

TOOLS CATALOGUE

2017



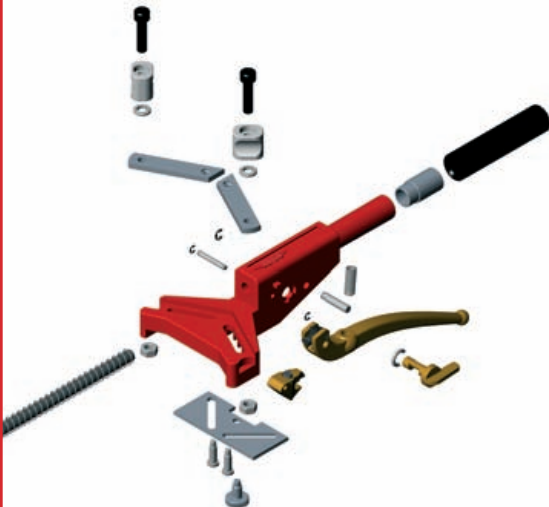
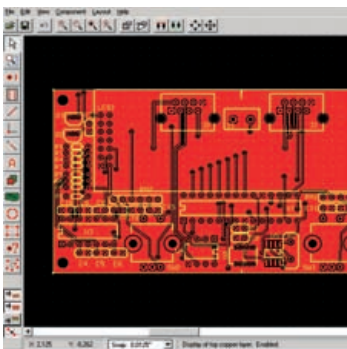
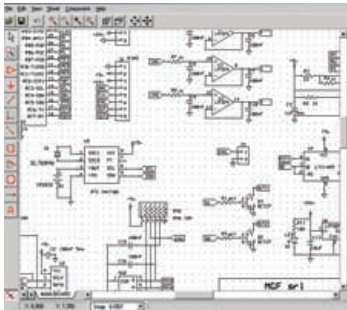
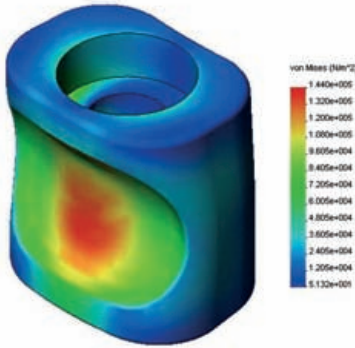
www.mgftools.com
www.nebulizzare.com



MGF
Professional Plumbing Tools

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MGF Engineering System



We believe that the focus is man. **Thus the plumber is the pivot in our engineering process.** We want to understand his needs, conscious that the building site works it is hard and difficult.

Only after that we start an integrated development cycle to transform plumbers problems into solutions, and solutions into working tools.

For these reasons the engineering process is all internal. Our customer service starts here.

Mechanical Engineering

We dedicate a particular attention to the mechanical engineering of our tools.

We perfectly know that in the building site each tool is stressed at its limits, and that every plumber desires a **robust tool** first of all.

Thus we study the mechanical strains in each component, to reinforce it only where it's necessary and to keep it **light and strong**.

In the picture at left you see the study of the slide frame strain test in a bending tool during a multilayer pipe bending.

Electronic Engineering

"Power is nothing without control".

MGFTools designs also electronic circuits driving the best performing tools. In our tools electronic control is the way to produce simpler, smarter and intelligent machines.

Our control systems are tailor made on plumber needs, nothing coming from other applications adapted with a cosmetic make-up.

On this left image, the electronic control circuit of our concrete heating device **MGF Vulcano**.

PCB Design

PCB design is also strategic for our customer service mission.

Putting the plumber in the middle of our engineering process, we know that one of the most requested feature is the **compact size**, specially for the control devices.

In this image at left an engineering phase for a new prototype of a maintenance tool.

Design for Assembling

Last but not least is "put everything together".

Every component has a specific function, as in the human body, and everyone is functional to the common objective.

Assembling is the final step, when **customer demand** finally becomes a **smart solution**.

Above all, we know that in the hard life of the construction site, the **easiest maintenance** is fundamental: also in this case the assembly design meets the most demanding plumber.

MGF Manufacturing System

We design mechanical and electronic components of our machines and tools, i.e. the concrete screed heater **MGF** Vulcano, or the plumber multimeter **MGF** Amico, the drain clearing pumps, the flushing pumps.

We make, in North Italy, Parma located facilities, all our plastic and metal components.

We assemble and test the machines in all the final step, as well as we build the control circuits.

All these competences are strategic to be flexible and fast in the technology development and in the product improvement.

The most important aspect is the speed of the continuous improvement we deserve to our products, to satisfy the most demanding professional plumbers.

Last but not least, we invest and we still invest in our facilities in Italy, when all our competitors are bringing the manufacturing plants outside Europe: **we proudly sustain the made in Italy**



MGF New turning/milling center



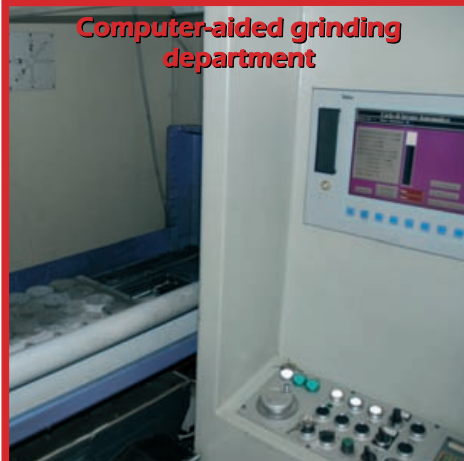
Metal sheet working



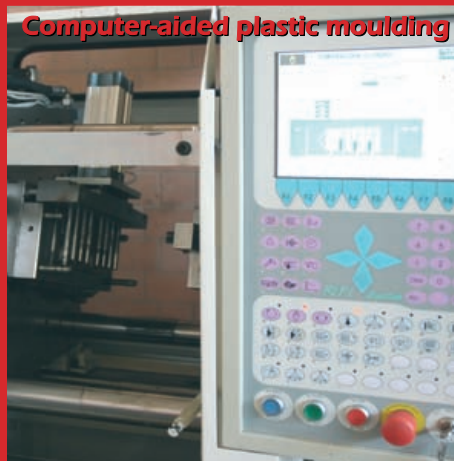
CNC robotized turning



CNC robotized milling



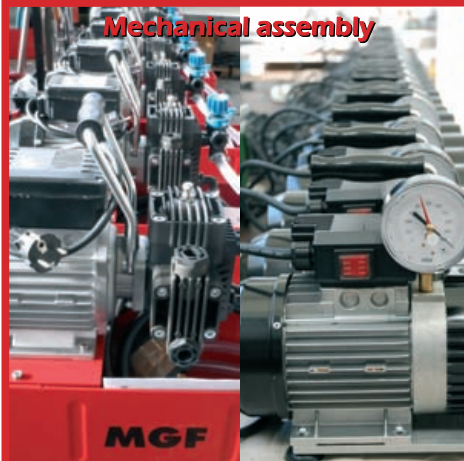
Computer-aided grinding department



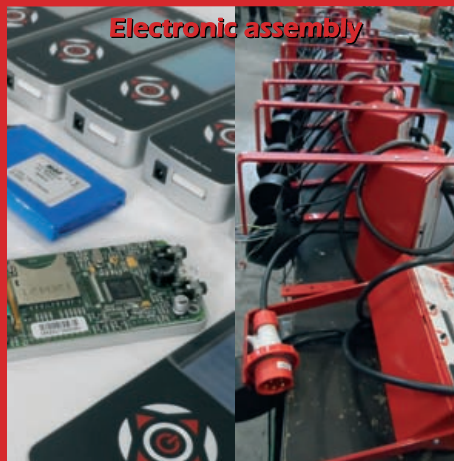
Computer-aided plastic moulding



Robotized welding



Mechanical assembly



Electronic assembly



Automatized Logistics MGF

MGF : quality management and services



Quality Checks along the whole process

During the **production process**, we perform repeatability checks on machine tools (automatic probes too), and non-compliant parts are discarded immediately.

Within the departments checklists are prepared to guide our technicians in accurate and detailed testing.

At the end of the production process, in the assembly lines, we carry out a simulation of the functionality of the machine, using electronic automated systems to perform accurate and detailed datalogging and prevent human errors.

Only at the end of this process, we proudly brand our innovative products with **MGF** logo.

And in the unlikely event that a problem should emerge after the sale, we offer a fast and efficient technical assistance.

Only through collaboration with customers we can get the best from our products.

For this we take care of the **technical service**, either as an added value for our customers, and as a tool for analysis and continuous product improvement.

MGF sales network: a winning team at your service

The **MGF** sales network employs a team of professionals commercially and technically motivated and guided by a lean organization able to identify customer needs and to suggest the best solution to satisfy them.

Each **MGF** agency works with a team of sales managers who perfectly know every product and are equipped to demonstrate the products on the field.

For these reasons our sales network offers to the market an high value-added service package that our customers acknowledge and appreciate.

MGF official distributors: transparent and long lasting win2win partnerships

MGF works with several retailers, distributors and purchasing groups in Italy and Europe and always offers new strategies and commercial incentives.

A clear trade policy, consistent and respectful of partners, even to the detriment of turnover, has always distinguished us.

Together with the commercial services offered, the commercial partnership with our group is certainly successful and has several advantages and added values.

The sales-technical **MGF** training courses, qualifying and useful

MGF organizes free training courses on various levels, for plumbers, sales people, agents, service centers.

The revamped headquarters now includes two multimedia equipped meeting rooms, and a permanent showroom where products not only can be touched, but can also be tested.

In addition to the extensive documentation available on www.mgftools.com site, we offer specific training documentation.

MGF calibration service for your peace of mind

MCF Metrological Laboratory offers a calibration service with the following features:

- The calibration procedure for each instrument is the same procedure suggested by LAT, Italian committee, to ensure the quality of the service offered. All this has a cost, but it provides the certainty of "sleep soundly"
- The measuring samples have a certified traceability. In practice, our samples are traceable to the universally recognized primary measurement standards.
- The calibration laboratory is air-conditioned throughout the year: it is known that changes in temperature affect the measured value. What sense does calibrating a pressure gauge reading a wrong value?
- The tool under calibration is in fact stabilizing according to the times and in the manner required by the procedure. For example, for a refrigerant gas scale remains equalizing for 12 hours before the calibration. How to calibrate seriously in an hour, as others do?
- We compare ourselves with certification authorities to be sure that the reports provided comply with the strictest specifications required regulations.



Features and Benefits



Instrument identification and name of the technician who carried out the calibration:
traceability

Identification of the calibration sample and its technical features:
traceability

Full calibration log:
complete

Strumento:	930798	Data Emissione:	03/03/2014
Matricola:	13120967	Data Taratura:	03/03/2014
File:	temperatura ambiente e umidità ambiente 100% RH	Cliente:	NOME AZIENDA INSTALLATRICE
Tecnico:	Francesco	Procedura di taratura:	PT-002
Dispositivo Completo:	Trasduttore digitale	Modello:	TR002
Contributore:	MCF	Fondo scala:	5 MPa
Lunga taratura:	Laboratorio	Certificato:	54106
Temperatura Inizio Taratura:	18°C	Temperatura Fine Taratura:	18°C
Fondo scala manometro basso:	3,8 MPa	Risoluzione:	20 MPa
Fondo scala manometro alto:	5,3 MPa	Risoluzione:	100 MPa

P riferimento [MPa]	Ciclo 1 crescente [MPa]	Ciclo 1 decrescente [MPa]	Errore di lettura [MPa]	Incertezza estesa [MPa]	Errore di lettura %	Incertezza estesa non corretta [MPa]
0	0	0	0	0	0%	4,8
600	595	595	5	5	0,23%	7,5
1500	1495	1495	5	5	0,23%	7,8
2300	2295	2295	5	5	0,23%	8,9
3600	3595	3595	5	5	0,23%	9,2

P riferimento [MPa]	Ciclo 1 crescente [MPa]	Ciclo 1 decrescente [MPa]	Errore di lettura [MPa]	Incertezza estesa [MPa]	Errore di lettura %	Incertezza estesa non corretta [MPa]
0	0	0	0	12	0%	0
700	695	695	-5	12	0,23%	-5,1
1500	1495	1495	-5	12	0,23%	-7,9
2500	2495	2495	-5	12	0,23%	-4,9
4000	4010	4010	10	12	0,5%	12,4
5000	5010	5010	10	12	0,5%	16,4

Instrument owner identification and calibration date:
traceability

Identification of the calibration procedure and of the primary sample certificate:
traceability

Calculation of uncertainty and measurement errors:
complete

Explanation notes:
easier to use

NOTE ESPLICATIVE
L'incertezza di misura estesa si calcola moltiplicando l'incertezza di misura standard per il fattore di estensione k=2. La taratura di cui sono riportati i risultati è stata effettuata nelle condizioni operative ed ambientali riscontrate durante le prove. Qualsiasi alterazione delle condizioni ambientali e dello strumento invalida i risultati qui riportati. Il calcolo delle correzioni e dell'incertezza del manometro in uso è responsabilità dell'utente e non di chi effettua la taratura.

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Calibrations Certificates

Art.	Description
RT_BIL	Scale Calibration Certificate
RT_CER	Leak Detector Calibration Certificate
RT_DIN	Torque Wrench Calibration Certificate
RT_MAN	Pressure Gauge Calibration Certificate
RT_TER	Termometer Calibration Certificate
RT_REN	Calibration Certificate Editing

Comparative Tests

Art.	Description
PC_BIL	Scale Comparative Test
PC_CER	Refrigerant Leak Detector Comparative Test
PC_DIN	Torque Wrench Comparative Test
PC_MAN	Pressure Gauge Comparative Test
PC_TER	Termometer Comparative Test
PC_REN	Comparative Test Editing

Massimo Rossi 0-125



2011 Italian Champion
2016 World Champion 250
2016 World Champion 350

MGF

www.nebulizzare.com



Ivan Copelli – 3° WORLD placed – 350 class

MGF Racing Team uses MGF Tools



Benders

"One machine can do the work of fifty ordinary men. No machine can do the work of one extraordinary man."

Elbert Green Hubbard (1856-1915)

CM Benders

For copper and multilayer pipes up to 26mm

Patent
Pending

Patented system
for the regulation of
the diameter to bend:
practical to use and
slide frames won't
be lost

Increase of power with
gear system:
powerful and strong,
no maintenance or
oil leaks

Rack thick-toothing:
smooth movement
for accurate bends

High grip rubber handle:
comfort for continuous
use

Automatic return with
spring mechanism:
quick and easy

Aluminum formers
and slide frames:
robust and reliable

- ✓ For pipes in millimeters and inches, in annealed copper, covered annealed copper, multilayer pipes, mild steel.
- ✓ It reduces installation expenses and costs without fitting storage.
- ✓ A non-jointed line is safer, has fewer pressure drops and leaks.
- ✓ Quick and professional execution thanks to the bend geometry calculation system.
- ✓ Wide range of formers, all compatible with all the **MGF** range.

Metal formers:
unbreakable

Carrying case in
polyurethane resin:
resistant

Art.	Bender in a case with a set of formers
902300	10, 12, 14, 16, 18, 20, 22 mm
902500	16, 20, 26 mm
902399	12, 15, 18, 22 mm
903100	3/8", 1/2", 5/8", 3/4", 7/8"
9023XX-PM	Bender (machine only, no case)

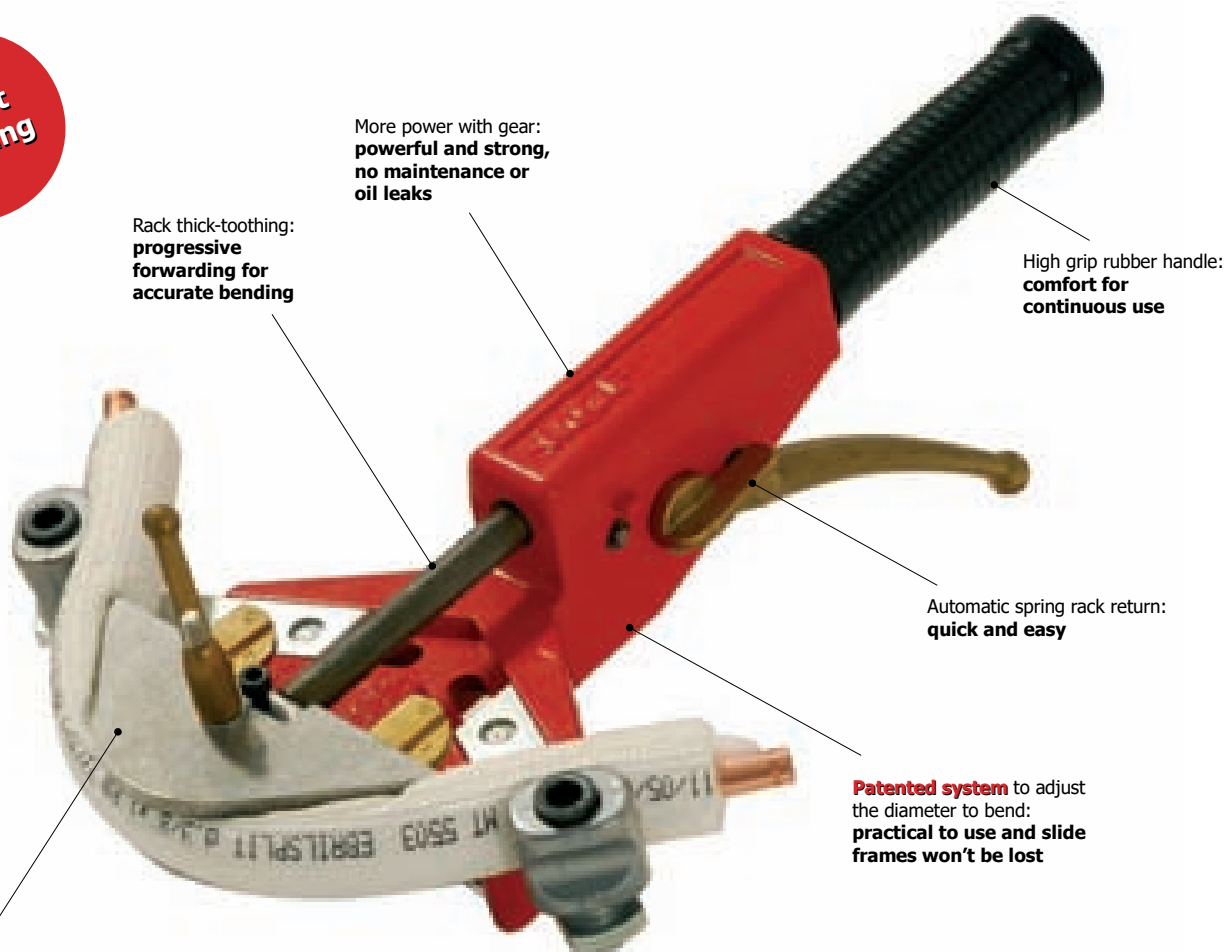
Technical Features

Annealed copper	Ø 10-22 mm (s ≤ 1) Ø 3/8"-7/8"
Coated copper	Ø 10-22 mm (s ≤ 1) Ø 3/8"-7/8"
Multilayer Steel	Ø 10-18 mm (s ≤ 1) Ø 14-26 mm
Weight	1,8 Kg
Dimensions	390 x 318 x 1114 mm
Packing	PVC molded case

M373/P373 Bender

For coated copper and multilayer pipes

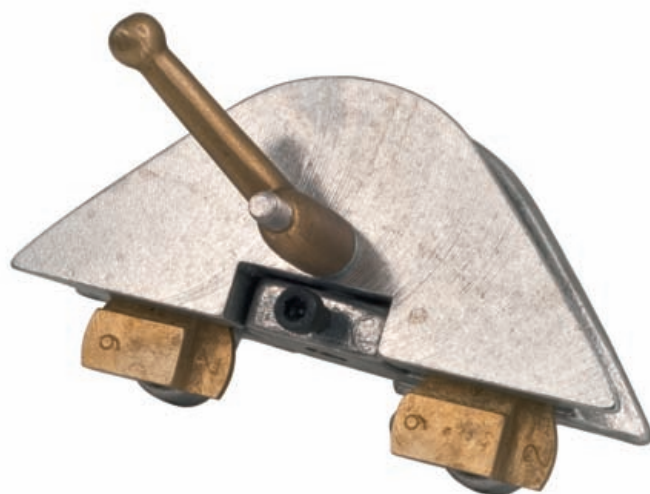
Patent
Pending



Patented former for bending pre-insulated pipes without cutting the insulation: **excellent timesaving bending**



New case:
more resistant than metal



Technical Features

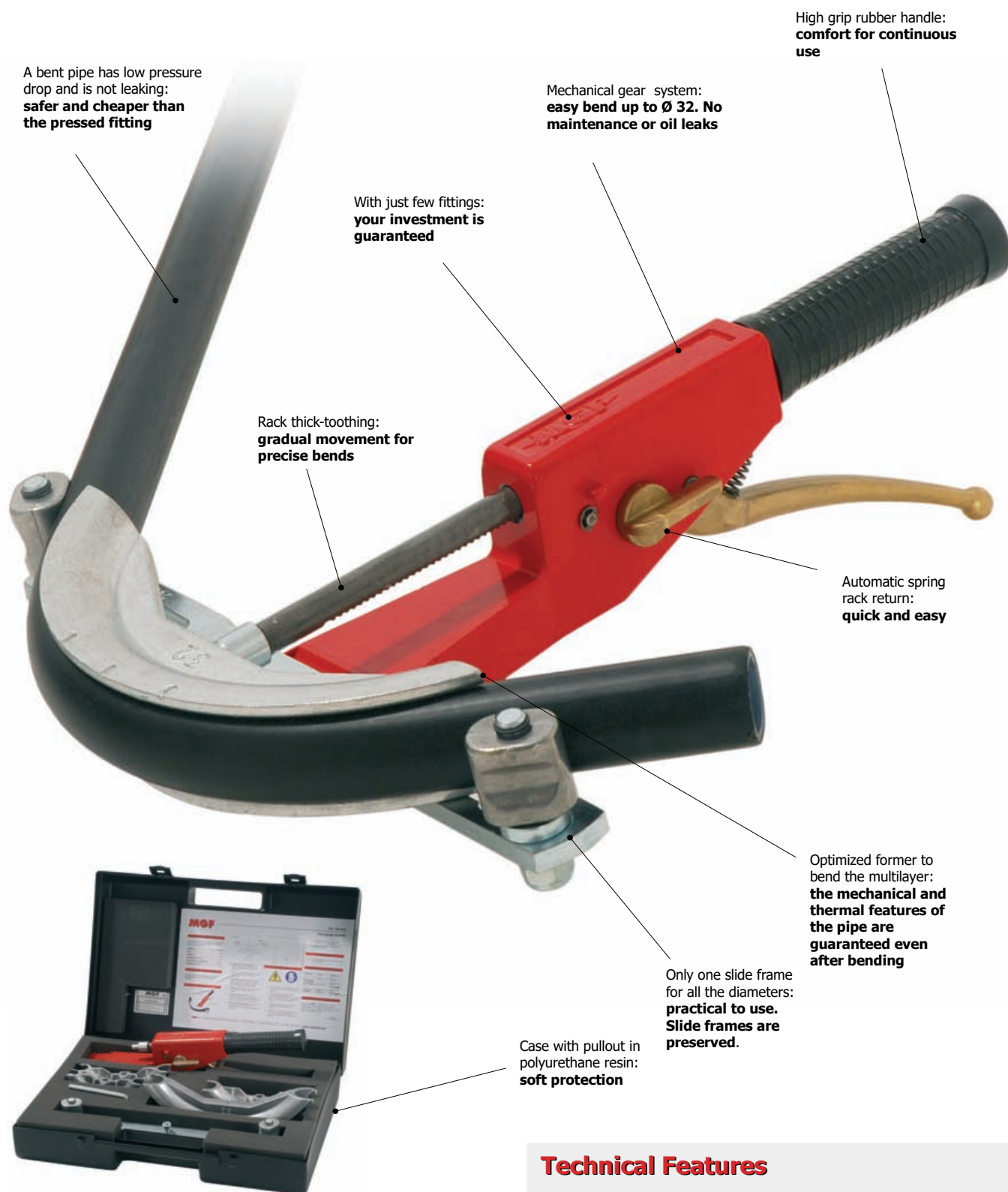
Annealed copper	Ø 10-22 mm (s ≤ 1) Ø 3/8"-7/8"
Coated copper	Ø 10-22 mm (s ≤ 1) Ø 3/8"-7/8"
Steel	Ø 10-18 mm (s ≤ 1)
Multilayer	Ø 14-26 mm
Weight	2,2 Kg
Dimensions	390 x 300 x 100 mm
Packing	PVC molded case

- ✓ Patented former to bend pipes with foam insulation.
- ✓ Perfect bending warranty, there is no need to cut the insulation: time saving and greater accuracy than the "by hand" system.
- ✓ Bends pipes with soft insulation coating, even for the air conditioning.
- ✓ Patented automatic adjustment system of slide frames, without replacing any component.
- ✓ Wide range of formers, all compatible with the **MGF** range.

Art.	Benders in case with a set of formers
902400	10, 12, 14, 16, 18, 20, 22 mm + M373
932499	3/8", 1/2", 5/8", 3/4", 7/8" + P373

ALPEM

Manual bender for multilayer pipes up 32mm



Art.	Bending set with formers and PVC molded case
902904	16, 20, 26 mm
902900	16, 20, 26, 32 mm
902902	16, 20, 25, 26, 32 mm
902910	16, 18, 20, 25, 32 mm
9029XX-PM	ALPEM bender (only machine, without case)

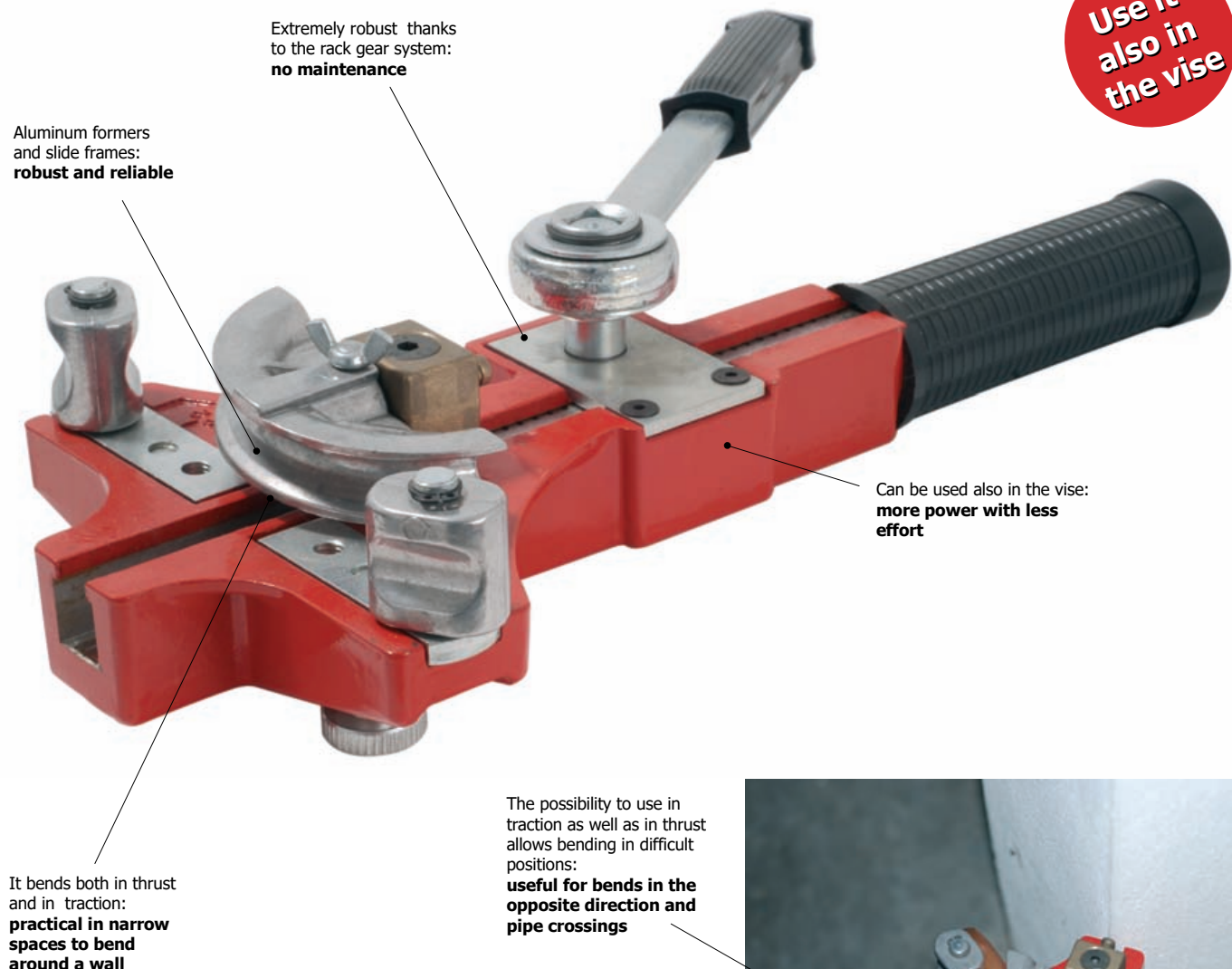
Technical Features

Annealed copper	Ø 10-22 mm (s ≤ 1) Ø 3/8"-7/8"
Covered copper	Ø 10-22 mm (s ≤ 1) Ø 3/8"-7/8"
Multilayer Steel	Ø 10-18 mm (s ≤ 1) Ø 14-32 mm
Weight	1,8 Kg
Dimensions	430 x 310 x 110 mm
Packing	PVC molded case

MASTER Benders

Bender for steel, copper and aluminium, also with insulation, up to 22mm

**Use it
also in
the vise**



- ✓ For pipes in millimeters and inches, in annealed copper, covered annealed copper, multilayer, steel.
- ✓ It reduces installation expenses and costs for fitting storage.
- ✓ A non-jointed line is safer, has fewer pressure drops and breaking points and is less expensive.
- ✓ Quick and professional execution thanks to the calculation system of bend geometry.
- ✓ Wide range of formers compatible with all the **M&F** range.
- ✓ **Patented former** to bend pipes with soft covering, also for conditioning.

Art.	Bender in a case with a range of formers
902000	10, 12, 14, 16, 18, 20, 22 mm
902000-PM	MASTER bender (machine only, no tools or jack)
916200	1/2" ratchet for MASTER

Technical Features

Annealed copper	Ø 8-22 mm ($s \leq 1$) Ø 3/8"-7/8"
Coated copper	Ø 8-22 mm ($s \leq 1$) Ø 3/8"-7/8"
Multilayer Steel	Ø 8-18 mm ($s \leq 1$) Ø 14-22 mm
Weight	2,2 Kg
Dimensions	390 x 300 x 100 mm
Packing	PVC molded case

Formers for all MGF Benders

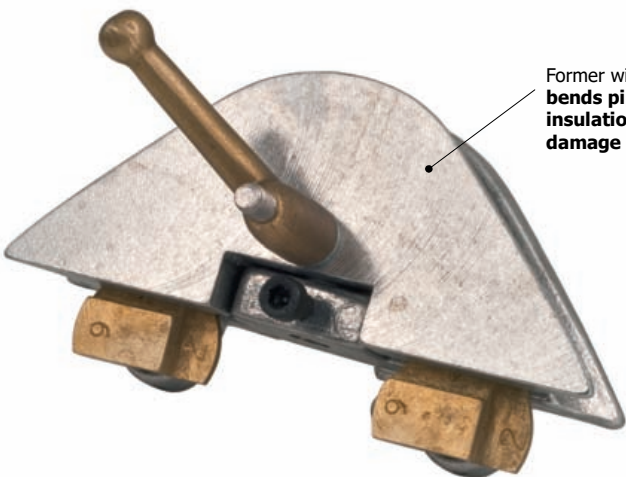
Compatible with CM, M373/P373, ALPEM, MASTER



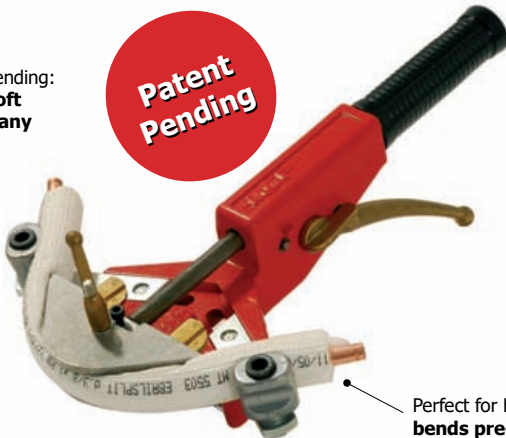
Die-cast aluminum formers, can be used on copper just annealed:
are everlasting and do not wear out

Wing screw for fixing the former:
more efficient and safe working

Interchangeable and compatible with the CM, ALPEM and MASTER benders:
reduces the cost of the investment



Former with patent pending:
bends pipes with soft insulation without any damage



Patent Pending

Perfect for HVAC piping:
bends pre-insulated copper pipes, without bottlenecks

Millimeter Size Formers

Art.	Ext. Diameter	Radius
281298	8 mm (only Master)	28 mm
281299	10 mm	35 mm
281300	12 mm	40 mm
281301	14 mm	48 mm
281306	15 mm	50 mm
281302	16 mm	58 mm

Art.	Ext. Diameter	Radius
281307	17 mm	60 mm
281303	18 mm	69 mm
281304	20 mm	76 mm
281305	22 mm	88 mm
281308	24 / 22 mm insul.	88 mm
281312	25 mm	91 mm

Art.	Ext. Diameter	Radius
281310	26 mm	91 mm
281315	32 mm	132 mm
281313	40 mm	182 mm
281314	50 mm	230 mm
281311	M373 (10-16 insul.)	70 mm

Inch Size Formers

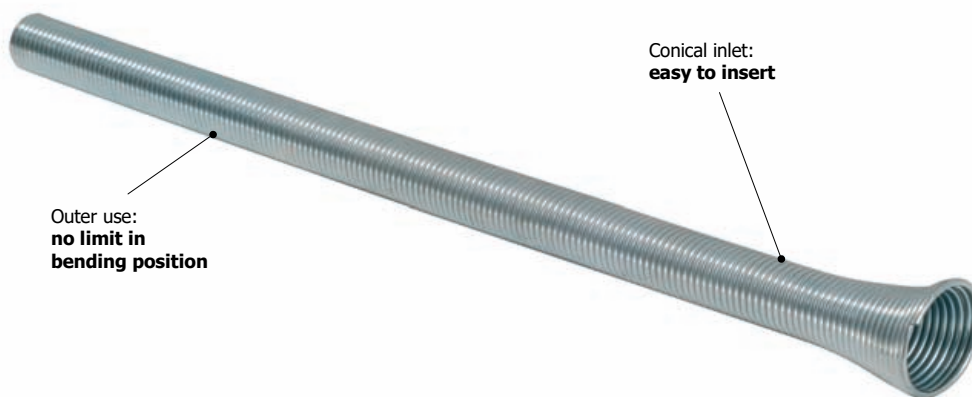
Art.	Ext. Diameter	Radius
281350	3/8"	35 mm
281351	1/2"	48 mm

Art.	Ext. Diameter	Radius
281352	5/8"	58 mm
281353	3/4"	69 mm

Art.	Ext. Diameter	Radius
281354	7/8"	88 mm
281320	P373 (3/8"-7/8" insul.)	69 mm

Spring Benders – Outer Use

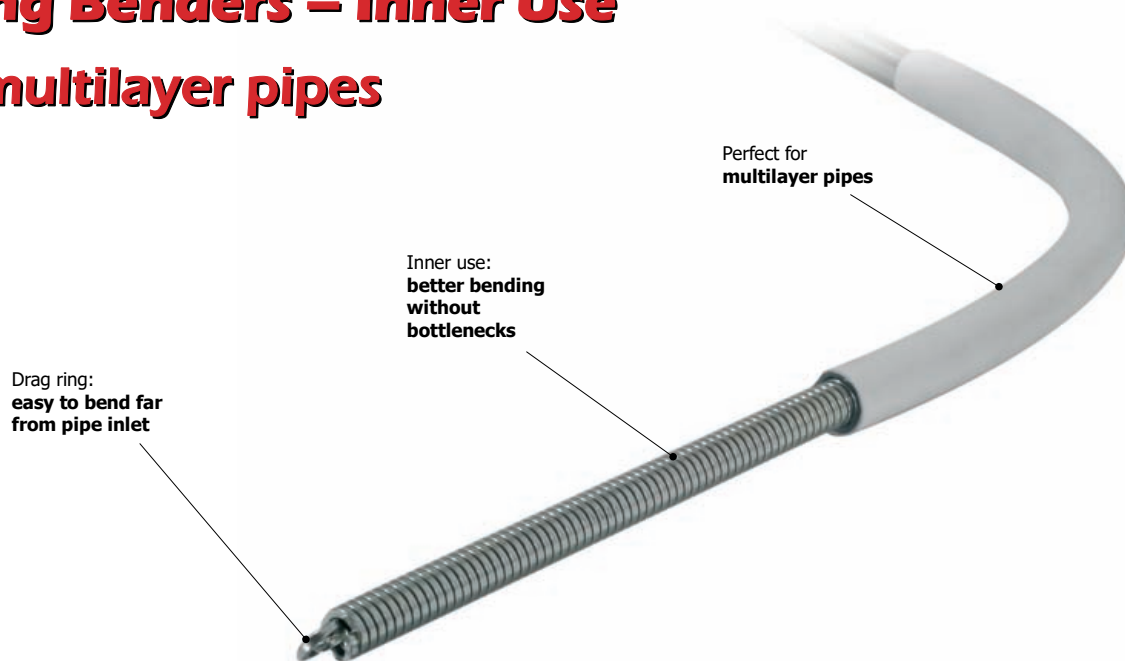
For annealed copper pipes



Art.	External Diam.	Lenght	Weight	Art.	External Diam.	Lenght	Weight	Art.	External Diam.	Lenght	Weight
903301	8 mm, 5/16"	250 mm	0,06 Kg	903306	16 mm, 5/8"	290 mm	0,22 Kg	903307	1/4"	250 mm	0,06 Kg
903302	10 mm	290 mm	0,08 Kg	903311	18 mm	290 mm	0,30 Kg	903308	3/8"	285 mm	0,08 Kg
903303	12 mm	290 mm	0,12 Kg	903323	20 mm	290 mm	0,35 Kg	903309	7/16"	260 mm	0,12 Kg
903304	14 mm	290 mm	0,20 Kg	903312	22 mm	290 mm	0,45 Kg	903310	1/2"	290 mm	0,20 Kg
903305	15 mm	270 mm	0,20 Kg					903313	3/4"	250 mm	0,35 Kg

Spring Benders – Inner Use

For multilayer pipes



Art.	Inner Diam.	Spring Lenght	Pipe 14x2	Pipe 16x2	Pipe 16x2,2	Pipe 18x2	Pipe 20x2	Pipe 20x2,5	Pipe 26x3	Pipe 32x3	Weight
903332	10mm	500mm	•		•						0,35 kg
903333	12mm	500mm		•		•					0,35 kg
903334	14mm	500mm						•			0,40 Kg
903335	16mm	500mm					•				0,40 Kg
903336	20mm	500mm							•		0,40 Kg
903337	26mm	500mm								•	0,40 Kg

BIG

Bender for steel and galvanized steel pipes up to 3"

Dual piston movement:
fast and powerful at
the same time

Pinch protection:
for safe working

Folding plate:
makes it easier to
removal of the pipe
at the end of bend

Automatic
spring return:
for speed
bending

Diagonal design of
the back formers:
faster execution of
small diameter
bends

Best for blacks and
galvanized steel pipes:
perfect, wrinkle free,
bends

Swivel stand supplied
with the machine:
full optional
equipment

Technical Features

- Hydraulic bender for black or galvanized steel pipes according to DIN 2440, 2441 and DIN EN 10255
- Bends pipes up to 3" and up to 90°
- Hydraulic system with automatic spring piston return

Bender power (1 1/2" e 2")	100000 N
Power required for 2" bending	32500 N
Bender power (3")	130000 N
Power required for 3" bending	65000 N
Weight (Big 2" – only bender)	50,00 Kg
Weight (Big 3" – only bender)	60,00 Kg
Bender size (Big 2")	500 x 130 x 130 mm
Bender size (Big 3")	560 x 140 x 140 mm
Box weight (2")	75 Kg
Box weight (3")	120 Kg
Oil type	hydraulic
Box	Wooden box complete with formers and slide frames

Art.	Model
902700	Big 2" (with formers from 1/4" to 2")
902799	Big 3" (with formers from 1/4" to 3")

Formers and Spares

Art.	Model	Radius
281011	Former for BIG 1/4"-3/8"-1/2"	86 mm
281012	Former for BIG 3/4"	108 mm
281013	Former for BIG 1"	135 mm
281014	Former for BIG 1 1/4"	170 mm
281015	Former for BIG 1 1/2"	193 mm
281016	Former for BIG 2"	242 mm
281017	Former for BIG 3"	358 mm
790030	Hydraulic Oil (1 L)	

FIBERGLASS Bender

To bend up to 180° and 10 mm (3/8")

Technical Features

- For pipes in soft copper, aluminum and soft steel
- Perfect for: HVAC, plumbing and hydraulic piping installation
- Bender made in **composite material**, resistant and light
- Thanks to the extreme resistance of this composite material, it is possible to bend with extremely small bending radius **even steel pipes up to 10 mm.**

Weight 0,36 Kg
Dimensions 250 x 60 x 100 mm

Composite, extra sliding material:
bending radius is minimum

Goniometer included 0/180°:
precise bend with no calculation

Bends 7 different diameters:
universal

Art.	Model	Bending radius	Weight	Dimensions
902800	Fiberglass bender (4, 6, 8, 10, 1/4", 5/16", 3/8")	15 mm (diam 4-6) – 25 mm (diam 8-10)	0,365 Kg	250 x 60 x 100 mm

CLASSIC Benders

To bend up to 180° and 16 mm (5/8")

Technical Features

- For pipes in **soft copper, aluminum and soft steel**
- Aluminum bender, robust and lightweight
- Movable hook** for the pipe, to make bending operations easier
- Possibility to use in vise

Weight According to model
Dimensions According to model

Former with goniometer 0/180°:
accurate bend without calculation

Movable hook:
easier bends

Bends up to 180°:
the former allows very close and complex bends

Art.	Model	Bending radius	Weight	Dimensions
903299	Classic Bender 6 mm	18 mm	0,508 Kg	300 x 70 x 30 mm
903298	Classic Bender 8 mm (5/16")	24 mm	0,600 Kg	350 x 70 x 30 mm
903297	Classic Bender 10 mm	30 mm	0,905 Kg	490 x 170 x 40 mm
903296	Classic Bender 12 mm	36 mm	0,901 Kg	350 x 120 x 30 mm
903295	Classic Bender 14 mm	47 mm	1,115 Kg	430 x 120 x 40 mm
903294	Classic Bender 15 mm	54 mm	1,100 Kg	440 x 120 x 40 mm
903293	Classic Bender 16 mm (5/8")	58 mm	1,100 Kg	490 x 120 x 50 mm
903292	Classic Bender 1/4"	18 mm	0,480 Kg	300 x 70 x 30 mm
903291	Classic Bender 3/8"	30 mm	0,867 Kg	320 x 90 x 40 mm
903290	Classic Bender 1/2"	42 mm	1,300 Kg	430 x 150 x 40 mm

Pressfitting Tools

"If I had my life to live over again, I'd be a plumber."

Albert Einstein (1879-1955)

iPress MINI

Battery powered pressing tool

Authorized
MGF
Service

Choose and change rapidly
mini pressing jaws:
**save your time, time is
money!**

Equipped with
innovative body with
two components:
safe

Illumination for
working safely:
lighting included



Tool information via LED
display



Illumination for working
safely

Lightweight and ergonomic:
fatigue-free work!

Extremely compact:
**press fittings in the most
difficult positions**

One handed operation:
easier fittings installation

Information shown by LED and buzzer:
**guarantee of a perfect pressing
without errors**

High-quality, powerful
Makita Li-Ion technology for
**lasting, battery-powered
pressing**



Standard equipment:

- iPress MINI pressing tool
- Makita Battery
- Battery charger
- Strong thermoformed case in PVC

**Pressing with 18V/1,3 Ah battery with
constant thrust force for nominal diameters
depending on the system up to 32 mm**

- ✓ Quick pressing thanks to short pressing cycle of 3-4 seconds
- ✓ Extremely short charging time of just 15 minutes
- ✓ Time saved when multiple pressing by means of automatic piston return
- ✓ Very high safety factor based on "Quickstop" function
- ✓ Precise pressing force thanks to HPC pressure monitoring with audible signal
- ✓ Long battery and tool service life thanks to "Autostop" after the pressing operation

Technical Features

Thrust force	Linear thrust of approx. 15 kN
Battery	Makita 1,3 Ah Li-Ion high efficiency
Jaw holding head	Approx. 350° rotating
Charging time	15 minutes
Pressing battery charge	approximately 150 (for DN20)
Machine weight	1,7 Kg – 2,5 Kg (with jaw)
Dimensions	377 x 75 x 116 mm (Length x Width x Height)

iPress MINI

Battery powered pressing tool



iPress MINI
To work in reduced spaces



The pressing machine you can use
wherever you want



Models and Accessories

Art.	Model	Weight
900997	iPress MINI battery powered pressing tool	1,7 Kg
730009	Mains adapter 230V-18VDC	0,6 Kg
730000	iPress by Makita battery charger	1,0 Kg
730001	iPress MINI-AX 18V-1,3Ah battery	0,4 Kg

Applications

Stainless steel, steel	max. DN22* (DN28 upon request)
Copper, copper alloys	max. DN28*
Multi-layer composite pipe	max. DN32*
PEX pipes	max. DN32*

* These values are pressfitting system related.
Please contact your fitting supplier for binding information.

Safe and controlled pressing: Hydraulic Pressure Check

Hydraulic Pressure Check, HPC for short, monitors the oil pressure in the tool's hydraulic circuit, hence ensuring a continuous, consistent press quality. During each pressing cycle, the achieved pressing pressure is determined by a pressure sensor and compared to the required minimum value. An optical and audible warning signal indicates if the achieved pressure differs from the specified working pressure.

The user will know immediately that the corresponding pressing location must be checked and repressed or replaced as required.

If three consecutive pressing occur outside the required pressure range, the tools switch off automatically and must be sent in for service. This additional safety function has been requested by our customer and system partners, offering more safety as you work.



Jaws for i-Press MINI

- ✓ Compatible with all the pressing tools homologated by the system supplier
- High corrosion protection through special finish
- ✓ Optimum safety thanks to the machining of tool steel for high stress
- ✓ Easy distinction between the profiles for reasons of system using different surfaces colors

Profiles marking: proof of the used jaw

Minimal wear: induction hardening on the point that wear

Easy pairing: diameter and profile on the jaw

Discover all the jaws and Dies for
iPress MINI from 20 page or on **M&G** website

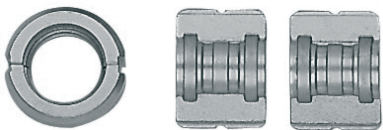


MINI Jaw
for iPress MINI pressing machine



Universal MINI jaw for
interchangeable Dies

Interchangeables Dies for
Universal MINI jaws



MINI Jaws, Universal MINI Jaws and Dies

for iPress MINI MGF Tools by Klauke



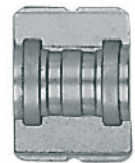
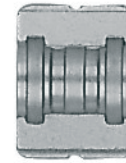
MINI Jaws

Profiles: TH, M, V, H e U



Universal MINI Jaws for Interchangeable Dies

Several profiles with only one Jaw



Interchangeable Dies

Profiles suitable for MINI jaws with inserts

Why **MGF** is the best buy:

- ✓ Jaws made with special tools steel, forged and hardened, to guarantee long lasting over time
- ✓ Thanks to additional induction hardening in points subject to wear and tear, the insertion bevels and profile geometry, the quality of the Klauke jaws has become legendary
- ✓ Easy pairing of jaws and profiles thanks to the codes with nominal diameters, profile and manufacturing data
- ✓ High corrosion protection through special coating
- ✓ Technical support performed directly from **MGF**

Technical Features

Fittings in Steel / Special Steel max. DN22

Fittings in Copper / Copper Alloys max. DN28

Fittings for Multilayer / PEX max. DN32

MINI KLAUKE JAWS

Additional induction hardening in weak points:
quality guaranteed over time

Manufactured with special steel forged and hardened:
best safety



MINI Jaw

Available with profiles: **TH, M, V, H and U**

Diameter and profile on the jaw:
easy matching

Used jaw proof:
profiles are marked

Art.	Model
281650	MINI Jaw Klauke with profile TH 14
281651	MINI Jaw Klauke with profile TH 16
281652	MINI Jaw Klauke with profile TH 18
281653	MINI Jaw Klauke with profile TH 20
281654	MINI Jaw Klauke with profile TH 26
281655	MINI Jaw Klauke with profile TH 32
281660	MINI Jaw Klauke with profile M 12
281661	MINI Jaw Klauke with profile M 15
281662	MINI Jaw Klauke with profile M 18
281663	MINI Jaw Klauke with profile M 22
281664	MINI Jaw Klauke with profile M 28
281675	MINI Jaw Klauke with profile V 12
281676	MINI Jaw Klauke with profile V 14
281671	MINI Jaw Klauke with profile V 15
281677	MINI Jaw Klauke with profile V 16
281672	MINI Jaw Klauke with profile V 18
281673	MINI Jaw Klauke with profile V 22
281674	MINI Jaw Klauke with profile V 28
281656	MINI Jaw Klauke with profile H 16
281657	MINI Jaw Klauke with profile H 20
281658	MINI Jaw Klauke with profile H 26
281640	MINI Jaw Klauke with profile U 16
281641	MINI Jaw Klauke with profile U 20
281642	MINI Jaw Klauke with profile U 26
281643	MINI Jaw Klauke with profile U 32

KLAUKE MINI UNIVERSAL JAWS for Dies and Interchangeable Dies

Art.	Model
281796	Klauke MINI Universal Jaw for Inter. Dies
Art.	Model
281716	TH 14 Die for Klauke MINI Universal Jaw
281717	TH 16 Die for Klauke MINI Universal Jaw
281718	TH 18 Die for Klauke MINI Universal Jaw
281719	TH 20 Die for Klauke MINI Universal Jaw
281720	TH 26 Die for Klauke MINI Universal Jaw
281721	TH 32 Die for Klauke MINI Universal Jaw
281722	V 15 Die for Klauke MINI Universal Jaw
281723	V 18 Die for Klauke MINI Universal Jaw
281724	V 22 Die for Klauke MINI Universal Jaw
281725	V 28 Die for Klauke MINI Universal Jaw
281644	M 12 Die for Klauke MINI Universal Jaw
281645	M 15 Die for Klauke MINI Universal Jaw
281646	M 18 Die for Klauke MINI Universal Jaw
281647	M 22 Die for Klauke MINI Universal Jaw
281648	H 16 Die for Klauke MINI Universal Jaw
281649	H 20 Die for Klauke MINI Universal Jaw
281659	H 26 Die for Klauke MINI Universal Jaw
281665	U 16 Die for Klauke MINI Universal Jaw
281669	U 18 Die for Klauke MINI Universal Jaw
281666	U 20 Die for Klauke MINI Universal Jaw
281667	U 26 Die for Klauke MINI Universal Jaw
281668	U 32 Die for Klauke MINI Universal Jaw

Manufactured with special steel forged and hardened: **legendary robustness**

Additional induction hardening in points subject to wear: **an investment that lasts**

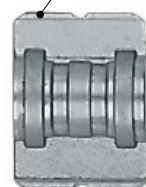
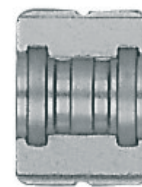


Universal MINI Jaw for Interchangeable Dies

One Jaw, Many Profiles to Press

Changing the only Die, it's possible to press several different profiles: **save money**

Wear protection thanks to the special surface finish: **long lasting investment**



interchangeable adapter to be applied on the universal jaws

Available with pressing profiles **TH, V, M, H** and **U**

Pressfitting Deburring and Calibrating Tools

Deburring and Calibrating Tools

Cutting edge made in special hardened steel, black finished with fiberglass handle.
Sizes are laser marked on the single steps
Patented ratchet system (optional)

Art.	Model
900954	Deburrer Calibrator 16x2 - 20x2 - 26x3 - 32x3
900955	Deburrer Calibrator 16x2 - 20x2,5 - 26x3 - 32x3
900957	Deburrer Calibrator 16x2,25 - 20x2,5 - 26x3 - 32x3
900953	Ratchet Deburrer Calibrator 16x2 - 20x2 - 26x3 - 32x3
900958	Ratchet Deburrer Calib. 16x2,25 - 20x2,5 - 26x3 - 32x3
900956	Ratchet Deburrer Calib. 16x2 - 20x2,5 - 26x3 - 32x3

Calibrating Tools Set with 2 different working ranges:

- ✓ **14x2 - 16x2 - 18x2 - 20x2 - 26x3 - 32x3**
- ✓ **16x2,25 - 20x2,5 - 25x2,5 - 32x3 - 0x3,5**

Art.	Model
900952	Pressfitting Calibrating Tools Set

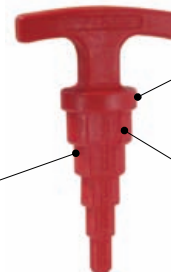
Composite material: **light, handy and non corrosive**



Adjusts the pipe diameter and rounds it up: **excellent pressfitting connection**

Deburring, chamfering and calibrating in the same operation: **fast and professional without gaskets damaging**

Composite material: **light, handy and non corrosive**



Adjusts the pipe diameter and rounds it up: **excellent pressfitting connection**

Each set is including 2 tools with a wide working range: **complete for all sizes**

iPress MEDIUM

Battery Powered Pressing Tool

Service
MGF
Center

Quickly jaws locking system:
fast and cost effective

LED lighting:
working safely

Li-Ion Makita technology for a quick and long charge, up to 300 pressing cycles:
save time with the biggest power capacity

Low weight, well balanced and ergonomic design:
effortless working!

Innovative 2-component body:
secure grip

Status LED indicating machine alarms and pressing quality:
more safety and quality to your job

All operations with only one hand:
handy and ergonomical



Tool information shown
via LED display



Illumination for working
safely



Standard equipment:

- iPress MEDIUM pressing tool
- Battery Makita
- Battery charger
- Strong PVC molded case

Battery-powered pressing tool 18V/3,0 Ah with constant thrust for system-related nominal sizes to 110 mm

- ✓ Quick pressing due to short pressing cycle
- ✓ Extremely short charging time of just 22 minutes
- ✓ Time saved when multiple pressing by means of automatic piston return
- ✓ Very high safety factor based on "Quickstop" function
- ✓ Accurate pressing force thanks to HPC pressure monitoring with audible signal
- ✓ Long battery and tool service-life thanks to "Autostop" after the pressing operation

Technical Features

Thrust force	Linear thrust of approx 32 kN
Battery	Makita da 3,0 Ah Li-Ion high efficiency
Jawholder Head	approx. 350° rotating
Charging time	22 minutes
Pressing for all battery charge	
Machine weight	3,5 Kg
Dimensions	366 x 81 x 317 mm (Length x Width x Hight)

iPress MEDIUM

Battery Pressing Tool



Immediate stop in case of need and depending on the application

In unclear situations during a pressing operation, for example when incorrect fitting or an incorrect pressing jaw are used, the immediate **"Quickstop"** function enables rapid reaction.

As soon as the push button is released, the tool comes to an immediate standstill without even the slightest follow-up movement. So that the user can make the necessary corrections without delay.

The **"Autostop"** after pressing tells the user that the pressing operation has finished.

This function also reduces tool wear and prolongs battery life.

Electronic control for optimum benefit

The generation of these tools is equipped with a robust, construction site standard electronic system.

This system provides the user with all important information on machine status, pressing result and battery power.

The information is output via a light diode or an audible signal:

- When 20% battery power remains: Visual LED signal
- Service notification: Visual LED signal
- Pressure deviation: Audible signal, buzzer

Key data such as the tool's year of manufacture, serial number, revision status of the integrated machine parts, number of pressing cycles and the last or next service are also evident for our Service Center, hence guaranteeing the best possible service result.



Pro-environmental high-quality synthetic oils for optimum functionality

Not only the technology and electronics have been revised, but closer attention has been paid also to environmental issues: MGF uses exclusively synthetic hydraulic oils in its new tools.

These oils are highly bio-degradable and harmless to water.

Furthermore, these hydraulic oils are tested to the most stringent standards available worldwide.



Models and Spare Parts

Art.	Model	Weight
900996	iPress MEDIUM battery pressing tool	3,5 Kg
640006	PVC molded case f/ iPress Medium	3,7 Kg
730000	iPress battery charger	1,0 Kg
730002	iPress MEDIUM battery	0,6 Kg
730009	Mains adapter 230V -18VDC	0,6 Kg

Working Range

Special steel, steel	max. DN54*
Copper, Copper alloys	max. DN54/108/4"*
Multilayer pipes	max. DN75/110*
PEX pipes	max. DN75*

* Supplied data depend on the used system.
Please contact your system supplier for binding information

Klauke MEDIUM

Electric Pressing Tool

Authorized
MGF
Service

Choose and quick change
STD pressing jaws:
**save your time and
money!**

Low weigh, well balanced and
ergonomic design:
effortless working!

All the operations
with only one hand:
easier working

Innovative 2-components body:
secure grip

"Quick stop" function:
high safety factor

230V power supply cord:
no batteries to recharge



Standard equipment:

- Electric pressing tool (230V)
Klauke MEDIUM
- Strong steel case with foam
insert

**Pressing tool with 230 VAC supply with
constant thrust for nominal diameters sizes
up to 110mm**

- ✓ Fast operation thanks to short pressing cycles
- ✓ Time saving in case of multiple pressing by means of automatic piston return system
- ✓ High safety factor based on "Quickstop" function
- ✓ Easy to use with only one hand, also thanks to its reduced weight to work without effort
- ✓ 230 VAC supply with power cord
- ✓ Flexible and convenient thanks to standard interchangeable jaws

Technical Features

Thrust Force	Approximately 32 kN linear
Jawholder	Approximately 350° rotating
Supply	230VAC mains
Pressing Time	5 seconds
Pressing Tool Weight	3,5 Kg
Dimensions	350 x 81 x 260 mm (Length x Width x Height)

Klauke MEDIUM

Electric Pressing Tool



Lighting fast pressing: only 5 seconds, we know that your time is money.



Technical Features



- ✓ Automatic piston return, the piston returns automatically at starting point as the maximum pressure is reached
- ✓ In unclear situations during a pressing operation, for example when incorrect fitting or an incorrect pressing jaw are used, the immediate "Quickstop" function enables rapid reaction. As soon as the push button is released, the tools comes to an immediate stand still without even the slightest follow-up movement. So that the user can make the necessary corrections without delay
- ✓ Flexible and convenient thanks to interchangeable jaws (*look at page 26 **MGF** Plumbing Tools Catalogue*)
- ✓ With Klauke MEDIUM pressing machine it is possible to work with only one hand thanks to its design and reduced weight
- ✓ Electric pressing tool 230 V power supply. The tool allows to work without stops for charging the battery
- ✓ Comfortable to use everywhere with strong steel case with foam insert to protect it from impacts and uncomfortable environments
- ✓ For further technical infos you can download the manual from the following website www.mgftools.com/it/downloads-mgftools

Applications

- **Stainless steel, steel:** max. DN54*
- **Copper, copper alloys:** max. DN54/108/4"*
- **Multi-layer pipe:** max. DN75/110*
- **PEX pipe:** max. DN75*

** These values are system-related.*

Please contact your system supplier for binding information



230V Power Supply
Without stops for recharging the tool



Klauke MEDIUM pressing tool for
copper pressfitting system



Klauke MEDIUM pressing tool for stainless steel
press fitting systems

Working Range

Stainless steel, steel	max. DN54*
Copper, copper alloys	max. DN54/108/4"*
Multi-layer pipes	max. DN75/110*
PEX pipes	max. DN75*

** These values are system-related.
Please contact your system supplier for binding information*

- ✓ **Flexible and convenient:** thanks to standard interchangeable jaws
- ✓ **Work without efforts:** thanks to its reduced weight
- ✓ **You can use it with only one hand:** easy to use
- ✓ **Power Supply:** 230 VAC with power cord

Model and spares

Art.	Model	Weight
900995	Klauke MEDIUM Electric Pressing Tool	3,5 Kg
640007	Steel Case with Foam Insert	8,0 Kg

MGF Jaws for Press Fitting Systems

Full Range, Interchangeable with all Tools.

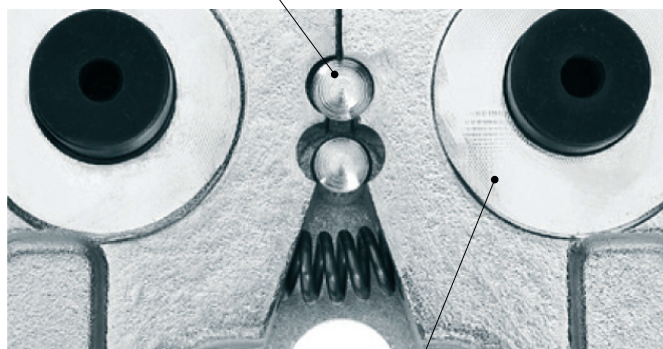
Discover the Advantages of the Perfect Jaw

MGF jaws are manufactured with advanced technologies, to ensure:

- **Best pressing precision:** to ensure fittings without leaks and pressing in compliance with manufacturers specifications
- **Plumber safety:** working without risk of injury its our first objective, and it shall be avoided to mistake the profile
- **Investment return:** because any work tool has to stay for many years in the plumber's toolbox, endure hardship of the construction site and be cheap!

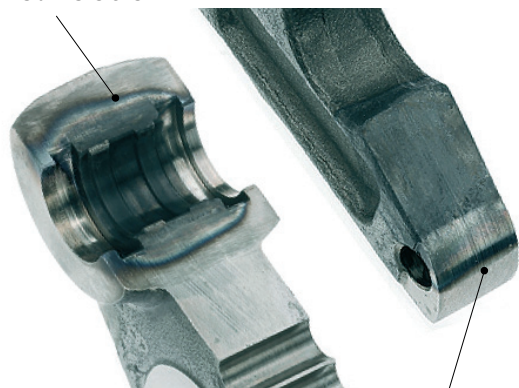
The quality of our jaws is pointed out by many features: long life is guaranteed by the ruggedness of the design, materials and workmanship. Making our products easy to use, we avoid mistakes and we make the pressing experience simpler. Using the best materials and special steels we increase the value of your investment.

Jaw synchronization system: **maximum precision coupling, for perfect pressing**



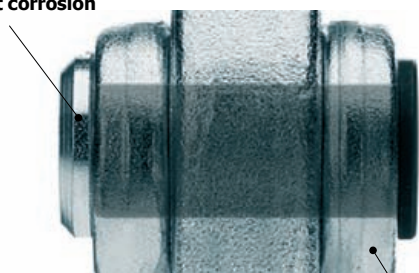
3D coordinate measuring tests performed on each profile: **best precision, compliance to stricter system manufacturer specifications**

Double induction hardening: **long lasting profile dimensions**



All the components are made in special forged steel: **robust and safe**

All components are galvanized: **best resistance in time against corrosion**



Constant cross section pivot: **no weak points**

Best Precision Pressing

Thanks to the **jaw synchronization system**, the perfect coupling of the jaws ensured the best dimensional quality in the pressing process.

Pressing profiles are machines with **high precision CNC machines**, and they are tested by **3D coordinate measuring machines**, to ensure the compliance to the stricter specifications by the best system manufacturers in the world.

Each profile is **double induction hardened**, to ensure the best wear resistance and, most important, to keep the profile dimensions over the time.

Plumber safety first: to work without injury risks

All components are first made with **special forged steels**, unlike the competition that sometimes uses molded parts, or more cheap and weak machined components.

The jaws then face a **double induction hardening process** only in the points subject to wear, which ensures an optimum distribution of stresses within the jaw, avoiding breaking risks and ensuring more compact and light parts, to work easier in narrow spaces.

Each jaw is also equipped with **clear and indelible mark** to identify the profile without possibility of error.

Investment value: competitive prices and durability

Each jaw is protected with a **silver gray galvanizing** against the corrosion in the construction site, to make it more resistant and long lasting.

The **jaw pivot** does not have weak points, being of constant section and therefore will last longer.

The **synchronization mechanism** and the double induction hardening ensures an incredibly long pressing profile duration.

MINI Jaws

MCF MINI Jaws are compatible with all the pressfitting tools, excluding REMS, KLAUKE and CBC.

281559	MINI Jaws with profile M 15
281560	MINI Jaws with profile M 18
281561	MINI Jaws with profile M 22
281562	MINI Jaws with profile M 28
281563	MINI Jaws with profile V 15
281564	MINI Jaws with profile V 18
281565	MINI Jaws with profile V 22
281566	MINI Jaws with profile V 28
281551	MINI Jaws with profile TH 16
281552	MINI Jaws with profile TH 20
281553	MINI Jaws with profile TH 26
281554	MINI Jaws with profile TH 32
281555	MINI Jaws with profile U 16
281556	MINI Jaws with profile U 20
281557	MINI Jaws with profile U 25
281558	MINI Jaws with profile U 32

MINI Jaw

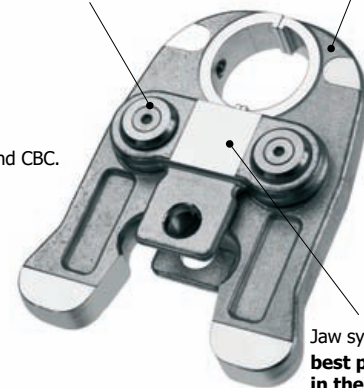
All the components are made in special forged steel: **best power and safety in class**

Double induction hardening: **best duration and precision**



Universal STANDARD Jaw for interchangeable dies

Constant section pivot: **no weak points**



Jaw synchronization system: **best precision coupling in the market, best pressing quality**

MINI and STANDARD Universal Jaws for Dies

MCF Universal MINI Jaws are compatible with all the pressfitting tools, excluding REMS, KLAUKE and CBC.

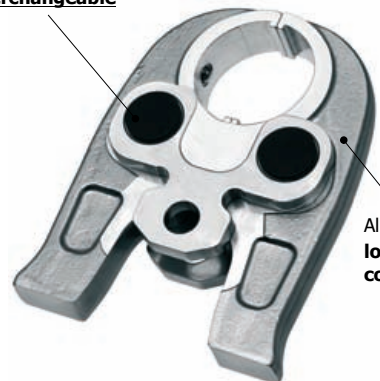
MCF Universal Standard Jaws are compatible with all the pressing tools.

281799	STANDARD Universal Jaw for Interchangeable Dies
281798	MINI Universal Jaw for Interchangeable Dies

Universal Jaws Dies

281726	Universal Jaw Die with profile TH 14
281700	Universal Jaw Die with profile TH 16
281701	Universal Jaw Die with profile TH 20
281702	Universal Jaw Die with profile TH 26
281703	Universal Jaw Die with profile TH 32
281704	Universal Jaw Die with profile M 15
281705	Universal Jaw Die with profile M 18
281706	Universal Jaw Die with profile M 22
281707	Universal Jaw Die with profile M 28
281708	Universal Jaw Die with profile U 16
281709	Universal Jaw Die with profile U 20
281710	Universal Jaw Die with profile U 25
281711	Universal Jaw Die with profile U 32
281727	Universal Jaw Die with profile V 12
281728	Universal Jaw Die with profile V 14
281712	Universal Jaw Die with profile V 15
281729	Universal Jaw Die with profile V 16
281713	Universal Jaw Die with profile V 18
281714	Universal Jaw Die with profile V 22
281715	Universal Jaw Die with profile V 28

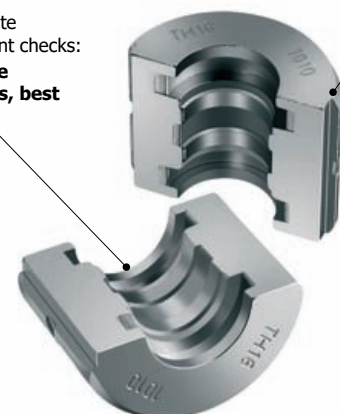
MINI Universal Jaw for interchangeable dies



All parts are galvanized: **long lasting against corrosion**

3D coordinate measurement checks: **best profile dimensions, best quality**

Universal Jaws DIES



MGF Pressfitting Jaws

Full Range and Best Prices!



Standard Jaw
With 2 moving parts

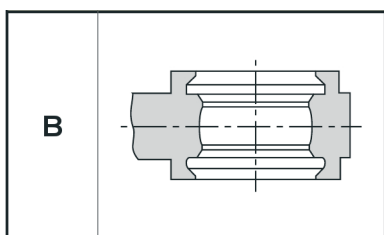


S Type Jaw
With 3 pressing parts (2 mobile + 1 fixed)



4G Type Jaw
With 2 moving parallel segments

BEGETUBE
IVAR
ALPEX - gas
MEGARO
MEGAPRESS
ROGAPRESS
COMISA - Evo Press, System gas



281401	Jaw B 16
281403	Jaw B 20
281404	Jaw B 26
281405	Jaw B 32

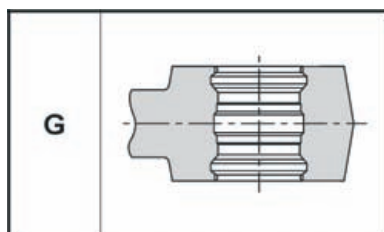
281420	Jaw G 16
281421	Jaw G 20
281422	Jaw G 26
281423	Jaw G 32

281428	Jaw H 12
281429	Jaw H 14
281430	Jaw H 16
281432	Jaw H 18

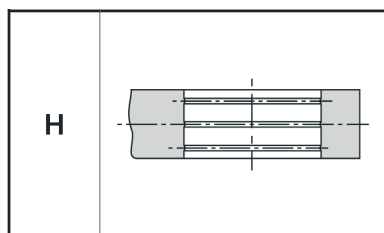
281433	Jaw H 20
281434	Jaw H 25
281435	Jaw H 26
281436	Jaw H 32
281437	Jaw H 40 (4G)

281439	Jaw H 12 A
281440	Jaw H 14 A
281441	Jaw H 16 A
281444	Jaw H 20 A
281446	Jaw H 26 A
281447	Jaw H 32 A
281448	Jaw H 40 A (4G)

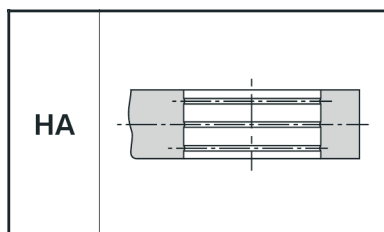
GEBERIT - Mepla



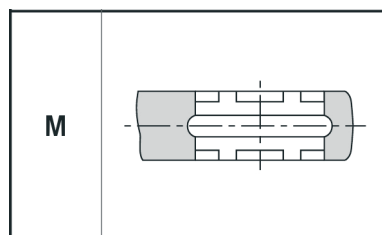
HAKA PRESS
PRANDELLI
VALSIR — Pexal, Pexal gas
BARBI - Easypress (IndustrialBlansol)
BRASSTECH - Aluplast Brasspress
COMISA - Evo Press, System, System gas
FAR RUBINETTERIE — Pressfar
FRABO — Frabopress
OVENTROP — Cofit P



POLYTHERM
POLYFIX
SYSTEM
WIRSBO

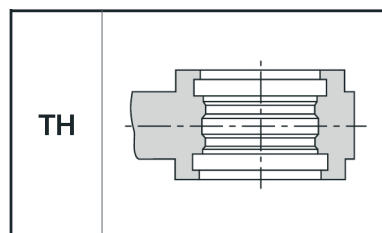


281461	Jaw M 12
281462	Jaw M 14
281463	Jaw M 15
281464	Jaw M 16
281465	Jaw M 18
281466	Jaw M 22
281467	Jaw M 28
281468	Jaw M 35
281469	Jaw M 42 (4G)
281470	Jaw M 54 (4G)



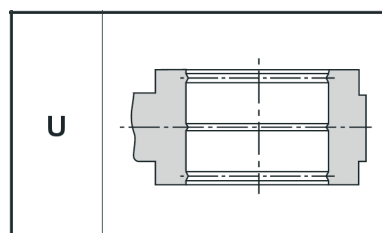
CHIBRO
GEBERIT - Mapress
TIEMME
KISAN
CIMBERIO SPA - Cimpress,
 Cimpress gas
EFFEBI - Preststige
EUROTUBI
GIACOMINI
OTERACCORDI - Oter Tecno, Oter
 Tecno gas
RACCORDERIE METALLICHE - Inox
 Press, Still Press

281489	Jaw TH 10
281491	Jaw TH 12
281492	Jaw TH 14
281493	Jaw TH 15
281494	Jaw TH 16
281495	Jaw TH 17
281496	Jaw TH 18
281497	Jaw TH 20
281498	Jaw TH 25
281500	Jaw TH 26
281501	Jaw TH 32
281502	Jaw TH 40
281503	Jaw TH 50 (S)
281504	Jaw TH 63 (S)



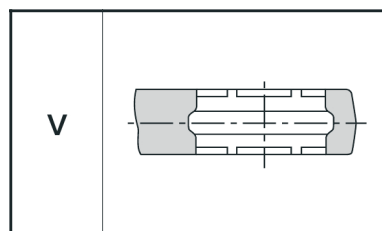
COMAP - SKINPress Visu-Control
DALPEX - Laser Multi Dalpex
GIACOMINI - Giacoflex, Giacoterm
TIEMME - Cobrapress
APE - Raccordi a pressare
BAMPI - Balpex (MP)
BRASSTECH - Aluplast, Brasspress
BUCCHI - tech (MP)
COMISA - Evo Press, System, System gas
EFFEBI - Tof Multipinza
FAR - Rubinetterie Pressfar
FRABO - Frabopress
RBM - Titafix
RUBINETTERIE BRESCIANE

281505	Jaw U 14
281506	Jaw U 16
281507	Jaw U 18
281508	Jaw U 20
281509	Jaw U 25
281510	Jaw U 32
281511	Jaw U 40
281512	Jaw U 50
281513	Jaw U 63 (S)
281514	Jaw U 75 (S)



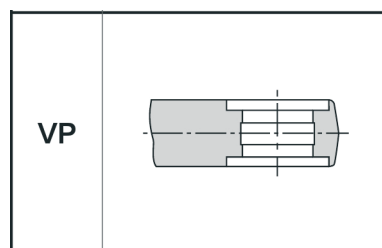
UPONOR - Unipipe
CO.E.S. - Klima
NUPIGECO - Multinupi
APE - Raccordi a pressare
BRASSTECH - Aluplast, Brasspress
FAR - Rubinetterie Pressfar
FRABO - Frabopress
OVENTROP - Cofit P
WAVIN

281521	Jaw V 12
281522	Jaw V 14
281523	Jaw V 15
281524	Jaw V 16
281525	Jaw V 18
281526	Jaw V 22
281527	Jaw V 28
281528	Jaw V 35
281529	Jaw V 42
281530	Jaw V 54



VIEGA
FRABO - Frabopress, Solarpress
CIMBERIO SPA - Cimpress
COMAP - Sudopress Cu, Visu-Control
EFFEBI - Preststige
F.B.Q. BARONIO - BQ press Carbon
 steel
SANHA

281534	Jaw VP 14
281535	Jaw VP 16
281536	Jaw VP 20
281537	Jaw VP 25
281538	Jaw VP 32

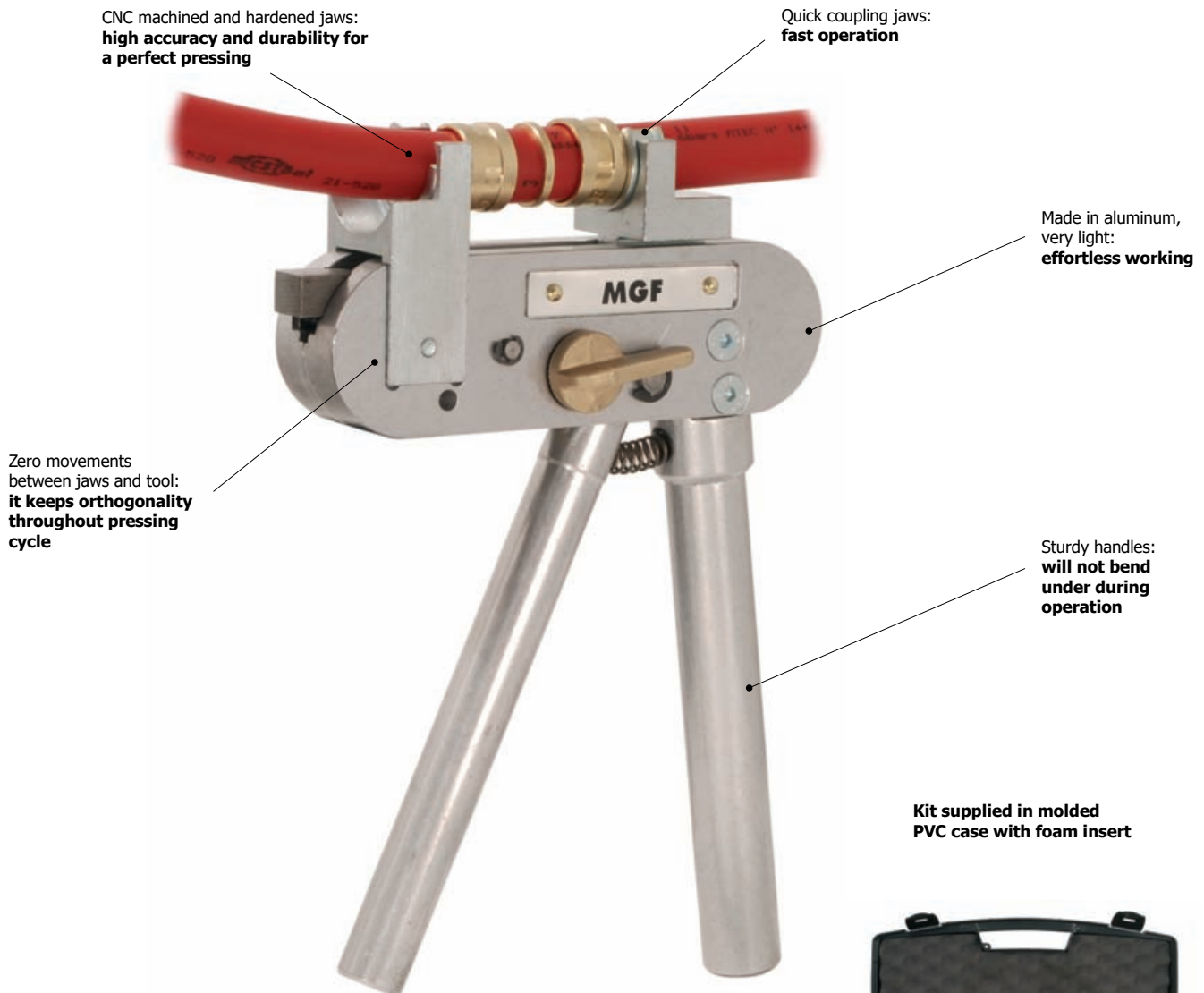


NUSSBAUM
VIEGA

281539	Jaw VUS 1 1/2"
281540	Jaw VUS 1 1/4"
281541	Jaw VUS 1"
281542	Jaw VUS 1/2"
281543	Jaw VUS 2"
281544	Jaw VUS 3/4"
281550	Jaw VUS 3/8"

PressAx

Axial Press Tool for Fittings from 12 to 26 mm



Kit supplied in molded PVC case with foam insert



- ✓ For axial press fittings for heating systems and plumbing systems in PEX and PER
- ✓ For axial pressfittings made by different system manufacturers: COMAP, ISOLTUBEX, MAXITUB, ROTEX, TECE, THISA, VELTA...
- ✓ Compact and sturdy, oversized, zinc-plated components resistant to oxidation
- ✓ Lightweight and easy to handle, made with aluminum alloys
- ✓ Quick coupling system for fast jaws replacement

Art.	Description
900990	PressAx Box with adapters
9009XX-PM	PressAx (only machine)
430052	Ø 12 mm Die for PressAx
430053	Ø 16 mm Die for PressAx
430054	Ø 20 mm Die for PressAx
430055	Elbow adapter for PressAx
430056	Tee adapter for PressAx
922699	CLASSIC 42 cutting tool

Technical Features

Weight	1,5 Kg
Size	390 x 318 x 1114 mm
Box	Plastic case with foam insert
Thrust Power	2700 N

Box Content

- Pressing Tool
- Full Dies Range: Ø12mm, Ø16mm, Ø20mm, Elbow adapter, TEE adapter
- Service Allen Key
- Classic Shear 42mm
- Molded PVC case with foam insert

Maintenance

"One day the machines will be able to solve all the problems, but none of them will pose one."

Albert Einstein (1879-1955)

BLITZ Unclogging Air Compressor

The Plumber Drain Clearing Compressor

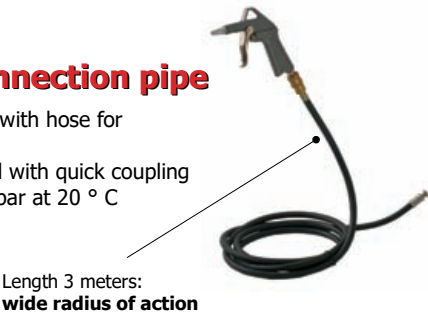
205
L/min:
powerful



- ✓ It unclogs drains from Ø 21 mm to Ø 170 mm
- ✓ It can test for pressure leaks up to 8 bar any kind of pipeline or vessel, without introducing oil (oilless compressor)
- ✓ It fills expansion tanks and membrane tanks in general
- ✓ It cleans through air blow
- ✓ Thanks to the pressure control it is suitable for tyre inflation, spray painting with paint spraygun, use of small pneumatic tools

Air Blow Gun with quick connection pipe

Aluminum air blow gun with hose for compressed air.
The rubber pipe is fitted with quick coupling
and can reach up to 18bar at 20 ° C



Technical Features

Weight	15 Kg
Dimensions	185 x 420 x 480 mm
Max pressure	8 bar
Air connection	1/4"
Tank	4,2 L
Air Suction	205 L/min
Supply	230 V ~ 50 Hz
Power	1100 W
Protection	IP23

Art.	Model
904500	BLITZ Unclogging Air Compressor
904540	Air Blow Gun with quick connection pipe

Professional Unclogging Pump

Multifunctional to Unclog Drains, Test, Inflate...



- ✓ Powerful drains unclogging from Ø 21 to Ø 170 mm
- ✓ Pressure test with only air up to 8 bar
- ✓ Test water systems without filling them
- ✓ Inflates expansion tanks and membrane tanks as well
- ✓ Perfect for tyre inflation as well
- ✓ Full optional supply with air pipe and adapters

Technical Features

Weight	8 Kg
Dimensions	260 x 120 x 570 mm
Max Pressure	8 bar
Max Air Flow	125 cc/stroke
Air Connection Adapter	1/4"
Tank Capacity	3,1 L

Available Models

Art.	Model	Optionals Included
904100	Unclogging Pump	A adapters Ø65, 100, 170 mm + hose
904101	Unclogging Pump LT	A adapter Ø65 mm + hose
904105	Unclogging Pump XLT	A adapter Ø65 mm

Spare Parts

Art.	Model	Use
251134	Plug Ø170	WC Unclogging
251135	Plug Ø100	Drains Unclogging
301484	Hose with quick connector and 1/4" fitting	Testing or Inflating

Multifunction Portable Water Jetter

Maintenance

Carry-on system:
light and handy

Made in
Italy

Water jet pressure regulation:
suitable for heat exchanger and
radiators cleaning

Hot water pumping up to
60°C: deeper cleaning

Full Optional Standard
Equipment (art.905300)

Lance with jet regulator:
smooth pressure cleaner
for heat exchanger

Gun Lance
Extension

Gun

Professional piston pumping:
top in class pressure
(120 bar) and flow rate
(420 l/h)

Drain Unclogging Water Jetter with 10m
hose: powerful portable unclogging

Chemical Kit: deep cleaning with
chemicals and water jet

Unclogging water jetter with
extra flexible hose:
overstep 45° and 90°
elbows

More than cleaning...

1. Unclogging

Drain unclogging water jetter with
powerful front and back water jets
allows clean and ecological drain
unclogging: **CleanMatic is a
professional portable water
jetter for plumbers.**

2. Clean with Chemicals

On all models is possible to dose
chemicals directly on the lance by
the red knob. Differently from
other machines with chemical inlet
on the pump, it's possible to use
acids without damaging the pump
internally.

3. Smooth Cleaning

The water jet power can be
continuously adjusted accordingly
to the needs, avoiding any
damage, from 0 to 120 bar.
**All the power you need, only
when you need it.**
This function is perfect for heat
exchanger cleaning.

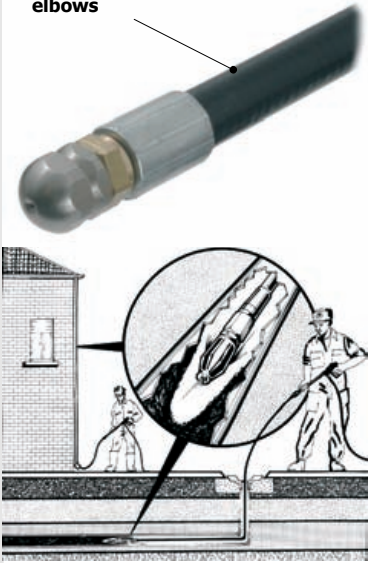
Starting from left to right::

- Chemical Kit (970053)
- Pressure regulating on the
top of the lance

Technical Features

Weight	12,8 Kg
Dimensions	200 x 440 x 320 mm
Max Pressure	90 bar (120 max)
Max Temperature	60°C
Max Flow	7 L/min (420 l/h)
Lance Hose Length	7 m
Unclogging Water Jetter Hose	10 m
Power	1750 W
Voltage	230 VAC ~ 50 Hz
Service Class	S1
Insulation Category	IPX5
Tank Capacity	4,2 L

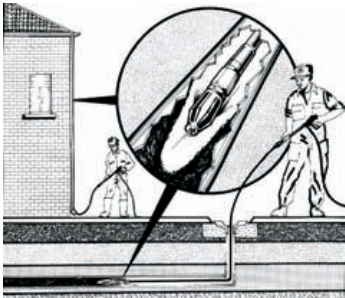
Art.	Model
905300	Cleanmatic Multifunction Portable Water Jetter (with 10m water jetter, chemical kit, high pressure gun and lance with extension)
905400	Cleanmatic LT Multifunction Portable Pressure Cleaner (with chemical kit, high pressure gun and lance with extension)
970061	Water jetter with 10 m flexible hose
970053	Chemical Kit
970500	Lance 400 mm
970506	Lance Extension 300 mm
970501	High Pressure Gun with 7m hose
970582	Water Jetter Nozzle 1/8"F spare



Professional Water Jetter - Unclogging Machine



Example of the unclogging water jetter pipe in action. Thanks to the front and rear jets on the nozzle, the pipe moves along the drain.



Technical Features

Art.	Model	Capacity	Max Press.	rpm	Power	Tension	Phases	Pipe	Weight
905350	CleanPower 10/170	10 L/min	170 bar	2800	2,65 KW	230V~	Monophase	30m	34,0 Kg
905351	CleanPower 15/260	15 L/min	260 bar	2800	5 KW	400V~	Threephase	50m	44,5 Kg

Product Advantages

- Pump with ceramic pistons, crankshafts mechanism and brass head, **for maximum duration and resistance**
- Wheeled machine with chemical products tank, **easy to carry**
- Low-pressure position for gentle water jet (i.e. heat exchangers cleaning), **perfect for all plumbing tasks**
- Washing gun lance and adjustable water jet, **full optional**
- Unclogging water jetter pipe diameter 3/8", it can move along 90° elbows in pipes from 1/2" size

Spare Parts

Art.	Model
970134	Hose Reel (included)
970135	Lance + Cleaning gun + 8m pipe included in 10/170
970136	Lance + Cleaning gun + 8m pipe included in 15/260
970582	Nozzle for unclogging water jetter pipe 1/8" F (standard)
790051	Oil for MGF pump in tank 5L

Maxi Descaling Pump



- ✓ Limescale descaling pump for cleaning boilers, circuits, water heaters, instantaneous coils, water heaters ...
- ✓ Equipped with a large tank, easy to clean and perfect for descaling big heating systems
- ✓ Product with special impeller pump suitable for acid media
- ✓ Professional Plumbing Tool

Art.	Model	Box
939990	Maxi descaling pump	1
939996	Concentrated Descaling Acid (10 Kg Tank)	1
939997	Non Fuming Descaling Acid (10 Kg Tank)	1

Technical Features

Weight	9 Kg
Dimensions	350 x 350 x 500 mm
Max flow	56 L/min
Power	220 W
Max head – Pump pressure	10 m – 1 bar
Tank capacity	19 L
Connections	1/2" F
Power Supply	230 V ~ 50 Hz
Current	1 A
Sound pressure	70dBA
Max functioning temperature	35 °C
Category	S1
Insulation category	IP55

Mini Descaling Pump



- ✓ Descaling pump to eliminate effectively the limestone deposits inside boilers, heat exchangers, pipes....
- ✓ Membrane pump: **higher head and resistance to dirty fluids**
- ✓ Professional descaling machine

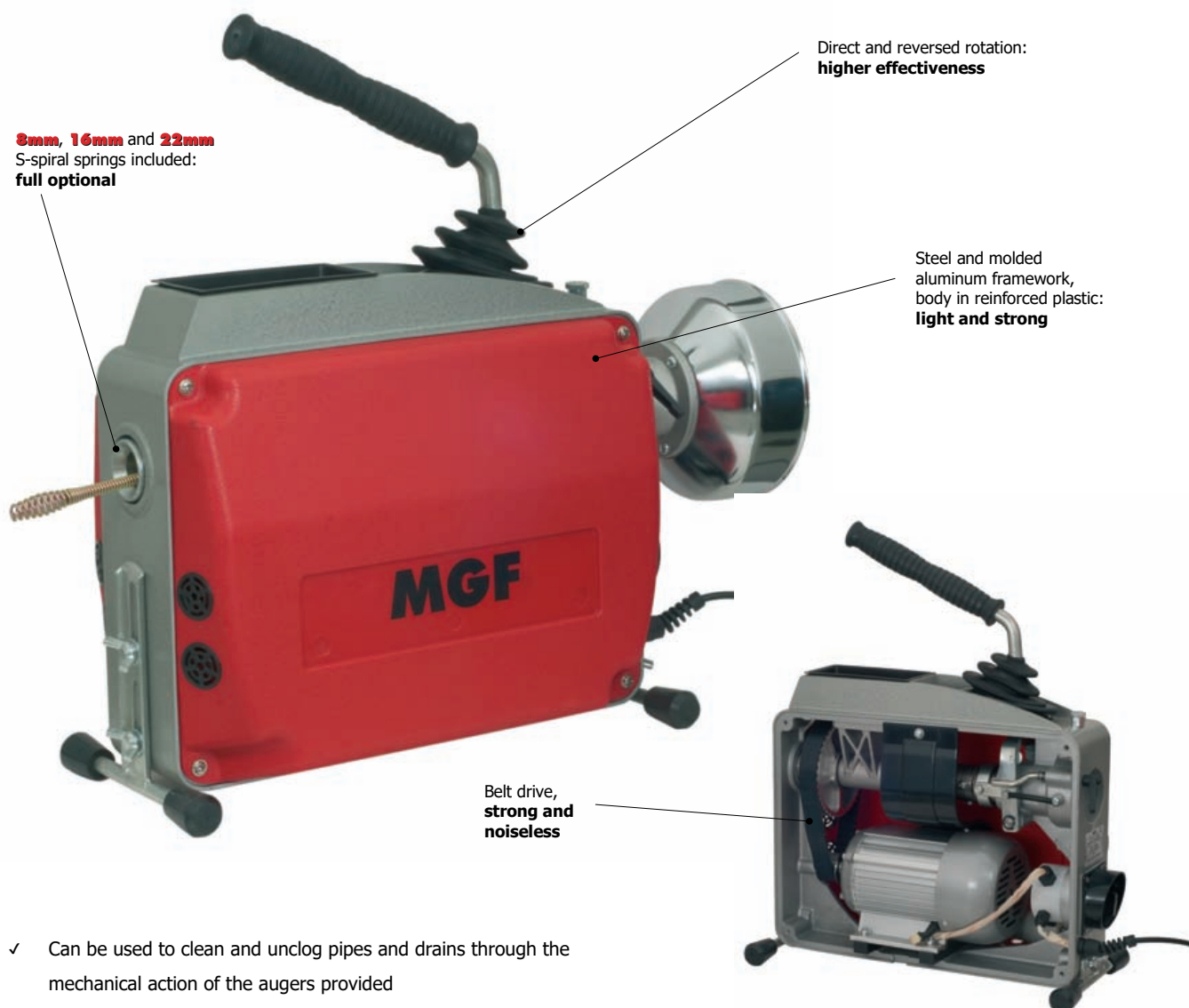
Art.	Model	Box
939991	Mini Descaling Pump	1
939996	Concentrated Descaling Acid (10 Kg tank)	1
939997	Non Fuming Descaling Acid (10 Kg tank)	1

Technical Features

Weight	3,5 Kg
Size	350 x 270 x 170 mm
Max flow rate	8 L/min
Pump head	34 m
Tank capacity	3,5 L
Connections	1/2"F with 90° elbow
Power Supply	230 V ~ 50 Hz
Current	1 A
Power	250 W
Sound pressure	70 dBA
Protection	IP55

MDM 150

Spring Drain Cleaning and Unclogging Machine



- ✓ Can be used to clean and unclog pipes and drains through the mechanical action of the augers provided
- ✓ The complete range of augers tools provided allows to solve any problem of drain clogging
- ✓ Light and handy, thanks to the quick connector of the augers, it allows to operate quickly and easily, transmitting high torque to the augers

Art.	Description
904199	MDM150 (Machine with augers, cables and all spares)
904199.M	MDM150 (Only machine)
300012	Protection pipe for MDM 1,5 m (<i>not included</i>)
209000	Spring 6pz. x 2,5m Ø16mm with drum
209002	Spring 3pz. x 5m Ø22mm with drum
209004	Spring 1pz. x 6m Ø8mm without drum
925950	Work gloves
295009	Spanner

Technical Features

Machine

Weight: 16 Kg (42,2 Kg with tools)
Dimensions: 195 x 370 x 380 mm

Engine

Input Power: 370 W
Rotate Speed: 400 rpm
Voltage: 230VAC / 50Hz
Protection Class: IP44

Working scope

Pipes: Ø 20 – 150 mm
Max length: 30 m

Provided

Springs: Ø 8 mm (209004), Ø 16 mm (209000) and Ø 22 mm (209002)
Augers: 5 spirals (295000, 295001, 295002, 295003, 295004), 3 lances (295005, 295006, 295007)
Tools Included: gloves (925950) and spanners (295009)

MDM 100

Spring Drain Clearing and Unclogging Machine



- ✓ Can be used to clean and unclog drains and pipes in general through the mechanical action of the augers tools provided
- ✓ The complete range of augers tools allows to solve any problem of drain clogging
- ✓ Light and handy, thanks to the quick connection of the augers, it allows quick and clean way unclogging, while transmitting high torque to the auger

Art.	Description
904198	MDM100 (Machine with augers, spirals, tools...)
904198.M	MDM 100 (Only machine)
300012	Protection pipe for MDM 1,5 m (<i>not included</i>)
209000	Spring 6pz. x 2,5m Ø 16mm with drum
925950	Work gloves
295009	Spanner

Technical Features

Machine	
Weight	12 Kg (22 Kg with tools)
Dimensions	195 x 360 x 340 mm
Engine	
Power	250 W
Rotation	400 RPM
Tension	230 VAC / 50 Hz
Working scope	
Pipes	Ø 32 - 100 mm
Max length	30 m
Provided	
Springs	Ø 16 mm (209000)
Augers	2 spirals (295000, 295004) and 2 lances (295005, 295008)
Tools Included	gloves (925950) and spanner (295009)

Drains Cleaning Augers and Cutters



Straight Drain Cleaning Auger Ø16mm

Used to realize the clogging media, through the extraction of obstructing material.

Diameter	16 mm
Length	135 mm

Art.	Description	Weight
295000	Straight Drain Cleaning Auger Ø 16 mm	0,075 Kg



Straight Auger with Hook Ø 22 mm

Used to hook fibrous clogging materials (tissues, clothes etc.) and extract them from the drain.

Diameter	22 mm
Length	190 mm

Art.	Description	Weight
295001	Straight Auger with Hook Ø 22 mm	0,165 Kg



Funnel-shaped Auger Ø 22 mm

Its conical shape allows to eliminate soft ground clogging, tissues or paper. Also useful to retrieve augers lost in pipes.

Diameter	22 mm
Length	140 mm

Art.	Description	Weight
295002	Funnel-shaped Auger Ø 22 mm	0,165 Kg



Dual Bulb Unclogging Auger Ø16mm

Used to unclog narrow or curved pipes

Diameter	16 mm
Length	130 mm

Art.	Description	Weight
295003	Dual Bulb Unclogging Auger Ø 16 mm	0,095 Kg



Straight Auger with Hook 16 mm

Used to hook fibrous residues (textile, tissues... etc...) and extract them from the drain.

Diameter	16 mm
Length	135 mm

Art.	Description	Weight
295004	Straight Auger with Hook Ø 16 mm	0,055 Kg



4 Blade Spade Cutter Ø 16 mm

Ideal for muddy clogging or wastes with similar consistency.

Diameter	16 mm
Length	35 mm

Art.	Description	Weight
295005	4 Blade Spade Cutter Ø 16 mm	0,035 Kg

Drains Unclogging Augers and Cutters

Drain Cleaning Spade Cutter Ø 22 mm

Ideal for muddy clogging or materials of similar consistency.

Diameter	22 mm
Length	57 mm

Art.	Description	Weight
295006	Drain Cleaning Spade Cutter Ø 22 mm	0,060 Kg



4 Blades Spade Cutter Ø 22 mm

Ideal for muddy clogging or similar consistency materials.

Diameter	22 mm
Length	65 mm

Art.	Description	Weight
295007	4 Blades Spade Cutter Ø 22 mm	0,100 Kg



Drain Unclogging Spade Cutter Ø 16 mm

Ideal for muddy clogging or similar consistency materials.

Diameter	16 mm
Length	37 mm

Art.	Description	Weight
295008	Drain Unclogging Spade Cutter Ø 16 mm	0,025 Kg



Cables & Spirals Springs for Unclogging Machines

Technical Features

- Cables and Spiral Springs made in high quality steel
- Each cable is protected by a particular anti corrosion treatment
- Quick connection system, to mount the auger and to extend the cable
- The cable connection system ensures an high efficiency torque transmission
- Each drain cleaning cable is supplied on a drum, suitable for cleaning and carrying

Art.	Description	Pack	Weight
209004	Ø8mm Drain Cleaning Cable 6m	1 x 6 m	0,5 Kg
209000	Ø16mm Cable with Drum	6 x 2,5 m	7,7 Kg
209001	Ø16mm Drain Cleaning Cable 2,5m	1 x 2,5 m	1,2 Kg
209002	Ø22mm Cable with Drum	3 x 5 m	10,0 Kg
209003	Ø22mm Drain Cleaning Cable 5m	1 x 2,5 m	2,0 Kg



MDM 50B

Battery Sink Machine



Ergonomic handle:
easy to use

Equipped with a 8mm
cable 10,7m long:
best in class

Aluminum spindle with
automatic feed:
**advances & retrieves cable
with push of a button**

Supplied with a sturdy
steel box epoxy painted:
clean and robust

With a spare battery included:
**extra value and time
saving**

- ✓ Excellent for small line cleaning. Opens clogged lavatory, sinks, urinals and tub or shower drains from Ø20 to Ø65mm
- ✓ Equipped with 8mm cable with core for a better torque transmission
- ✓ Plastic drum, light and easy to clean
- ✓ Adjustable speed up to 600 rpm
- ✓ Auto feeding system, advances and retrieves the cable at high speed, up to 5m/min
- ✓ Powerful 14,4VDC battery motor, with 20Nm torque power
- ✓ **Standard Equipment:**
 - ✓ Battery Sink Machine
 - ✓ 2 Rechargeable batteries with fast charger
 - ✓ Epoxy painted metal box

Technical Features

Cable Diameter	8 mm
Cable Length	10,7 m
Motor Voltage	14,4 VDC
Max Torque	20 Nm
Speed	adjustable up to 600 rpm
Pipe Diameter	from Ø20 to Ø65mm
Cable Feeding Speed	up to 5m/min
Quick Battery Charger	included
Battery	1,3 Ah
Spare Battery	included
Box	Epoxy painted steel
Size	560 x 270 x 290 mm

Art.	Description	Weight
904192	MDM 50B – Battery Sink Machine	9,6 kg

MDM 50

Electric Sink Machine



Painted steel carrying case:
easy to transport



Excellent for clogged drains



On the field example



- ✓ Professional tool for unclogging drains in WC, lavatories, showers...
- ✓ **8mm** cable, **10,7m** long, **the best in class**
- ✓ Spring with reinforced core, for a better torque transmission.
- ✓ Working range: inner diameter pipe 20-65mm
- ✓ Useful metal carrying box included
- ✓ Powerful universal motor with electronic speed control
- ✓ **Supplied with:**
 - Electric sink machine
 - Carrying case

Technical Features

Cable Diameter	8 mm
Cable Length	10,7 m
Power Supply	230V - 50Hz
Motor Power	800 W
Spindle Speed	0-600 rpm
Feeding Speed	0-5 m/min
Size	560 x 270 x 290 mm
Weight	9,6 Kg
Carrying Case	painted steel, included

Art.	Model	Weight
904191	MDM 50 Electric Sink Machine	9,6 Kg

PUSH-UP Drain Cleaning Pump

Adjustable handle (rotation + longitudinal translation):
flexible in all situations



Supplied with 3 sleeves long, short and drain sucker:
excellent for every drain

PUSH-UP Drain Cleaning Pump

- Unclogs obstructions in basin, shower, tub and toilet drains etc... using water pressure
- Special piston with a push-pull system for easier unblocking
- Made in composite material, strong and easy to clean
- Supplied with 3 sleeves, **best in class**, for basins, WC and drain sucker sleeve
- Suction and pressure unclogging technique

Art.	Model	Weight
904150	PUSH-UP Drain Cleaning Pump	1,7 Kg
904150T	PUSH-UP 3 Sleeves Set	0,5 Kg

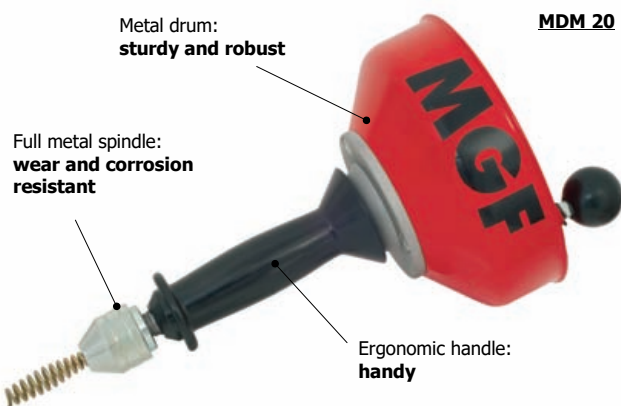
Drain sucker sleeve example



Long sleeve example



MDM 20 and MDM 25 Hand Spinners

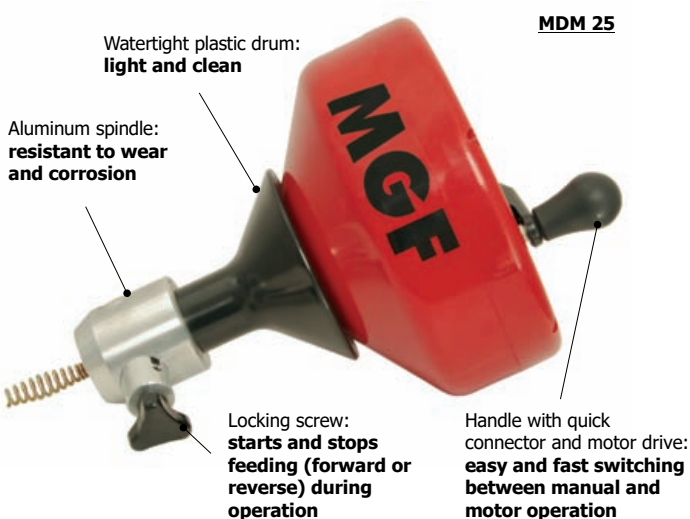


Metal drum:
sturdy and robust

MDM 20

Full metal spindle:
wear and corrosion resistant

Ergonomic handle:
handy



Watertight plastic drum:
light and clean

MDM 25

Aluminum spindle:
resistant to wear and corrosion

Locking screw:
starts and stops feeding (forward or reverse) during operation

Handle with quick connector and motor drive:
easy and fast switching between manual and motor operation

MDM20 and MDM25 Hand Spinners

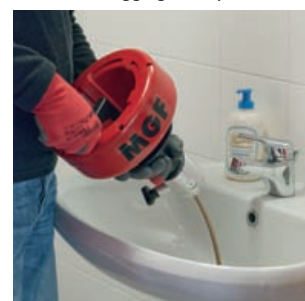
- Cheap unclogging device for basin, showers, tub drains...
- Can be used with a power drill by hexagonal connector on the drum (**only MDM 25**)
- MDM25: 8mm cable 10.7m long, **best in class**
- MDM 20: 8mm cable x 7,5m long, with metal drum and spindle
- Pipe diameter 20-65mm

Art.	Model	Weight
904180	MDM 20 Hand Spinner for Unclogging	3,5 Kg
904190	MDM 25 Hand Spinner for Unclogging	6 Kg
904190M	MDM 25 Cable with Auger	1 Kg
904180M	MDM 20 Cable with Auger	1 Kg

Shower drain cleaning example



Basin unclogging example



Solar Express

Electric Filling and Flushing Pump

Widest filling opening (210mm), best in class: compare **MGF** with competitors, and choose the best!

Each pump is supplied equipped with 2 pipes 3m long, resistant to 10 bar and 80°C (H.T.), in accordance with ISO R1307: avoid **spilling chemicals with cheap pipes inadequate for high temperatures!**



All components withstand a temperature of at least 80°C: it can be used in summer with solar panels

Excellent resistance to solutions with pH>6,5 and pH<9: **best working range on the market**

Big filter withstanding to high temperatures (as all other parts): details often distinguish a professional product from the "misleading advertising"

Easy to reach switch: handy

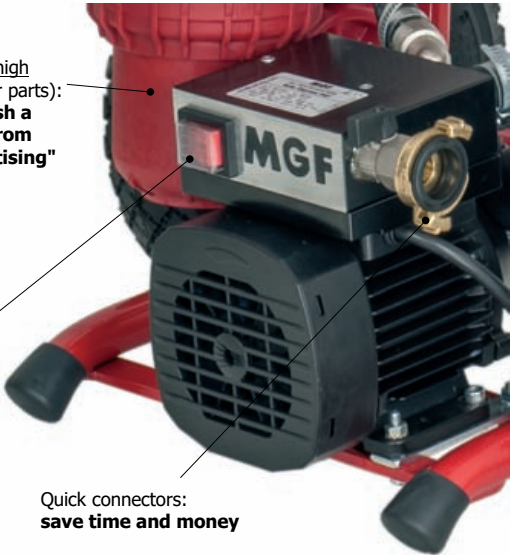
Quick connectors: save time and money

EXPRESS
Best in Class!

Transport hooks: safer on the van

50 liters tank with filling indicator and table for dilution: **professional product for flushing and filling**

It weighs only 21 Kg and with pneumatic wheels: **born for the building site, the most imitated**



Technical Features

Dimensions	1000x450x500 mm
Max Flow	40 L/min
Max Pressure	4 bar
Pump Head	40 m
Tank Capacity	50 L
Water Connection	3/4"
Power Supply	230V - 50 Hz
Current	2,6 A
Power	250W
Sound Pressure	70 dBA
Insulation Class	IP44

Art.	Model	Weight
905149	Solar Express	21 kg
305150	SOLAR 3m 10bar 80°C Pipe (Black)	1,2 kg

Solar System

Multifunction Flushing and Filling Machine

Large opening (210mm):
easy to fill and clean, the top on the market!

50-liter tank:
greater capacity for mixing chemicals and for foams, the top on the market!

Round section tank with reinforcements:
will not strain when it is full of hot liquid

Flexible transparent pipe with rigid reinforcement:
easy to see the air bubbles and the hose is not squeezed

For liquid solutions with pH>6.5 and pH<9:
the widest working range

Inlet quick connection fitting:
excellent for decanting from external reservoirs and to empty a system

Additional outlet with quick connection fitting:
for parallel flushing or for emptying a pipeline

Technical
UNI-CTI
8065
Regulations

Van transport hooks:
safer

Resistant up to 80 °C:
excellent to circulate water in summer without shading the solar panels

Each pump is supplied equipped with 2 pipes 3m long, resistant to 10 bar and 80°C (H.T.), in accordance with ISO R1307:
avoid spilling chemicals with cheap pipes inadequate for high temperatures!

It weighs only 21 Kg and with pneumatic wheels:
born for the building site, the most imitated

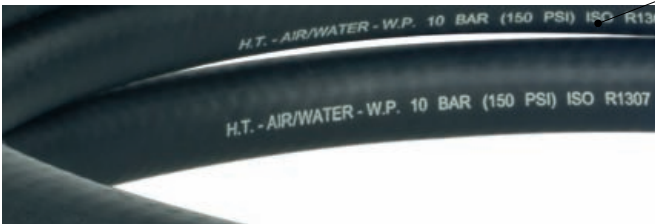


Technical Features

Size	1000 x 450 x 500 mm
Max Flow Rate	50 L/min
Max Pressure	5,2 bar
Max Pump Head	52 m
Tank Capacity	50 L
Pipe Fittings	3/4" F
Power Supply	230V - 50 Hz
Power	500W
Current	3,7A
Sound pressure	70 dBA
Protection Rating	IP55

Art.	Model	Weight
905150	Solar System	23 kg
305150	SOLAR 3m 10bar 80°C Pipe (Black)	1,2 Kg

Technical Advantages



Mixing calculations ruler and level indicator: **mix the chemicals in the desired concentration and without calculations**



5 reasons MGF why is the best choice:

- 1) **CAD engineered frame with FEM method** (Finite Element Method) numeric technique adopted in aerospace and motors engineering to optimize forces and loads. Thanks to this method, the frame is reinforced only where necessary, thus MGF pumps are the lighter pumps in the market, ensuring the higher loading capacity.
- 2) **Pneumatic wheels** improve the handling capacity in building sites, yards and over stairs against small wheels. Nowadays the pneumatic wheels are a standard for best machines in the market.
- 3) **Quick connectors and ergonomy:** because time is money, every flushing shall be as fast as we can, and without mistakes.
- 4) **Out of the box high temperature compliance.** All the parts in MGF pumps are made to withstand high temperatures: pipes, pumps, filters, tank... Avoid spilling chemicals with cheap pumps inadequate for high temperatures!
- 5) **Mixing calculations ruler and level indicator.** Thanks to this simple system you can mix the chemicals in the desired concentration and without calculations or account for the amount of liquid filled in the circuit.

Each pump is supplied equipped with 2 pipes 3m long, resistant to 10 bar and 80°C (H.T.), in accordance with ISO R1307: **avoid spilling chemicals with cheap pipes inadequate for high temperatures!**

Syphon in the tank return inlet: **avoid foam generation**



Art.	Model
905175	12 bar Pressure Gauge for Solar and Tsunami Flushing Pump
810074	Filter for SOLAR and TSUNAMI Flushing Pump
810075	Valve + Gasket Kit for SOLAR and TSUNAMI Flushing Pumps



TSUNAMI – Flushing Pump

Best in class Flushing Power

Maintenance

THE PHYSICS BEHIND AN EXCELLENT FLUSHING

The **turbulent flow** of the flushing solution in the pipe exerts a mechanical action and accelerates the chemical reactions by mixing.

To reach the speed necessary to generate fluid turbulence is thus fundamental a **high flow rate**, for a small installation recommend at least 40L / min, preferable 60 L / min or more.

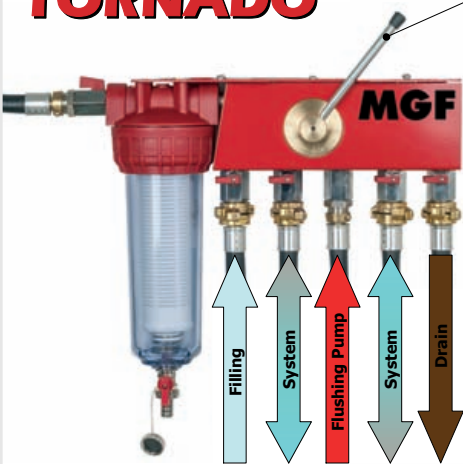
In case of bottlenecks generated by sludge to be flushed it is important to **reverse the flow direction** and especially **higher pressure** to contrast the pressure drop.

Each pump is supplied equipped with 2 pipes 3m long, resistant to 10 bar and 80°C (H.T.), in accordance with ISO R1307: **avoid spilling chemicals with cheap pipes inadequate for high temperatures!**



Brass backflow valve for deeper flushing

TORNADO



TORNADO & TSUNAMI is the best flushing system in the world.

With black pipes included!

Operating the valves only, without disconnecting pipes, you can perform all of the flushing tasks:

- 1) Drain the system sludge
- 2) Mix chemicals
- 3) Effectively flush with the flow inverter
- 4) Self-clean the 9" filter
- 5) Rinse pipes with the pump
- 6) Rinse pipes without the pump
- 7) Fill the system with water or chemicals
- 8) Purge air from the circuit

MGF TECHNOLOGY ADVANTAGES

- ✓ No more fluids on the floor
- ✓ Uninterrupted flushing
- ✓ Never again clogged filters
- ✓ No more cavitating pumps
- ✓ No aluminum flow inverter oxidized or blocked
- ✓ No more uncomfortable trolleys



Technical Features

Dimensions (mm)	1000 x 450 x 500		
Flow Rate (L/min)	60	70	95
Max Pressure (bar)	7	8	9
Max Pump Head (m)	70	80	90
Power (KW)	0,75	1,1	1,5
Tank Capacity	50 L		
Pipe Fittings	3/4"F		
Power Supply	230V - 50 Hz		
Pressure Level	70 dBA		
Protection Rating	IP55		

Art.	Model	Peso
905153	TSUNAMI 60/7 Flushing Pump	25,0 Kg
905151	TSUNAMI 60/7 Flushing Pump	30,0 Kg
905154	TSUNAMI 95/9 Flushing Pump	30,0 Kg
905155	TORNADO – Flushing Unit	5,2 Kg
305150	Pipe 3m 10bar 80°C ISO R1307	1,2 Kg

1. Flushing Chemicals for Central Heating

Flushing Chemical for NEW SYSTEMS

Flushing chemical to be used before starting up the new central heatings. Prevents corrosion, keeps high efficiency and reduces energy consumption during time.

Ph 8 / 8,5

Recommended Dilution from 1% to 2%

Use Circulate at maximum flow rate with a **MGF** pump, inverting flow direction, for at least one hour. At the end, rinse the system until water is perfectly clean.

Flushing Chemical for SLUDGES

Dissolves sludge, metal oxides and suspends limestone.

It also exerts an anti corrosive action and prevents the subsequent deposits formation.

Ph $10,5 \pm 0,5$

Recommended Dilution from 2% to 3%

Use With central heating circulation pump for 15-20 days. At the end, flush and rinse the system using a **MGF** pump at maximum flow rate with clean water.

Flushing Chemical with SANITIZER and BIOCIDES

It removes algae, bacteria and viruses from heating and cooling systems circuit. Wide spectrum biocide.

Ph $3,2 \pm 0,05$

Recommended Dilution from 1% to 1,5%

Use Circulate at maximum flow rate with a **MGF** pump, inverting flow direction, for at least one hour. At the end, rinse the system until water is perfectly clean.



Art. 791012

Art. 939950

Art. 939955

Art.	Model	Kg	Pack
791011	Flushing Chemical for NEW SYSTEMS 1L	0,80	12
791012	Flushing Chemical for NEW SYSTEMS 5L	4,80	4
939950.1	Flushing Chemical for SLUDGES 1L	1,21	12
939950	Flushing Chemical for SLUDGES 5L	5,57	4
939955.1	Flushing Chemical w/SANITIZER and BIOCIDES 1L	1,23	12
939955	Flushing Chemical w/SANITIZER and BIOCIDES 5L	5,00	4

2. Chemicals for Central Heating Protection

ANTIFREEZE Heat Transfer Liquid

Top quality permanent antifreeze based on MonoPropylene Glycol, not harmful for humans. Recommended for solar panels.

Ph 9,7

Recommended Dilution from 12% to 50%

Use Circulate at maximum flow rate with **MGF** pumps until air inside the system is completely purged.

CORROSION INHIBITOR

Corrosion inhibitor for heating and cooling circuits, to be used in case of insufficient passivation on the metal parts, thus there is a real risk of corrosion.

Recommended Dilution from 3% to 5%

Use Circulate with **MGF** pump in addition to the glycol, to the maximum flow rate, so that the induced turbulence can homogenize the solution obtained.



Art. 939951

Art.	Model	Weight	Pack
939951	ANTIFREEZE Heat Transfer Liquid 10L	10,05 Kg	1
791028.1	CORROSION INHIBITOR 1L	1,0 Kg	12
791028	CORROSION INHIBITOR 5L	5,2 Kg	4



Art. 939954



Art. 939956

Inhibitor against LIMESCALE and CORROSION

It produces a thin film on the walls of the tubes, preventing chemical reactions between metals and eliminating thermal and gas strains.

Ph 12,5

Recommended Dilution from 1% to 2%

Use After system flushing, mix with top quality antifreeze products (monopropylene glycol). Mix and fill the system with a **MGF** high performance pump.

Preventing BIOCID

It prevents the formation of bacteria and algae in air conditioning and central heating circuits.

Ph 7

Recommended Dilution 2,5%

Use After system flushing, mix with top quality antifreeze products (monopropylene glycol). Mix and fill the system with a **MGF** high performance pump.

Art.	Model	Weight	Pack
939954	Inhibitor against LIMESCALE and CORROSION 5L	5,2 Kg	4
939954.1	Inhibitor against LIMESCALE and CORROSION 1L	1,0 Kg	12
939956	Preventing BIOCID 5L	5,0 Kg	4

Leaks Detection and Sealing



Art. 938073 - 938074



Art. 939956

Liquid LEAKS DETECTOR for Gas Systems

A small amount of liquid detects the leak by forming bubbles, even at low pressures.

Equipped with straw for reaching difficult points.

Can 400 mL

Foam LEAKS DETECTOR for Gas Systems

Persistent foam that detects the leak by forming bubbles, even at low pressures.

Equipped with straw for reaching difficult points.

Can 400 mL

Central Heating SEALANT

Leaks sealant to eliminate leaks from central heating systems, with different codes according to the maximum leak sealable.

Tank 1L - 5L

Art.	Model	Kg	Pack
938074	Liquid LEAKS DETECTOR 400mL	0,50	12
938073	Foam LEAKS DETECTOR 400mL	0,50	12
791045	Central Heating LEAKS SEALANT up to 10L/day (1L)	1,00	6
791046	Cent. Heat. LEAKS SEALANT from 10 to 30L/day (1L)	1,00	6
791047	Centr. Heat. LEAKS SEALANT from 30 to 400L/day (5L)	5,00	4
791048	Centr. Heat. LEAKS SEALANT from 400 to 1000L/day (5L)	5,00	4

Combustion Chamber Cleaner

Combustion Chamber CLEANER

Removes soot and deposits from boilers combustion chambers (flue gas side). It improves the efficiency of the boiler.
To remove residuals is necessary restarting the boiler.

Recommended Dilution undiluted
Ph 12,0 ± 0,2



Art. 791022 and Art. 791023

Art.	Model	Weight	Pack
791022	Combustion Chambers Cleaner 5Kg	5 Kg	4
791023	Combustion Chamber Cleaner 10Kg	10 Kg	1

Descaling Acids – Only for Descaling Pumps

Non Fuming Descaling Acid

Dissolves limestone, oxides and does not corrode the metal pipe.
Inhibited against corrosion, with a change in color. It does not generate fumes.

Recommended Dilution from 10% to 30%
Color red (orange when ineffective)
Ph at 1% 1,6 / 1,9
Use Circulate with MINI or MAXI **MGF** descaling pump, wearing appropriate protective equipment. After treatment it is recommended to neutralize with acid neutralizer.

Concentrated Acid Descaler

Dissolves limestone, oxides and does not corrode the metal pipe.
Inhibited against corrosion, with a change in color.

Recommended Dilution from 10% to 30%
Color red (orange when ineffective)
Ph at 1% 1,65 / 1,95
Use Circulate with MINI or MAXI **MGF** descaling pump, wearing appropriate protective equipment. After treatment it is recommended to neutralize with acid neutralizer.

Water Soluble Descaler

Dissolves limestone, oxides and concrete. Easy to carry.
Inhibited against corrosion. After treatment it is recommended to neutralize with acid neutralizer.

Recommended Dilution max 250 g/L
Color white/pink (yellow when lose effectiveness)
Ph @ 250g/L 1,6
Solubility 250 g/L (at 25°C)

Acids Neutralizer Liquid

Liquid supplied with litmus test for the measurement of the residual acidity.

Recommended Dilution from 2% to 10%
Ph 13 ± 0,5



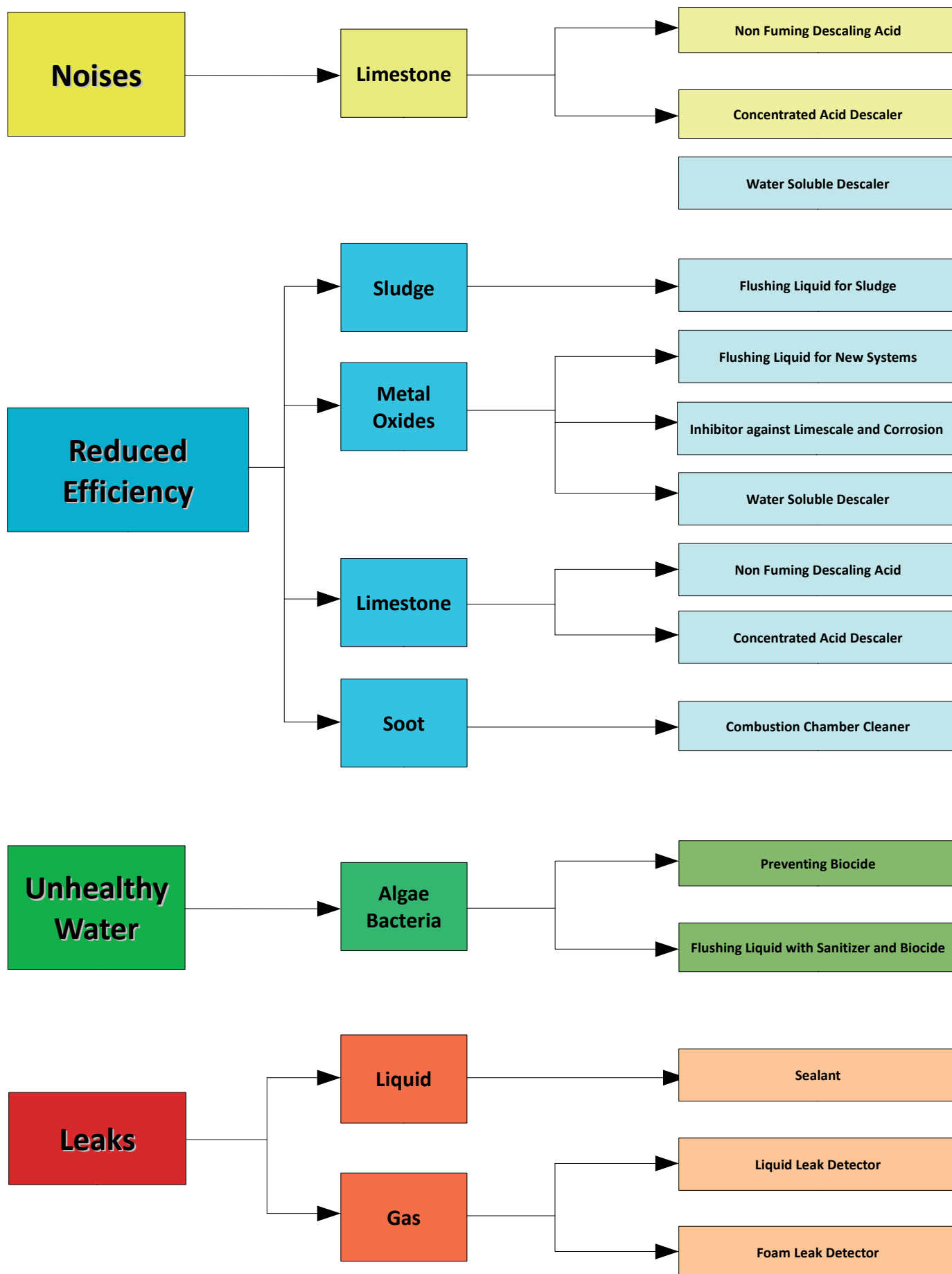
Art. 939996 and Art. 939997



Art. 791027

Art.	Model	Weight	Pack
939992	Non Fuming Descaling Acid 1L	1 Kg	12
939995	Concentrated Descaler Acid 1L	1 Kg	12
939997	Non Fuming Descaling Acid 10L	10 Kg	1
939996	Concentrated Descaler Acid 10L	10 Kg	1
791013	Water Soluble Descaler Powder 1Kg	1 Kg	12
791014	Water Soluble Descaler Powder 5Kg	5 Kg	4
791027	Acids Neutralizer	7Kg	4

Mini Guide: Choosing the Right Chemical



Testing

"To find fault is easy; to do better may be difficult."

Plutarco (46-120)

MGF Vulcano C-Plus

Concrete Screed Heater – Mobile Heating Central

10 KW
Thermal
Power

The only with 5 heating programs:

- Automatic
- Manual
- Thermal shock
- Delta temperature
- Pressure Test

Innovative heat exchanger with resistors protection system: **durable, reliable and safe**

Swiveling connections: **for a cleaner and safer workspace**

Expansion tank: **to connect directly to the system without adding anything else**

Additional inlet with quick connector for filling or emptying the underfloor heating system: **fast operation**

USB socket: **free and fast firmware upgrade**

SD Card slot: **each report can be saved, as required by the regulations**

Main Technological Advantages

- Heat exchanger **protected against limestone**, robust, reliable and efficient, unlike other electric heat exchangers.
- Possibility to save reports to prove the test and concrete screed heating process, as required by the regulations, directly on the **included SD Card**
- **Backlight Display**, excellent for the building site
- **Graphic Color Display**, to see all the required informations
- **Real Time Clock**, to print start and end time (only with optional battery)
- ARM Microcontroller running at **32bit** for reliable and accurate testings.
- **USB Socket** for easy, fast and free firmware updates. Download them from **www.mgftools.com**

Pipes and transport hooks: **rational transportation**

3 speeds circulation pump: **plug and play**

Off road pneumatic wheel: **excellent on the building site**



Technical Features

Weight	25,8 Kg
Size	400 x 500 x 1100 mm
Three-Phase Power	10 KW (400VAC 3PH+N+E)
Single-Phase Power	3KW, 3,3 KW or 6,7KW (opt.adapter)
Frequency	50 – 60 Hz
Current	14,5 A Max
SD Card	microSD 2Gb Included
Max Working Pressure	8 bar
Max Sensor Pressure	50 bar (resolution: 10 mbar)
Water Temperature Sensor	-20°C /+120°C (resolution: 0,1°C)
Swiveling Connectors	3/4" M with valve
Pipes Included	2 x 2,5m x 3/4" F with rotating nut
Additional Inlet	"Gardena" or 1/2" F
Circulation Pump	3 speeds (1300,1800,2200 rpm)
Flow Rate	5÷53 L/min (0,3÷3,2 m³/h)
Pump Head	1÷5 m
Expansion Tank	2L, loaded at 3,5 bar

Art.	Model	Weight
906152	MGF Vulcano C-PLUS	25,8 Kg

MGF
Professional Plumbing Tools

MGF Vulcano PRINT

Concrete Screed Drying and Testing with Reporting

Main Technological Advantages

- Heat exchanger **protected against limestone**, robust, reliable and efficient, unlike other electric heat exchangers.
- High efficiency** heat exchanger
- Possibility to save reports to prove the test and concrete screed heating process, as required by the regulations, directly on the **included SD Card or with the built-in printer**
- Backlight Display**, excellent for the building site
- Graphic Color Display**, to see all the required informations
- Real Time Clock**, to print start and end time (only with optional battery)
- ARM Microcontroller running at **32bit** for reliable and accurate testings.
- USB Socket** for easy, fast and free firmware updates. Download them from **www.mgftools.com**

Color graphic LCD and icons:
intuitive graphic user interface

Working mode, power, PIN and printing controls:
all the functions in the same page



Clear identifications of the machine, customer and plumber:
according to the technical regulations



Report proving duration and temperature of the cycle:
according to the existing regulations



Report proving pressure testing with datalogging each hour: **according to the regulations**

Built-in thermal printer:
according to existing regulations

USB and SD Card:
best connectivity

10 KW Thermal Power

Heat exchanger without boiler resistors, protected against limestone:
robust and reliable

With expansion tank and circulation pump:
complete

All parameters in one page:
simple and easy GUI

All road pneumatic wheels:
excellent for the building site



Technical Features

Weight	25,8 Kg
Size	400 x 500 x 1100 mm
Three-phase Power	10 KW (400VAC 3PH+N+E)
Mono-phase Power	3,0 KW, 3,3 KW or 6,7KW (opt.)
Frequency	50 – 60 Hz
Current	14,5 A Max
SD Card	microSD 2Gb included
Max Working Pressure	8 bar
Max Sensor Pressure	50 bar (resolution: 10 mbar)
Water Temperature Sensor	-20°C / +120°C (resolution: 0,1°C)
Swiveling Connectors	3/4" M with valve
Included Pipes	2 x 2,5m x 3/4" F with rotating nut "Gardena" or 1/2" F
Additional Inlet	
Circulating Pump	3 speeds (1300, 1800, 2200 rpm)
Flow Rate	5÷53 L/min (0,3÷3,2 m³/h)
Pump Head	1÷5 m
Expansion Tank	2L, loaded at 3,5 bar

Art.	Model	Weight
906153	MGF Vulcano PRINT	25,8 Kg

MGF Vulcano

Mobile Concrete Screed Heater and Pressure Tester

Main Technological Advantages

- Heat exchanger **protected against limestone**, robust, reliable and efficient, unlike other electric heat exchangers.
- Possibility to save reports to prove the test and concrete screed heating process, as required by the regulations, directly on the **included SD Card**
- Backlight Display**, excellent for the building site
- Graphic Color Display**, to see all the required informations
- Real Time Clock**, to print start and end time (only with optional battery)
- ARM Microcontroller running at **32bit** for reliable and accurate testings.
- USB Socket** for easy, fast and free firmware updates. Download them from **www.mgftools.com**

Can be paired with Vulcano Plus o C-Plus: **top-class power up to 20 or 30 KW !!!!**

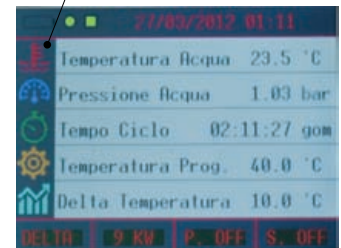
Very light and compact (only 10 Kg): **easy to carry even on stairs**

Heat exchanger without classic boiler resistors: **robust and reliable**

Icons graphic display: **contemporary and intuitive GUI**

Rubber feet: **very stable, preserves expensive floors**

Paired with a **MGF** pump, can be used for filling and flushing the system, as well to refill water: **the best investment**



Technical Features

Weight	10,5 Kg
Size	300 x 100 x 400 mm
Three-phase Power	10 KW (400VAC 3PH+N+E)
Single-phase power	3,0 KW, 3,3 KW or 6,7KW (230VAC with opt. adapter)
Frequency	50 – 60 Hz
Current	14,5 A Max
SD Card	microSD 2Gb included
Max Working Pressure	8 bar
Max Sensor Pressure	50 bar (resolution: 10 mbar)
Water Temperature Sensor	-20°C /+120°C (resolution: 0,1°C)
Swiveling Connectors	3/4" M with valve
Included Pipes	1 x 2,5m x 3/4" F rotating nut

Art.	Model	Weight
906150	MGF Vulcano (including 1 x 2,5m pipe 3/4" FF)	10,5 Kg
906161	MGF Vulcano + Solar Express Kit	31,5 Kg

MGF Vulcano Technology

Discover the advantages, compare, and choose

MGF Vulcano electric boiler and concrete screed heater offer a set of exclusive advantages. We recommend, before buying, to read, compare and only then choose the best investment.

Easy to Use

- Sturdy, reliable and **98% efficiency** heat exchanger, unlike other electric mobile heaters.
- Backlight, waterproof keyboard**, excellent for building sites.
- Graphic LCD color display**, to show all the informations with all uncompromised clarity and style.
- Perpetual real time clock**, to print reports with date and time (battery not included).
- New generation **32bit ARM microcontroller** for accurate tests and top class performance
- USB Socket** for easy, fast and free firmware upgrades. Look for the last update on the website: **www.mgftools.com**

All the parameters in one page:
simple and clear HMI

Select all the functions in one page:
fast and easy

Backlight, dustproof and waterproof keyboard:
sturdy and robust



Testing

Light and Handy

- 4 different working programs for heating, drying and testing
- Sturdy, reliable and **98% efficiency** heat exchanger, unlike other electric mobile heaters.
- The new heat exchanger reduces the overall weight up to 25%
- With **pneumatic wheels**, excellent for the construction sites and stairs.
- Transport handle** for transporting over ladders or scaffolds
- Transport hooks** for safe transport on trucks and vans



Sturdy and Safe

- Sturdy, reliable and **98% efficiency** heat exchanger, unlike other electric mobile heaters.
- Cannot be damaged by limestone** and the maintenance is much easier
- Not equipped with **armored heating elements**
- Automatic parameters saving and restart** in case of blackout, to keep the concrete hot
- Pressure sensor**, to test the system and to avoid dry runs
- Temperature sensor**, to control the screed heating cycle phases
- The **LCD is double protected** from dust, water, scratches and shocks.



100% Compliant to Regulations

UNI 1264-4 par 4.4: Startup of the Heating System

"This operation must be performed at least 21 days after the laying of the concrete backing layer or in accordance with the instructions of the manufacturer and in any case after at least 7 days in the case of support layers of dioxide. The initial heating begins at a supply temperature of between 20 and 25 ° C, which must be maintained for at least 3 days. Subsequently, it is necessary to set the maximum design temperature, which must be maintained for at least 4 more days. **The startup process of the heating system shall be documented.**"

Vulcano whole range performs an automatic cycle as required, makes a pressure test with a digital sensor, and reports the evidence of the process on SD Card or on printed receipt (only Vulcano PRINT models)



MGF Vulcano Kits and Optionals

MGF Vulcano Power 20 KW Kit

It provides the best heating power on the market.

Including: **MGF** Vulcano and **MGF** Vulcano C-Plus.

It's therefore possible to use the two mobile heaters separately to simultaneously dry the screed or to heat two separate systems, unlike any other expansions available, or together to achieve the maximum heating power.

Weight	36,3 Kg
Threephase Power	20 KW (400VAC 3ph+N+E)
Monophase Power	13,5 KW (230VAC w/ opt. adapters)
Frequency	50 – 60 Hz
Current	14,5 A max per unit
SD Card	2 microSD (2Gb) included
Max Working Pressure	8 bar max
Pressure Sensors	50 bar (Resolution: 10 mbar)
Water Temperature Sensor	-20°C / +120°C (Resolution: 0,1°C)
System Connections	3/4" M with valve and swiveling nut
Connection Pipes	2 x 2,5m with 3/4" F swiveling nut
Filling Aux Connector	"Gardena" or 1/2" F
Circulation Pump	3 speeds (1300,1800,2200 rpm)
Flow Rate	5÷53 L/min (0,3÷3,2 m³/h)
Pump Head	1÷5 m
Expansion Tank	2L, loaded at 3,5 bar

For the most demanding customer:
**the most powerful and convenient
mobile heating system available
on the market today**



Can be used also separately:
**MGF only professional
plumbing tools**

Art.	Model
906162	Kit MGF Vulcano Power 20KW

MONOPHASE Adapters

- Nothing else to add (resistors, thermostats, modules...)
- Power setting is performed from front panel
- Temperature control is from front, panel everything is integrated in the machine

Industrial Monophase Adapter - 6,7 KW

Excellent to heat up to 6.7 KW the circuit using a single phase.
The BLUE plug is rated 32A, because the current required is 26A.

We recommend using this adapter only if you can not get a three-phase power supply. Refer to the electrician on site or contact us for any further information.

Schuko Plug Monophase Adapter - 3,3 KW

Excellent to heat up to 3,3 KW the circuit using a single phase.
The SCHUCKO plug is rated 16A, because the current required is 13A.

We recommend using this adapter only if you can not get a more powerful power supply, as this power level allows heating only of small surfaces. Refer to the electrician on site or contact us for any further information.



Excellent to heat using max
6,7KW and a monophase power
supply



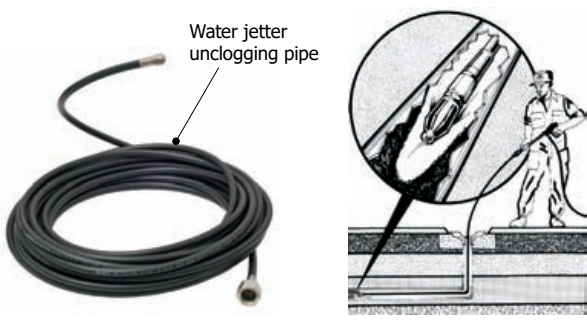
Excellent to heat using max
3,3KW and a monophase power
supply



Art.	Model
816150	Industrial Adapter 400V -230V for Vulcano
816151	Schuko Adapter 400V -230V for Vulcano
306151	Connection Pipe 10 bar / 80°C – 3/4" F x 2,5m
306152	Connection Pipe 10 bar / 80°C – 3/4" F x 0,6m

PRESS Testing Pump

Pressure Tester and Water Jetter



- ✓ Excellent for pressure testing, for pouring and filling on water systems and for drain cleaning with the water jetter pipe.
- ✓ Multipurpose, it can pump many non-acid liquids, such as antifreeze fluids.
- ✓ Adjustable, high pressure system with safety bypass valve.
- ✓ Strong construction: oversized motor and special anticorrosive materials for long lasting operation.
- ✓ **Supplied with:** 1/2" high pressure pipe and inlet pipe with joint and filter.

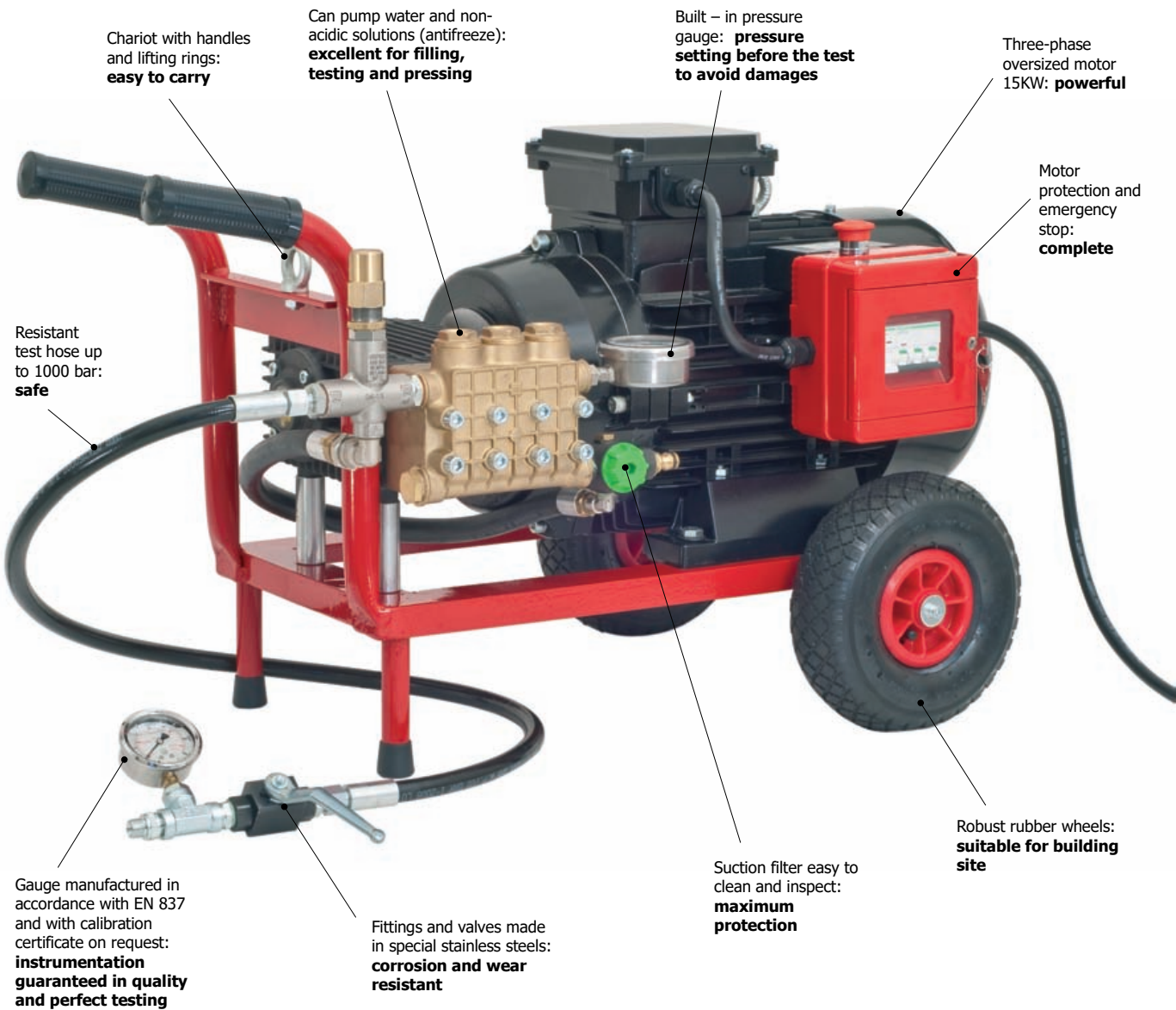
Technical Features

Weight	14,6 Kg
Size	200 x 440 x 320 mm
Output Pressure	0 - 60 bar (adjustable)
Flow Rate	7 L/min
High-pressure pipe	1,5m x 1/2" F swiveling nut
Power	1750 W
Power Supply	230V ~ 50Hz / 110V ~ 60Hz
Category	S1
Insulation Category	IPX5

Art.	Model
905200	Press 60bar 230V (full optional)
905250	Press 60bar 110V (full optional)
300020	Unclogging pipe

High Pressure 500 bar Electric Test Pump

Best in Class Performance



- ✓ Ideal for filling, pressurizing, testing of water, steam and chemical systems in the industry, shipyards...
- ✓ Robust transport cart with rubber wheels, and hooks for lifting the machine with straps
- ✓ Control panel with motor protection and emergency stop button
- ✓ Stainless steel inlet filter easy to clean and inspect, with 50um mesh
- ✓ Quick connection for water supply, the pump can be supplied also from a tank
- ✓ Handles on chariot for easy handling
- ✓ Possibility to set the pressure before the test, to avoid dangerous pressures in the system to be tested
- ✓ Upon request we provide calibration certificate for the gauge

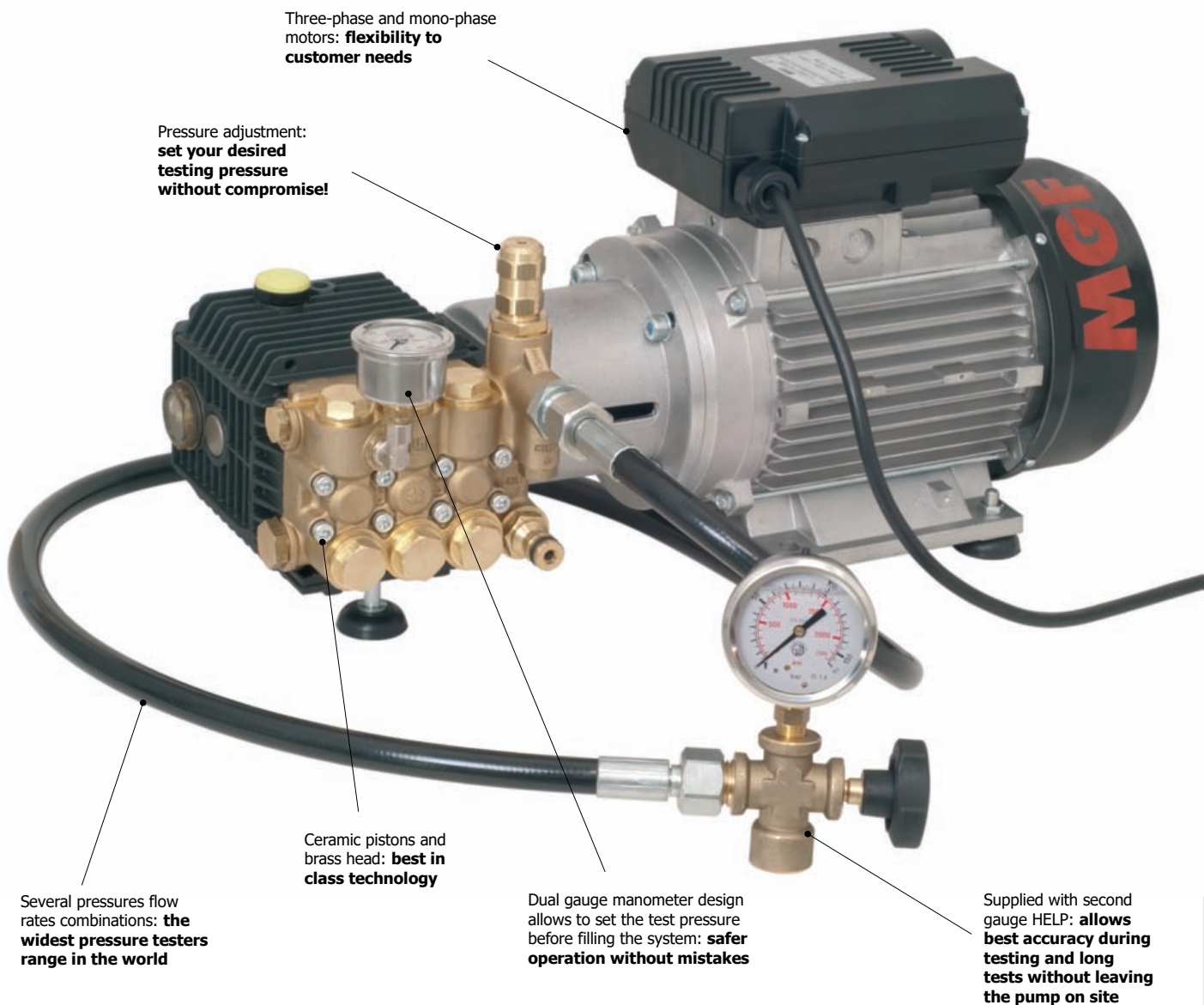
Technical Features

Size	975x570x600(h) mm
Weight	132 Kg
Weight with Wood Box	140 Kg
Working Pressure	from 0 up to 500 bar
Flow Rate	7-15 L/min
Water Supply	water, min 20L/min
Minimum Pressure	1 bar
Max Water Temperature	60°C
Power Supply	400V~ 50Hz - three-phase
Current	29A - 15KW
Service Class	S1 - cosfi=0,8 - class F

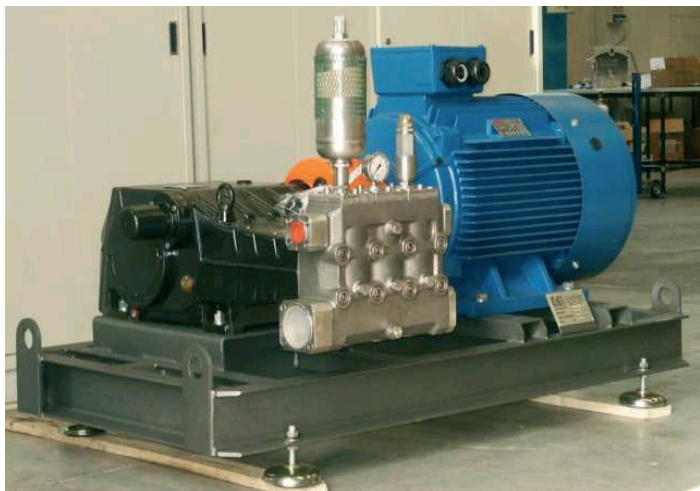
Art.	Model	Pack
905650	500bar Test Pump 15L Threephase 400V/15KW	1
790051	Oil pump MGF Tank 5 L	2
790050	Oil pump MGF Bottle 0,5 L	15

High Pressure Electric Testing Pump

Easy Testing up to 250 bar



Example of testing system made on customer specifications with high flow rate/pressure. Weight of the model in the picture: 250Kg approximately



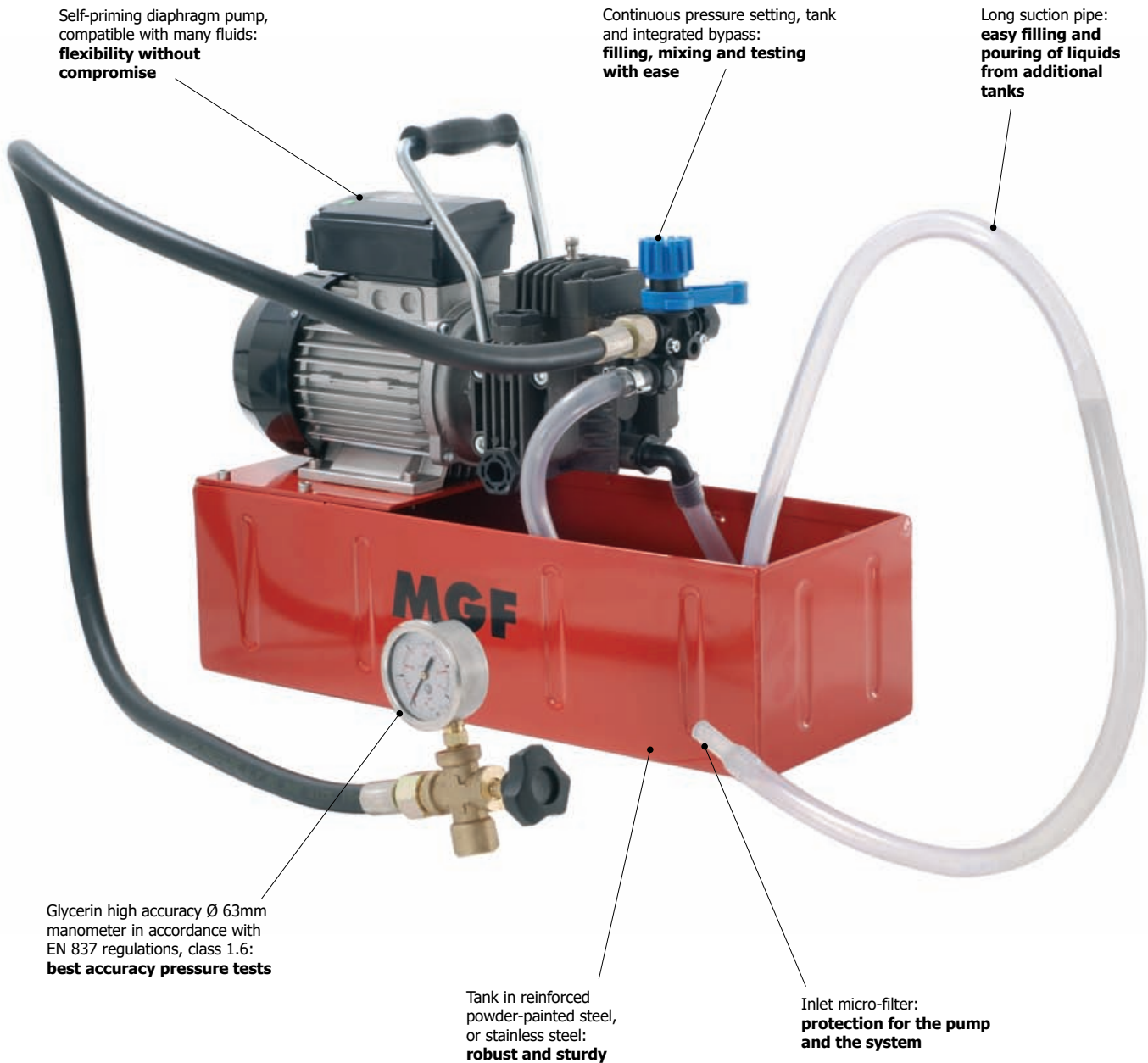
Technical Features

Size	460 x 250 x 220 mm
High-Pressure Pipe	1,5m x 1/2" F w/swiveling nut
Insulation Class	IPX5
Service Class	S1
Testing Pressure	adjustable from 0 to max

Art.	Pressure	Flow	Power Supply	Weight
905699	120 bar	4 L/min	230V ~ 50Hz - 1ph - 1,5KW	22,0 Kg
905698	120 bar	4 L/min	400V ~ 50Hz - 3ph - 1,5KW	22,0 Kg
905697	120 bar	8 L/min	230V ~ 50Hz - 1ph - 1,5KW	22,0 Kg
905696	120 bar	8 L/min	400V ~ 50Hz - 3ph - 1,5KW	22,0 Kg
905600	180 bar	13 L/min	400V ~ 50Hz - 3ph - 5,0KW	27,0 Kg
905820	250 bar	13 L/min	400V ~ 50Hz - 3ph - 6,35KW	30,0 Kg

Electric Diaphragm Test Pump

Testing and Filling without Constraints



- ✓ Excellent for pressure testing and filling of water systems, for pouring and filling operations and for chemical mixing
- ✓ It's compatible with many fluids, even with suspended particles, thanks to the diaphragm pumping system
- ✓ Pump head made in anodized aluminum, is perfect for professional use
- ✓ Gauge calibration available upon request

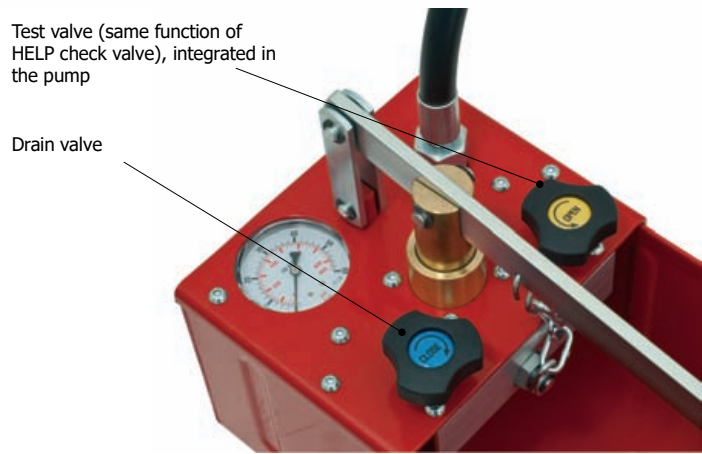
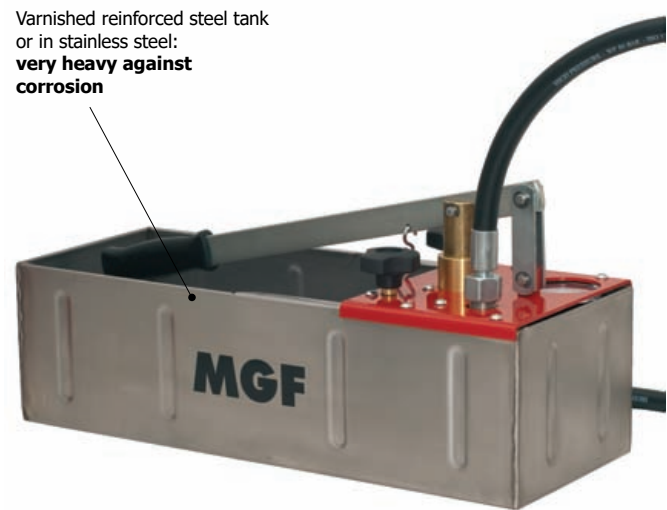
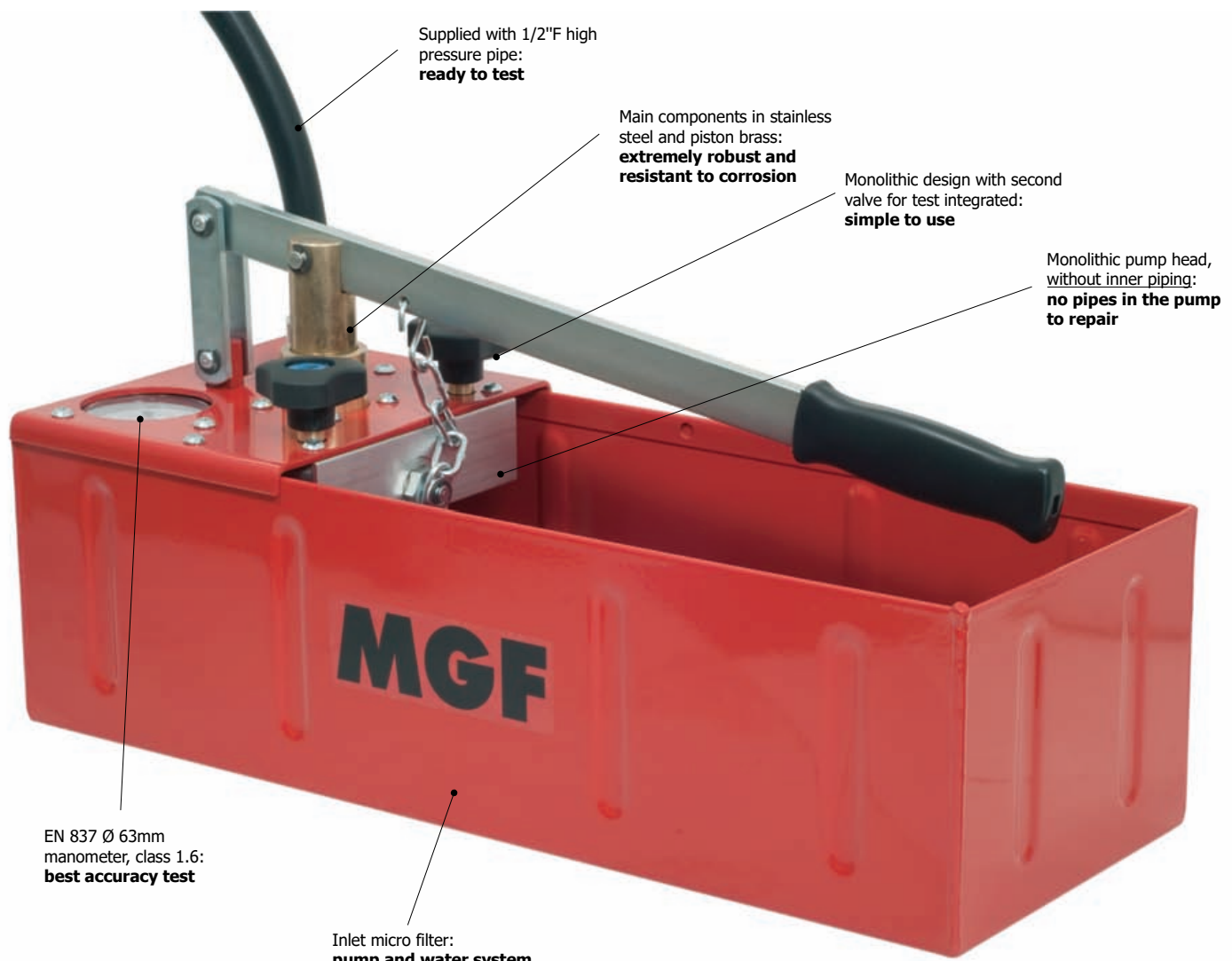
Art.	Diaphragm and Gaskets	Tank
905100	NBR	Painted Steel
905198	NBR	Stainless Steel

Technical Features

Weight	18 Kg
Size	250 x 530 x 410 mm
Working Pressure	0 - 20 bar (adjustable)
Flow Rate	14-17 L/min
High Pressure Pipe	1,5m x 1/2" F w/swiveling nut
Power	750 W
Power Supply	230 V ~ 50 Hz
Service Class	S1
Insulation Category	IP55

DUAL Pump

Dual Valve Pressure Tester



- Excellent for water systems pressure tests and filling
- Can pump also non acid solutions, as glycol for antifreeze fluids
- Supplied with high pressure hose for water system connection
- Gauge calibration available upon request

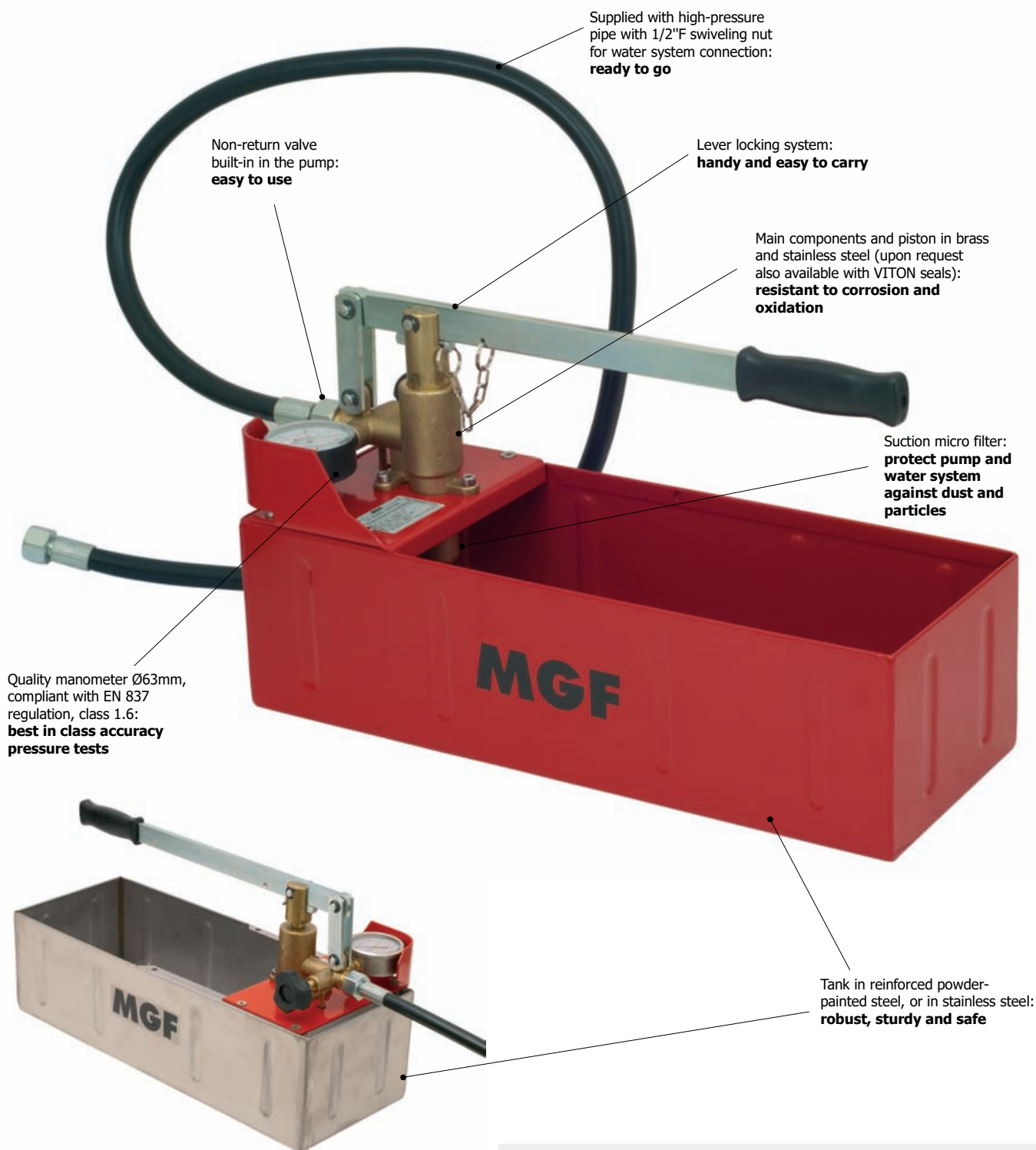
Technical Features

Weight	7,8 Kg
Tank	12 L
Size	500 x 190 x 280 mm
High Pressure Pipe	1,5m x 1/2" F w/swiveling nut

Art.	Pressure	Flow	Gaskets	Tank
904320	60 bar	22 cc/cy de	NBR	Painted
904321	60 bar	22 cc/cy de	NBR	Stainless Steel

MGF Pressure Testing Pump

Pressure Tests up to 120 bar



Art.	Pressure	Flow	Gaskets	Tank
904300	60 bar	22 cc/cycle	NBR	Painted
905900	60 bar	22 cc/cycle	Viton	Painted
906000	60 bar	22 cc/cycle	NBR	Stainless Steel
906099	60 bar	22 cc/cycle	Viton	Stainless Steel
904600	120 bar	11 cc/cycle	NBR	Painted
904699	120 bar	11 cc/cycle	NBR	Stainless Steel

- Excellent for water systems pressure tests and filling
- Can pump also non acid solutions, as glycol for antifreeze fluids
- Supplied with high pressure hose for water system connection
- Gauge calibration available upon request

Technical Features

Weight	7,7 Kg
Tank	12 L
Size	500 x 190 x 280 mm
High Pressure Pipe	1,5m x 1/2" F w/swiveling nut

MGF Testing Pump with Bucket Tank

Pressure Tests up to 60 bar



Non-return valve built-in in the pump: **simple and easy to use**

Main parts as piston in brass and stainless steel, upon request also available with VITON seals: **resistant to corrosion and oxidation**

EN 837 compliant, Ø63mm, class 1,6 manometer: **best in class pressure test accuracy**

Gauge calibration available upon request

Inlet micro filter: **protects your pump and water system against dirt particles**

Tank in reinforced powder painted steel: **strong**

1/2"G connection high pressure pipe with swiveling nut: **ready to go**

Use with HELP test valve

1. Filling at desired pressure



2. Long time pressure test without pump on site



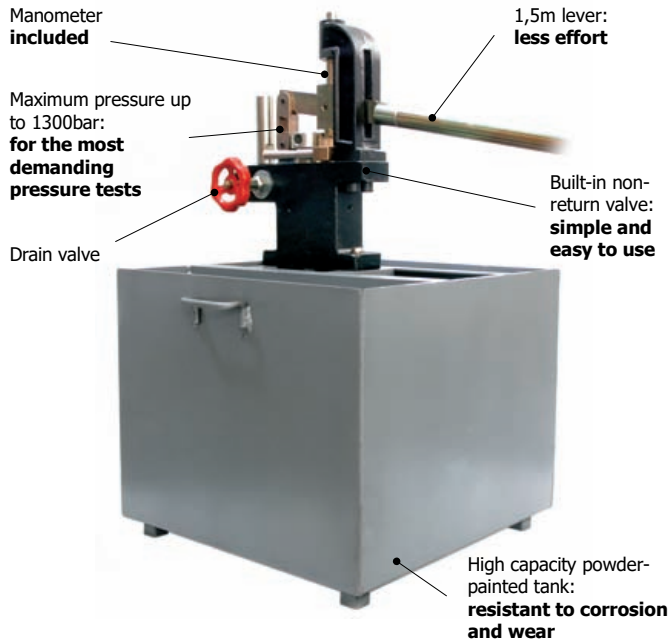
Technical Features

Art.	Pressure	Flow	Gaskets	Tank
904200	60 bar	22 cc/cycle	NBR	Painted
904298	60 bar	22 cc/cycle	Viton	Painted

Weight	11 Kg
Tank	12 L
Size	260 x 260 x 540 mm
Pipe	1,5 mm x 1/2"F w/swiveling nut

High Pressure Testing Pump

Pressure Testing up to 1300 bar



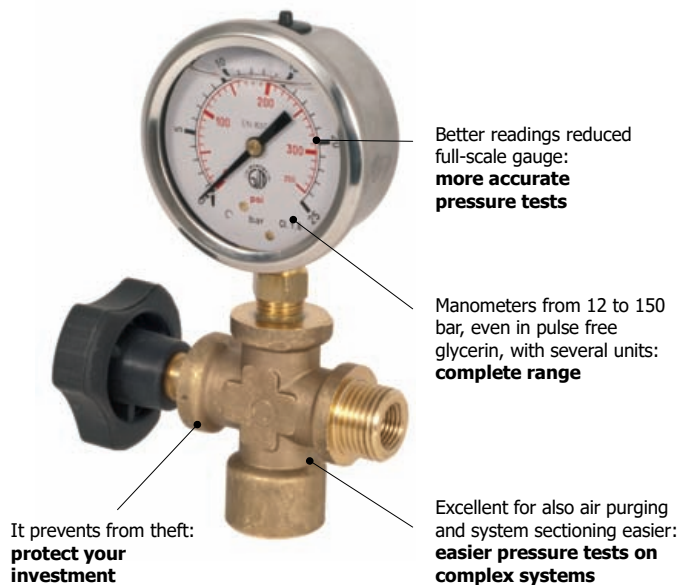
- ✓ Excellent for pressure testing systems, piping, vessels at very high pressure (i.e. shipyards, chemical industry, steam systems...)
- ✓ **Gauge calibration available upon request**

Technical Features

Weight	50 Kg
Size	500 x 500 x 400 mm
High Pressure Pipe	On demand

Art.	Pressure	Tank
904700	300 bar	100 L
904800	500 bar	100 L
904900	1000 bar	100 L
904930	1300 bar	100 L

HELP Testing Valve with Gauge



- Installed on the connection pipeline between the pump and the system, allows long time testing without the pump on site
- Fine and accurate reading with the proper pressure scale and unit
- Brass body, sturdy and robust, high pressure resistant
- Excellent with all **MGF** pressure testing pump

Art.	Bar	PSI	Mpa	Type
904400	12 bar	174 PSI	-	Dry
905700	25 bar	362 PSI	-	Glycerin
905799	40 bar	580 PSI	-	Glycerin
905800	60 bar	870 PSI	6 Mpa	Glycerin
905899	60 bar	870 PSI	-	Dry
905898	150 bar	2175 PSI	-	Glycerin
RT_MAN	Pressure Gauge Calibration Certificate			

High Pressure Test Pipes



- High resistance and flexibility multilayer pipes and zinc plated swiveling nuts
- Compatible with all **MGF** testing pump

Art.	Model
300000	Test pipe 150bar-1500mm x 1/2"F w/swiveling nut
300002	Test pipe 80bar-1500mm x 1/2"F w/swiveling nut (NBR gasket)
300017	Test pipe 80bar-1500mm x 1/2"F w/swiveling nut (nylon gasket)
300016	Test pipe 80bar-3000mm 1/2"F w/swiveling nut - 3/8"M
960004	Inlet hose 1500mm with filter
300023	Test pipe 330bar pipe-1500mm-3/8"F-1/2"F DN10
300020	Drain cleaning pipe with water jetter for PRESS Test Pump
300024	Test pipe 700bar-1500mm-3/8"M

Testing

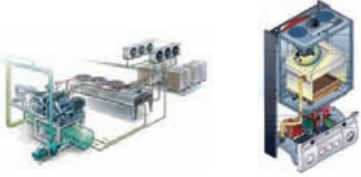
"One good reason why computers can do more work than people is that they do not have to answer phone calls.."

Arthur Bloch (1948-)

MGF Amico

Multifunction Test Instrument for Plumbing and HVAC

Patented System



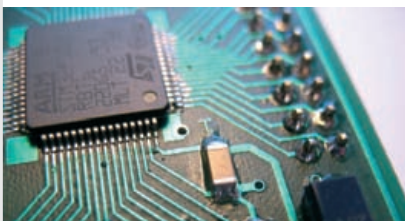
Performs automatic tests according to **UNI 7129, UNI 7130, UNI11137, UNI11147** always updated when the regulations are updated. Performs diagnostic and pressure tests on HVAC and water systems. Excellent for environmental monitoring.

Best Connectivity



USB and SD card, to manage data without the instrument

Advanced Technology



32bit ARM microcontroller, supporting advanced features such as graphics, and accurate readings, **Li-ion battery** for long life without charger.



Backlight display and keyboard, plus **LED torch** for working in the dark

All the maths calculated by software:
avoid mistakes and save time

LED Torch:
to work also in the dark

**Firmware
UNI
7129:2015**

Li-ion battery:
one week no stop working

LCD graphic display, with all the required information in one page:
easy to use

Color graphics display:
online help in every page

Joystick keyboard with large backlight keys:
to use with one hand in the dark

Anodized aluminum housing:
professional and stylish

Simple easy and free software update:
more value to your investment

Datalogger and report on SD card:
never lose data

MGF
Professional Plumbing Tools

Meets Plumbing and HVAC Needs

Gas Supply Network Testing and Validation according to European Regulations

MGF Amico firmware is constantly updated for the **UNI-EN 7129:2015, 7130, 11137:2012 and 11147** regulations about gas safety.

Test cycle is automatic and **the test report is printed**, ready for filing, with all the required informations (see below).

The reports are **saved automatically on the SD card** and can be conveniently backed up on a server PC even without the instrument.

Test cycle is guided by our online help, on each page, making the procedure easy and error free, even without training or reading the instruction manual.

HVAC Systems Test, Validation and Diagnosis

MGF Amico firmware includes many useful functions for the HVAC technician:

- High accuracy pressure test with nitrogen. Full scale measurement (50bar) with the best in class resolution of 1mbar

Working pressures test with saturation temperatures (digital multi refrigerant manifold). 1 mbar resolution over full scale range.

Refrigerants leak detector with PPM measuring

- Environmental analysis for thermo-hygrometric parameters:
 - ✓ Temperature
 - ✓ Humidity
 - ✓ Dew point calculation

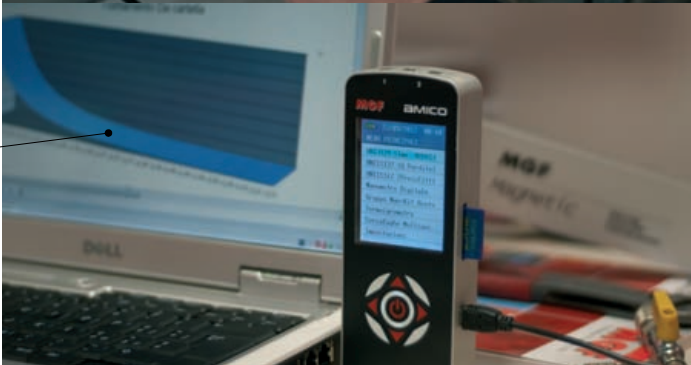
Air Quality Monitoring

MGF Amico offers 3 different probes with sensors air quality measurements:

- probe for combustible gases (i.e. methane)
- probe for flue gases (i.e. carbon monoxide)
- probe for fluorinated refrigerants (CFC, HFC, HCFC)

In addition to the classic detectors buzzer leak alarm, **MGF** Amico displays the **gas concentration in parts per million (PPM)**.

Backlight display allows measuring even in areas with poor lighting.



Sample Reports

Report headers with company and customer name, from the device or from PC: **professional and crystal clear reports**

Serial code generated for each test: **useful compliance to ISO requirements for traceability**

Example of graph generated by data logger function (included): **measurements can be easily analyzed and reported**

The instrument shall validate the system being tested: **not all instruments do it!**

MGF Amico

www.mgftools.com

Matricola apparecchio: 987881.1.7

INSTALLATORE: / PDR

MONTARELLI & IMBERTI

VIA PRESEPIA, 2

20138 S. GIOVANNI G. L.

C.F./P.I. 01672640304

IDENTIFICAZIONE INPIANTO

Nome: ROSSI MARTA

Via: MANZONI, 32

Int: 7

Citta: 20010 MILANO

Tel: 02/08752943

Normativa di riferimento

UNI 7129

Matricola Test: 888188 / 82

Data: 08/01/08

Pressione prova: 2028 mmHg ± 2828 Pa

Tempo stabilizz: 15:00

Tempo Test: 15:00

Delta pr.: 8mmHg

Test Tenuta: OK

Technical Features and Standard Equipment



It is possible to work also with the instrument docked in the case

Additional pipes for connection to several devices (gas boilers, gas meters...)



Art. 750107



Art. 750011



Art. 750103



Art. 938074
938073

Technical Features

Battery Life	up to 30 hours
Battery	Lithium-ion, 2700 mAh
Power Supply	Battery charger (included), 15 W
ADC Converters	16 bit
Display	LCD Color 320x240
Weight	0,3 Kg
Real Time Clock	Until year 2156
Acoustic Signaling	by buzzer

General Purpose Functions

Battery	Energy saving, battery monitor
Print	Serial, PC
Antitheft	PIN code (set by the customer)
Calibration	Self-calibration sensors
Sensors	Automatic acknowledgment
Display	Backlight, auto-off setting
Customizations	Reports headers (company & cust.)
Data Memory	2GB SD card

Equipment provided in case for all the models

- Handheld testing instrument **MGF** Amico
- Wall mount power supply and battery charger
- Case with docking station and integrated printer*
- Software for updates, electronic user manual
- USB cable
- 2Gb SD Card to record tests data (virtually infinite capacity)

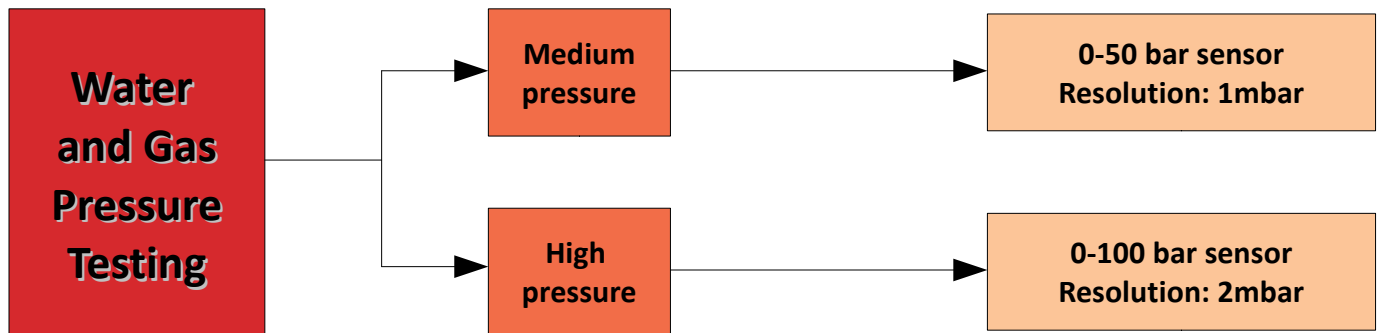
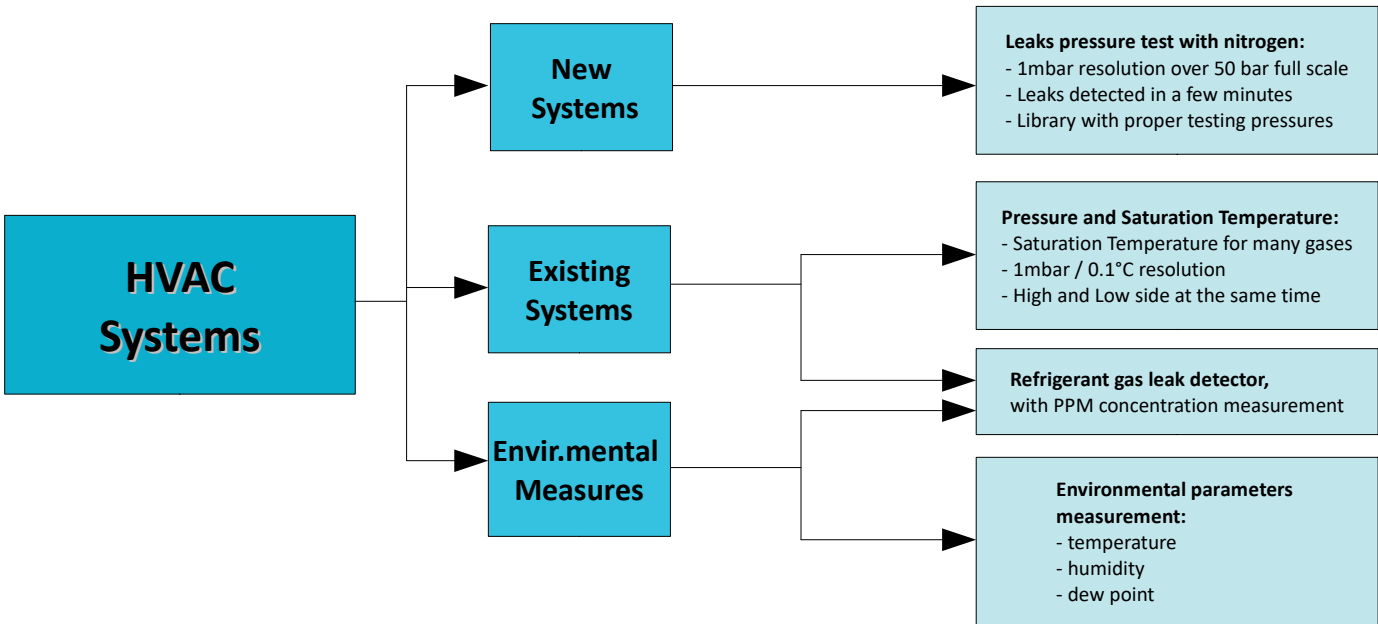
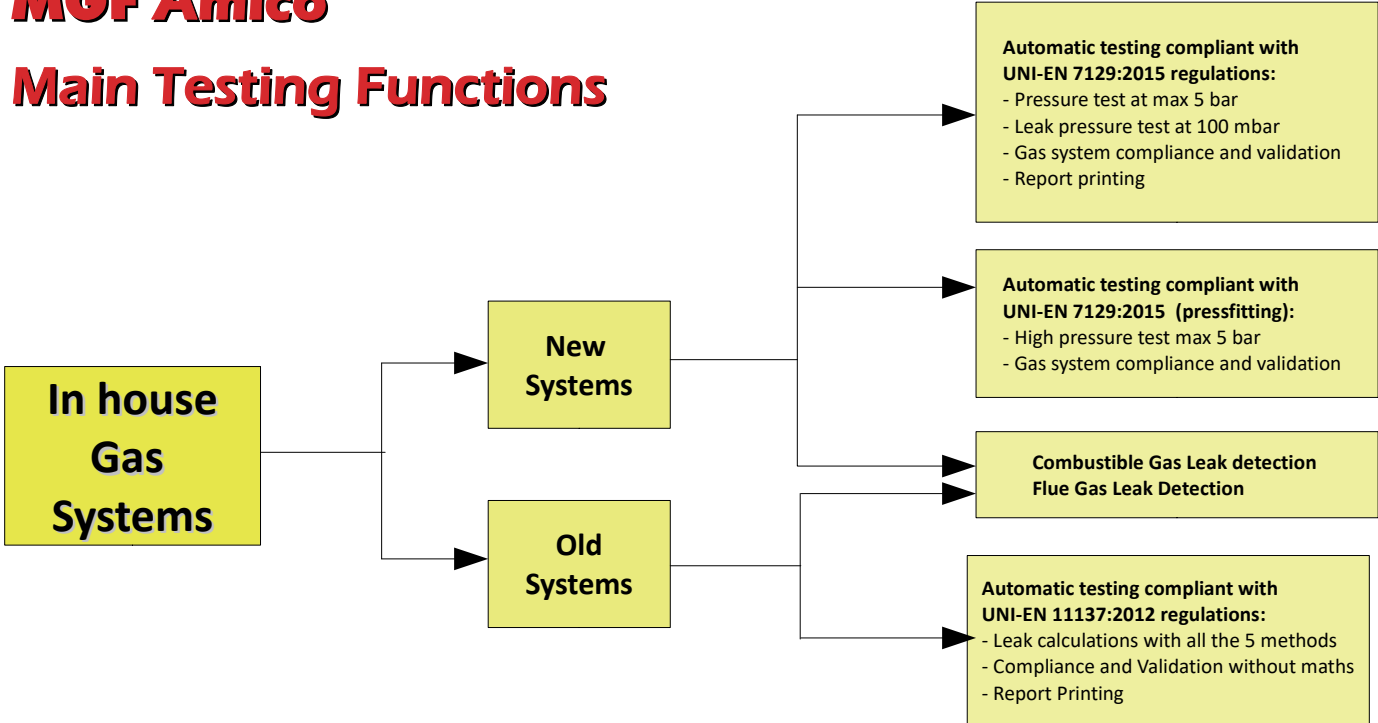
* excluding "Basic" model

Art.	Model
907005	Amico PRO instrument with docked case + kit for Gas systems test UNI-EN compliant + Sensor 50 bar for water systems + HVAC sensor + 3 leak detectors (combustible gas, flue gas and refrigerants) <i>... ALL in ONE!</i>
907006	Amico GAS instrument in docked case + kit for gas test UNI-EN compliant <i>...for the certification of gas systems</i>
907007	Amico FREEZE instrument in docked case + HVAC sensor + Fluorinated refrigerants leak detector <i>...for HVAC professionals</i>
907008	Amico PRINT instrument in case with docking station and thermal printer, without probes <i>...to be free to choose the necessary sensors</i>
907009	Amico BASIC instrument in case without printer and sensors <i>... to choose sensor to print at home</i>

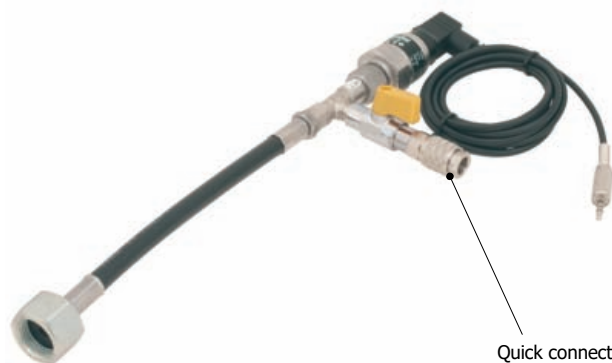
Art.	Model	Box
750107	USB SD Card Reader	1
823000	8 bar Aluminium Test Pump	1
938074	Liquid Leak Detector (400mL)	12
938073	Foam Leak Detector (400mL)	12
750103	Thermal Paper for new Amico Printer	10
300006	Amico Gas Meter Valve Pipe w/quick connector	1
750011	MGF Amico Power Supply	1
823200	Volume Calculation Device for MGF Amico	1

MGF Amico

Main Testing Functions



MGF Amico – Digital Pressure Probes



Pressure Probe 5 bar

Compatibility	Air, Methane, LPG, Gas, Water
Material	AISI 316 stainless steel
Full Range Scale	0 – 5 bar absolute bar 0 – 4 bar relative bar
Max Pressure	7,5 bar
Maximum Resolution	1 mmH ₂ O = 0,1 mbar
Accuracy	1 mbar
Linearity	< 0,5% FS max
Working Temperature	0°C....50°C

Art.	Model
757104	5 bar Pressure Probe for MGF Amico



Pressure Probe 50 bar

Compatibility	Water, Water Solutions, Gases (PH min 5; PH max 8)
Material	AISI 316 stainless steel
Full Range Scale	0 – 50 relative bar
Max Pressure	75 bar
Maximum Resolution	1 mbar
Accuracy	10 mbar
Linearity	< 0,5% FS max
Working Temperature	0°C....50°C

Art.	Model
757112	50 bar Pressure Probe for MGF Amico



Pressure Probe 100 bar

Compatibility	Water, Water Solutions, Gases (PH min 5; PH max 8)
Material	AISI 316 stainless steel
Full Range Scale	0 – 100 relative bar
Max Pressure	150 bar
Maximum Resolution	1 mbar
Accuracy	10 mbar
Linearity	< 0,5% FS max
Working Temperature	0°C....50°C

Art.	Model
757113	100 bar Pressure Probe for MGF Amico



HVAC Pressure Probe 50 bar

Compatibility	Refrigerant Gases
Material	AISI 316 stainless steel
Full Range Scale	0 – 50 relative bar
Max Pressure	75 bar
Maximum Resolution	1 mbar
Accuracy	10 mbar
Linearity	< 0,5% FS max
Temperature	0°C....50°C

Art.	Model
757103	50 bar HVAC Pressure Probe

MGF Amico – Environmental Parameters Probe

Combustible Gas Leak Detector

Detected Gases	Methan, Ethan, Propane, Isobutane, Hydrogen
Sensor Heating Time	20 s
Technology	Solid state, w/ heating element
Battery Life	1h +
Full Scale Range	0 - 4000PPM
Max working humidity	65%
Resolution	1 ppm

Art.	Model
757105	Combustible Gas Leak Detector Probe for Amico

Flue Gas Leak Detector

Detected Gas	Carbon monoxide, H ₂
Sensor Heating Time	20 s
Technology	Solid state, w/ heating element
Amico Battery Life	1h +
Full Scale Range	0 - 4000PPM
Max Working Humidity	65%
Resolution	1 ppm

Art.	Model
757102	Carbon Monoxide Leak Detector for Amico

Refrigerants Leak Detector

Detected Refrigerants	freon, CFC, HCFC, HFC, (i.e. R22, R407, R410, R134a, R600, R490)
Sensor warming period	20 s
Technology	Solid state, w/heating element
Amico Battery Life	1 h +
Full Scale Range	0 - 4000PPM
Max Working Humidity	65%
Resolution	1 ppm

Art.	Model
757111	Refrigerants Gas Leak Detector Probe for Amico

Temperature and Humidity Probe

Relative Humidity Range	0 – 100 %
Temperature Range	0 – 50 °C
Dew Point	> 0 °C
Temperature Resolution	0,1 °C
Temperature Accuracy	± 1 %
Relative Humidity Resolution	0,1 %
Relative Humidity Precision	± 2,5%
Time Constant (with ventilation)	1 min
Time Constant (Still Air)	5 min

Art.	Model
757101	Temperature and Humidity Probe for Amico



AC700 – Flue Gas Analyser and Pressure Tester

Certified Flue Gas Emissions



One-Instrument Analysis of:

- ✓ O₂ (oxygen);
- ✓ CO (carbon monoxide);
- ✓ CO₂ (carbon dioxide);
- ✓ NO_x (nitric oxides);
- ✓ Flue gas temperature;
- ✓ Comburent air;
- ✓ Delta T;
- ✓ Pressure;
- ✓ Differential pressure;
- ✓ Efficiency and leaks;
- ✓ Air excess;
- ✓ CO environment (only through additional probe).



Simple and powerful device

Multi-language software and instructions:
first analysis within 10 minutes, compliant with national regulations

Customizable visualization of all the measures:
easy to use

Possibility to measure NO_x concentration:
complete device

Automatic calculation of the "average of the tests" and report printing:
in accordance with the regulations

Maintenance contract, with **free replacement of the cells and extension of the guarantee:**
all the costs under control!!

In accordance with
**UNI10839
EN50379**

In accordance with
**UNI10835
(draught)**

In accordance with
**UNI7129
(seal)**

Test

Technical Features

Work Temperature	+5°C/+40°C
Batteries	1,5V AA (x4) rechargeable
Battery Life	12 hours
Combustibles	Gas oil, Natural gas, City gas, LPG, Pellets, Butane, Propane
Display	LCD backlight + torch led
Data memory	50 reading sets
Time and date	24h Real time watch
Dimensions	200 x 96 x 60 mm
Weight	0,500 Kg
Case	Rubber frame with magnet and hard case
TÜV validations	for O ₂ , T smoke and T air environment for CO for NO for EN 50379-1 and EN 50379-2

Flue Gas Temperature

Range:	-0 °C ... + 600 °C type K, 0...400 °C TÜV validated
Resolution:	0,1 °C
Accuracy:	± 2 °C (0 ... 125 °C) ± 3 °C (125...250 °C) ± 4 °C (da 250 °C) time constant 50s

Air Temperature

Range:	-0 °C ... + 100 °C type K, 0...80 °C TÜV validated
Resolution:	0,1 °C
Accuracy:	± 1 °C, time constant 120s

O₂ concentration

Range:	0...21,0 Vol% O ₂ TÜV validated
Resolution:	0,1 Vol%
Accuracy:	± 0,3 Vol%, time constant 50s

CO concentration (Compensated in H₂)

Range:	0...2000 ppm TÜV validated, Short oversaturation acceptable up to 4000 ppm
Resolution:	1 ppm
Accuracy:	± 20 ppm (up to 400 ppm) ± 5 % (over 400 ppm)

NO-concentration

Range:	0...600 ppm TÜV validated
Resolution:	1 ppm
Accuracy:	± 5 ppm (up to 100 ppm) ± 5 % (over 100 ppm)

Pressure and Differential

Range:	-80 mbar ... + 80 mbar
Resolution:	0.01 mbar
Accuracy:	± 0.02 mbar (up to ± 5 mbar) ± 1 % (over ± 5 mbar)

AC700

Flue Gas Analyzer with NOx Sensor

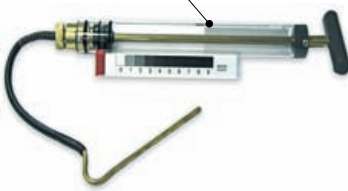


The analyzer is provided with a hard shockproof case: **handy and sturdy**

All the probes to work in one box: **complete solution**



Smoke pump (optional): **Monitor the smokiness degree of your boiler**



All Inclusive Supply

The AC700 flue gas analyzer is supplied "full optional":

- Adjusted and calibrated analyzer (with certificate)
- Protective frame with magnet
- Flue gas probe
- Air temperature probe
- Forced air probe
- Instrument maintenance kit
- Pressure test kit
- Differential pressure test kit
- Universal power supply and rechargeable batteries
- Infrared printer
- User Manual and calibration certificate

Art.	Description
907049	AC700 – Flue gas analyzer set without NOx sensor
907048	AC700 – Flue gas analyzer set with NOx sensor
907052	Manual smoke pump for AC600
907053	Infrared printer for AC600 Flue gas analyzers
907054	Flue Gas Probe without pressure hose
907058	Flue Gas Probe with pressure hose
907055	Flue gas analyzer filter
791022	Combustion Chambers Cleaner 5kg
791023	Combustion Chambers Cleaner 10kg
907057	Test kit UNI 7129 for AC 700

Dual Channel Differential Thermometer

With
CDROM
Software

MAX, MIN, AVG e
HOLD function:
to save maximum,
minimum, average
values

Holder

DATA-LOGGER
function:
for professionals
diagnostic needs



Measures two
temperatures and
calculates their
difference:
**excellent for
heat
exchangers**



Technical Features

Temperature Range	-250°C ... 1372°C
Resolution	0,1°C
Temperature Scale	°C, °F, K
Differential Value Display	yes
Calculation	T1, T2, T1-T2
Compatible Thermocouples	K, J, T, E
Memory (100 Locations)	Max, Min, AVG, Hold
Backlight	yes
Possibility to calibrate probes	yes
Data logger with software	yes
Connection	USB, NTC (x2)
Weight	0,364 Kg
Battery (included)	9V alkaline 6F22

Art.

Model

932393

Dual-Channel Differential Thermometer

Professional Digital Thermo-Hygrometer

Measure Air Temperature and Humidity

With
CDROM
Software

CD Rom and USB
interface:
datalogger function

Memory of minimum and
maximum values and
memory of the needed value:
forget notes

Backlight display:
maximum functionality

Soft Case:
**instrument
protection**

Excellent to measure environmental
parameters and to test HVAC systems:
**for plumbing and HVAC
professionals**



Technical Features

Temperature	
Full Range	-20/+60 °C (res. 0,1 °C)
Accuracy	±0,1°C
Relative Humidity	
Full Range	0% - 100% (res. 0,1%)
Data Storage	99 readings
Supplied with	USB cable, CD
Sampling Time	< 10 s
Supply	4 AAA alkaline batteries included
Working temperature	-20 / +60 °C
Weight	129 g
Size	183 x 54 x 37 mm

Art.

Model

932388

Professional Digital Thermo-Hygrometer

Temperature Probes - Thermocouples Type K



Art. 932392

Operating temperature
from 0°C up to +750°C

Cable length 1,5m



Art. 932387

Operating temperature
from -20°C up to +250°C

Cable length 2m



Art. 932386

Operating temperature
from -20°C up to +90°C

Cable length 2m

- ✓ Thermocouples probes type K
- ✓ With pipe clamp, pipe strap probe or for air/gas
- ✓ Compatible with differential thermometer dual-channel and pocket digital thermo-hygrometer

Art.

Model

932392

Type K temperature probe for air/gas

932387

Type K temperature probe with pipe clamp

932386

Type K temperature probe with velcro strap

Laser Thermometers

Infrared Thermometer with Laser

Ideal for remote non-contact measurements of non-reflective surfaces.
The laser pointer locates the center of the surface being measured.

Temperature Full Range	-18°C up to 280°C
Resolution	0,1°C
Accuracy	2%
Sampling Time	0,5 s
Measurement Area:Distance	1:10
Constant measurement	yes
Display	Backlight
Battery (included)	9V 6F22 battery
Weight	0,177 kg

Art.	Model
932389	Infrared Thermometer with Laser



Pocket Infrared Thermometer

Ideal for remote non-contact measurements of non-reflective surfaces.

Temperature Range	-55°C up to 220°C
Resolution	0,1°C
Accuracy	1%
Sampling Time	0,5 s
Measurement Area:Distance	1:12
Minimum/maximum Memory	yes
Display	Backlight
Battery (included)	3V CR2032
Weight	0,040 Kg

Art.	Model
932395	Pocket Infrared Thermometer



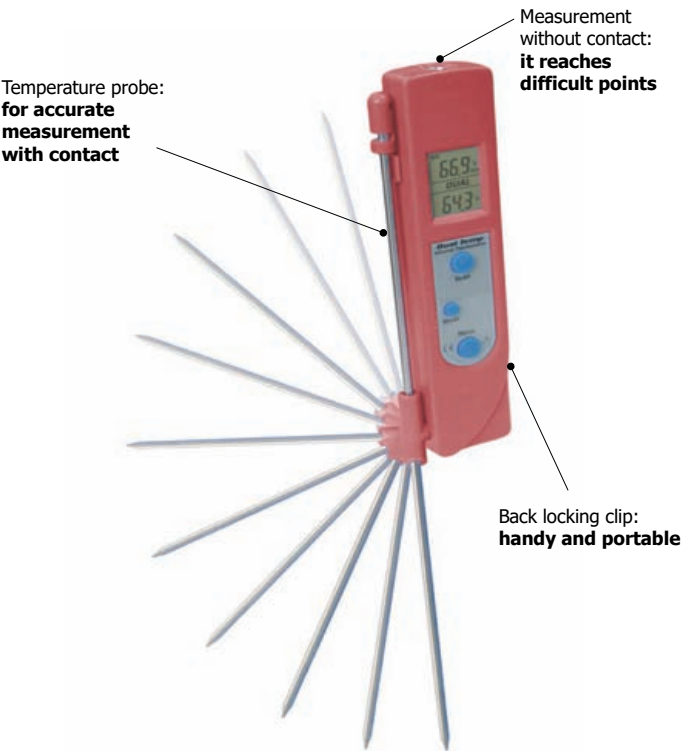
2 in 1 Thermometer Infrared + Probe

Excellent for remote non-contact measurements of non-reflective surfaces or contact measurements with probe.

Additional probe allows contact measurements on liquid or surfaces.

Temperature Probe Length	100 mm
Probe	stainless steel
Infrared Temperature Range	-55°C / 220°C
Probe Temperature Range	-55°C / 330°C
Resolution	0,1°C
Minimum/maximum Memory	yes
Data Hold Function	yes
Battery (included)	3V CR2032
Weight	0,100 Kg

Art.	Model
932394	2 in 1 thermometer infrared + probe



MU1000 – Digital Multimeter

Measure with accuracy all the electric parameters



Technical Features

Display	LCD 4 digits, automatic polarity indication
VU meter bar style	yes
Buzzer	yes
Sampling	Dual Slope
Surge Protection	1000 VAC (CAT II)
Data Hold Function	yes
Battery Level Monitoring	yes
Voltage Range	max 750 VAC / 1000 VDC
Voltage Resolution	0,00001 V
Alternate Current Range	10 ACA / 10 DCA
Alternate Current Resolution	0,0001 mA
Resistance Range	400 Ohm / 40 MOhm
Frequency Range	10 Hz / 10 MHz
Diode Test	yes (0,001 V max resolution)
Conductivity Test	yes (0,1 Ohm)
Temperature Measurement	yes (-40 / 1000 °C)
Transistor Test	yes
Software	yes
Cable for PC connection	RS232 (USB with adapter)
Battery (included)	9 V Alkaline
Operating Temperature	0 °C / 50 °C
Storage Temperature	-20 °C / 60 °C
Maximum Humidity	80%
Weight	0,500 Kg
Size	205 x 71 x 38.8 mm

Art.	Model
932396	MU1000 Digital Multimeter

MU750 – Pocket Digital Multimeter

Easy and Compact



Technical Features

Display	LCD 4 digits, 48 x 16mm, indication of polarity
VU meter bar style	no
Buzzer	yes
Sampling	Dual Slope
Surge Protection	500 VAC (CAT II)
Data Hold Function	yes
Tension Range	max 500 VAC / 500 VDC
Tension Resolution	0,001 VAC / 0,0001 VDC
Current Range	10 ACA / 10 DCA
Current Resolution	0,0001 A
Resistance/Continuity Range	400 Ohm / 40 MOhm
Transistor Test	yes
Diode Test	yes
Battery	2x1,5V AAA Alkaline (incl.)
Battery Level Monitoring	only battery discharge alarm
Operating Temperature	0 °C / 40 °C
Storage Temperature	-10 °C / 50 °C
Maximum Humidity	75%
Weight	0,15 Kg
Size	130 x 74 x 41 mm

Art.	Model
932375	MU750 Pocket Digital Multimeter

MU500 – Multimeter with Amp Clamp

The “Issue Finder”

Technical Features

Clamp Opening	32 mm
Display	LCD 3 1/2 digits, with polarity indicator
Buzzer	yes
Sampling	Dual Slope
Surge Protection	500 VAC (CAT III)
Data Hold Function	yes
Diode Test	yes
Peak Hold Function	yes
Battery Monitor	yes
Auto Power Off	yes
Voltage Range	max 600 VAC / 600 VDC
Voltage Resolution	0.1 mV MAX
Alternate Current Range	1000 A
Alternate Current Resolution	up to 40 A
Resistance Range	400 MOhm / 0.1 Ohm
Frequency Range	10 MHz / 0,001 Hz
Battery	9V 6F22 (included)
Operating Temperature	0 °C ... 40 °C
Storage Temperature	-10 °C ... 50 °C
Maximum Humidity	75%
Weight	0,35 Kg
Size	236 x 97 x 40 mm

Art.	Model
932397	MU500 Multimeter with Amp Clamp



Combustible Gas Leak Detectors

Next Generation Leak Detectors

Technical Features

Operating Temperature	0 ... 52°C
Power Supply	NIMh Batteries
Battery	2x 1,2V 3200Ah (included)
Battery Life	8 h
Battery Charger Included	yes
Pre Heating Time	25 s
Probe Length	38 mm
Size	178 x 178 mm
Size	0,49 Kg
Sensibility	50-1000 ppm
Sensibility Levels	6
Reset Function	yes
Low Battery Alarm	yes
Lighting Led	yes

Art.	Model
932295	Next Generation Gas Leak Detector



Pocket Digital Thermo Anemometer

Measure Air Temperature and Speed



- Excellent to test fan-coil system and air conditioners: **for plumbing and HVAC professionals**
- Auto power off after 15 min: **battery drains avoided**
- Several full range scales: **avoid conversions and calculations**
- Weights only 52 g with carry on band: **really handy and pocket sized**

Pocket Thermo Anemometer

Air Speed

Unit	Range	Resolut.	Threshold	Accuracy
m/s	0-30	0.1	0.1	±5%
ft/min	0-5860	19	39	±5%
knots	0-55	0.2	0.1	±5%
km/h	0-90	0.3	0.3	±5%
mph	0-65	0.2	0.2	±5%

Temperature

Unit	Range	Resolut.	Accuracy
°C	-10 / 45	0.2	±2°C
°F	14 / 113	0.36	±3.6°F

Battery

CR2032 (3 V, included)

Weight

52 g

Size

100 x 40 x 18 mm

Art.

Model

932399

Pocket Thermo Anemometer

Digital Thermometers

Probe protection with clip: **handy and useful**

Measure temperatures in °C and °F: **avoid conversions and calculations**



Stylus Probe Digital Thermometer

For contact measurements on liquids and surfaces

Probe Length	100 mm
Temperature Range	-50°C / 300°C -58°F / 572°F
Resolution	0,1°C
Probe	stainless steel
Sensor Diagnostics	yes
Auto OFF Function	yes
Power Supply	1,5 V LR44 battery (included)
Weight	0,021 Kg

Art.

Model

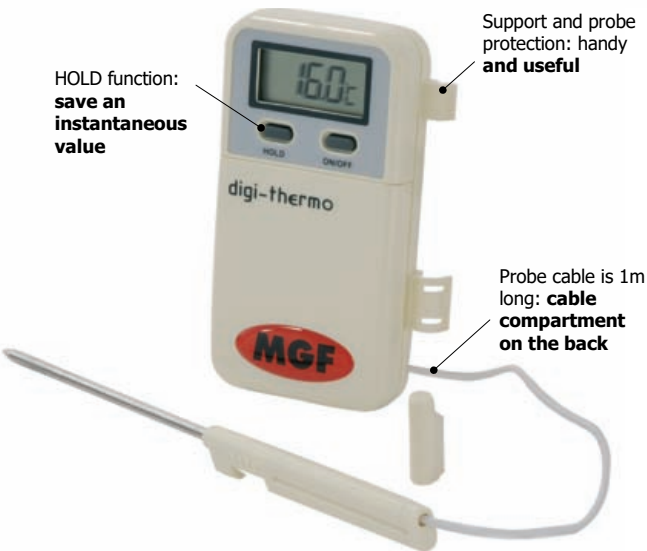
932390

Stylus Probe Digital Thermometer

HOLD function: **save an instantaneous value**

Support and probe protection: **handy and useful**

Probe cable is 1m long: **cable compartment on the back**



Digital Probe Thermometer

For measures in contact with liquids and surfaces

Probe length	100 mm
Temperature Range	-55°C / 300°C -58°F / 572°F
Resolution	0,1°C
Functions	Maximum, Minimum and Hold
Probe	stainless steel
Min/Max Threshold Alarm	yes
Weight	0,082 Kg
Battery (not included)	type AAA (UM4) 1,5V

Art.

Model

932398

Digital Probe Thermometer

Cutting Tools

"Daring is the price of progress"

Victor Hugo (1802-1885)

Pipe Cutters

Longer and grinded rollers:
better pipe alignment

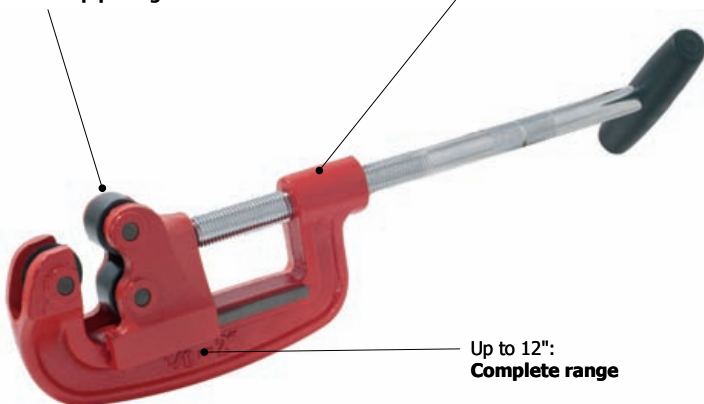
Body in forged steel:
stronger



Upon request range up to 12":
Complete range

Longer and grinded rollers:
better pipe alignment

Body in forged steel:
stronger

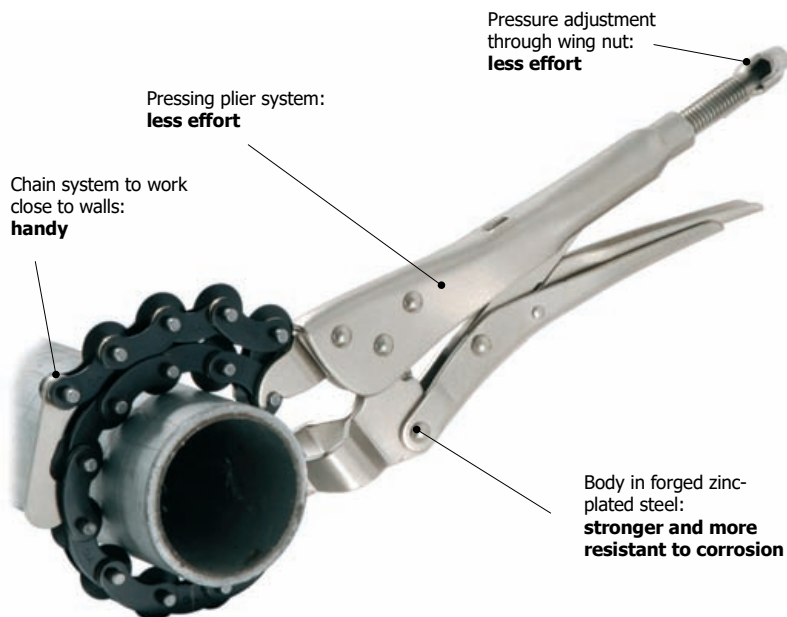


Up to 12":
Complete range

Pressing plier system:
less effort

Chain system to work
close to walls:
handy

Pressure adjustment
through wing nut:
less effort



Body in forged zinc-
plated steel:
**stronger and more
resistant to corrosion**

IRON Pipe Cutter

- Longer and grinded rollers, for a better pipe support during operation and for a faster and without "threading" cutting
- The forged steel body gives strength to the tool and the necessary robustness for the toughest cuts
- Thanks to the special steel roller burrs are prevented outside the pipe and therefore it is not necessary to deburr the pipe before threading

Art.	Range	Wheel	Weight
922497	1/8" – 2"	922496	2,50 Kg
922495	1 1/4" – 4"	922494	5,10 Kg

* Upon request range up to 12"

STEEL Pipe Cutter

- Longer and grinded rollers, for a better pipe support during operation and for a faster and without "threading" cutting
- The forged steel body gives strength to the tool and the necessary robustness for the toughest cuts
- Thanks to the special steel roller burrs are prevented outside the pipe and therefore it is not necessary to deburr the pipe before threading

Art.	Range	Wheel	Weight
922599	1/8" – 1 1/4"	922598	1,10 Kg
922597	1/8" – 2"	922596	2,50 Kg
922595	1 1/4" – 4"	922594	5,10 Kg

* Upon request range up to 12"

YC Chain Pipe Cutter

- Excellent to cut pipes in copper, brass, aluminum, plastic
- The chain, made with **15** tempered steel rollers, allows to reach all the most difficult positions on pipes being already installed, and to cut the pipe easily
- The pressing plier system with adjusting wing nut allows to work without effort

Working Range 3/4" - 3 1/4"
19 – 83 mm

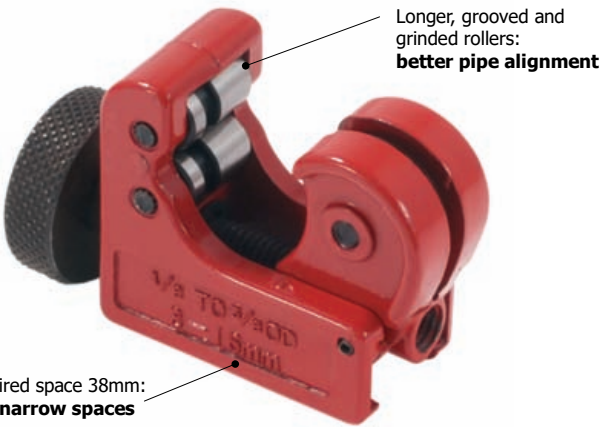
Art.	Model
922450	YC Chain Pipe Cutter
922449	Spare chain for YC chain pipe cutter

Pipe Cutters for COPPER and STEEL

Mini 16: 3-16mm and 1/8"-5/8"

- Grinded and grooved rollers: no threads, it is easier to cut non-burred pipes or pipes with flares
- Maximum required space: 38 mm
- For pipes in mm and in inches

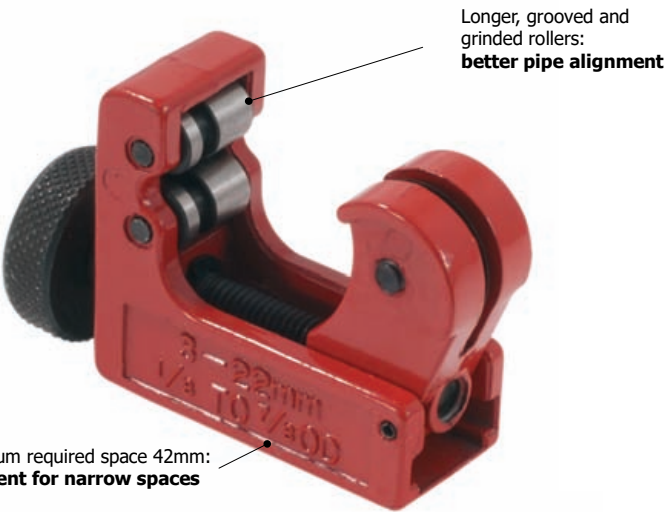
Art.	Material	Wheels	Range	Weight
922095	Copper	922098	3-16 mm 1/8" – 5/8"	0,10 Kg
922093	Thin steel	922096		0,10 Kg



Mini 22: 3-22mm and 1/8"-7/8"

- Grinded and grooved rollers: no threads, it is easier to cut non-burred pipes or pipes with flares
- Maximum required space: 42 mm
- For pipes in mm and in inches

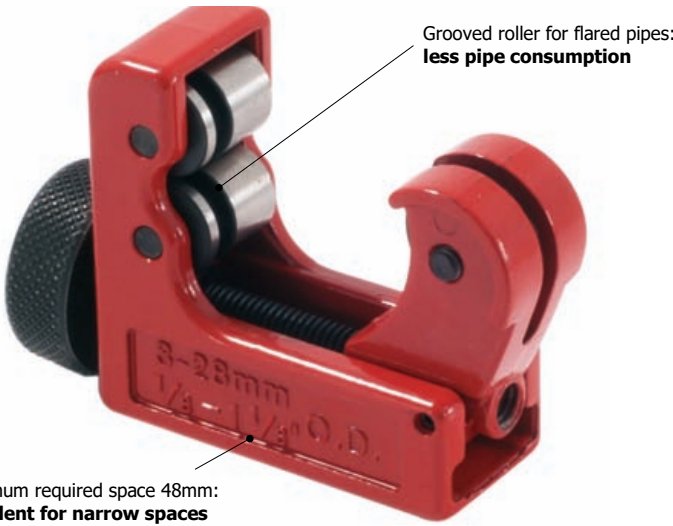
Art.	Material	Wheels	Range	Weight
922099	Copper	922098	3-22 mm 1/8" – 7/8"	0,12 Kg
922097	Thin steel	922096		0,12 Kg



Mini 28: 3-28mm and 1/8"-1 1/8"

- Grinded and grooved rollers: no threads, it is easier to cut non-burred pipes or pipes with flares
- Maximum required space: 48 mm
- For pipes in mm and in inches

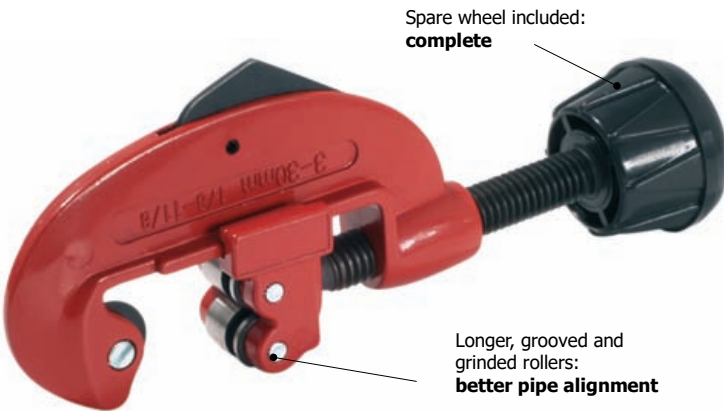
Art.	Material	Wheels	Range	Weight
922091	Copper	922098	3-28 mm 1/8" – 1 1/8"	0,20 Kg
922089	Thin steel	922096		0,20 Kg



Classic 30: 3-30mm

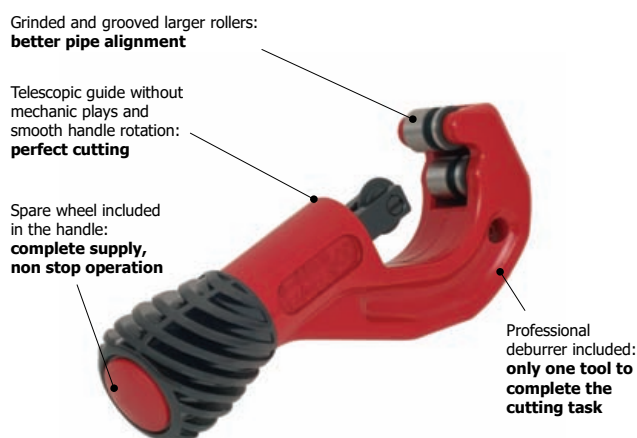
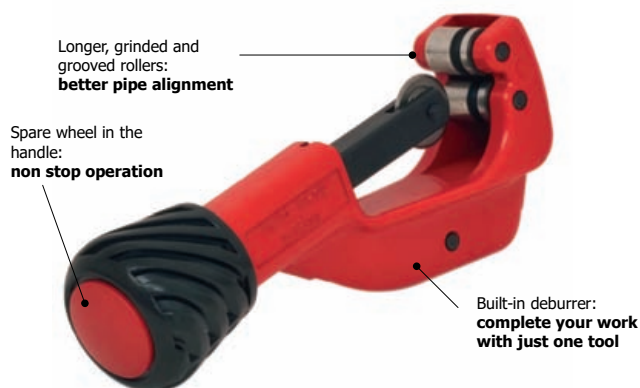
- Ground and grooved rollers: no threads, it is easier to cut non-burred pipes or pipes with collars

Art.	Material	Wheels	Range	Weight
922199	Copper	922098	3-30 mm 1/8" – 1 1/4"	0,29 Kg
922197	Steel	922096		0,29 Kg



Telescopic Pipe Cutter

For copper and thin steel



Telescopic 32: 3-32mm and 1/4"-1 5/8"

- Grinded and grooved rollers: no threads, easier cutting of non-burred pipes or pipes with flares
- For pipes in mm and in inches

Art.	Material	Wheel	Range	Weight
922299	Copper	922098	3-32 mm 1/4" – 1 5/8"	0,29 Kg
922297	Thin Steel	922096		0,29 Kg

Special 38: 6-38mm and 1/4"-1 1/4"

- Grinded and grooved larger rollers: no threads, cutting non-burred pipes or pipes with flares is easier
- For cutting pipes in mm and in inches

Art.	Material	Wheel	Range	Weight
922390	Copper	922389	6-38 mm 1/4" – 1 1/4"	0,47 Kg
922387	Thin Steel	922396		0,47 Kg

Special 42: 6-42mm and 1/4"-1 5/8"

- Grooved and grinded enlarged rollers: no threads, cutting non-burred pipes or pipes with flares is easier
- For pipes in mm and in inches

Art.	Material	Wheel	Range	Weight
922399	Copper	922389	6-42 mm 1/4"-1 5/8"	0,57 Kg
922397	Thin Steel	922396		0,57 Kg
922395	Plastic	922394		0,57 Kg

Special 45: 6-45mm and 1/4"-1 1/2"

- Grinded and grooved enlarged rollers: no threads, cutting non-burred pipes or pipes with collars is easier
- For pipes in mm and in inches

Art.	Material	Wheel	Range	Weight
922393	Copper	922398	6-45 mm 1/4"-1 1/2"	0,61 Kg
922392	Thin Steel	922396		0,61 Kg
922391	Plastic	922394		0,61 Kg

Telescopic Pipe Cutter with Spring Return

For copper, plastic, multilayer and CSST

Automatic 32:

For CSST corrugated pipes up to 32mm

- The exclusive support system with 6+2 rollers allows cutting the corrugated pipe without pipe squeeze

Art.	Material	Wheel	Weight
921990	Plastic/steel	921989	0,59 Kg



Exclusive 8-roller system for CSST corrugated pipe **cutting easily and without pipe squeezing**



Automatic 67:

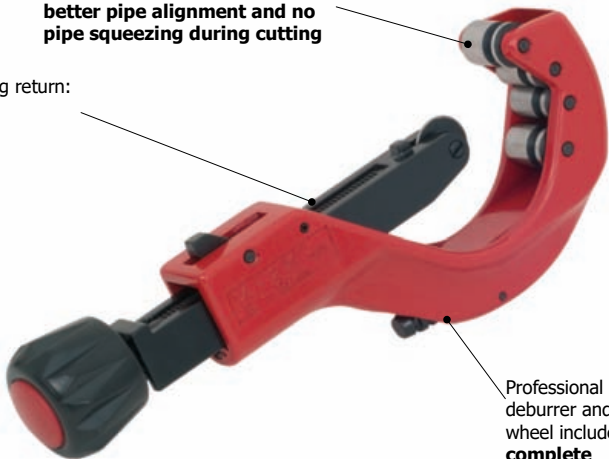
6-67mm and 1/4"-2 1/2"

- Grinded and grooved larger rollers: no threads, cutting non-burred or flared pipes is easier
- 4 rollers to prevent from pipe crushing

Art.	Material	Wheel	Weight
921899	Copper	922398	0,59 Kg
921898	Thin Steel	922396	
921897	Plastic	922394	

4 large, grinded and grooved rollers: **better pipe alignment and no pipe squeezing during cutting**

Automatic spring return: **faster cutting**



Professional deburrer and spare wheel included: **complete**

Automatic 140:

50-140mm and 2"- 5 1/2"

- Grooved rollers: no threads, cutting non-burred pipes is easier

Art.	Material	Wheel	Weight
921999	Plastic	921992	1,5 Kg

Wheel automatic spring return: **fastest cutting operation**



Automatic 168:

100-168mm and 4"- 6 1/2"

- Grooved rollers: no threads, cutting non-burred pipes is easier

Art.	Material	Wheel	Weight
921998	Plastic	921992	1,6 Kg

Wheel automatic spring return: **fast cutting operation**



Pipe Shears

For plastic pipes

Light and cheap:
excellent to cut
small pipes



Spring opening:
faster

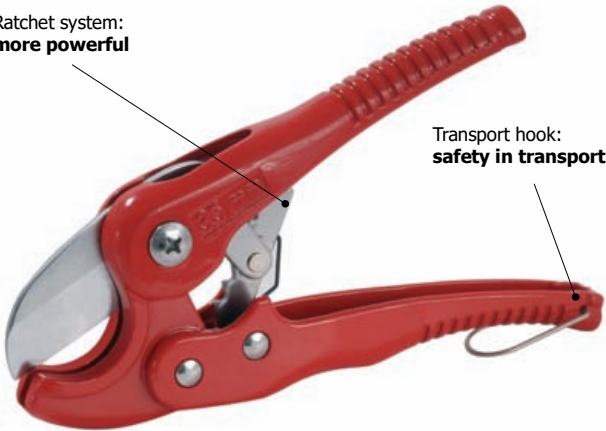
Safety hook:
professional grade

Classic 32

- Plastic pipe shears
- Light and cheap, single stroke operation
- Built-in spring opening and safety hook
- Intended materials: Plastic (PVC, CPVC, PP, PEX, PE, rubber hose) and multilayer tubing

Art.	Material	Ø Max	Weight	Blade
922695	PVC, PE, PP, PB, VPE, PVDF	Ø 32 mm	0,1 Kg	-

Ratchet system:
more powerful



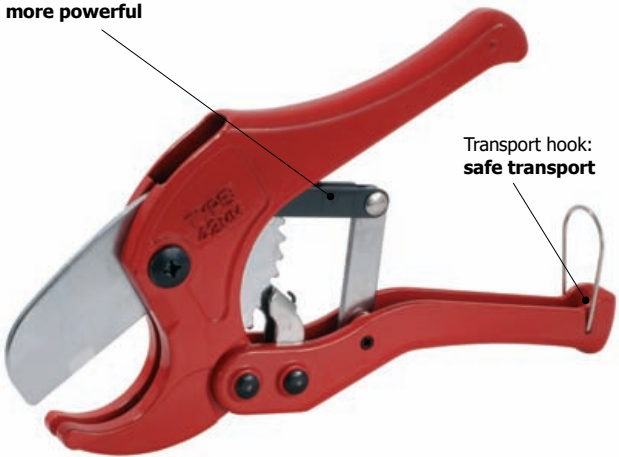
Transport hook:
safety in transport

Classic 35

- Lever ratchet system for more powerful cutting
- Interchangeable blade
- Safety hook
- Manual opening
- Intended materials: Plastic (PVC, CPVC, PP, PEX, PE, rubber hose)

Art.	Material	Ø Max	Weight	Blade
922693	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø 35 mm	0,30 Kg	922692

Ratchet system:
more powerful



Transport hook:
safe transport

Classic 42

- Lever ratchet system for more powerful cutting
- Interchangeable blade
- Transport latch
- Manual opening
- Intended materials: Plastic (PVC, CPVC, PP, PEX, PE, rubber hose)

Art.	Material	Ø Max	Weight	Blade
922699	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø 42 mm	0,30 Kg	922698

Ratchet system:
more powerful



Latch:
safety in transport

Classic 63

- Lever ratchet system for more powerful cutting
- Interchangeable blade
- Transport latch
- Manual opening
- Intended materials: Plastic (PVC, CPVC, PP, PEX, PE, rubber hose)

Art.	Material	Ø Max	Weight	Blade
922697	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø 63 mm	1.17 Kg	922696

Pipe Shears

For multilayer and plastic pipes

Unique 42

- Lever ratchet system for powerful cutting
- Interchangeable blade
- Blade in 1080 steel, excellent for cutting tools blades
- Blade hardness: 55-58 HRC
- Safety transport latch
- Blade release system without button
- Intended materials: Plastic (PVC, CPVC, PP, PEX, PE, rubber hose), multilayer pipes, electric wires, plastic conduits

Art.	Material	Ø Max	Weight	Blade
	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø 42		
922799	Plastic conduit	15x3	0,30Kg	922798
	Electrical wires	Ø 12		



Unique 63

- Lever ratchet system for more powerful cutting
- Interchangeable blade
- Blade in 1080 steel, excellent for cutting tools blades
- Blade hardness: 55-58 HRC
- Transport safety latch
- Quick blade release system
- Intended materials: Plastic (PVC, CPVC, PP, PEX, PE, rubber hose), multilayer pipes

Art.	Material	Ø Max	Weight	Blade
922795	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø 63	0,57 Kg	922794



Automatic 35

- Ratchet mechanism system
- Fast spring blade return, with half run locking system
- Blade in steel with chromium, manganese and molybdenum, excellent for blades and cutting tools
- Blade hardness: 52-58 HRC

Art.	Material	Ø Max	Weight	Blade
922899	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø 35	0,57 Kg	922898



Automatic 42

- Ratchet mechanism system
- Fast spring blade return, with half run locking system
- Blade in steel with chromium, manganese and molybdenum, excellent for blades and cutting tools
- Blade hardness: 52-58 HRC

Art.	Material	Ø Max	Weight	Blade
922897	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø 42	0,69 Kg	922896



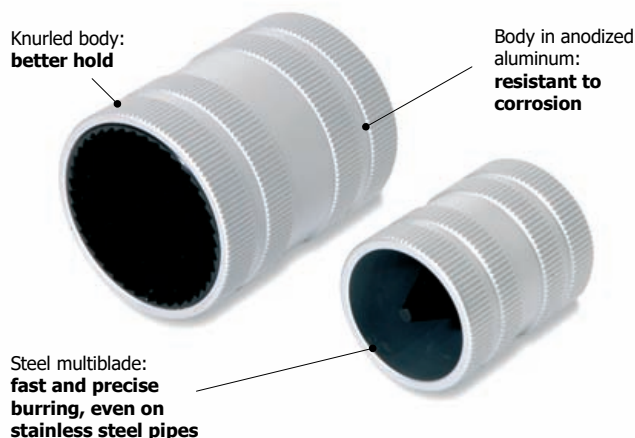
Unique MINI 28

- Polypropylene single stroke pipe shear
- Optimized lever for a powerful and accurate cut

Art.	Material	Ø Max	Weight	Blade
922797	PVC, PE, PP, PB, VPE, PVDF, MPL	Ø	0,1 Kg	-



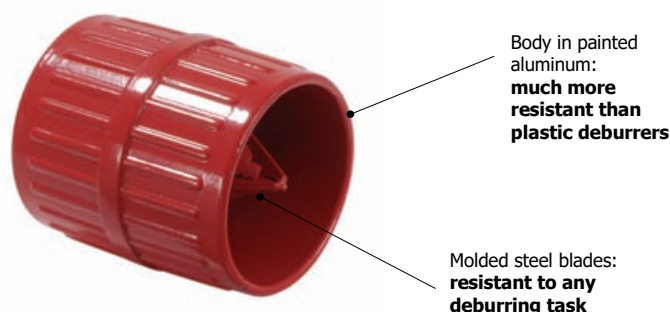
Reamers, Deburrers and Tap Reseaters



Inner Reamer and Outer Deburrer for 8-38 and 10-54mm

- Inner reamer and outer deburrer for pipes in stainless steel, steel, copper, aluminum, plastic and multilayer
- Body in anodized aluminum, resistant to corrosion
- Multiblade cone in hardened steel, excellent for stainless steel tubes
- Dual task operation: reaming and deburring the pipes

Art.	Model	Weight
922994	Inner Reamer and Outer Deburrer (8-38 mm)	0,21 Kg
922993	Inner Reamer and Outer Deburrer (10-54 mm)	0,44 Kg



Inner Reamer and Outer Deburrer for 40mm interior / exterior

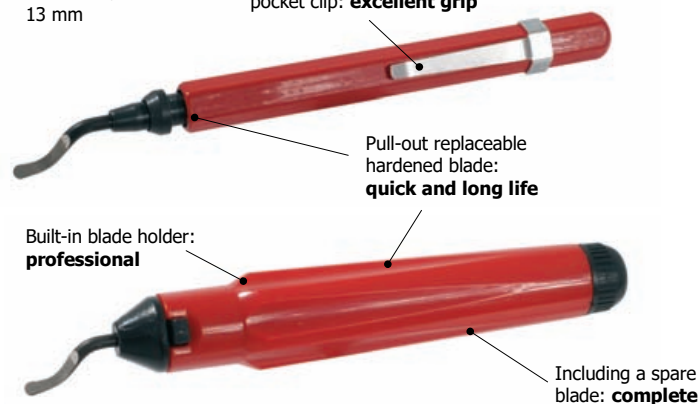
- Inner reamer and outer deburrer for pipes copper, aluminum, plastic and multilayer
- Body in painted aluminum, resistant to corrosion and much stronger than plastic tools
- Blades in tempered steel, molded in the aluminum body, sturdier than plastic deburrers

Art.	Model	Weight
922999	Inner Reamer and Outer Deburrer (40mm)	0,23 Kg

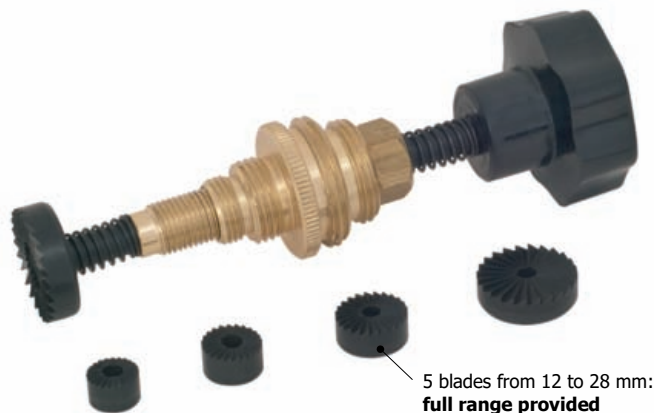


Pipe Deburring Tool

- Deburring tool for pipes and edges in copper, aluminum, plastic and multilayer
- Extremely light and handy, with pocket clip and perfect grip handle
- HSS hardened, **MGF** quality rotating blades
- Heavy duty metal design



Art.	Model	Weight
922992	Inner Pipe Reaming Tool	0,04 Kg
922998	Pipe Deburring Tool	0,04 Kg
922997	Pipe Deburring Tools w/ Spare Blade Holder	0,04 Kg
922996	Spare Deburring Blade Tool	0,008 Kg



Millkit - Taps Reseating Tool

- Taps reseating tool with **5 milling sizes blades**: 12, 14, 17, 24, 28 mm
- Milling blades connection thread: 6MA
- Fits most popular taps, with brass bushing
- Progressive spring
- Ergonomic plastic handle
- Supplied in blister

Art.	Model	Weight
924000	MillKit 12 - 14 - 17 - 24 - 28 mm	0,71 Kg

Cutting Tools

Hacksaw Model 826

- Handy blade thumbscrew tensioning system
- 45° blade adjustment system for big sizes cutting
- Spare blades housing
- Exclusive blade locking system for "impossible cuts"
- Aluminum handle
- Blade length: 30 cm

Art.	Model	Weight
922650	Hacksaw Model 826	0,50 Kg
922621	HSS 30cm blade (high flex & long-lasting)	0,002 Kg
922623	30cm double-edged blade for PVC pipes	0,002 Kg

Hacksaw Model 824

- Handy blade tensioning system
- Adjustable blade for 8 different cutting positions
- Handle in aluminium
- Blade length: 30 cm

Art.	Model	Weight
922649	Hacksaw model 824	0,50 Kg
922621	30cm HSS blade (high flex & long-lasting)	0,002 Kg
922622	30cm HSS blade	0,002 Kg
922623	30cm double-edged blade for PVC pipes	0,002 Kg

Hacksaw model 821

- Useful wing nut blade tensioning system
- Body in cold-rolled steel
- Shockproof handle in MOPLIN composite compound
- Blade length: 30 cm

Art.	Model	Weight
922648	Hacksaw Model 821	0,38 Kg
922621	30cm HSS blade (high flex & long-lasting)	0,002 Kg
922622	30cm HSS blade	0,002 Kg
922623	30cm double-edged blade for PVC pipes	0,002 Kg

M25 Professional Cutter

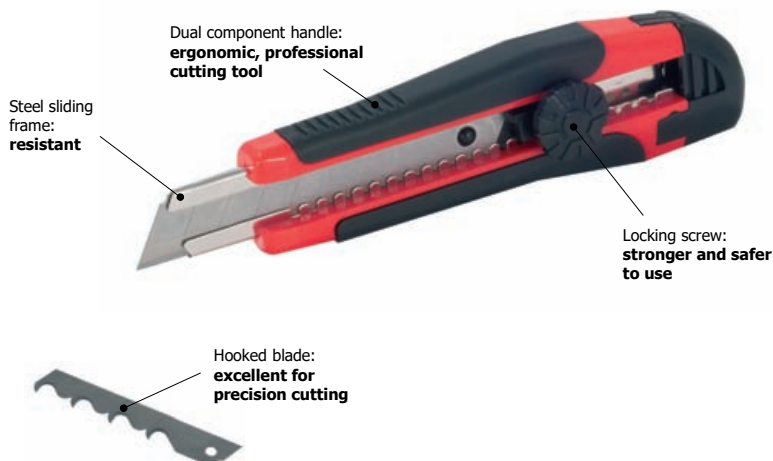
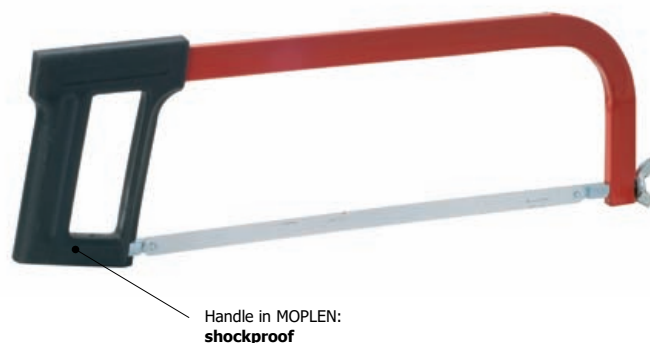
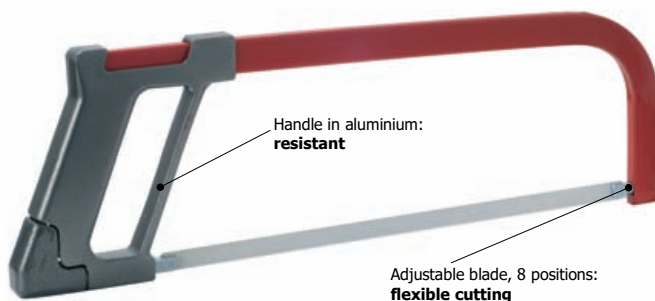
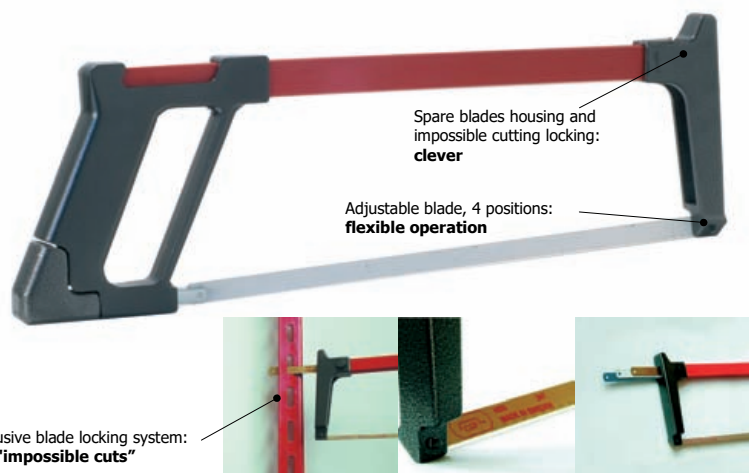
- Body in ABS
- Handle in non-slip rubber
- Locking screw
- Segmented blade 25 mm high and 128 mm long

Art.	Model	Weight
922630	M25 Professional Cutter	0,17 Kg
922629	M25 Professional Cutter (12 pack box)	2,10 Kg
922626	M25 spare blade (10-piece blister)	0,03 Kg

M18 Professional Cutter

- Body in ABS
- Handle in non-slip rubber
- Locking screw
- Segmented blade 18 mm high and 100 mm long
- **Supplied with 2 segmented blades**

Art.	Model	Weight
922628	M18 Professional Cutter	0,10 Kg
922627	M18 Professional Cutter (12 pack box)	0,04 Kg
922625	M18 blade (10-piece blister)	0,008 Kg
922624	M18 hooked blade (5-piece blister)	0,008 Kg



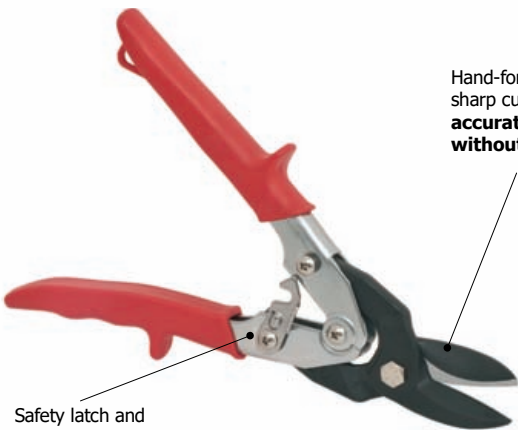
Tin Snips

Safety latch and spring release: **handy and safe**

Hand-forged grinded sharp cutting edges: **accurate cutting without burrs**



Hand-forged grinded sharp cutting heads: **accurate cutting without burrs**



Safety latch and high grip handle: **handy and safe**

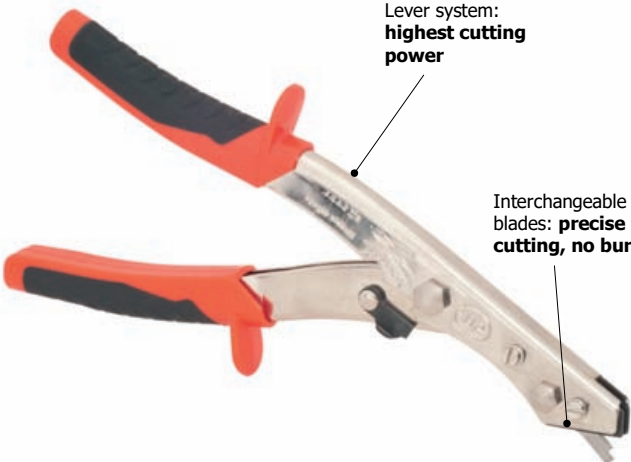
Marking on handle (R or L): **easy to find**

For straight and bended cuts: **universal**



Lever system: **highest cutting power**

Interchangeable blades: **precise cutting, no burr**



Tin Snips

- For shaped cutting, even tight curves
- High precision grinded blades without mechanical play and razor edge for metal cutting without slips or burrs
- Screw joint and lever mechanism to develop more power
- Hand-forged, sharp cutting heads
- Made in Germany
- Length: 250 mm
- Blade hardness: 60-62 HRC
- Blade length: 35 mm
- Maximum plate thickness: 1,8 mm
- Maximum stainless-steel thickness: 1,2 mm

Art.	Model	Weight
922846	Tin Snips (left)	0,455 Kg
922847	Tin Snips (right)	0,455 Kg

Straight Tin Snips

- For long, straight and continuous cutting
- High precision grinded blades without mechanical play and razor edge for metal cutting without slips or burrs
- Screw joint and lever mechanism to develop more power
- Hand-forged, sharp cutting heads
- Made in Germany
- Length: 250 mm
- Blade hardness: 60-62 HRC
- Blade length: 30 mm
- Maximum plate thickness: 1,8 mm
- Maximum stainless-steel thickness: 1,2 mm

Art.	Model	Weight
922848	Straight Tin Snips	0,450 Kg

Universal Tin Snips

- For straight or shaped cutting, requiring large bending radius
- High precision grinded blades without mechanical play and razor edge for metal cutting without slips or burrs
- Screw joint and lever mechanism to develop more power
- Hand-forged, sharp edge heads
- Made in Germany
- Length: 250 mm
- Blade hardness: 60-62 HRC
- Blade length: 30 mm
- Maximum plate thickness: 1,8 mm
- Maximum stainless-steel thickness: 1,2 mm

Art.	Model	Weight
922849	Universal Tin Snips (left)	0,515 Kg
922850	Universal Tin Snips (right)	0,515 Kg

Knabber Tin Snips

- Essential for tin metal sheet working
- For shaped cutting, holes and corrugated plate
- For round and square cuts with clean cutting edges without any burr
- Cutting width 2,7 mm
- Lever system to cut:
 - Maximum plate thickness: 1,2 mm
 - Maximum aluminum, copper, plastic thickness: 2,0 mm
- Length: 260 mm
- Interchangeable blades

Art.	Model	Weight
922845	Knabber Tin Snips	0,470 Kg
922845L	Spare Blade for Knabber Tin Snips	0,020 Kg

Tin Snips and Plumbing Welding Pliers

Tin Snips for Straight Cuts

- Tin snips for straight, long and continuous cutting
- High precision forged, hardened and grinded blades for easy cuts without burrs
- Made in Germany
- With opening spring
- Length: 250 mm
- Weight: 0,540 Kg
- Blade hardness: 57-59 HRC
- Blade length: 42 mm
- Maximum plate thickness: 1,8 mm
- Maximum stainless-steel thickness: 1,2 mm

Art.	Model	Weight
922843	Tin Snips for Straight Cuts	0,54 Kg

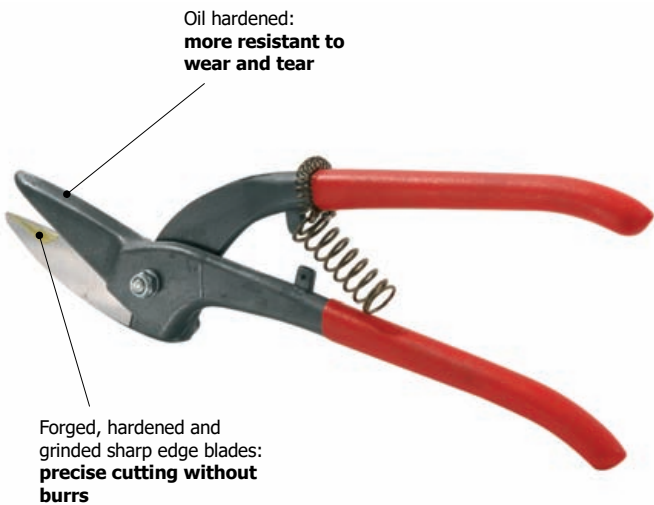
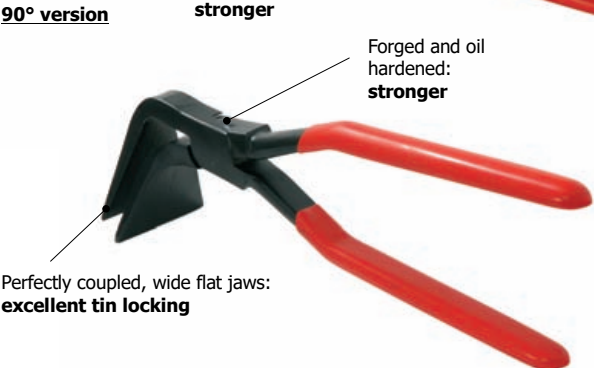
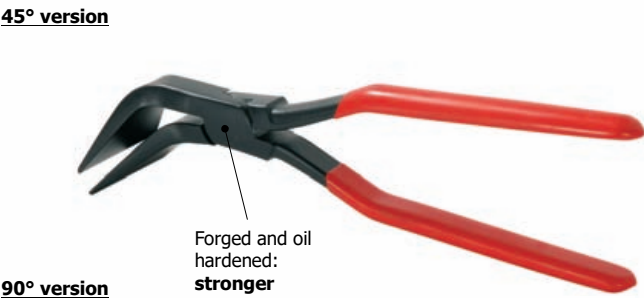
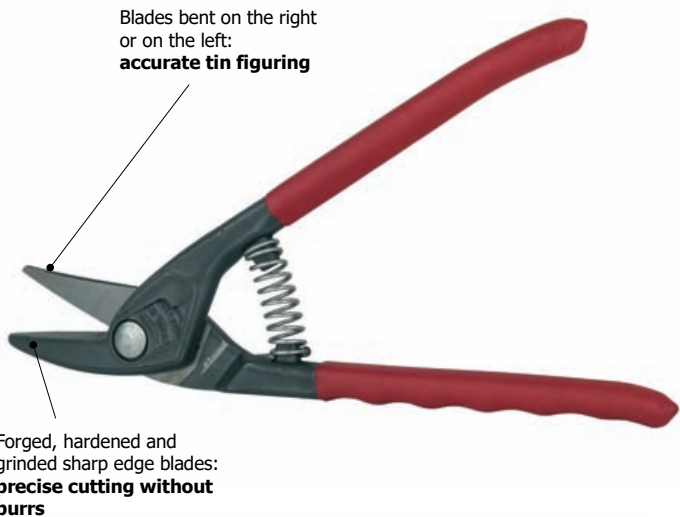


Figure Tin Snips

- Figure tin snips for cutting and shaping with small radii
- High precision forged, hardened and grinded blades for easy cuts without burrs
- Made in Germany
- With opening spring
- Length: 250 mm
- Weight: 0.540 Kg
- Blade hardness: 57-59 HRC
- Blade length: 42 mm
- Maximum plate thickness: 1.8 mm
- Maximum stainless-steel thickness: 1.2 mm

Art.	Model	Weight
922844	Figuring Tin Snips (Left)	0,54 Kg
922842	Figuring Tin Snips (Right)	0,54 Kg



Plumbing Welding Pliers

- In forged and oil-tempered steel
- Plastic coated handles
- With lap-joint and strong handles
- Perfectly coupled, flat and wide jaws
- Available in three models with different jaws orientation: 0°, 45° e 90°
- Jaws width: 60 mm

Art.	Model	Weight
920120	Plumbing Welding Pliers 0°	0,68 Kg
920119	Plumbing Welding Pliers 45°	0,68 Kg
920118	Plumbing Welding Pliers 90°	0,68 Kg

Scissors and Side Cutters

**Pro.
Product
Made in
Italy**

Dual component,
soft grip handle:
more comfort

Micro toothed blade:
**accurate cutting
without burrs**



Compact:
**easy to use in
narrow spaces**

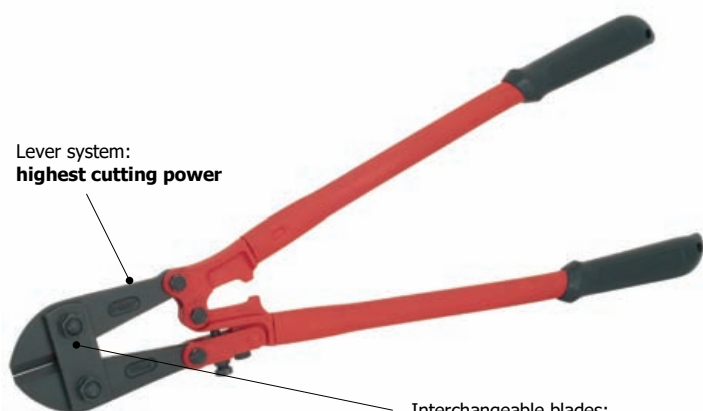


Induction hardened steel,
sharp cutting edges:
**precise cutting without
burr**



Induction hardened steel,
sharp cutting edges:
**precise cutting without
burr**

Reinforced heavy
duty design:
cut bigger sizes



Lever system:
highest cutting power

Interchangeable blades:
long lasting

Electrician Scissors

- Dual component handle
- HRC56 Stainless-steel straight blades
- Micro tooth on blades
- Blade length: 35 mm
- Scissors length: 140 mm

Art.	Model	Weight
920330	Scissors for electrical wires	0,100 Kg

Standard Side Cutter

- Dual component, soft grip handles
- For wires, electrical wires and steel
- Induction hardened steel, sharp cutting edges
- Power transmission with optimum leverage for easy and effortless work
- Made in Germany

Art.	Model	Kg.	Max Special Steel Thickn.	Max Steel Thickn.	Max Wire Thickn.
920347	Side Cutters 145 mm	0,16	5 mm	1,7 mm	8 mm
920346	Side Cutters 160 mm	0,22	6 mm	2 mm	11 mm
920345	Side Cutters 180 mm	0,25	7 mm	2,5 mm	13 mm

Heavy Duty Side Cutter

- Dual component, soft grip handles
- For wires, electrical wires and steel
- Induction hardened steel, sharp cutting edges
- Power transmission with optimum leverage for easy and effortless work
- Made in Germany

Art.	Model	Kg.	Max Special Steel Thickn.	Max steel Thickn.	Max wire Thickn.
920344	HDSide Cutters 180 mm	0,3	2,2 mm	2,6 mm	8 mm
920343	HDSide Cutters 200 mm	0,3	2,5 mm	2,8 mm	11 mm
920342	HDSide Cutters 240 mm	0,4	3 mm	3,5 mm	13 mm

Bolt Cutter

- Cutting heads in hardened chromium-vanadium steel
- Screwed-in heads, replaceable
- Handles in PVC

Art.	Model	Weight
920320	Bolt Cutter 450 mm	1,5 Kg
920319	Bolt Cutter 600 mm	2,3 Kg
920318	Bolt Cutter 750 mm	4,4 Kg
920317	Bolt Cutter 900 mm	4,7 Kg

Expanding and Flaring Tools

"The best thing a man can do sometimes is to keep his word."

Anonimo

Expankit

Single Stage Tube Expander and Calibration Tool



- ✓ Tube expander and calibration tools. Excellent results in copper, aluminium and steel pipes
- ✓ Free-floating, self centering and end stop mechanism to ensure quick and accurate expansions and calibrations
- ✓ Heads provided with step for calibration

Technical Features

Material	Max. Thickness	mm	inches
Annealed copper	-	10 - 42	3/8" - 1 5/8"
Aluminium	1.6 mm	10 - 28	3/8" - 1 1/8"
Mild steel	1.6 mm	10 - 28	3/8" - 1 1/8"
Stainless-steel	1.0 mm	10 - 22	3/8" - 7/8"

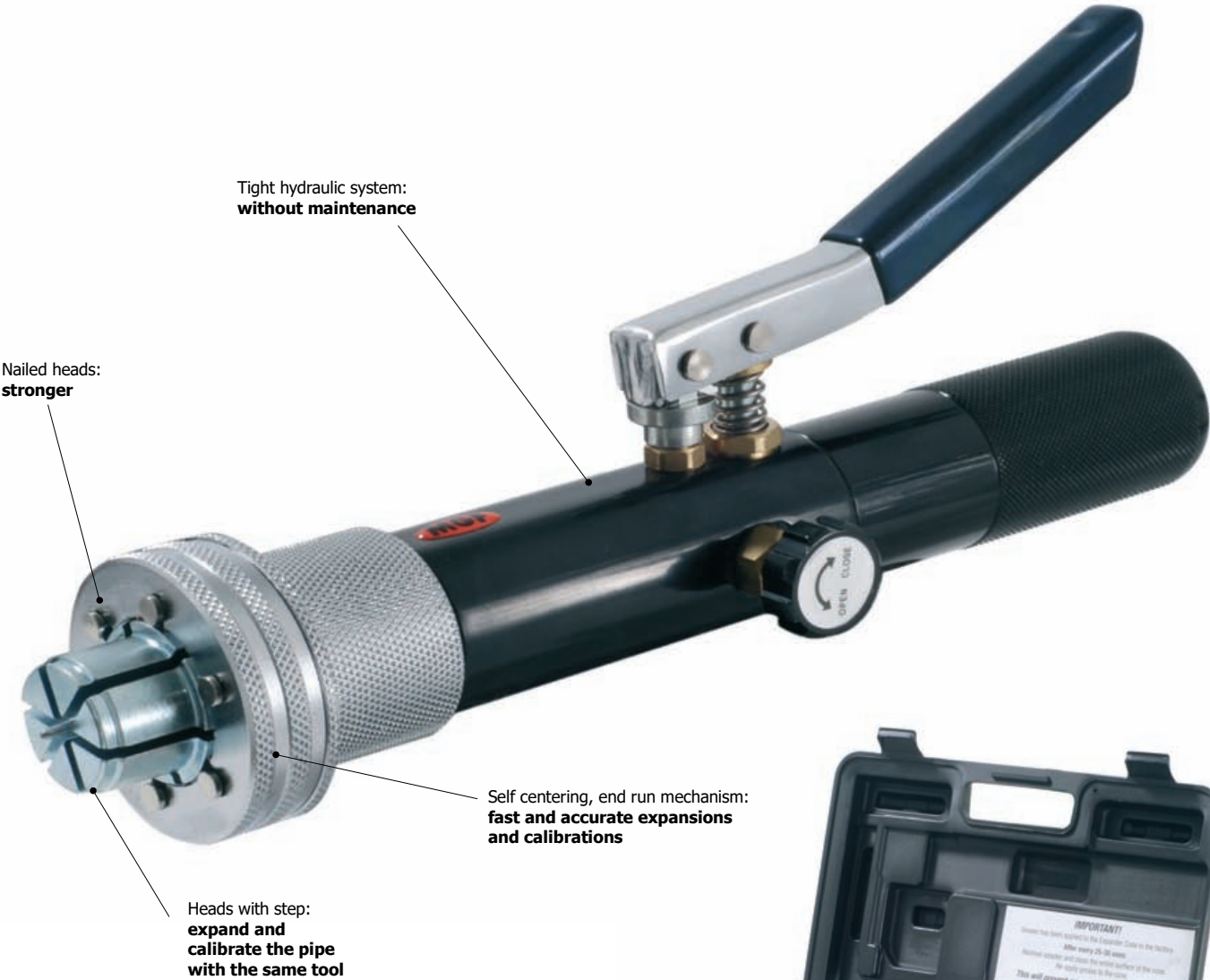
Standard Supply

Pipe expander in metal case, with expanding and calibrating heads and deburrer/reamer tool (optional, item 922999).

Art.	Model
923094	Pipe Expander Kit w/heads 12,14,16,18,22mm and deburrer
923093	Pipe Expander Kit w/heads 12,14,18,22mm and deburrer
923092	Pipe Expander Kit w/heads 12,14,16,18,22mm
923091	Pipe Expander Kit w/heads 12,14,18,22mm
923097	Pipe Expander Kit w/heads 3/8"-1/2"-5/8"
923091	Pipe Expander (without spares)

Expankit H

Hydraulic Pipe Expander and Calibration Tool



- ✓ Tube expander and calibration tool for copper, aluminum and steel pipes
- ✓ Self centering, end stop mechanism to ensure fast and accurate expansions and calibrations
- ✓ Stepped head to recalibrate the pipe
- ✓ Powerful hydraulic system for effortless expansion job

Standard Supply

Hydraulic expander in black molded case, heads and deburrer (art. 922998).

Art.	Model
923085	Tube expander, w/ heads 3/8", 1/2", 5/8", 3/4", 7/8", 1" and deburrer
923083	Hydraulic Tube Expander (only tool)

Technical Features

Material	Max. thickness	mm	inches
Annealed copper	-	10 - 42	3/8" - 1 5/8"
Aluminum	1,6 mm	10 - 28	3/8" - 1 1/8"
Mild steel	1,6 mm	10 - 28	3/8" - 1 1/8"
Stainless steel	1,0 mm	10 - 22	3/8" - 7/8"

Tube Expanding Heads



Art.	Description	Weight	Art.	Description	Weight	Art.	Description	Weight	Art.	Description	Weight
280100	Head 10 mm	0,13	280105	Head 18 mm	0,13	280112	Head 3/8"	0,13	280117	Head 1"	0,16
280101	Head 12 mm	0,13	280106	Head 22 mm	0,15	280113	Head 1/2"	0,13	280118	Head 1 1/8"	0,27
280102	Head 14 mm	0,14	280108	Head 28 mm	0,27	280114	Head 5/8"	0,14	280120	Head 1 3/8"	0,4
280103	Head 15 mm	0,14	280110	Head 35 mm	0,4	280115	Head 3/4"	0,14	280122	Head 1 5/8"	0,48
280104	Head 16 mm	0,14	280111	Head 42 mm	0,43	280116	Head 7/8"	0,14			

Tube Flaring and Expanding Kit



FLAREKIT Tube Flaring and Expanding Tool

- Eccentric chrome plated cone for excellent 45° flares
- The only tool for tube expansion on small diameters: **perfect for HVAC and plumbing copper piping**
- Jaws for inch and millimeter sized pipes available
- **Standard supply:** tool for 45° flares and expanding tubes, heads and jaws in plastic molded case.

Art.	Model / Range	Weight
923299	1/8"-3/16"-1/4"-5/16"-3/8"-7/16"-1/2"-5/8"-3/4"	2,1 Kg
923298	4, 4.75, 6, 8, 10, 12, 14, 16, 19 mm	2,1 Kg
923598	Adaptor 90° (not included)	1,04 Kg

Eccentric chrome plated cone:
excellent and tight flares

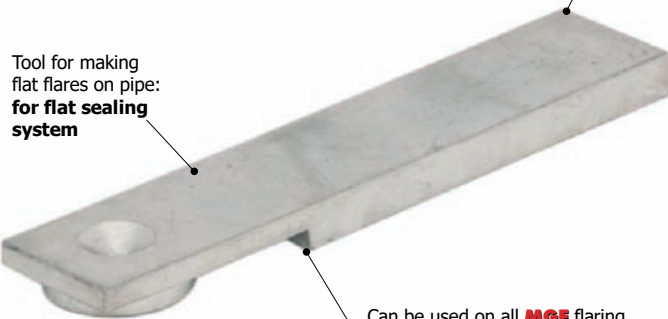
Knurling heads:
easy to mount

Tool for making
flat flares on pipe:
for flat sealing
system

Adapting Tool for Flat Flares

Adapter for flat flares on pipes.
Can be used on **all MGF flaring tools** (excluding the handle clutch release models)

Packaged in blister.



Can be used on all **MGF** flaring
tools (excluding the handle clutch
release models)

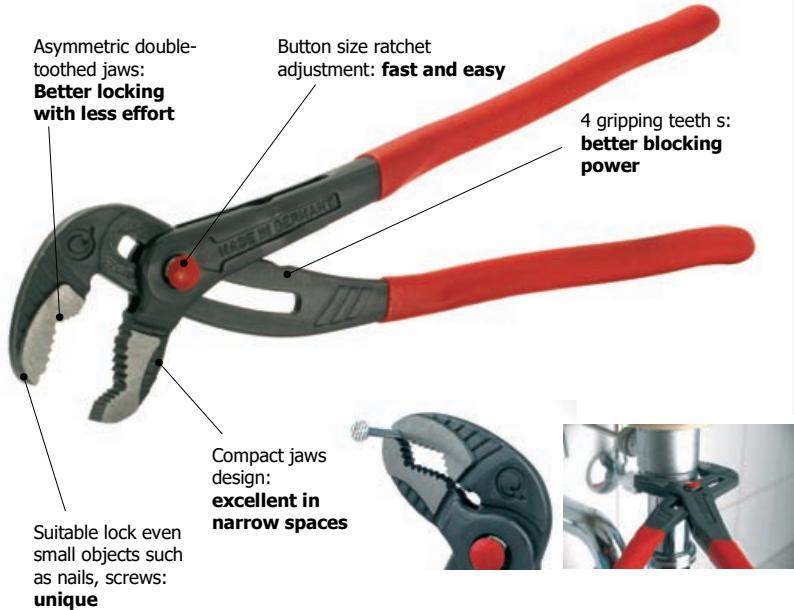
Art.	Range	Weight
923598	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	0,2 Kg

Pliers

"Take control of your job or it will take control of you"

Benjamin Franklin (1706-1790)

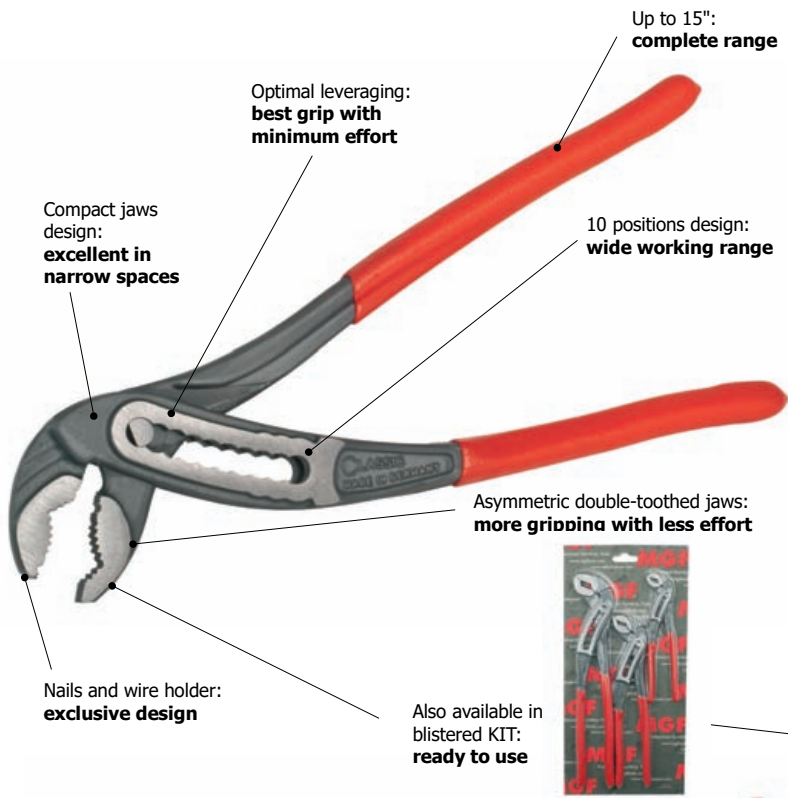
Adjustable Waterpump Pliers



TECNO Waterpump Plier

- Professional grade waterpump plier with automatic precise size adjustment
- Selected size remains also once the plier is opened
- Optimal geometry with self locking jaws
- In forged and oil-hardened chrome-vanadium steel
- Additional hardening on cogs
- Ergonomic handle in vinyl
- Finger trap protection against squeezing
- Gripping performance 40% above ISO standards thanks to arch-shaped pitch adjustment
- With nail and wire holder
- Made in Germany

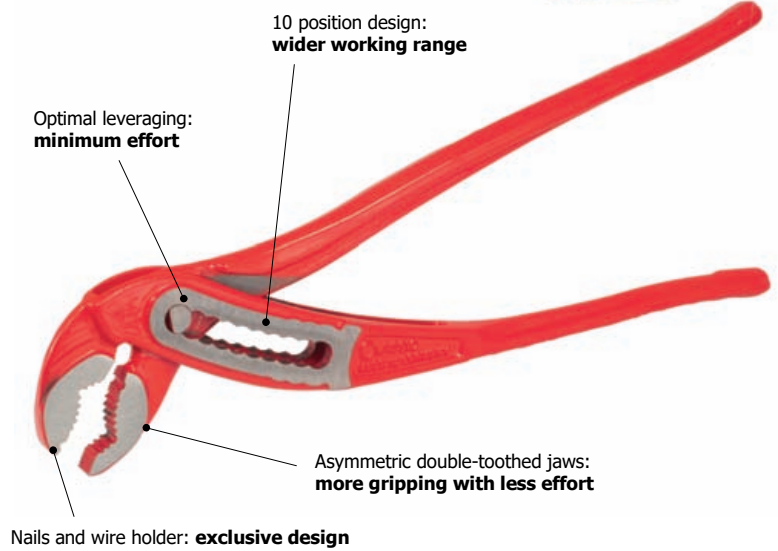
Art.	Length	Width	Weight
920173	10" / 250 mm	1 1/2" / 50 mm	0,37 Kg
920172	12" / 320 mm	2 1/2" / 75 mm	0,63 Kg
920171	15" / 400 mm	3" / 100 mm	1,25 Kg



CLASSIC Waterpump Plier with Plastic Handle

- Professional grade waterpump plier
- Optimal geometry with self locking jaws
- In forged and oil-hardened chrome-vanadium steel
- Additional hardening on cogs
- Ergonomic handle in vinyl
- Finger trap protection against squeezing
- Gripping performance 40% above ISO standards thanks to arch-shaped pitch adjustment
- With nail and wire holder
- Made in Germany

Art.	Length	Width	Weight
920179	7" / 180 mm	1 1/4" / 40 mm	0,180 Kg
920178	10" / 240 mm	1 1/2" / 50 mm	0,315 Kg
920177	12" / 300 mm	2 1/2" / 65 mm	0,490 Kg
920169	15" / 400 mm	3" / 100 mm	1,025 Kg
920151	Kit pliers with plastic handle in blister: 7", 10", 12"		



CLASSIC Waterpump Plier

- Professional grade waterpump plier
- Optimal geometry with self locking jaws
- In forged and oil-hardened chrome-vanadium steel
- Additional hardening on cogs
- Finger trap protection against squeezing
- Gripping performance 40% above ISO standards thanks to arch-shaped pitch adjustment
- With nail and wire holder
- Made in Germany

Art.	Length	Width	Weight
920176	7" / 180 mm	1 1/4" / 40 mm	0,145 Kg
920175	10" / 240 mm	1 1/2" / 50 mm	0,315 Kg
920174	12" / 300 mm	2 1/2" / 65 mm	0,475 Kg

Adjustable Waterpump Pliers

Adjustable Waterpump Pliers

- Classic 7 positions design
- Gripping power according to ISO specifications
- Made with oil-hardened **chrome-vanadium** steel
- Finger trap protection for safe work, prevents injuries caused by squeezing

Art.	Lenght	Width	Weight
920196	7" / 175 mm	1" / 30 mm	0,165 Kg
920195	10" / 240 mm	1 1/4" / 40 mm	0,325 Kg
920194	12" / 300 mm	1 1/2" / 49 mm	0,580 Kg
920187	16" / 400 mm	3" / 100 mm	1,280 Kg



Adjustable Waterpump Pliers with Plastic Handle

- Classic 7 positions design
- Gripping power according to ISO specifications
- Made with oil-hardened chrome-vanadium steel
- Finger trap protection for safe work, prevents injuries caused by squeezing

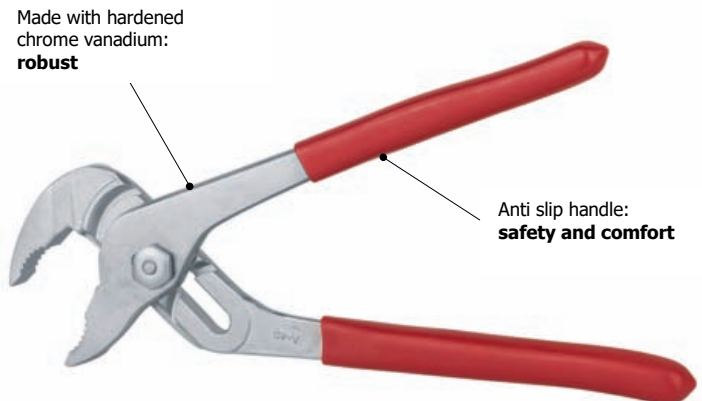
Art.	Lenght	Width	Weight
920199	7" / 175 mm	1" / 30 mm	0,165 Kg
920198	10" / 240 mm	1 1/4" / 40 mm	0,325 Kg
920197	12" / 300 mm	1 1/2" / 49 mm	0,580 Kg
920186	16" / 400 mm	3" / 100 mm	1,360 Kg



Groove Joint Waterpump Pliers

- Made with zinc plated chrome vanadium hardened steel
- Ergonomic comfort anti-slip plastic handle
- Strong self-gripping teeth for joints, fasteners and pipes

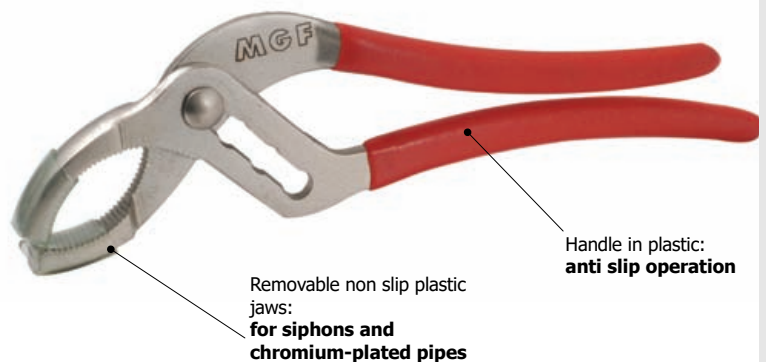
Art.	Ø Max	Lunghezza	Peso
920193	1" 30 mm	8" 230 mm	0,24 Kg
920192	1 1/2" 45 mm	10" 250 mm	0,40 Kg
920191	2" 54 mm	12" 315 mm	0,62 Kg
920190	4" 95 mm	16" 418 mm	1,10 Kg



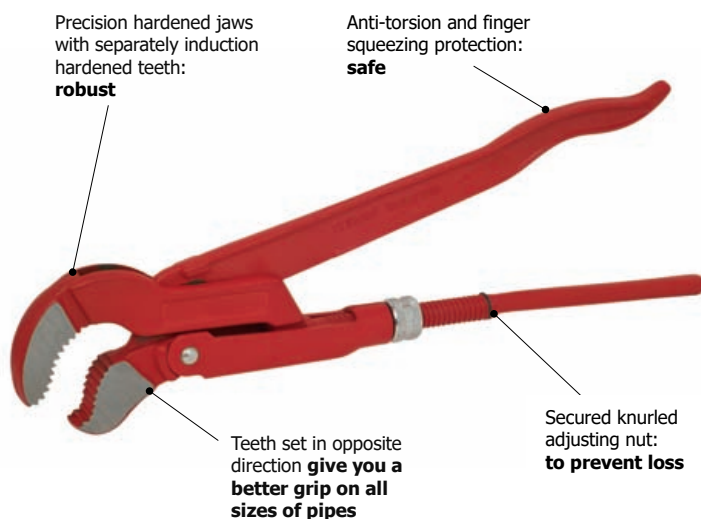
Siphons and Connectors Pliers

- With removable non-slip plastic jaws, providing a secure grip with minimal chance of damaging your pipe
- To be used on pipes, hoses, fittings, and other cylindrical materials, up to 65 mm in diameter
- Ergonomic comfort anti-slip plastic handle
- Made in oil induction hardened steel

Art.	Ø Max	Lenght	Weight
920189	2" 65 mm	10" 254 mm	0,30 Kg

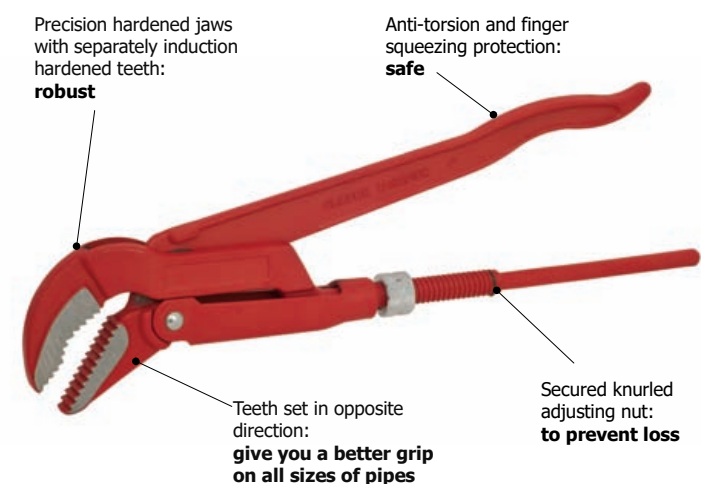


Swedish Pipe Wrenches



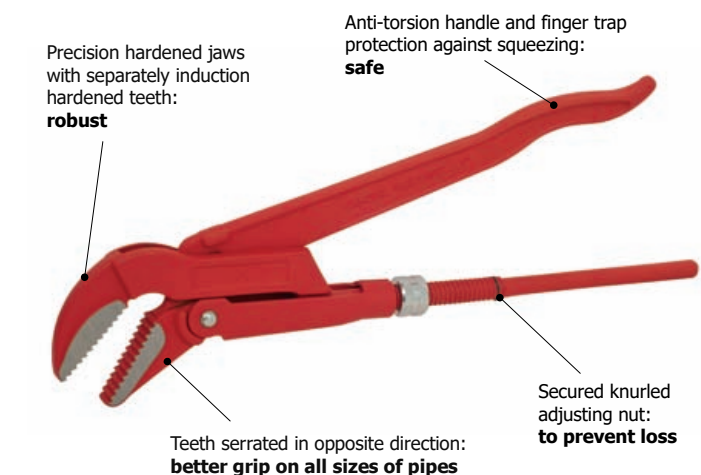
45° Swedish Pipe Wrench S-Type

Art.	Ø Max		Length		Weight
920799	1/2"	22 mm	10"	250 mm	0,40 Kg
920798	1"	35 mm	12"	320 mm	0,79 Kg
920797	1 1/2"	46 mm	16"	420 mm	1,43 Kg
920796	2"	65 mm	20"	530 mm	2,37 Kg
920795	3"	80 mm	24"	640 mm	4,16 Kg



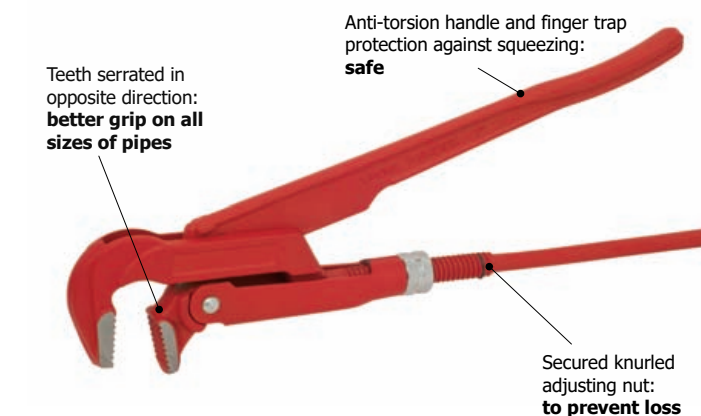
45° Swedish Pipe Wrench with Notch

Art.	Ø Max		Length		Weight
920599	1/2"	22 mm	10"	250 mm	0,42 Kg
920598	1"	35 mm	12"	320 mm	0,75 Kg
920597	1 1/2"	46 mm	16"	420 mm	1,40 Kg
920596	2"	65 mm	20"	560 mm	2,32 Kg



45° Swedish Pipe Wrench Flat Type

Art.	Ø Max		Length		Weight
920595	1"	35 mm	12"	320 mm	0,75 Kg
920594	1 1/2"	46 mm	16"	420 mm	1,40 Kg
920593	2"	65 mm	20"	560 mm	2,32 Kg



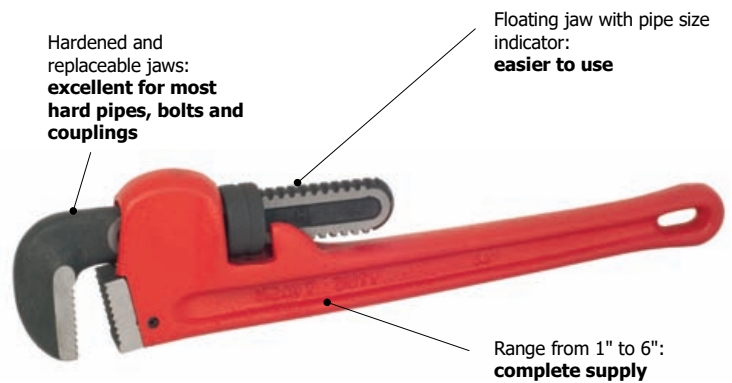
90° Swedish Pipe Wrench

Art.	Ø Max		Length		Weight
920699	1"	35 mm	12"	320 mm	0,73 Kg
920698	1 1/2"	46 mm	16"	420 mm	1,31 Kg
920697	2"	65 mm	20"	560 mm	2,32 Kg
920696	3"	80 mm	24"	620 mm	2,97 Kg

American Pipe Wrenches

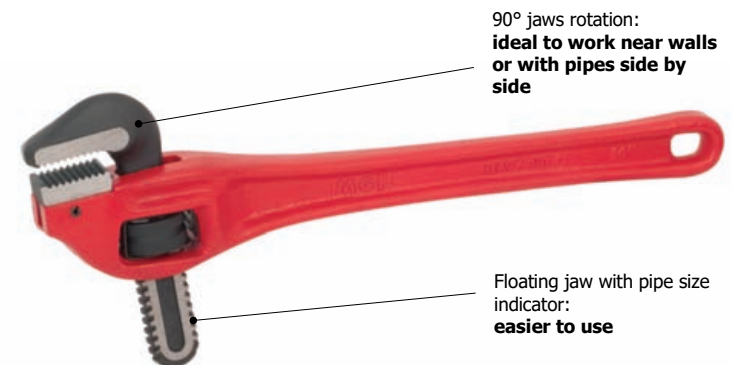
American Heavy Duty Pipe Wrench

Art.	Ø Max		Lenght		Weight
925099	1"	35 mm	8"	200 mm	0,42 Kg
925098	1 1/2"	49 mm	10"	250 mm	0,83 Kg
925097	2"	60 mm	12"	300 mm	1,30 Kg
925096	2"	60 mm	14"	355 mm	1,70 Kg
925095	2 1/2"	76 mm	18"	457 mm	2,60 Kg
925094	3"	90 mm	24"	609 mm	4,50 Kg
925093	5"	140 mm	36"	914 mm	9,20 Kg
925092	6"	166 mm	48"	1200 mm	17,00 Kg



American Heavy Duty 90° Pipe Wrench

Art.	Ø Max		Lenght		Weight
925085	2"	60 mm	14"	355 mm	1,60 Kg
925084	2 1/2"	76 mm	18"	457 mm	2,70 Kg



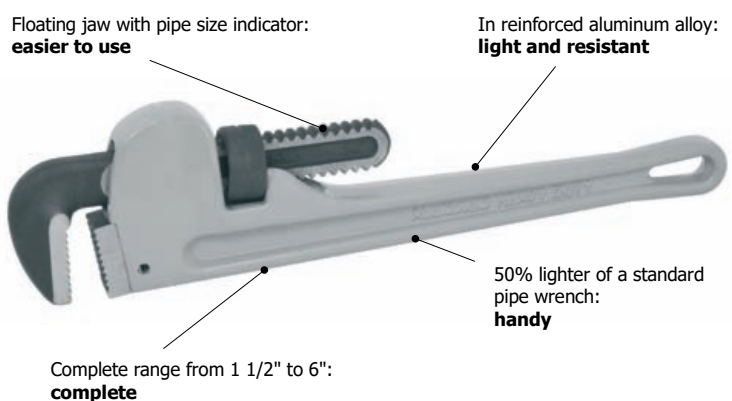
American Heavy Duty 35° Pipe Wrench

Art.	Ø Max		Lenght		Weight
925091	1"	35 mm	8"	200 mm	0,35 Kg
925090	1 1/2"	49 mm	10"	250 mm	0,80 Kg
925089	2"	60 mm	12"	300 mm	1,30 Kg
925088	2"	60 mm	14"	355 mm	1,70 Kg
925087	2 1/2"	76 mm	18"	457 mm	2,30 Kg
925086	3"	90 mm	24"	609 mm	4,00 Kg



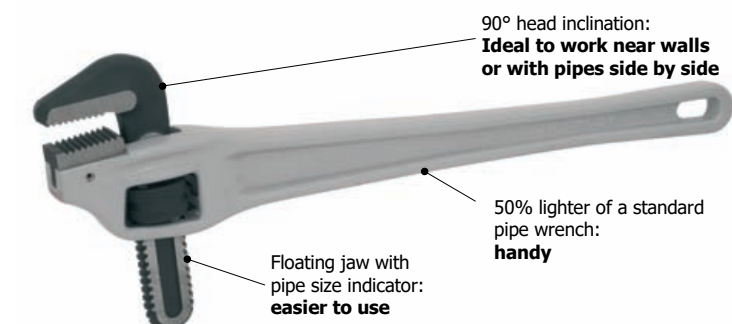
American Aluminum Pipe Wrench

Art.	Ø Max		Lenght		Weight
920499	1 1/2"	49 mm	10"	250 mm	0,50 Kg
920498	2"	60 mm	14"	355 mm	0,96 Kg
920497	2 1/2"	76 mm	18"	457 mm	1,54 Kg
920496	3"	90 mm	24"	609 mm	2,65 Kg
920495	5"	140 mm	36"	914 mm	4,96 Kg
920494	6"	166 mm	48"	1200 mm	7,49 Kg

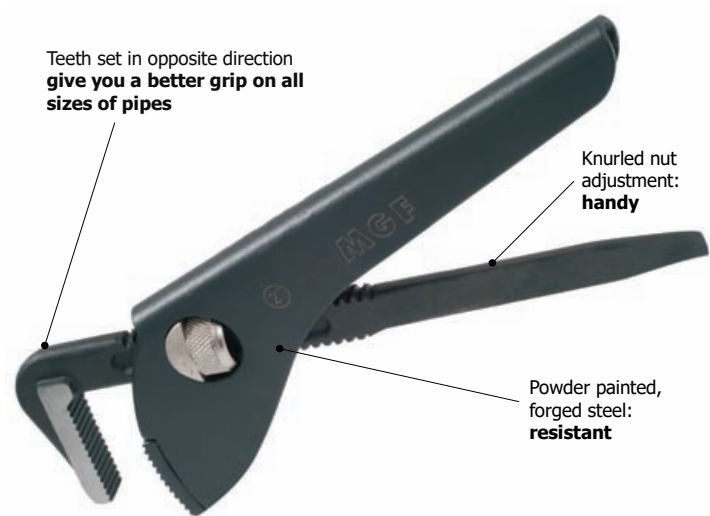


American 90° Aluminum Pipe Wrench

Art.	Ø Max		Lenght		Weight
920493	2"	60 mm	14"	355 mm	0,84 Kg
920492	2 1/2"	76 mm	18"	457 mm	1,28 Kg
920491	3"	90 mm	24"	609 mm	2,65 Kg



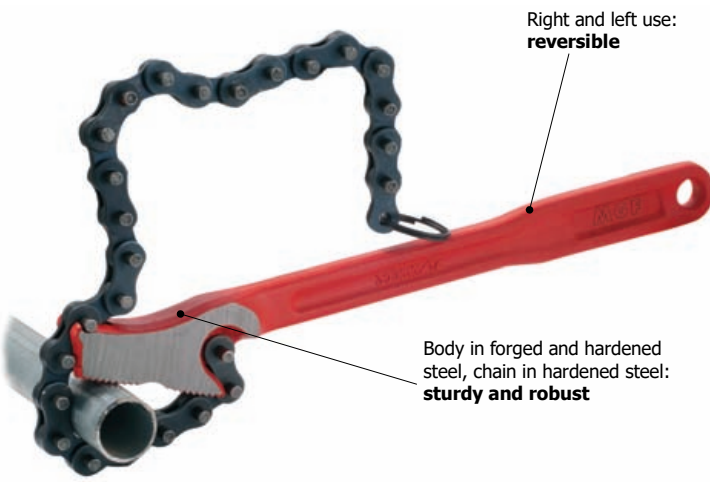
Pipe Wrenches



Teeth set in opposite direction
give you a better grip on all
sizes of pipes

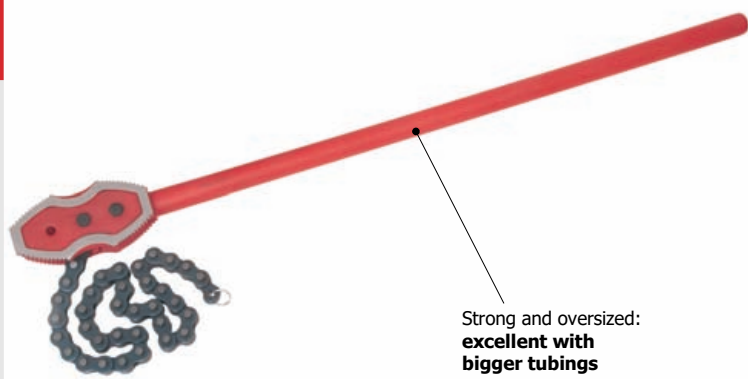
Knurled nut
adjustment:
handy

Powder painted,
forged steel:
resistant

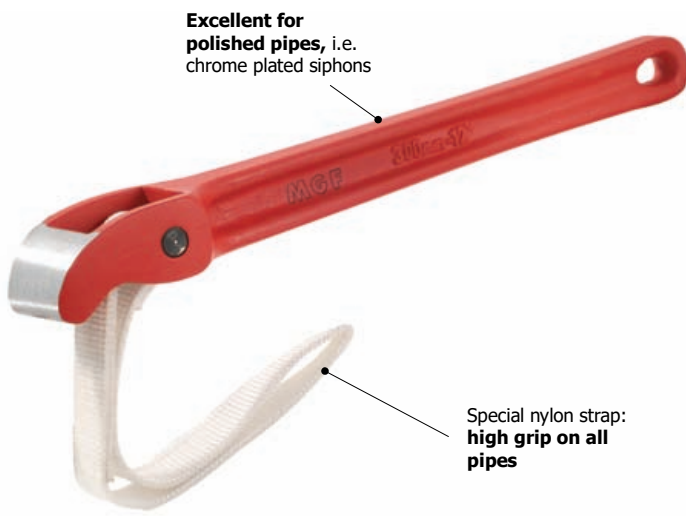


Right and left use:
reversible

Body in forged and hardened
steel, chain in hardened steel:
sturdy and robust



Strong and oversized:
excellent with
bigger tubings



Excellent for
polished pipes, i.e.
chrome plated siphons

Special nylon strap:
high grip on all
pipes

Pipe Wrench mod. BLITZ

Art.	Ø Max		Length		Weight
920999	1"	35 mm	7"	175 mm	0,33 Kg
920998	1 1/2"	49 mm	9"	225 mm	0,56 Kg
920997	2"	60 mm	10"	275 mm	0,78 Kg
920996	2 1/2"	76 mm	12"	300 mm	0,96 Kg
920995	3"	90 mm	14"	350 mm	1,06 Kg

Chain Pipe Wrench

- Dual hardened jaws for ratchet effect and fast operation
- Can be used in both directions
- Heavy-duty pipe wrench, with forged and hardened handle and hardened chain

Art.	Ø Max	Length	Chain	Weight
925199	4"	115 mm	12" 300 mm	330001 0,78 Kg

Heavy Duty Chain Pipe Wrench

Art.	Ø Max	Length	Chain	Weight
925198	4"	115 mm	900 mm	330002 5,71 Kg
925197	6"	166 mm	900 mm	330003 6,60 Kg
925196	8"	220 mm	1100 mm	330004 11,80 Kg
925195	10"	270 mm	1100 mm	330005 13,00 Kg
925194	12"	324 mm	1300 mm	330006 16,80 Kg
925193	16"	432 mm	1300 mm	330007 19,00 Kg

Strap Wrench

- Excellent for polished pipes, i.e. chrome plated siphons
- Special nylon strap provides high grip on all pipes
- Two models available

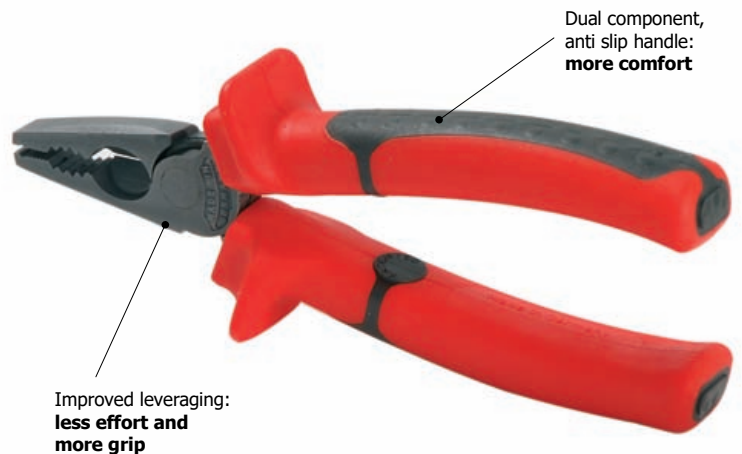
Art.	Ø Max	Length	Belt	Weight
925192	3"	100 mm	450 mm	330008 0,33 Kg
925191	8"	220 mm	1000 mm	330009 0,34 Kg

Combination Pliers

CLASSIC Combination Pliers

- Induction hardened jaws and sharp cutting edge
- Gripping surfaces for flat and round material, versatile
- Improved leveraging point, with excellent power transmission
- Chrome vanadium heavy-duty steel, forged, oil-hardened
- Made in Germany

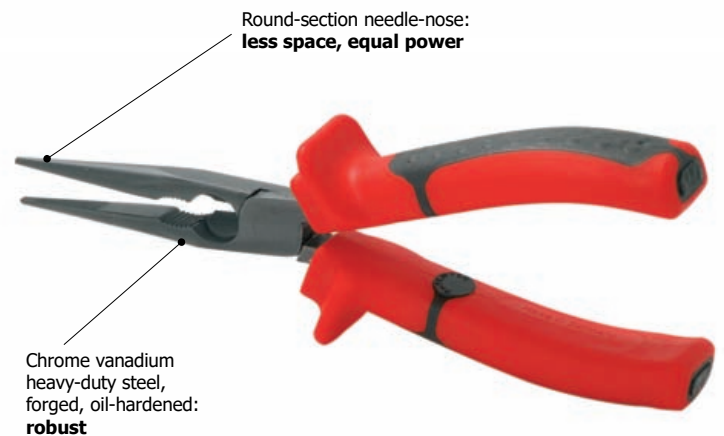
Art.	Length	Ø max copper	Ø max steel	Weight
920350	6 1/2" / 165 mm	4 mm	2 mm	0,20 Kg
920349	7" / 180 mm	5,2 mm	2,2 mm	0,25 Kg
920348	8" / 205 mm	5,9 mm	2,5 mm	0,28 Kg



Needle-Nose Combination Pliers

- Induction hardened jaws and sharp cutting edge
- Slim head and pointed, anti-twist jaws design: excellent tool for confined areas thanks to slim head design and pointed jaws (anti-twist)
- Improved leveraging point, with excellent power transmission
- Chrome vanadium heavy-duty steel, forged, oil-hardened
- Made in Germany

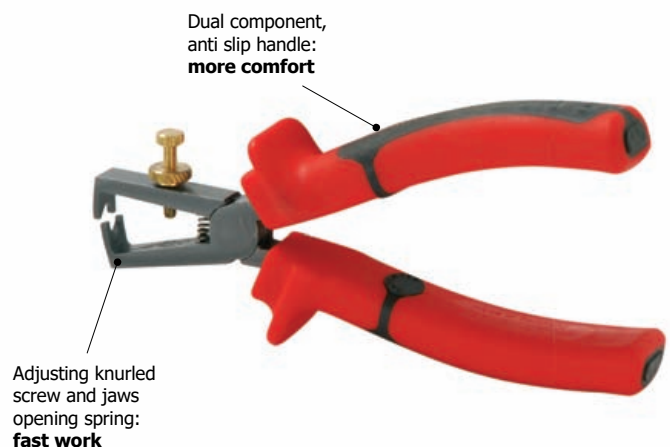
Art.	Length	Ø max copper	Ø max steel	Weight
920341	7" / 170 mm	3 mm	1 mm	0,16 Kg
920340	8" / 205 mm	4 mm	2 mm	0,21 Kg



Wire stripper

- For single, multiple and fine stranded cables, with plastic or rubber insulation
- With knurled adjusting screw
- With jaws opening spring
- Made with special oil induction hardened steel
- Bi-component handle, anti slip
- Length: 160 mm
- Made in Germany

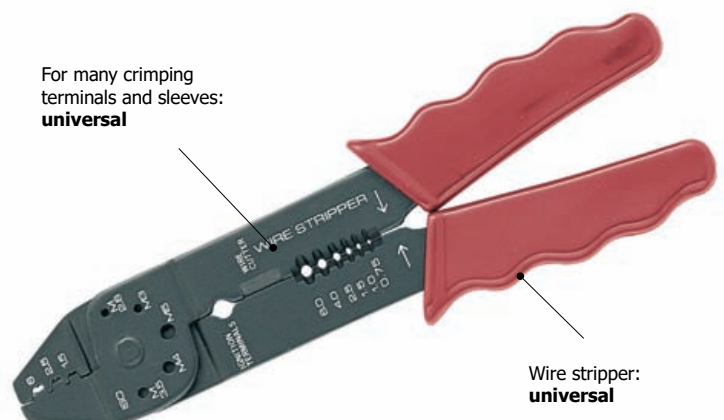
Art.	Model	Weight
920339	Wire stripper	0,38 Kg



Crimping Plier and Wire Stripper

- For cutting and stripping wires and cables and crimping insulated and non-insulated terminals, connectors and plug type connectors
- For 1,5 to 6 mm insulated terminals
- For M2,5 to M5 end sleeves
- For 1,5 to 4,5 mm non-insulated terminals
- Wire stripper for cables with section: 0,75-1-1,5-2,5-4-5 mm²
- Length: 215 mm

Art.	Model	Weight
920338	Crimping Plier and Wire Stripper	0,38 Kg



Spanners and Screwdrivers

"Money is like an arm or a leg: use it or lose it."

Henry Ford (1863-1947)

Basins Wrenches



- ✓ Fasteners behind sinks are nearly impossible to reach with standard wrenches. These tools allow operation behind sinks and loosen nuts and connections that hold the faucet in place
- ✓ All the jaws are forged, hardened and 0-180° swiveling for excellent operation
- ✓ Sliding or swiveling handle for easy operation in the narrow spaces near sinks
- ✓ Teethed jaws for a perfect grip
- ✓ Packed in blister

Art.	Model	Width	Length	Weight
920396	Standard	10 - 32 mm	288 mm	0,49 Kg
920397	Forged	15 - 32 mm	235 mm	0,49 Kg
920399	Telescopic	10 - 32 mm	275 - 460 mm	1,12 Kg

Drain Wrench



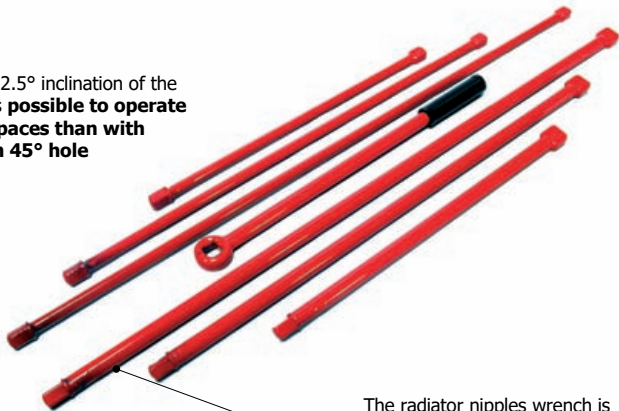
- ✓ For all drains with 1" and 1 1/4" side openings
- ✓ Body in aluminum, teeth in brass and springs in special steel
- ✓ With the available adapters it is possible to work on all the drains on the market
- ✓ The adapters are in aluminum, strong and safe for polished drains
- ✓ Adapters are optional

Art.	Model	Length	Kg
920398	Universal Drain Wrench	160 mm	0,3
920395	Shower Drain Adapter for Drain Wrench	-	-
920394	Bathtub Overflow Adapter for Drain Wrench	-	-
920393	OMP, SILFRA, HANS GROHE Drain Wrench Adapter	-	-

Radiator Nipples Key



Thanks to the 22.5° inclination of the square hole it is **possible to operate in narrower spaces than with spanners with 45° hole**



The radiator nipples wrench is made in forged steel, as well as the square hole handle: **stronger than spanners with tubular handles**

Art.	Model	Size	Length	Weight
915600	Radiator Nipples Key Handle	□ 18 mm	500 mm	1,40 Kg
915700	Ratchet Wrench	□ 18 mm	500 mm	1,40 Kg
915000	Radiator Nipples Wrench	1"	500 mm	0,80 Kg
915100	Radiator Nipples Wrench	1"	750 mm	1,10 Kg
915200	Radiator Nipples Wrench	1"	1000 mm	1,45 Kg
915300	Radiator Nipples Wrench	1 1/4"	500 mm	1,10 Kg
915400	Radiator Nipples Wrench	1 1/4"	750 mm	1,57 Kg
915500	Radiator Nipples Wrench	1 1/4"	1000 mm	2,10 Kg



- ✓ Joining key for all 1" and 1 1/4" radiators nipples
- ✓ The new handle geometry helps reducing the operating space
- ✓ Joining radiators is now easier and faster
- ✓ The nipples wrenches are provided in several lengths for all the market requirements

Radiators Spud Wrench



Wrench made with special steel CNC machined and hardened: **higher precision and robustness**

Quick locking mechanism: **handy**

Art.	Model	Weight
916000	Radiator Spud Wrench + Ratchet Wrench	0,71 Kg
916100	Radiator Wrench for 3/8" to 1" Spuds	0,14 Kg
916200	Reversible Ratchet Wrench with square hole 1/2"	0,51 Kg

- ✓ Superior quality radiator wrench, in chrome-vanadium CNC machined steel, hardened and zinc-coated
- ✓ Made in Italy
- ✓ Stronger and more accurate than standard radiator nipples spanners
- ✓ Suitable for assembling radiator fittings and valves, in return fittings and tap extensions
- ✓ Multistep design allows removal of various size radiator spuds
- ✓ 1/2"square connector for ratchet wrench
- ✓ Supplied in blister

Wrenches

Long structure:
perfect for
threaded bars



Hook adapter:
useful for basin
drains



Supplied in blister:
product display and
protection

Opening 10 – 32 mm:
wide working range

Plastic molded case:
Easy to use



Supplied in
plastic case



Calibrated before
shipping:
accurate



Hexagon Nut Basin Wrench

- Supplied in blister
- For tightening and loosening tap nuts
- Hexagon pipe wrench, 25 cm long
- Removable jaw, adjustable up to Ø 32 mm – 1 1/4", for sinks fittings, bathtubs, sinks or bidets.
- Hexagonal spanners in the following sizes: 9-10-11-12-13-14-17

Art.	Model	Kg
920392	Nut Basin Wrench Kit 9-10-11-12-13-14-17	0,35
920392KIT	Adapters Kit 9-10-11-12-14-17mm	0,1
920392- C	Exagonal Nut Basin Wrench	0,25
920389	Jaw for basin wrench	0,16

Hexagonal Adapters For Basin Wrench

Art.	Size	Art.	Size
920392-9	9 mm	920392-12	12 mm
920392-10	10 mm	920392-14	14 mm
920392-11	11 mm	920392-17	17 mm

Combination Spanners

Art.	KIT Including:
920421	6, 7, 8, 9, 10, 11, 12, 13, 14, 17, 19, 22 mm
920422	8, 10, 11, 13, 14, 17, 19, 22 mm

Swiveling Combination Spanners

Art.	KIT Including:
920447	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm
920448	8, 10, 11, 12, 13, 14, 17, 19 mm

Ratchet Swiveling Combination Spanners

Art.	KIT Including
920449	8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm
920450	8, 10, 11, 12, 13, 14, 17, 19 mm

Torque Wrench Set

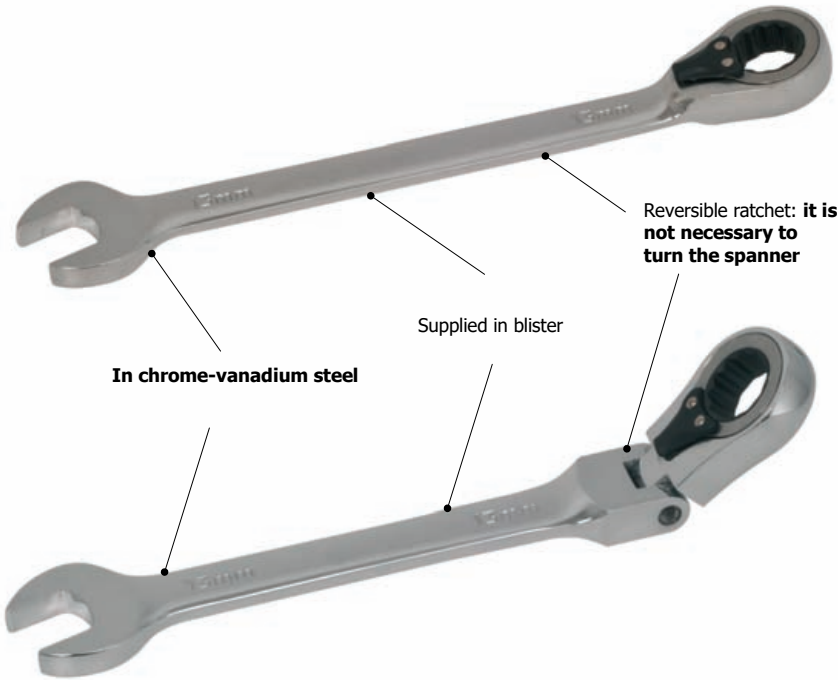
- Each wrench is calibrated before shipping
- Supplied in kit with wrenches inserts set for the following sizes: 17, 22, 24, 26, 27, 29 mm
- Adjustable torque measurement from 10 to 70Nm
- In chrome-vanadium plated steel

Art.	Model
932500	Torque Wrench Set in Molded Case (17-29 mm)
RT_DIN	Calibration Certificate Torque Wrench

Spanners

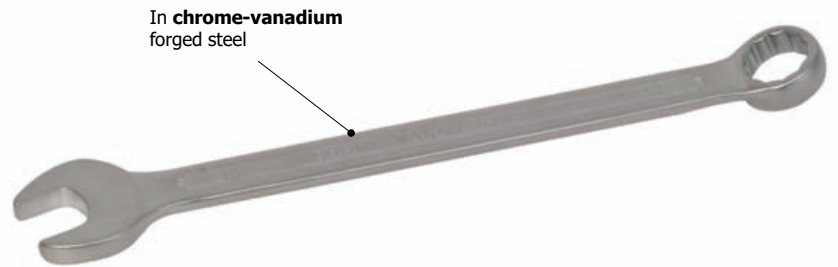
Ratchet Combination Spanners Ratchet and Swiveling Combination Spanners

Cod. jack	Cod. jack+articulation	Size
920446	920434	8 mm
920445	920433	9 mm
920444	920432	10 mm
920443	920431	11 mm
920442	920430	12 mm
920441	920429	13 mm
920440	920428	14 mm
920439	920427	15 mm
920438	920426	16 mm
920437	920425	17 mm
920436	920424	18 mm
920435	920423	19 mm



Combination Spanners

Cod.spanner	Size	Cod.Spanner	Size
920420.06	6 mm	920420.20	20 mm
920420.07	7 mm	920420.21	21 mm
920420.08	8 mm	920420.22	23 mm
920420.09	9 mm	920420.23	23 mm
920420.10	10 mm	920420.24	24 mm
920420.11	11 mm	920420.25	25 mm
920420.12	12 mm	920420.26	26 mm
920420.13	13 mm	920420.27	27 mm
920420.14	14 mm	920420.28	28 mm
920420.15	15 mm	920420.29	29 mm
920420.16	16 mm	920420.30	30 mm
920420.17	17 mm	920420.32	32 mm
920420.18	18 mm	920420.34	34 mm
920420.19	19 mm	920420.36	36 mm



Hexagonal Pipe Spanners Immersion Heater Spanner

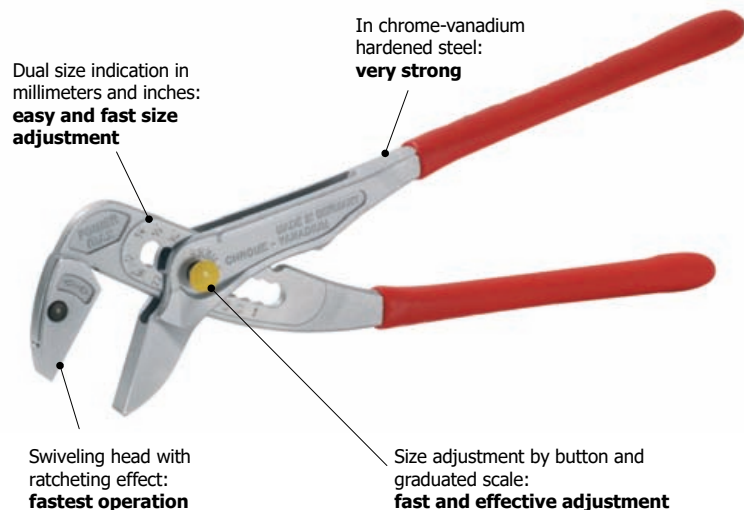
Sized and shaped for replacing the heating elements in the boilers

Art.	Size	Weight
920898	52 x 55 mm	0,64 Kg
920897	55 x 55 mm	0,71 kg
920896	55 x 60 mm	0,77 Kg

Designed for boilers heaters assembling and disassembling:
plumbing tool



Adjustable Spanners



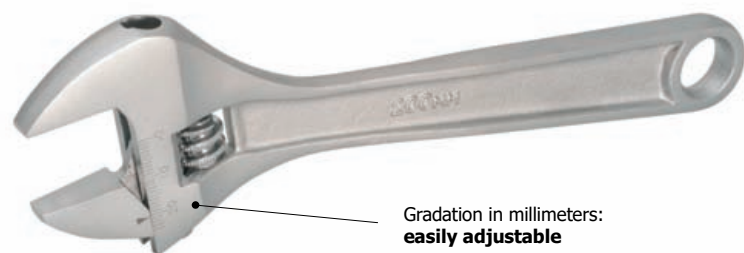
POWERMAX

Button Adjustable Spanner – Plier

- Ideal for mounting fittings with polished surface
- Faster size setting than in standard adjustable spanners thanks to the button system
- Finger trap protection for safe work, prevents injuries caused by squeezing
- Made of chrome vanadium steel, forged, oil-hardened
- Box joint with wide guide surfaces
- Vinyl handle
- High quality finishing
- Made in Germany

Art.	Width	Length	Weight
920150	0 - 53 mm	10" / 250 mm	0,37 Kg

Adjustable Spanners

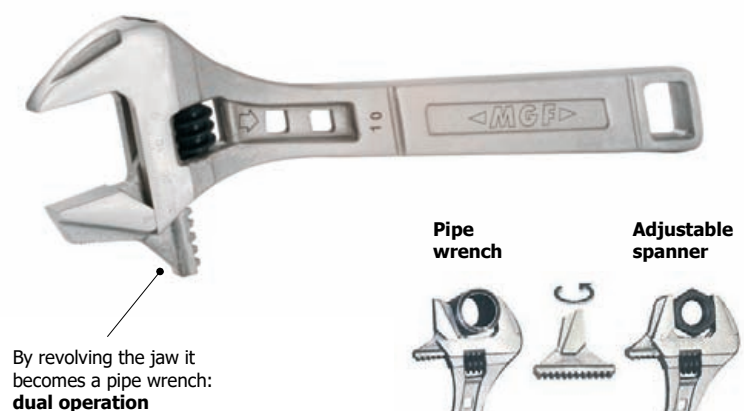


Art.	Width	Length	Weight
920299	0 - 14 mm	4" 101 mm	0,07 Kg
920298	0 - 20 mm	6" 152 mm	0,15 Kg
920297	0 - 25 mm	8" 203 mm	0,30 Kg
920296	0 - 30 mm	10" 254 mm	0,52 Kg
920295	0 - 35 mm	12" 304 mm	0,82 Kg



Ergonomic Adjustable Spanners

Art.	Width	Length	Weight
920294	0 - 25 mm	8" 203 mm	0,33 Kg
920293	0 - 30 mm	10" 254 mm	0,59 Kg
920292	0 - 35 mm	12" 304 mm	0,90 Kg



Combination Adjustable Spanners

Art.	Width	Ø Max	Length	Weight
920291	0 - 30 mm	1 1/4"	10" 254 mm	0,55 Kg
920290	0 - 35 mm	1 1/2"	12" 304 mm	0,85 Kg

Allen Wrenches

Metric Hex Allen Wrench Set

- Ball end hex key set (**7 wrenches**)
 - Keys feature chamfered ends on both sides of the key to help guide the key into the fastener
 - Short side of key has slanted head for extra torque
-
- Keys are resistant to rotational distortion
 - Plastic holder or metal folding holder

Art.	Wrenches	Size
920249	7	2,5 – 3 – 4 – 5 – 6 – 8 – 10 mm
920240	7	1,5 – 2 – 2,5 – 3 – 4 – 5 – 6 mm

T Handle Hex Allen Wrench with Ball End

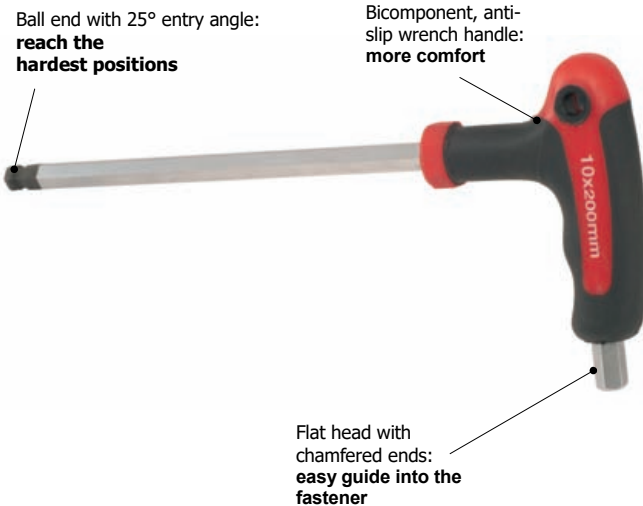
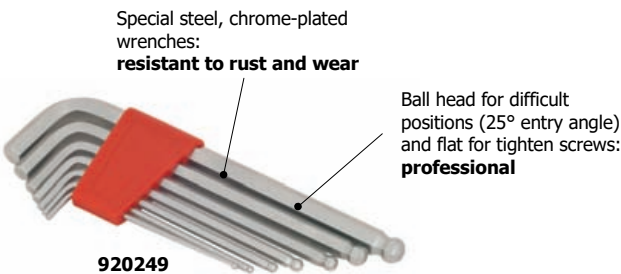
- Bicomponent T handle wrench, made with steel passing through handle for maximum comfort and torque
- Anti slip, comfortable ergonomic handle for best torque
- Keys provided with chamfered ends on both sides of the key to help guide the key into the fastener
- Ball end for working in difficult positions, allowing a 25° entry angle
- Size markings on the T-handle

Art.	Size
920230	2 mm
920229	2,5 mm
920228	3 mm
920227	4 mm
920226	5 mm
920225	6 mm
920224	8 mm
920223	10 mm

Allen Wrenches and Torx Wrenches Sets

- Allen wrenches set and Torx wrenches set: full range for every demand
- 6 wrenches set in molded plastic case: always tidy
- Dual component, anti slip, T handle: top class comfort
- Steel wrench passing through handle, for maximum torque transmission
- Allen wrenches with ball end, with 25° entry angle, for difficult position access
- Flat head with chamfered ends for easy access and high torque tightening
- Both Torx and Allen wrenches are made with chrome-vanadium steel

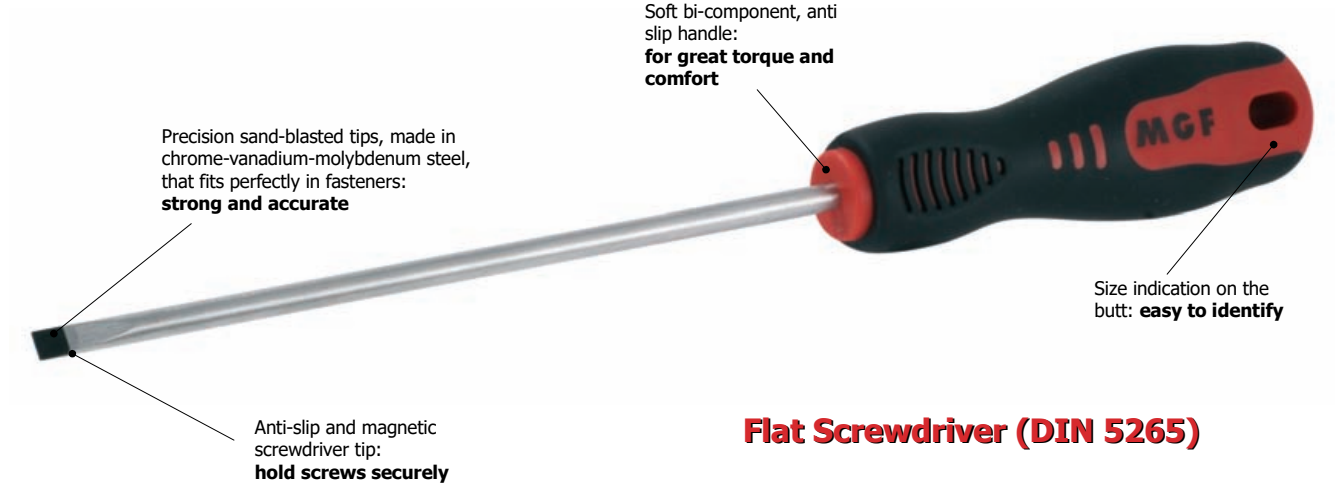
Art.	Wrenches	Size
920222	6 Allen wrenches	3 – 4 – 5 – 6 – 8- 10 mm
920219	6 TORX	T10 – T15 – T20 – T25 – T30 – T40



6 wrenches supplied in molded box: always tidy

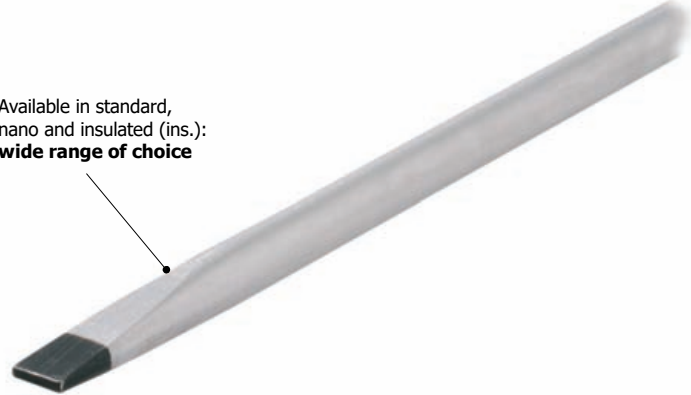


Screwdrivers



Flat Screwdriver (DIN 5265)

Art.	Size	Thickness	Handle
919098	60 x 3 mm	0.4 mm	100 mm
919097	100 x 3 mm	0.5 mm	100 mm
919096	125 x 4 mm	0.8 mm	100 mm
919095	150 x 5 mm	1,0 mm	105 mm
919088	125 x 5,5 mm	1,0 mm	110 mm
919099	25 x 6 mm	1.2 mm	60 mm (nano)
919094	150 x 6 mm	1.2 mm	110 mm
919090	125 x 6,5 mm	1.2 mm	110 mm
919087	150 x 6,5 mm	1.2 mm	110 mm
919089	150 x 8 mm	1.2 mm	110 mm
919093	100 x 3 mm (ins.)	0,5 mm	100 mm (ins.)
919092	125 x 4 mm (ins.)	0,8 mm	100 mm (ins.)
919091	150 x 5,5 mm	1.0 mm	100 mm



Philips Screwdriver (DIN 5262)

Art.	Size	Cross	Handle
919199	25 x 5.5 mm	PH-2	60 mm (nano)
919198	60 x 3 mm	PH-0	100 mm
919197	100 x 5 mm	PH-1	105 mm
919196	125 x 6 mm	PH-2	105 mm
919192	100 x 5 mm (ins.)	PH-1	105 mm (ins.)
919191	125 x 6 mm (ins.)	PH-2	105 mm (ins.)



Pozidriv Screwdriver (DIN 5262)

Art.	Size	Cross	Handle
919195	60 x 3 mm	PZ-0	100 mm
919194	100 x 5 mm	PZ-1	105 mm
919193	125 x 6 mm	PZ-2	105 mm



Screwdrivers

Torx Screwdriver

Art.	Size	Cross	Handle
919299	75 x 3 mm	T-10	100 mm
919298	75 x 4 mm	T-15	100 mm
919297	100 x 4 mm	T-20	100 mm
919296	100 x 5 mm	T-25	105 mm
919295	115 x 5 mm	T-27	105 mm
919294	125 x 6 mm	T-30	105 mm
919293	125 x 7 mm	T-40	110 mm

Hexagonal Ball End Screwdriver

Art.	Size	Hexagon	Handle
919399	75 x 3 mm	3 mm	100 mm
919398	100 x 4 mm	4 mm	100 mm
919397	100 x 5 mm	5 mm	105 mm
919396	125 x 6 mm	6 mm	105 mm

Blistered Screwdrivers Set

MINI Kit				
Flat screwdrivers:	125x5.5	100x3	150x5	
Philips screwdrivers:		PH-1	PH-2	
STANDARD Kit				
Flat screwdrivers:	60x3	100x3	150x5	100x3 IS
Philips screwdrivers:		PH-1	PH-2	
MAXI Kit				
Flat screwdrivers:	100x3	125x4	125x5.5	150x6.5
Philips screwdrivers:	PH-1	PH-0	PZ-1	PZ-2

Art.	Model
919599	MINI Screwdrivers Set
919598	STANDARD Screwdrivers Set
919597	MAXI Screwdrivers Set

Screwdrivers Display Stand

Including the following screwdrivers:

<u>Flat screwdrivers</u>	<u>Quantity</u>
100 x 5.5 mm	6
125 x 6.5 mm	5
150 x 8 mm	5
100 x 3 mm	7
125 x 4 mm	7
150 x 5 mm	6
<u>Philips screwdrivers</u>	<u>Quantity</u>
PH-1	6
PH-2	6
PZ-1	6
PZ-2	6

Art.	Model
919596	Screwdriver Counter Display



Blister pack:
practical and
transparent

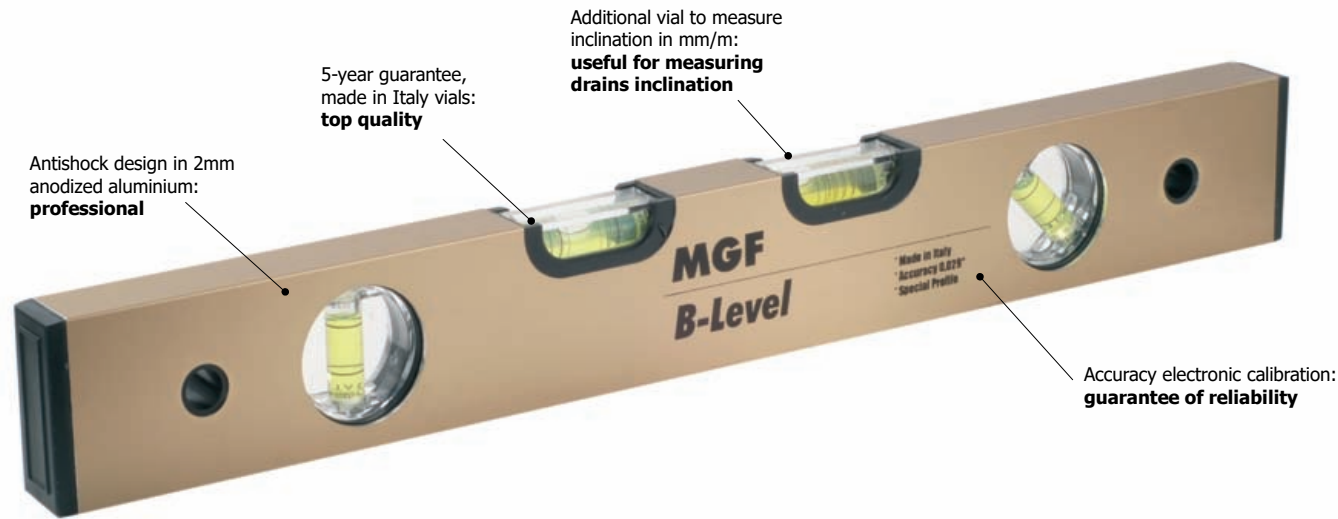


Measurement

"Measure your cloth ten times because you will be able to cut it just once."

Anonimo

Professional Levels - Made in Italy



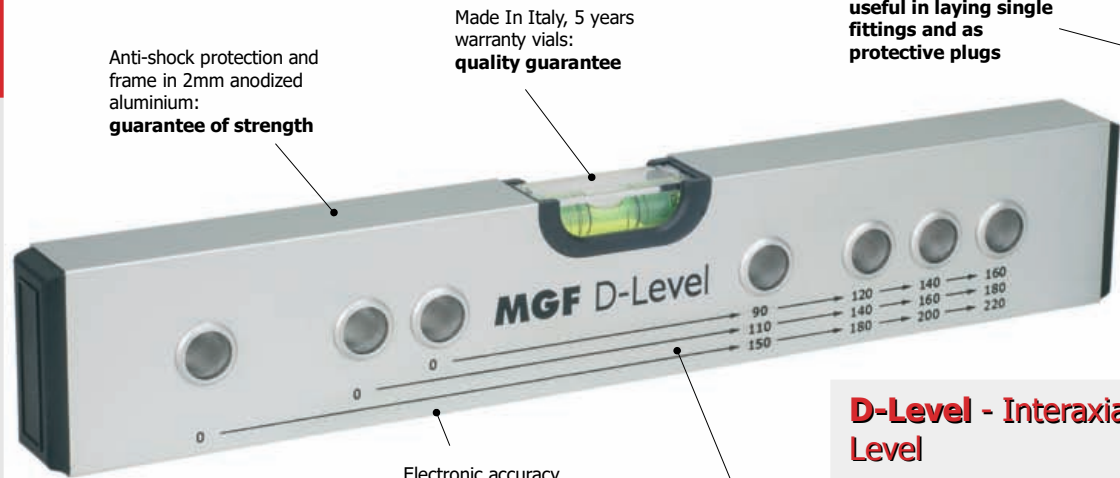
B-Level - Plumber Spirit Level

- Additional vial to measure the inclination in mm/m
- Very useful in laying drains and in measuring the inclination of pneumatic and plumbing systems
- Electronic accuracy calibrated

Accuracy 0,029°

Art.	Model	Lenght	Weight
921400	B-Level 40	400 mm	0,24 Kg
921500	B-Level 60	600 mm	0,33 Kg

Inserts can also be used as stand alone level: **useful in laying single fittings and as protective plugs**



D-Level - Interaxial Aluminum Spirit Level

- Level with interaxial measuring system for a perfect installation of taps
- Several interaxial positions with easy reading: 90-110-120-140-150-160-180-200-220 mm
- Electronically accuracy calibrated
- Supplied in plastic case with 2

Accuracy 0,029°
Hinge connections 3/8" and 1/2"

Art.	Model	Lenght	Weight
921600	D-Level	300 mm	0,24 Kg
921699	Perno D-level	-	0,05 Kg

Professional Levels - Made in Italy

Magnetic Level

- Resistant to impact, falls and corrosion
- Vial guarantee: 5 years
- Suitable for the assembly of conditioners, boilers etc.

Accuracy 0,057°

Art.	Model	Lenght	Weight
921200	Magnetic 40	400 mm	0,26 Kg
921300	Magnetic 60	600 mm	0,34 Kg
921201	Magnetic 80	800 mm	0,5 Kg
921301	Magnetic 100	1000 mm	0,64 Kg

Example of use:
the magnetic level remains attached to the metal parts and lets you work hands free

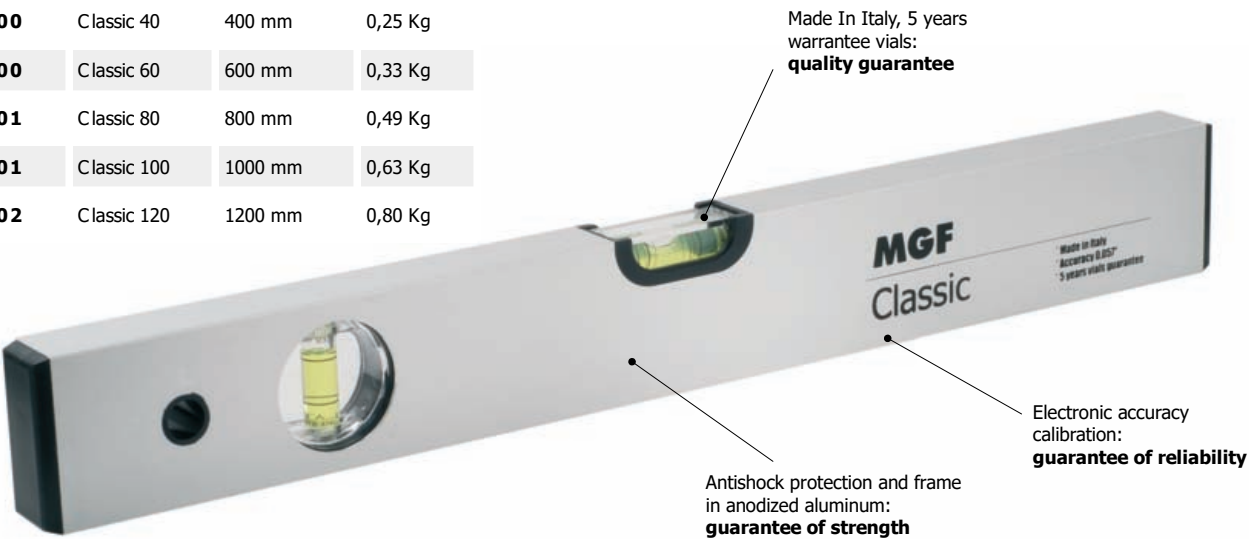


Classic Level

- Resistant to impact, falls and corrosion
- Electronic accuracy calibration

Accuracy 0,057°

Art.	Model	Lenght	Weight
921000	Classic 40	400 mm	0,25 Kg
921100	Classic 60	600 mm	0,33 Kg
921001	Classic 80	800 mm	0,49 Kg
921101	Classic 100	1000 mm	0,63 Kg
921102	Classic 120	1200 mm	0,80 Kg



Other Tools

"Man's first need is the unnecessary."

Albert Einstein (1879-1955)

Radiators Carts and Lifters

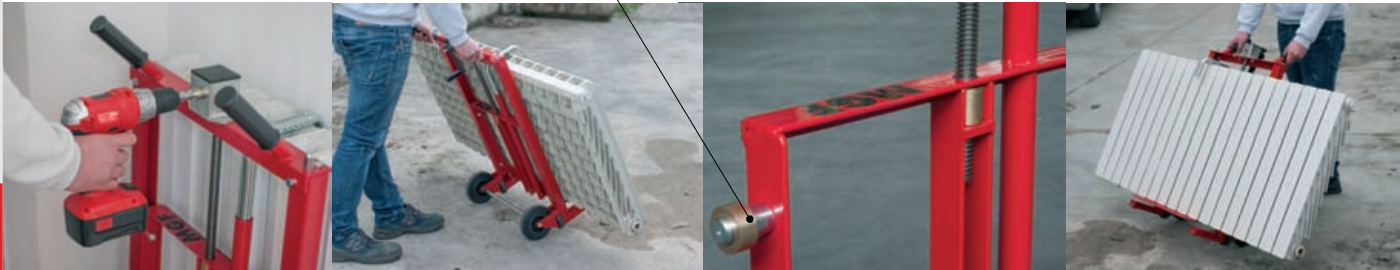


TermoLift P

Compact Radiators Cart and Lifter

- Cart for radiators with maximum 200Kg range and with **certificate of conformity** in compliance with **CE regulations**
- Sturdy and reliable screw lifting mechanism with bevel and worm screw, tested for 500000 lifting cycles
- In this new model the frame moves on a bearing system, reducing stress and wear
- Possibility of **lifting with cordless drill**
- Equipped with wheels for the radiator sideways motion during installation
- Protective bands avoid scratches on radiators painting
- Front hook with quick locking and release bayonet system
- Sturdy painted steel structure, designed to withstand more than the stresses declared, without damage over time

Art.	Model	Weight
918150	TermoLift P – Radiators Cart and Lifter	18,00 Kg
818150	Spare Gear Box for Termolift P	1,32 Kg



Hand Tools



Excellent also for the radiators sideways motion

TermoLift S

Radiator Cart and Lifter with Stairs Wheels

- Cart and lifter for radiators with the maximum capacity 200Kg
- Sturdy and reliable screw lifting mechanism
- **Equipped with 6 wheels also for the translation of the radiator during the assembly**
- With 3 coupled stair wheels for easily climb stairs
- Equipped with wheels locking system

Art.	Model	Kg
918151	TermoLift S Radiators Cart & Lifter w/Stair Wheels	27,00
918152	Gear Maintenance Kit for Termolift S	16,00
918153	Rod with Locking System for Termolift S	16,00
918151-26	Stair Wheels for Termolift S	1,00
918150-26	Ø 26 Wheel for Termolift S	0,04
918151-50	Ø 50 Wheel for Termolift S	0,06
918150-50	Handles for Termolift S	16,00
918150-1	Brass Bushing for Termolift S Screw	0,02
918152M	Gearbox Handle for Termolift S	0,02



Caulking Guns

Closed Housing Caulk Gun

- Cartridge housing with bayonet locking system
- 60:15 thrust ratio forward mechanism for with high-viscosity materials
- Thumb release help prevents dripping
- Body in anodized aluminum, resistant to corrosion
- Pressure adjustable with trigger

Art.	Model	Lenght	Weight
915802	Closed Housing Caulk Gun	225 mm	0,33 Kg

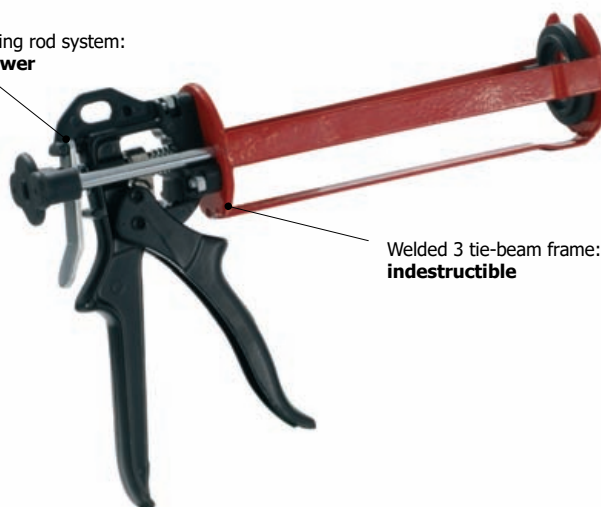


Glues and Epoxy Caulk Gun

- Suitable for professional use
- For 380ml cartridges
- 60:15 thrust ratio forward mechanism for with high-viscosity materials
- Thumb release help prevents dripping
- Reinforced triple slide piston
- Welded triple tie-beam
- Epoxy powder painted steel frame

Art.	Model	Lenght	Weight
915803	Epoxy Caulk Gun	210 mm	1,12 Kg

Triple sliding rod system:
great power

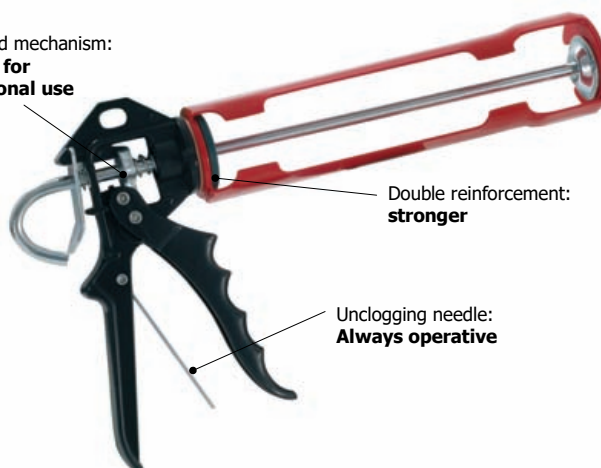


Reinforced Professional Caulk Gun

- Epoxy powder painted steel
- Steel construction to help ensure strength
- Smooth rod with hook end for easy dispensing
- 60:25 thrust ratio forward mechanism for with high-viscosity materials
- Thumb release help prevents dripping
- With unclogging needle

Art.	Model	Lenght	Weight
915801	Reinforced Professional Caulk Gun	225 mm	0,33 Kg

Reinforced mechanism:
Suitable for professional use



Professional Caulking Gun

- Epoxy powder painted steel
- Steel construction to help ensure strength
- Smooth rod with hook end for easy dispensing
- 60:25 thrust ratio forward mechanism for with high-viscosity materials
- Thumb release help prevents dripping
- With unclogging needle

Art.	Model	Lenght	Weight
915800	Professional Caulk Gun	225 mm	0,33 Kg

High power thrust system:
also for high viscosity chemicals



Plumbing Tripods, Workstations and Vises



Quick-release hinged vice:
fast on long pipes



Pipe bending formers
molded on the vice

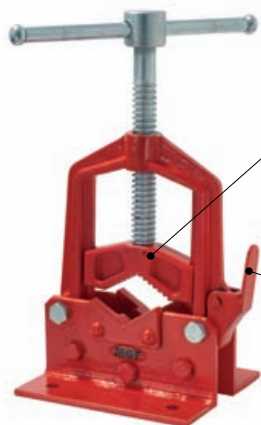


Example of chain pipe vice
in the building site



Birch multilayer
work top, painted
and polished:
**quality and
duration**

Buckle to block folding legs:
easy to carry



Hardened and CNC
machined jaws:
stronger pipe locking

Quick release system:
**easier and faster
pipes removal**

NEW YORK Hinged Vice with Folding Tripod

- Quick release hinged vice
- Wide working range: from 1/8" to 3"
- Folding tripod for easy transportation and storage

Art.	Model	Ø Pipe	Weight
918197	New York Heavy Hinged Vice	1/8" - 3"	18 Kg
918195	New York Light Hinged Vice	1/8" - 3"	16 Kg

TRIS 6" Tripod Workstation with Chain Vice

- Sturdy, plumbing workstation with built-in chain pipe vice on folding tripod
- Equipped with useful shelf plate
- Excellent in the building site and the workshop
- With bending formers for 3/8"-1/2"-3/4" pipes
- With chain vice with double fulcrum
- Clamping range Ø 10 – 165 mm, Ø 1/8 – 6"
- With hooking screw for improved stability

Art.	Model	Ø Pipe	Weight
918199	Tris Workstation	1/8" - 6" (10-168mm)	21 Kg

STANDARD Folding Workbench

- Sturdy, easy to carry folding workbench for universal use
- Work top in birch multilayer
- Work top with waterproof polished painting
- Folding legs and protecting edges in painted steel

Art.	Working surface	Height	Weight
918698	710 x 450 mm	810 mm	18 Kg
918697	1075 x 625 mm	840 mm	34 Kg

COBRA Hinged Vice

- Fast release hinged vice
- Wide working range: for pipes from 1/8" to 3"
- With holes for convenient assembling on any workbench top

Art.	Model	Ø Pipe	Kg
917400	COBRA Hinged Vice	1/8" - 3" 10 – 89 mm	5,5

HVAC Tools

"The sweater is a piece of clothing that children should wear when Mom feels cold."

Anonymous

Flaring Tools

Flarekit – for Flaring and Swaging Copper Pipes



Kit for flaring and swaging copper pipes

- Eccentric nichel-chrome plated cone
- Self-centering, slip-on forged steel yoke easily forms quality flares
- Excellent for swaging small diameter pipes, for welding joints in the HVAC technology
- Bars preventing pipe slipping for metric or inch sized pipes

Standard equipment: Tool for flaring and swaging, heads for pipe expanding pipe, plastic molded case

Art.	Operation Range	Weight
923299	1/8"-3/16"-1/4"-5/16"-3/8"-7/16"-1/2"-5/8"-3/4"	2,1 Kg
923298	4, 4.75, 6, 8, 10, 12, 14, 16, 19 mm	2,1 Kg
923598	90° flares adapter for flarekit (optional)	1,04 Kg

FT 400 – Flaring Tool with Handle Clutch Release



Handle clutch release professional flare tool. Precision tool for smooth, uniform flares. Improved productivity with less effort.

- Non ratcheting handle clutch release for a smooth flare
- Eccentric hardened steel flaring cone for a rolling action making uniform flare surface without galling
- Supplied in blister

Standard equipment: handle clutch release flare tool, anti slipping pipe bar holder, battery drill connector

Art.	Operating Range	Weight
923697	1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	1,63 Kg

FT 800 - Flaring Tool with Handle Clutch Release



Handle clutch release professional flare tool. Precision tool for smooth, uniform flares. Improved productivity with less effort.

- Non ratcheting handle clutch release for a smooth flare
- Eccentric hardened steel flaring cone for a rolling action making uniform flare surface without galling
- Quick connector for battery screwdriver
- Extended operating range anti-slip bar
- Supplied in plastic molded case

Standard equipment: handle clutch release flare tool, anti slipping pipe bar holder, battery drill connector, plastic molded case

Art.	Operating Range	Weight
923699	1/8"-3/16"-1/4"-3/8"-7/16"-1/2"-5/8"-3/4"	2,0 Kg

Flaring Tools

525F – Flaring Tool

Excellent flares on copper pipes in a simple and accurate way.

- Rotating cone, nichel-chrome plated and faceted
- Cone hardened with a special geometry for better, smooth surface, flares without strains
- Pipe anti-slipping bar with diaphragm system suitable for all diameters
- Many sizes,metric and inch, with the single hole diaphragm bar

Standard equipment: pipe flaring tool, universal diameter bar (4-16mm and 3/16"-5/8"), blister

Art.	Operating Range	Weight
923497	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	0,8 Kg
923598	90 Degree Flaring A dapter (optional)	1,04 Kg



Many diameters and sizes just one bar: **excellent for flaring in narrow spaces**

Nickel-Chrome plated and faceted cone: **smooth and tight flares**

Imperial – Flaring Tool

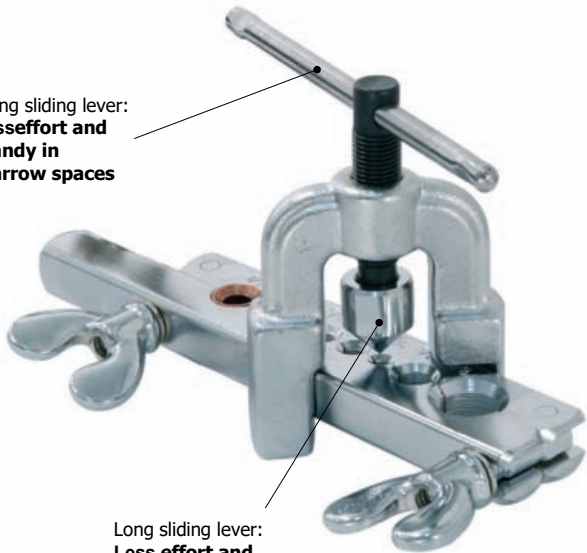
Ideal for flaring tubes made of brass, copper, aluminum and mild steel in a simple and accurate way.

- Cone sanded, hardened and chrome plated for smooth and tighter flares
- Anti-slip pipe holding bar
- Made with high quality special steel
- Long sliding lever, less effort and handy in narrow spaces

Standard equipment: Flare tool, pipe holding bar. Packed in blister

Art.	Operating Range	Weight
923399	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	1,0 Kg
923598	90 Degree Flaring A dapter (optional)	1,04 Kg

Long sliding lever: **lesseffort and handy in narrow spaces**



Long sliding lever: **Less effort and handy in narrow spaces**

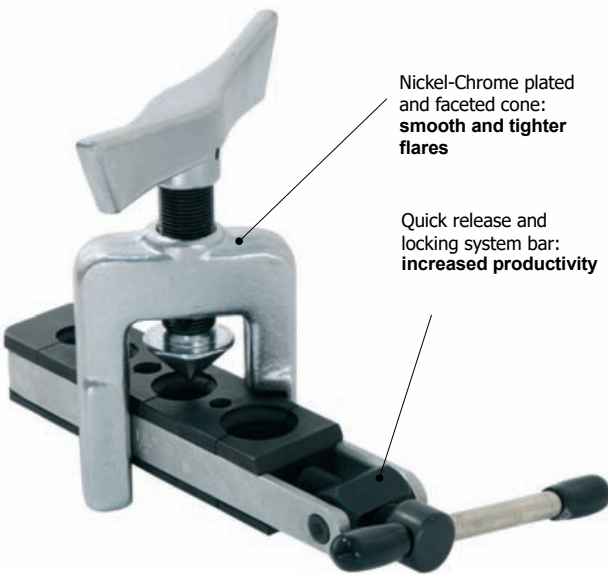
Quick – Flaring Tool

Excellent for accurate and smooth flares on pipes

- Pipe holding bar for metric or inch pipes
- Nickel-chrome plated faceted cone
- Quick release and locking system on the bar, increases productivity

Standard equipment: flare tool, anti-slip pipe holding bar. Packed in blister

Art.	Operating Range	Weight
923499	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	0,9 Kg
923498	6, 8, 10, 12, 15, 16 mm	0,9 Kg
923598	90 Degree Flaring A dapter (optional)	1,04 Kg

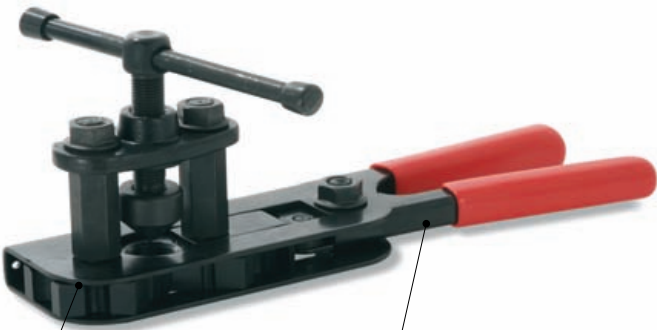


Nickel-Chrome plated and faceted cone: **smooth and tighter flares**

Quick release and locking system bar: **increased productivity**

Flare Tools

COMPACT – Plier Flaring Tool



All the measures in just one plier:
adjust the size by rotating the blocks

Plier locking system:
quick and effective

Excellent flares on pipes made of brass, copper, aluminum and mild steel up to 1 mm in thickness.

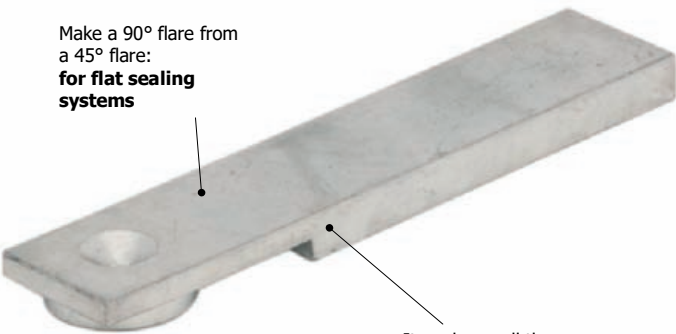
Recommended for the HVAC professionals.

- Cone tempered, sanded and floating for perfect flares
- Self centering mechanism
- Made of high quality special steel
- All measures in a single unit, no losing parts
- High efficiency plier locking system with anti slip, vinyl handles. Provides fast pipe locking and release

Standard equipment: plier flaring tool, packed in blister

Art.	Operating Range	Weight
923599	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	1,0 Kg
923598	90 Degree Flaring Adapter (optional)	1,04 Kg

90 Degree Flaring Adapter



Make a 90° flare from a 45° flare:
for flat sealing systems

It works on all the **MGF** flaring tools:
universal
(excluded clutch release models)

Adapter for 90 degrees flares from a base of 45 degrees flare. Suitable for **all MGF flaring tools** excluding the models equipped with handle clutch release system (FT800 and FT400).

Standard equipment: 90 degree flaring adapter, packed in blister.

Art.	Operating Range	Weight
923598	3/16", 1/4", 5/16", 3/8", 1/2", 5/8"	0,14 Kg

Pipe Flaring Oil



It improves the flare finish and the holding of the fitting

Oil enriched with additives and surfactants, **excellent for pipe flaring:**

- Does not stain the copper
- Easy to flush

- Improves the flare surface finishing thus the coupling with the fitting is tighter
- Special oil enriched with additives and surfactants
- Does not stain the copper
- Easy to remove during flushing

Art.	Model	Qty	Box
790101	Pipe Flaring Oil	100 ml	1

Dual Stage Vacuum Pump

Italian Quality Vacuum Pump for Professionals



Technical Features

Flow Rate	52 L/min
Water Evaporation (@ 20°C)	30 g/h
Power Supply	230 V ~ 50 Hz
Service Class	S1
Isolation class	IPX5
Final Vacuum	1x10 ⁻² mbar, measured according Pneurop
Vacuum Gauge	Ø 80 mm, class 1.6

Art.	Flow Rate	Vacuum	Water	Power	Kg	Vac+Sol
930400	52 L/min	10 ⁻² mbar	30 g/h	250 W	7,5 Kg	yes
930499	52 L/min	10 ⁻² mbar	30 g/h	250 W	7,3 Kg	no

Art.	Type	Full Range	Weight
272005	Vacuum Gauge (rear 1/8" fitting)	0 ÷ 1000 [mbar]	0,20 Kg
790100	Mineral Oil for Vacuum Pumps (0,5L)	-	0,47 Kg
790102	Mineral Oil for Vacuum Pumps (1,0L)	-	0,95 Kg



AC System

Sturdy luggage compartment:
Can be used as a stool

Calibration
Certificate
on Demand

Modular and professional kit for installation, testing and refrigerant filling of HVAC systems.

Vacuum pump made in MGF, excellent to evacuate all air and moisture from the pipelines.

- Integrated solenoid
- Air-oil separation filter
- High water evaporation capacity
- Deep final vacuum
- Manifolds frame and gauge protection

Manifolds with pulse-free gauges and knobs easy to handle.

The seals are mechanical, without membranes or gaskets subject to wear to be replaced.

The exclusive frame allows to handle the manifold during vacuum, without disconnecting it from the pump.

Equipped with carrying case: compact and easy to carry.

Each Set Includes:

- Dual stage vacuum pump with universal gauge manifold support frame
- High and low pressure hose kits for all refrigerants specified in the table below
- 4-way gauge manifolds for the refrigerants specified in the table below
- Refrigerant cylinders support for gases specified in the table below
- 5 kg digital scale (art. 932098) or 100 kg (Art. 932001)
- Mineral oil for vacuum pumps
- Instructions manual

Models with 5 Kg Scale

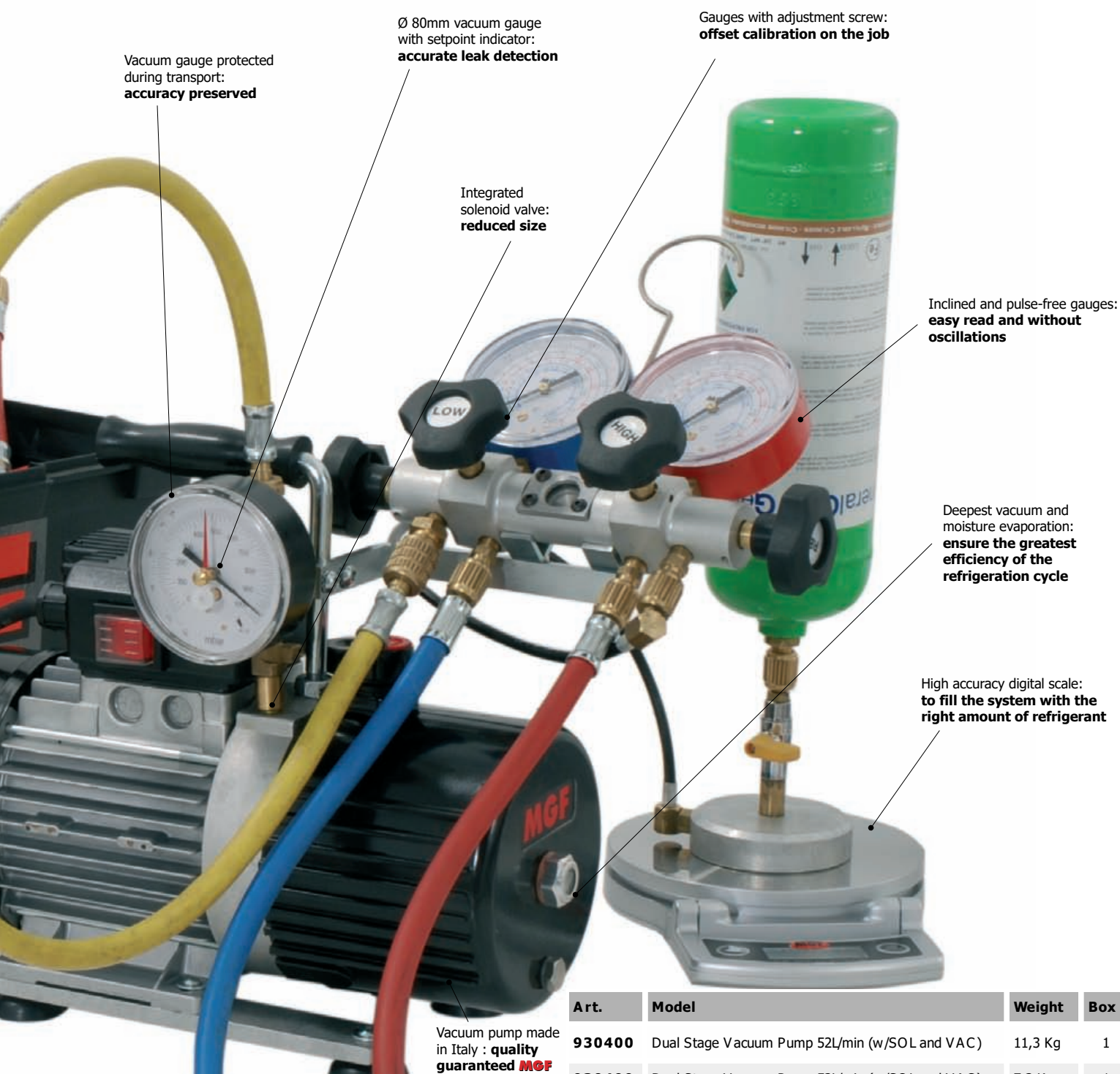
Art.	Model	R422	R424	R410	R407	R134	R404	R32
930100	AC System 1	•	•	•	•	•	•	•
930200	AC System 2	•	•		•	•	•	
930300	AC System 3			•				•

Models with 100 Kg Scale

Art.	Model	R422	R424	R410	R407	R134	R404	R32
930110	AC System 1	•	•	•	•	•	•	•
930210	AC System 2	•	•		•	•	•	
930310	AC System 3			•				•

Oil for vacuum pumps:
preserves the pump
and provides the
deepest vacuum

Complete System for the Conditioner Installation



Technical Features

Pump	52 l/min – 10 ⁻² mbar
Water Evaporation (@ 20°C)	30 g/h
Scale	5 Kg – 1 g
	110 Kg - 5g
Power	250 W
Power Supply	230 V ~ 50 Hz
Service Class	S1
Insulation Class	IPX5

Art.	Model	Weight	Box
930400	Dual Stage Vacuum Pump 52L/min (w/SOL and VAC)	11,3 Kg	1
930499	Dual Stage Vacuum Pump 52L/min (w/SOL and VAC)	7,3 Kg	1
302040	Pipes Kit 1/4"-1/4" 45° 1500 RNK (for AC System 1 & 2)	1,10 Kg	1
302080	Pipes Kit 5/16"-5/16" 45° 1500 RNK (for AC System 3)	1,10 Kg	1
930999	Cylinder Holder 1/4" (for AC System 1 and 2)	0,45 Kg	1
930998	Cylinder Holder 5/16" (for AC System 1 and 3)	0,43 Kg	1
932098	Scale MINI 5 Kg	0,54 Kg	1
932001	Scale MAXI 100 Kg	2,50 Kg	1
790100	Mineral Oil 0,5L for vacuum pumps	0,46 kg	1

Gauge Manifolds

Calibration
Certificate
on Demand

Gauges with
adjustment screw:
**offset calibration on
the job**

Gauges diameter 80mm:
more accurate reading

Pulse-free gauge
manometers:
**less vibrations, last
longer and more
accurate reading**

Body in anodized aluminium:
**higher resistance to
corrosion**

Great distance
between the fittings:
**easy pipe
connection**



- ✓ Pulse free gauge manometers with adjusting screw
- ✓ Ergonomic handles
- ✓ Wide distance between fittings allows easy operation
- ✓ HNBR gaskets, without membranes to change
- ✓ Refrigerants range: R410A, R32 (art. 930792) – R422,R407,R134a (art. 930793)
- ✓ Connections:
 - 3 x 5/16" + 1 x 3/8" SAE (art. 930792)
 - 3 x 1/4" + 1 x 3/8" SAE (art. 930793)
- ✓ 4 ways for convenient operation: filling and vacuum, besides pressure reading
- ✓ Gauge manometer Ø80 mm, class 1.0, EN 832 compliant
- ✓ Body in anodized aluminum

Technical Features

Gauge Manometer	Ø80 mm, class 1.0
Body	anodized aluminium
Gaskets	HNBR
Certifications	EN 832
Weight	1,069 Kg

Art.	Gas Scales	Connections	Ways
930792	R410A, R32	3 x 5/16" + 1 x 3/8" SAE	4
930793	R422, R407, R134a	3 x 1/4" + 1 x 3/8" SAE	4

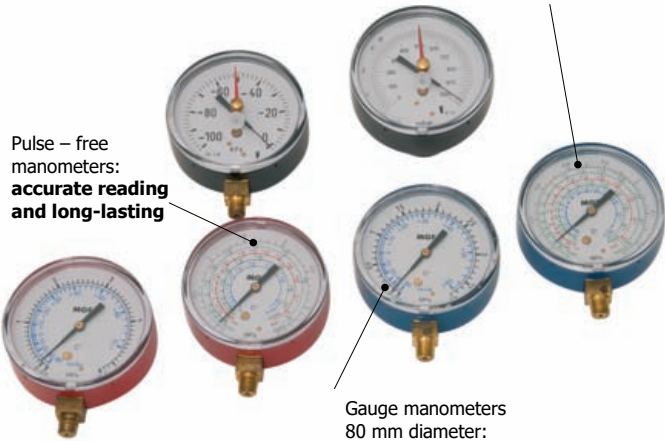
Gauge Manometers and Vacuum Gauges 1/8"G

Manometers with adjustment screw:
offset calibration on the job

- ✓ Pulse-free gauge manometers with adjusting screw
- ✓ Connection fitting 1/8"G
- ✓ Easy reading gauge manometer Ø80 mm
- ✓ Only 0,2 Kg weight
- ✓ Made in Italy

Calibration
Certificate
On Demand

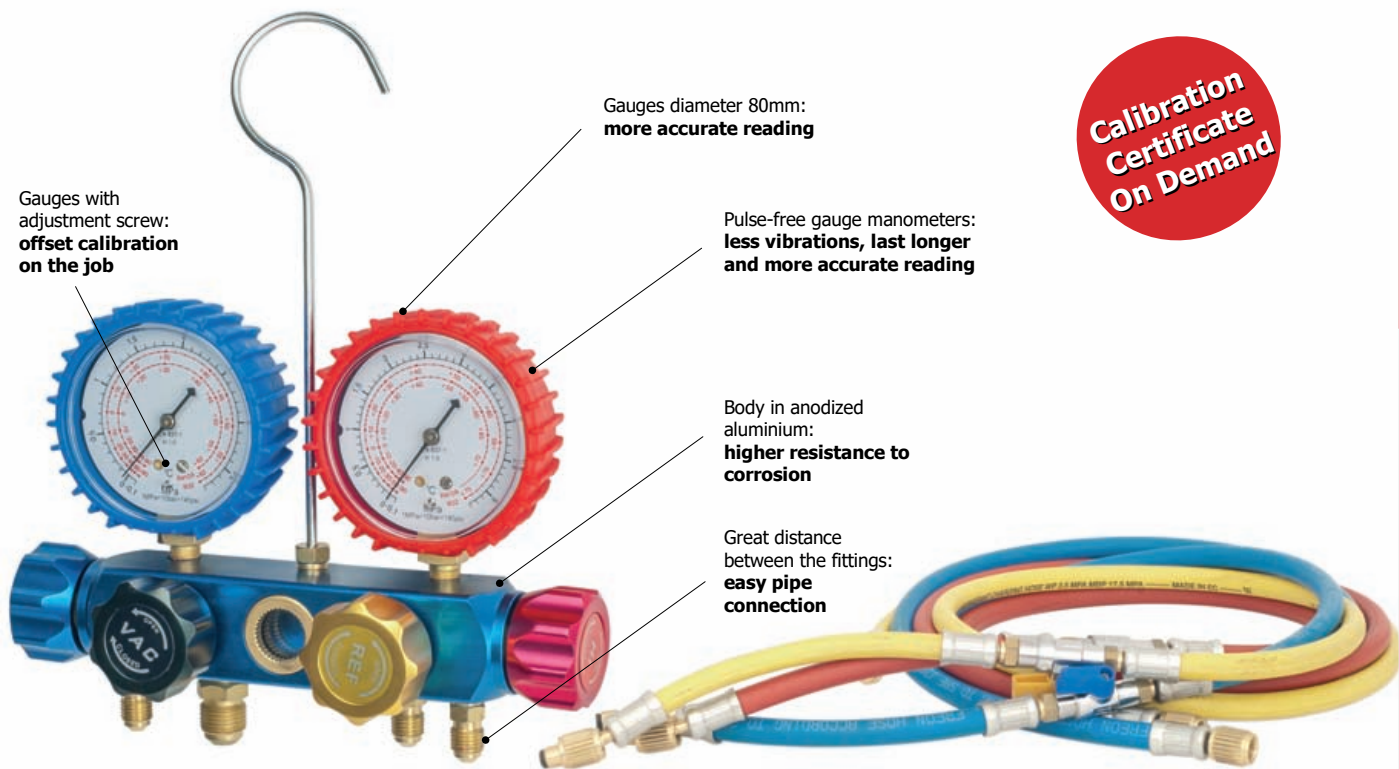
Pulse – free
manometers:
**accurate reading
and long-lasting**



Gauge manometers
80 mm diameter:
accurate reading

Art.	Model	Range [bar]	Conn.
272001	R422, R407, R134a (blue)	-1 ÷ 15	1/8"G
272002	R422, R407, R134a (red)	-1 ÷ 35	1/8"G
272003	R410A (blue)	-1 ÷ 38	1/8"G
272004	R410A (red)	-1 ÷ 53	1/8"G
272007	R410A, R32 (blue)	-1 ÷ 38	1/8"G
272008	R410A, R32 (red)	-1 ÷ 53	1/8"G
272006	Radial vacuum gauge with indicator	0 ÷ 1000 [mbar]	1/8"G

Gauge Manifolds Kit



Calibration
Certificate
On Demand

- ✓ Each kit includes a 4 ways gauge manifold and three color marked pipes with valve
- ✓ Gas scales
 - R410A, R32 (art. 930795)
 - R422, R407, R134a (art. 930794)

Art.	Gas Scales	Gauge Manifold	Pipes Fitting
930795	R410A, R32	930792	5/16" SAE
930794	R422, R407, R134a	930793	1/4" SAE

Technical Features

Each kit includes a 4 ways gauge manifold and three color marked pipes with valve

Gauge Manometer	Ø 80 mm, class 1.0
Body	anodized aluminium
Gaskets	HNBR
Certifications	EN832

Discover
MGF
Amico
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MGF Amico Digital Gauge Manifold with Pressure Test

Measures with unrivaled accuracy saturation temperatures and pressures on HVAC systems

Gauge Manometer Function: measure saturation temperature and pressure for all refrigerants, on high and low pressure side, with mbar resolution on full range scale.

Best accuracy and comfort

Pressure Test: nitrogen pressure tests to find micro leaks in few minutes, instead of 12-24 hours. Increases dramatically the productivity.

Save time and money with a professional instrument.



EASTERN COOL Vacuum Pumps



HVAC Tools

- ✓ Special design for refrigeration and HVAC technology
- ✓ Compact design, free from bulky components
- ✓ Motor thermal overload protection
- ✓ **Oil bottle supplied with the vacuum pump**
- ✓ Vibration absorbing feet

Inexpensive vacuum pumps, imported and certified by **MGF** before stocking.

Excellent for professionals looking for:

- Inexpensive product for not intensive use
- Certified final vacuum and calibrated gauge
- Vacuum pump similar to many competitors models, at a convenient price and certified
- Before shipping, we carry out the following checks:
- Motor electrical tests (high voltage and grounding)
- High accuracy digital vacuum gauge test
- Vacuum cycle simulation

Available in Stock: all the models below

Art.	930456	930457	930488	930487
Pumping Stages	2	2	2	2
Final Vacuum	0,01mbar	0,01mbar	0,01mbar	0,01mbar
Power Supply	230V~50/60Hz	230V~50/60Hz	230V~50/60Hz	230V~50/60Hz
Motor Power	190W	250W	375W	750W
Connection	1/4"SAE	1/4"SAE	1/4"SAE	1/4"SAE
Oil Tank	250mL	330mL	330mL	600mL
Vacuum Gauge	50mm	50mm	50mm	50mm
Weight	5,50 Kg	5,50 Kg	15,00 Kg	18,00 Kg
Size	210 x 320 x 320 mm	210 x 320 x 320 mm	560 x 300 x 210 mm	560 x 300 x 210 mm

HVAC STARTER KIT

Choose the Pump and Start Working

Calibration
Certificate
Available

High quality manifolds:
best testing accuracy

Digital scale for gas dosing:
high precision HVAC
system filling

High grade connecting pipes:
save time and refrigerant

Pump to purchase separately:
build the kit of your choice

Starter Kits with 5 Kg – 1 g Scale

Art.	Model	R422	R407	R404	R134	R410	R422	R32
930101	System 1 Kit	•	•	•	•	•	•	•
930201	System 2 Kit	•	•	•	•		•	
930301	System 3 Kit					•		•

Starter Kits with 100 Kg – 5 g Scale

Art.	Model	R422	R407	R404	R134	R410	R422	R32
930111	System 1 Kit	•	•	•	•	•	•	•
930211	System 2 Kit	•	•	•	•		•	
930311	System 3 Kit					•		•

Each Starter Kit Includes:

- High and low pressure side hoses with fittings for all gases specified in the table at left (pipe for pump-manifold connection, plus one or two hose kits, according to the model)
- 4-way manifold for all refrigerants specified in the table (1 or 2 manifolds, according to the model)
- Cylinders support for refrigerants specified in the table (one or two)
- 5 kg digital scale (art. 932098) or 100 kg digital scale (Art. 932001)
- Manual

Pressure Testing Kit with Inert Gas

The first kit for HVAC and Plumbing system testing

Pressure regulator certified for gases up to 300 bar and made in Italy: **best safety class**

Every test kit is provided with a sturdy molded case with foam inside: **protection for your instruments**

Excellent also for plumbing systems, thanks to the 1/8" Gas fitting adapter provided: **the best device for HVAC and plumbing specialists**

Indication of the right working pressure: **easy to use**

System shut-off valve: **easy to use**

Testing pressure indicator: **setting the starting pressure makes easier finding pressure losses**

Inert gas 1L cylinder for HVAC testing: **small and light**



Art.	Model	Box
934598	HVAC Testing Kit with 1L cylinder in case	1
934596	HVAC Testing Kit without cylinder	1
933090	Inert Gas Disposable Cilinder 1L	12
934590	Nitrogen Flushing Kit	1
934595	Preassembled Testing Pipe with Gauge	1

Technical Features

- Excellent pressure indication
- Testing pressure indicator with setting handle
- Can be used on plumbing systems as well, thanks to the 1/8" fitting included

Max Inlet Pressure	300 bar
Max Working Pressure	53 bar
Testing Gauge	Ø 80 mm, class 1.0
Supplied Adapters	1/4"SAE, 5/16"SAE, 1/2"Gas

HVAC Flushing Tools

Cyclone – HVAC System Flushing Pump

Technical Features

Weight	3,5 Kg
Size	350 x 270 x 170 mm
Max Flow Rate	10 L/min
Pump Head	34 m
Tank Capacity	3,5 L
HVAC Connection	1/4" and 5/16" (90°)
Power Supply	230 V ~ 50 Hz
Current	1 A
Power	250 W
Sound Pressure	70 dBA
Protection	IP55

- Chemical not included, to be ordered separately

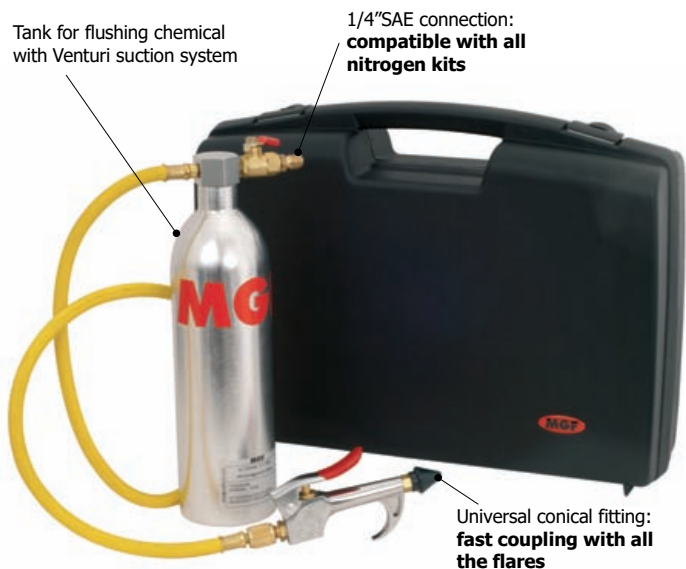
Art.	Model	Box
934698	Cyclone – HVAC Systems Flushing Pump	1
791002	Flux – HVAC Systems Flushing Chemical 1L	12



Inert Gas Flushing Kit

- ✓ **Flushing Kit for the combined use with a chemical and inert gas**
- ✓ Excellent to flux and degrease the pipes before using the vacuum pump in the HVAC system and after removing the condenser unit
- ✓ **Maximum pressure:** 30 bar (*pressure reducer not included*)
- ✓ **Including:** flushing chemical aluminum tank, gun with universal conical fitting, supplied with plastic molded case

Art.	Model
934590	Inert Gas Flushing Kit
934598	Inert Gas Flushing Kit with 1L cylinder



Cleanmatic Heat Exchangers High Pressure Washer

- ✓ Rotating the head in the lance, it's possible to regulate the **water jet power**, to clean effectively and softly the heat exchanger fins without damaging them
- ✓ The included dosing systems allows to mix the **concentrated chemicals**, as **MGF Split Clean**
- ✓ In this way the cleaning is more effective and the heat exchanger efficiency is improved

Art.	Model
905300	Cleanmatic Multifunction Portable Water Jetter (with 10m water jetter, chemical kit, high pressure gun and lance with extension)
905400	Cleanmatic LT Multifunction Portable Pressure Cleaner (with chemical kit, high pressure gun and lance with extension)



Refrigerant Gas Recovery and Recycling Unit

Convenient and Complete

R32



Automatic shut-off at 80% of cylinder capacity (optional):
work safety

Big manometers:
better vacuum reading and recovery complete understanding

PURGE mode:
Unit always clean

Two working modes:
recovery and purge. Eliminates refrigerant losses after recovery

Separate switch for fan and high-efficiency heat exchanger:
max performance even in the most difficult situations

Oil separator included:
separate oil, humidity and particles from the refrigerant

Over pressure and over current protection:
safe

Compact and handy:
easy to carry

Calibration Certificate Available

Excellent refrigerant gases recovery and recycling units, fully compatible with **R32** refrigerants.
Complete machine with efficient heat exchangers to recover more gas and doing the job faster.

Included with each Recovery Unit

- ✓ Refrigerants gas recovery unit (recycling function according to the model)
- ✓ Power supply cord
- ✓ Service hoses for connection
- ✓ Drying filter
- ✓ User Manual

Art.	Model	Weight
931092	Refrigerant Gas Recovery Unit (R32 compliant)	16 Kg
931091	Refrigerant Gas Recovery Recycling Unit (R32 comp.)	17 Kg
931080	Filter Dehydrator for Refrigerants (spare part)	0,1 Kg

Technical Features

Refrigerants	R-12, R22, R-134a, R-401A, R401B, R401C, R402A, R402B, R404A, R406A, R407A, R407B, R407C, R407D, R408A, R409A, R410A, R411A, R411B, R-412A, R500, R502, R507, R509, R422a, R424a, R434a, R428a, R32
Power Supply	220-240VAC 50Hz
Compressor	375 W (1/2HP) Oil-less
Max current	4A @ 50 Hz / 9A @ 60 Hz
HP Shut-off	38bar/550psi
Recovery Capacity (R22)	Vapor: 0.55 lbs./min (0.25 kg/min) Liquid: 3.97 lbs./min (1.80 kg/min) Push/Pull: 13.7 lbs./min (6.25kg/min)
Ultimate Vacuum	500mbar (15" Hg)
Automatic stop at 80% of the capacity	Optional
Working temperature	0-40°C
Chassis	Polyethylene
Size	485 x 220 x 365 mm (19.1 Lx8.7 Wx14.4 H)
Weight	16 Kg (35lbs) / 17 Kg (37lbs)

Electronic Refrigerant Scales

For Accurate Refrigerants Dosing and HVAC Filling

Refrigerants Scale **MAXI 100 Kg / 5 g**

- ✓ Supplied in molded plastic case
- ✓ Remote Display with extensible cord (max 1,5m)
- ✓ Remote display support
- ✓ Ideal for accurate refrigerants dosing and HVAC filling

Technical Features

TARE and Auto OFF Functions	yes (after 3 hours)
Triple Scale	Kg, Lb, Oz
Plate Size	223 x 223 mm
Power Supply	9V Alkaline Battery (6LR61) included
Battery Life	30 h
Maximum Weight	100 Kg / 220 lbs
Accuracy	5 g
Precision	±0,5%
Display LCD	66 x 20 mm
Backlight display	yes, adjustable and removable
Color	Black
Weight	3,5 Kg
Size	223x223xh50 mm
Working Temperature	0 < T < 49 °C

Art.	Model	Weight
932001	Refrigerant Scale MAXI 100 Kg	3,5 Kg



Example of use
Maxi of 100 Kg:
Remote control



Refrigerants Scale **MINI 5 Kg / 1 g**

- ✓ Flat plate for all refrigerants supports
- ✓ Supplied in **MGF** carton box with user manual

Technical Features

TARE and Auto OFF Functions	yes (after 120 seconds)
Triple Scale	gram (g), once (oz), and pound (lb)
Plate Size	110 x 110 mm
Power Supply	2 AAA Batteries (not provided)
Max load	5 Kg / 11 lbs
Resolution	1 g
Display LCD	40 x 15 mm
Color	White
Weight	185 g
Size	130x160xh30 mm

Art.	Model	Weight
932095	Refrigerant Scale MINI 5 Kg	0,19 Kg



Refrigerants Leak Detectors

Leak detectors compliant with the specifications of EEC Regulation 1516/2007. In particular the minimum sensitivity is better than required. On demand we perform the yearly inspection and calibration, including the calibration certificate. For more informations on calibration procedure, visit the website www.mgftools.com, HVAC regulations area.

R32



Mute and Ri.e.et functions:
More efficient leak detection

LED bar in three colors:
Better leak reading

Built in UV lamp:
now it's possible to see the refrigerant leak

R32



LED bar in three colors:
Better leak reading

Ri.e.et function:
more efficient leak detection

R32



Mute and Ri.e.et functions:
Leak detection is more efficient

Adjustable sensitivity:
Avoid sensor saturation

Battery monitoring:
always operative

R32



Ri.e.et function:
more efficient leak detection

Adjustable sensitivity:
avoid sensor saturation

NEXT GENERATION 2 in 1 Refrigerants Leak Detector with UV Lamp

Detect leaks for all the refrigerants gases: CFC (i.e.: R12, R11, R500, R503, etc...), HCFC (i.e.: R22, R123, R124, R502, etc...), HFCs (i.e.: R134a, R404a, R125, R410, R407, R422, ...etc...) and HFC (i.e.: R32, R143A, ...).

Supplied in a molded case.

Automatic calibration.

15 Levels of sensitivity.

Two spare sensors for free.

Batteries included.

Response Time

2 s

Leak Detection

3 g / year

Calibration Certificate Included

Art.	Model	Weight
932297	Leak Detector Next Generation 2 in 1	0,65 Kg

NEXT GENERATION STD Refrigerants Leak Detector

Excellent for all the refrigerants: CFC (i.e.: R12, R11, R500, R503, etc...), HCFC (i.e.: R22, R123, R124, R502, etc...), HFCs (i.e.: R134a, R404a, R125, R410, R407, R422,... etc...) and HFC (i.e.: R32, R143A, ...).

Supplied in a molded plastic case.

Automatic calibration.

7 Levels of sensitivity.

Two spare sensors for free.

Batteries included.

Response Time

2 s

Leak Detection

3 g / year

Calibration Certificate Included

Art.	Model	Weight
932298	Refrigerants Leak Detector Next Generation STD	0,65 Kg

HIGH GRADE PRO Refrigerants Leak Detector

Compatible with all the refrigerant gas: CFC (i.e.: R12, R11, R500, R503, etc...), HCFC (i.e.: R22, R123, R124, R502, etc...), HFCs (i.e.: R134a, R404a, R125, R410, R407, R422, .. etc...) and HFC (i.e.: R32, R143A, ...)

Supplied in aluminum case.

Automatic calibration.

Immediate response time.

Two spare sensors for free.

7 levels of sensitivity.

Batteries included.

Sensor

3 g / year

Calibration Certificate Included

Art.	Model	Weight
932299	High Grade Pro leak detector	0,60 Kg

HIGH GRADE LT leak detector

Compatible with all the refrigerant gases: CFC (i.e.: R12, R11, R500, R503, etc...), HCFC (i.e.: R22, R123, R124, R502, etc...), HFCs (i.e.: R134a, R404a, R125, R410, R407, R422, etc...) and HFC (i.e.: R32, R143A, ...).

Supplied in aluminum case.

Automatic calibration.

Immediate response time.

Two spare sensors for free.

7 levels of sensitivity.

Batteries included.

Sensor

3 g / year

Calibration Certificate Included

Art.	Model	Weight
932296	High Grade LT leak detector	0,60 Kg

MGF
Professional Plumbing Tools

HVAC Service Tools

Superheat Diagnosis Set

Valve core remover and installer for diagnosis and replacement of faulty valve cores, without recovering the refrigerant from the system.

Excellent accuracy in overheat diagnosis by reading gas pressure and temperature in the same point.

Provided in plastic case with thermoformed sponge.

Temperature Range -58 °F / 302 °F
 -50 °C / 150 °C



Art.	Model
934599	Superheat Analysis Set

Refrigerants Tank Heater Blanket

- Using an electronic tank heater blanket speeds up recharging time: once heated, the gas increases its pressure, thus filling is faster and complete
- With temperature shut off switch, max 40°C, to work safely
- Adjustable size with springs, excellent for all cylinders
- 400 W Power for extremely fast operation
- Power supply: 230V/ 50Hz, Schuko Plug



Powerful and fast to install:
save your time with fast recharging



Art.	Model
932100	Refrigerants Tank Heater Blanket

Valve Core Removers/Installers

- Excellent to remove valve cores without refrigerant losses
- Removing valve core speeds up recharging time by eliminating bottlenecks
- Service Kit (art. 934797) supplied in plastic molded case



Universal Dual Head Valve Core Remover/Installer

Art.	Model
934799	Universal Dual Head Valve Core Remover/Installer
934798	Valve Core Remover/Installer 1/4"SAE
934797	Universal Valve Core Remover/Installer Kit (1/4"-5/16"SAE)



Valve Core Remover/Installer



Universal Valve Core Remover/Installer Kit (in plastic case)

Condenser Fin Comb

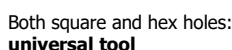
Excellent for cleaning and straightening fins on condenser and evaporators, heat exchangers in general.

Improve the heat exchange improves the performance of the machines.

Six sided head suitable for 8, 9, 10, 12, 14 and 15 fins per inch heat exchangers: **universal**



Art.	Model
934796	Condenser Fin Comb

[illegible][illegible]

- High accuracy tightness for fittings with certified torque: a fitting correctly tightened doesn't break, is tight and lasts longer
- Adjustable torque from 10 to 70 Nm, universal also for high pressure refrigerants, as R410a
- Complete wrenches inserts set: 17, 22, 24, 26, 27, 29mm
- Each wrench is **tested** and **calibrated** before shipping
- Kit supplied in blow molded case

Ratchet Wrenches

- Simply opens inlet and outlet valves in compressors
- In chrome-plated steel
- Reversible ratchet with easy access handle
- Designed to operate in hard to reach places
- Professional tool, excellent for HVAC service centers

Art.	Model
932598	Ratchet Wrench 1/4"-3/16" square and 9/16"-1/2" hex
932599	Ratchet Wrench 1/4", 3/8", 3/16", 5/16" square

- Specially engineered for HVAC professionals
- Pinching off and locking the pipes, avoids system contamination and preserves piping
- Curved jaws for the best tightness to the locked pipe
- With adjustment screw and release lever for maximum power with minimum effort

Art.	Ø Max	Lenght	Weight
920188	16 mm	190 mm	0,29 Kg

HVAC Service Chemicals

FLUX - HVAC Systems Flushing Chemical

- To be used before filling the system, both in the case of old pipes and compressor replacement
- Excellent solvent, removes oil, grease and paraffins
- Without residuals, fast evaporating
- Non corroding, compatible with paintings, rubber and plastic
- To be used with CYCLONE or with a nitrogen flushing kit

Suggested Dilution	pure
Flushing Time	10 minutes
Bottle	1L

Art.	Model	Weight	Box
791002	MGF Flux – Flushing Chemical 1L	1 Kg	12



SplitClean – Heat Exchanger Cleaner

- Cleaning and degreasing foamy chemical
- Excellent for heat exchanger fins, compressors, radiators.
- Also dissolves dirt caused by insects
- To be used with *CleanMatic* o *CleanMatic LT* dosing system
- Rinsing recommended

Suggested Dilution	from 1% to 5%
Flushing Time	5 minutes
Tank	5 Kg
Ph	13,6

Art.	Model	Weight	Box
791030	MGF SplitClean 5Kg	5 Kg	4



JET Sanitizer for Air Ducts and Rooms

- Sanitizer effective on a wide range of bacteria, viruses and pathogens including Legionella, Escherichia coli, Proteus mirabilis, Staphylococcus, Candida ...
- Manufactured according with hygiene regulations
- Supplied with straw for difficult zones

Sanitizing Time	2 min
Ph	7/8
Spray Can	600 mL

Art.	Model	Weight	Box
791010	MGF Jet 600mL	0,8 Kg	12



Spray can:
handy and fast



SanitAir Evaporators Sanitizer

- It eliminates organic deposits (mould, fungi, bacteria and spores), smell and dirt from conditioning plants (exchangers, conduits...)
- Effective foam also in the fissures and interstices of conditioners, flexible extension to reach the most difficult areas
- It improves the thermal exchange of the conditioner
- It prevents from the spreading of legionella
- It does not require rinsing
- Manufactured according to hygiene regulations

Ph	8,6±0,5
Spray bottle	600 mL

Art.	Model	Weight	Box
791020	MGF SanitAir Sanitizer Spray 600 mL	0,8 Kg	12



Spray can:
handy and fast



FOGGY

HVAC Air Ducts Ultrasonic Sanitizer

Patent
FOGGY
Pending

More effective
than traditional
spray sanitizers:
for refrigeration
professionals

Automatic sanitizing cycle:
easy and intuitive

Two adjustable and
interchangeable outlets:
versatile

Only 1,5 Kg:
light and handy

Reduced cost for
each sanitizing cycle:
**spend less and get
more**

HVAC Tools

How it Works?

Patent pending ultrasonic air ducts and heat exchangers sanitizer, excellent for refrigeration industry.

1. The **sanitizing chemical**, certified, is effective against a wide spectrum of bacterias populating air ducts, evaporators heat exchangers, HVAC units, disinfecting them in **only 2 minutes**
2. **Foggy** creates a very fine chemical mist that is easily transported through air ducts by venting them. **No other spray can be so effective**

Why it's Worth Using Foggy?

1. Because sanitizing will be truly effective and durable and will qualify your job
2. Because it is a professional product, and stands out from cheap spray cans sold in shopping centers
3. Because a certified air ducts disinfection is compulsory in all work and public places

How Often to Use Foggy?

1. Foggy should be used once a year to keep the system disinfected.
2. The best period, in HVAC systems, is at the season beginning (spring)

How to Use Foggy?

1. The forms included make the work easier and allow to monitor the systems under treatment. For further information contact www.mgftools.com sales team
2. Place Foggy near the air inlet, filters dismantled, i.e. near the air conditioner evaporator air inlet. Turn on the ventilation (without cooling). Start sanitizing cycle on Foggy
3. Even if the active principle is not toxic for mammals, a prolonged exposure may cause irritation to the respiratory tract: turn the machine on and air the rooms after the sanitizing

ALFACLEAN – HVAC/R Disinfecting and Sanitizer

Technical Features

Weight	1,5 Kg
Treatment Duration	2-3 minutes from duct complete filling
Supplied with	Foggy, power cord, 1 refill, 2 outlets
Refill	500 ml (for 75-minute treatment)
Standardizations obtained	EINECS (Europe), TSCA (USA), ACOIN/AICS (Australia), MITI (Japan), DSL (Canada)

The effectiveness of the machine is certified against the following microorganisms

Gram-negative bacteria:

Acinobacter baumannii
Areomonas hydrophila
Campylobacter jejuni
Citrobacter freundii
Edwardsiella tarda
Enterobacter aerogenes
Enterobacter cloacae
Escherichia coli
Klebsiella aerogenes
Klebsiella pneumoniae
Legionella pneumophila
Lactobacillus casei
Proteus mirabilis
Proteus rettgeri
Proteus vulgaris
Pseudomonas aeruginosa
Pseudomonas cepacia
Pseudomonas fluorescens
Pseudomonas perolens
Pseudomonas putida
Salmonella chleraeusis
Salmonella dublin
Salmonella poona
Salmonella typhimurium
Serratia marcescens
Vibrio cholerae Non 0 :1
Yersinia enterocolitica

Gram-positive bacteria:

Bacillus cereus
Bacillus megaterium
Bacillus polymyxa
Bacillus subtilis
Clostridium welchii
Corynebacterium acnes
Enterococcus faecium
Enterococcus faecalis
Listeria monocytogenes
Mycobacterium smegmatis
Staphylococcus albus
Staphylococcus aureus
Staphylococcus epidermis
Streptococcus faecalis
Streptococcus lactis
Streptococcus pyogenes

Yeasts and fungi:

Candida albicans
Rhodotorula rubra
Saccharomyces cerevisiae (ellipsoideus)
Saccharomyces cerevisiae (pastorianus)
Saccharomyces cerevisiae (turbidans)
Alternaria tenuis

Aspergillus niger
Aureobaidium pullulans
Chaetomium globosum
Trichoderma viride
Penicillium rubrum
Trichophyton mentagrophytes



Art. 791041

At the end of treatment you can recover the remaining product and reuse it for further treatments:
no waste



Art.	Model	Weight	Box
791040	FOGGY – Machine with 2 nozzles and 1 Alfadecan package	2,0 Kg	1
791039	FOGGY – Machine with 2 nozzles	1,5 Kg	1
791037	Foggy REMOTE – with remote control cable	1,5 Kg	1
791041	AlfaClean – 500 ml, for 75 minute treatment	0,15 Kg	15

Ultrasonic system: thanks to the very fine sanitizer misting, it is possible to reach all the air ducts points



Example of operation of an internal unit

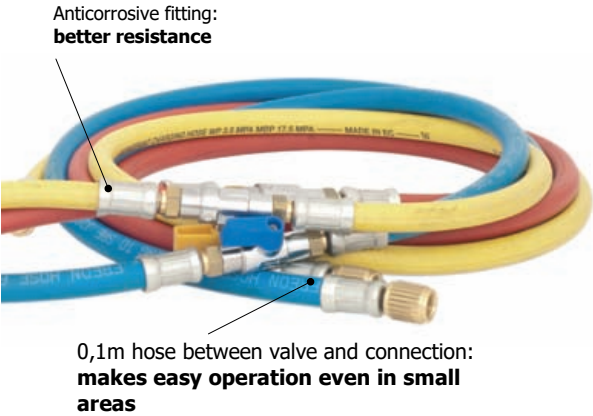


Example of sanitization of a fan coil unit through the nozzle. The treatment in offices is binding to avoid biological risks



HVAC/R Charging Hoses According to SAE J2196

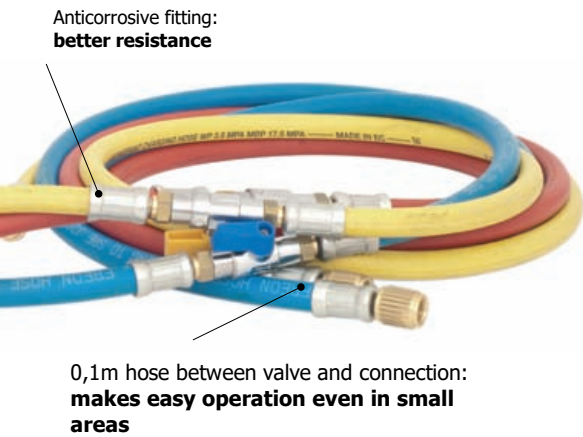
Charging Hoses 1/4"SAE (R422,R407,R134...) 1500 mm with Valve, Knurled Nut and Core Depressor



- Service hoses with 1/4" SAE knurled nut, suitable for all refrigerants
- Low refrigerant permeability hoses
- Valves included to save refrigerants
- 0,1m hose between valve and connection makes easy operation even in small areas

Art.	Model	# Hoses	Color
302340	Charging Hoses Kit 1/4" - 1/4" 45° 1500 RNK	3	Y,R,B
302341	Charging Hose 1/4" - 1/4" 45° 1500 RNY	1	Yellow
302342	Charging Hose 1/4" - 1/4" 45° 1500 RNR	1	Red
302343	Charging Hose 1/4" - 1/4" 45° 1500 RNB	1	Blue

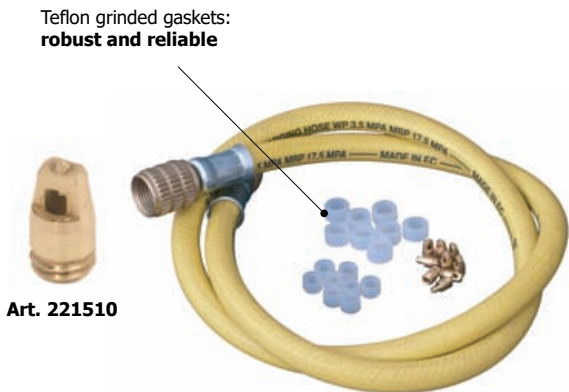
Charging Hoses 5/16" SAE (R410 e R32) 1500 mm with Valve, Knurled Nut and Core Depressor



- Service hoses with 5/16" SAE knurled nut, suitable for all refrigerants
- Low refrigerant permeability hoses
- Valves included to save refrigerants
- 0,1m hose between valve and connection makes easy operation even in small areas

Art.	Model	# Hoses	Color
302380	Charging Hoses Kit 5/16" - 5/16" 45° 1500 RNK	3	Y,R,B
302381	Charging Hose 5/16" - 5/16" 45° 1500 RNY	1	Yellow
302382	Charging Hose 5/16" - 5/16" 45° 1500 RNR	1	Red
302383	Charging Hose 5/16" - 5/16" 45° 1500 RNB	1	Blue

Service Hoses and Spare Parts



- **Valve core depressor** in brass, for charging hoses 1/4" or 5/16"
- Service hose with 3/8" knurled nut, for **reduced pressure drop during vacuum**
- Gaskets are made in teflon turned and grinded, for an excellent robustness and tightness

Art.	Model	Art.	Model
302143	Hose 3/8" 900mm (Y)	221510	Universal Valve Core Depressor
302144	Hose 3/8" 2500mm (Y)	251150	Gasket 1/4" - 5/16"
302145	Hose 3/8" 3500mm (Y)	251152	Gasket 3/8"

(Y) = yellow

Refrigerants in Refillable Cylinders

The European Regulation 842/2006 establishes the phaseout of HCFC and HFC gases, depending on use, the type and power of the plant itself. In detail to the fluorinated greenhouse gases, such as **R410a**, **R407**, **R22**, it has **banned** the use of non-refillable containers. Also since 01/01/2010 the use of virgin hydrochlorofluorocarbons, R22, was banned in the maintenance of existing refrigeration and air-conditioning at this date and therefore it is possible to use only a refilled cylinder.

MGF, according to European Regulation 2037/2000, informs that in case of HCFC refrigerant systems (R22) or HFC (R407C, R134a and R410a), you shall perform leaks detection.

R410

Art.	Model	Volume	Weight	Box
933095	R410 Refillable Cylinder	1 L	0,8 Kg	12
933207	R410 Refillable Cylinder	2,5 L	2 Kg	6
933195	R410 Refillable Cylinder	7 L	5 Kg	1

R407

Art.	Model	Volume	Weight	Box
933097	R407 Refillable Cylinder	1 L	0,85 Kg	12
933208	R407 Refillable Cylinder	2,5 L	2 Kg	6
933197	R407 Refillable Cylinder	7 L	5 Kg	1

R422D

Art.	Model	Volume	Weight	Box
933099	R422D Refillable Cylinder	1 L	0,9 Kg	12
933206	R422D Refillable Cylinder	2,5 L	2 Kg	6
933199	R422D Refillable Cylinder	7 L	5 Kg	1

R32

Art.	Model	Volume	Weight	Box
933094	R32 Refillable Cylinder	1 L	0,8 Kg	12
933221	R32 Refillable Cylinder	2,5 L	1,8 Kg	6
933198	R32 Refillable Cylinder	7 L	5 Kg	1
933194	R32 Refillable Cylinder	12 L	10 Kg	1



HVAC/R Service Fittings

Fittings with Valve and Core Depressor

Art.	Model	Art.	Model	Art.	Model
934086	1/4" M-1/4" F (R)	934085	1/4" M-1/4" F (Y)	934080	5/16" M-5/16" F (B)
934098	1/4" M-5/16" F (R)	934097	1/4" M-5/16" F (Y)	934090	1/4" M-1/4" F (B)
934082	1/4" F-5/16" M (R)	934078	1/4" F-5/16" M (Y)	934088	1/4" F-5/16" M (B)
934079	5/16" M-5/16" F (R)	934083	5/16" M-5/16" F (Y)	934099	1/4" M-5/16" F (B)

(R) = red | (Y) = yellow | (B) = blue



Fittings and Valves for Refrigerants Cylinders

Art.	Model	Art.	Model	Art.	Model
934084	1/4" M-1/4" F	934077	1/4" M - 3/8" F	930999	Cylinder Supp. 1/4"
934096	1/4" M-5/16" F	934076	1/4" F - 3/8" M	930998	Cylinder Supp. 5/16"
934089	5/16" M-1/4" F	934092	1/2" BSPT F-1/4" M*	934095	1/4" M-1/2" ACME F
934093	5/16" M - 5/16" F	934091	1/2" BSPT M-1/4" M*	934094	1/2" ACME M-1/4" F
934075	5/16" M-3/8" F	934081	Adapter for 5Kg Cil.	934150	Swivel 3/8" FF

(*) without core depressor



Flare Fittings

Flare Fittings Starter Kit



The starter kit is provided in plastic case and includes the following items:

Art. 934199	Short Nut 1/4"	15 pcs
Art. 934198	Short Nut 3/8"	15 pcs
Art. 934197	Short Nut 1/2"	5 pcs
Art. 934190	Flare Union MM 1/4"	15 pcs
Art. 934189	Flare Union MM 3/8"	15 pcs
Art. 934188	Flare Union MM 1/2"	5 pcs
Art. 934171	Flare Adapter 3/8"M-1/2"F	5 pcs
Art. 934110	Copper Gasket 1/4"	10 pcs
Art. 934111	Copper Gasket 3/8"	10 pcs
Art. 934112	Copper Gasket 1/2"	10 pcs
Art. 934113	Copper Gasket 5/8"	10 pcs

Art.	Model
934100	Flare Fittings Starter Kit

Flare Fittings Straight Unions Male-Male

Compliant with Refrigeration Fittings Standard SAE J513

Accurately machined and well packaged to avoid damage during shipping and handling



Made from brass forgings: avoids seepage by porosity, assure tight leak proof joints

Recommended maximum pressure: 48 bar (4,8 MPa)

Art.	Model
934179	Straight Union 1/4"M – 1/2"M Flare
934180	Straight Union 1/4"M – 3/8"M Flare
934157	Straight Union 1/2"M – 5/8"M Flare
934177	Straight Union 1/2"M – 3/4"M Flare
934178	Straight Union 3/8"M – 1/2"M Flare
934158	Straight Union 5/8"M – 3/4"M Flare
934186	Straight Union 3/4"M – 3/4"M Flare
934187	Straight Union 5/8"M – 5/8"M Flare
934188	Straight Union 1/2"M – 1/2"M Flare
934189	Straight Union 3/8"M – 3/8"M Flare
934190	Straight Union 1/4"M – 1/4"M Flare

Flare Fittings Straight Adapters Male-Female

Compliant with Refrigeration Fittings Standard SAE J513

Accurately machined and well packaged to avoid damage during shipping and handling



Made from brass forgings: avoids seepage by porosity, assure tight leak proof joints

Recommended maximum pressure: 48 bar (4,8 MPa)

Art.	Model
934167	Straight Adapter 3/4"M – 5/8"F Flare
934168	Straight Adapter 5/8"M – 3/4"F Flare
934169	Straight Adapter 5/8"M – 1/2"F Flare
934170	Straight Adapter 1/2"M – 5/8"F Flare
934171	Straight Adapter 1/2"M – 3/8"F Flare
934172	Straight Adapter 1/2"M – 1/4"F Flare
934173	Straight Adapter 3/8"M – 1/2"F Flare
934174	Straight Adapter 3/8"M – 1/4"F Flare
934175	Straight Adapter 1/4"M – 1/2"F Flare
934176	Straight Adapter 1/4"M – 3/8"F Flare

Flare Fittings

Art.	Model
934194	Nut 7/8" Female Flare
934195	Nut 3/4" Female Flare
934196	Nut 5/8" Female Flare
934197	Nut 1/2" Female Flare
934198	Nut 3/8" Female Flare
934199	Nut 1/4" Female Flare

Art.	Model
934162	Cap 5/16" Female Flare
934163	Cap 5/8" Female Flare
934164	Cap 1/2" Female Flare
934165	Cap 3/8" Female Flare
934166	Cap 1/4" Female Flare

Art.	Model
934134	Reducing Nut 3/4"F Flare x 5/8" Pipe
934135	Reducing Nut 5/8"F Flare x 1/2" Pipe
934136	Reducing Nut 1/2"F Flare x 3/8" Pipe
934137	Reducing Nut 3/8"F Flare x 5/16" Pipe
934138	Reducing Nut 3/8"F Flare x 1/4" Pipe
934140	Reducing Nut 1/4"F Flare x 3/16" Pipe

Art.	Model
934145	90° Elbow 1/4"M – 1/4"F Flare
934146	90° Elbow 3/8"M – 3/8"F Flare
934147	90° Elbow 1/2"M – 1/2"F Flare
934151	90° Elbow 1/4"M -1/4"M Flare
934152	90° Elbow 3/8"M -3/8"M Flare
934153	90° Elbow 1/2"M -1/2"M Flare
934159	90° Elbow 5/8"M -5/8"M Flare
934160	90° Elbow 3/4"M -3/4"M Flare
934154	TEE 1/4"M -1/4"M -1/4"M Flare
934155	TEE 1/4"M -3/8"M -1/4"M Flare
934156	TEE 3/8"M -3/8"M -3/8"M Flare

Nuts

Compliant with Refrigeration Fittings Standard SAE J513

Recommended maximum pressure: **48 bar (4,8 MPa)**



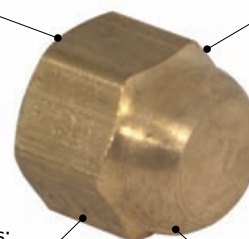
Made from brass forgings: **avoids seepage by porosity, assure tight leak proof joints**

Accurately machined and well packaged to avoid damage during shipping and handling

Caps

Compliant with Refrigeration Fittings Standard SAE J513

Recommended maximum pressure: **48 bar (4,8 MPa)**



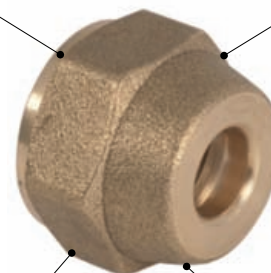
Made from brass forgings: **avoids seepage by porosity, assure tight leak proof joints**

Accurately machined and well packaged to avoid damage during shipping and handling

Reducing Nut

Compliant with Refrigeration Fittings Standard SAE J513

Recommended maximum pressure: **48 bar (4,8 MPa)**



Made from brass forgings: **avoids seepage by porosity, assure tight leak proof joints**

Accurately machined and well packaged to avoid damage during shipping and handling

90° Elbows and Flare TEEs



90° Elbow Male-Female



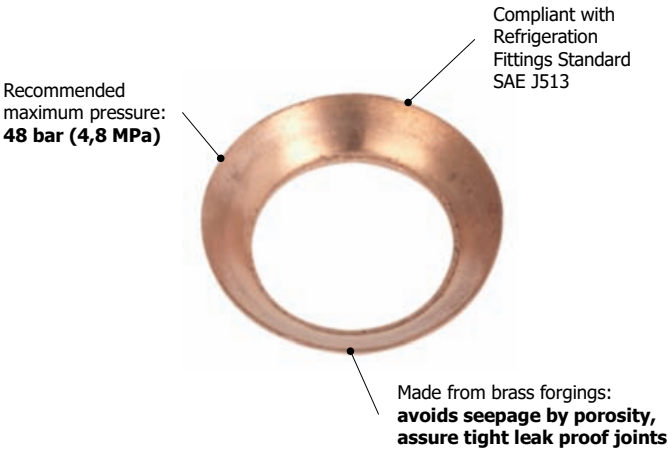
90° Elbows Male-Male



Flare Fittings TEE

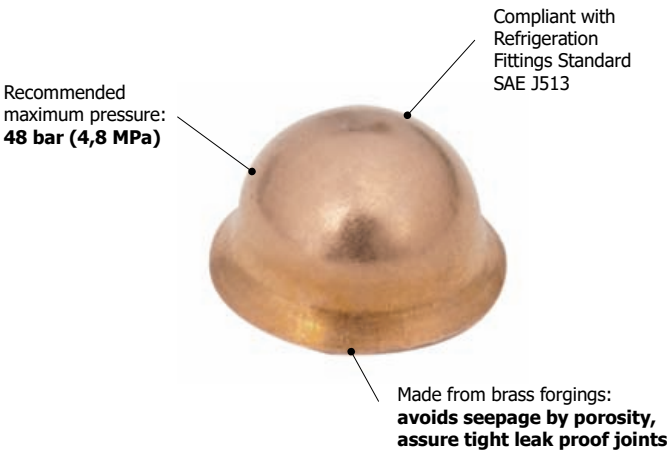
Flare Fittings

Flare Fittings Copper Gaskets



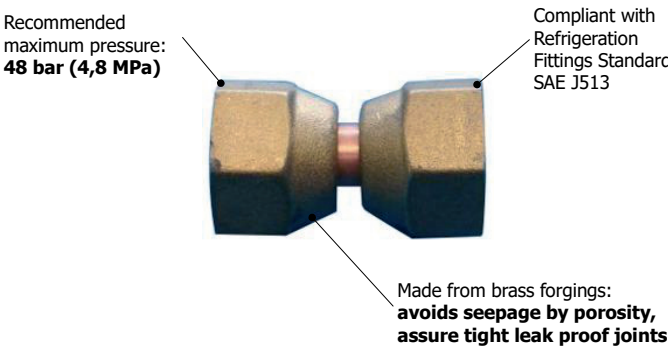
Art.	Model
934110	Flare Fittings Copper Gasket 1/4"
934111	Flare Fittings Copper Gasket 3/8"
934112	Flare Fittings Copper Gasket 1/2"
934113	Flare Fittings Copper Gasket 5/8"
934114	Flare Fittings Copper Gasket 3/4"
934115	Flare Fittings Copper Gasket 5/16"

Flare Fittings Copper Bonnets



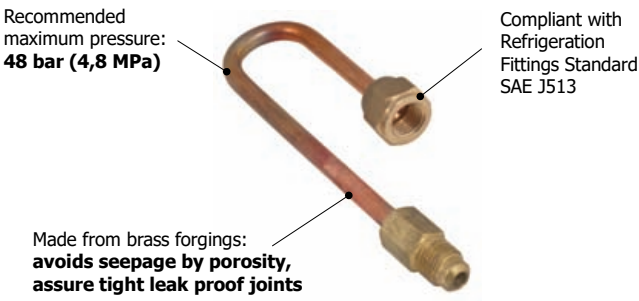
Art.	Model
934116	Flare Fittings Copper Bonnet 1/4"
934117	Flare Fittings Copper Bonnet 5/16"
934118	Flare Fittings Copper Bonnet 3/8"
934119	Flare Fittings Copper Bonnet 1/2"
934120	Flare Fittings Copper Bonnet 5/8"
934121	Flare Fittings Copper Bonnet 3/4"

Flare Fittings Swivel Connector



Art.	Model
934122	Flare Fitting Swivel Connector FF 1/4"
934124	Flare Fitting Swivel Connector FF 3/8"
934125	Flare Fitting Swivel Connector FF 1/2"
934126	Flare Fitting Swivel Connector FF 5/8"

Flare Fittings 180° Swivel Connector



Art.	Model
934141	Flare Fitting 180° Swivel Connector MF 1/4"
934142	Flare Fitting 180° Swivel Connector MF 3/8"
934143	Flare Fitting 180° Swivel Connector MF 1/2"
934144	Flare Fitting 180° Swivel Connector MF 5/8"

Copper Solder Joint Fittings

Art.	Model
934219	Copper Solder Joint TEE 1 1/8"
934220	Copper Solder Joint TEE 1 3/8"
934216	Copper Solder Joint TEE 1/2"
934214	Copper Solder Joint TEE 1/4"
934215	Copper Solder Joint TEE 3/8"
934217	Copper Solder Joint TEE 5/8"
934218	Copper Solder Joint TEE 7/8"

Art.	Model
934201	Copper Straight Fitting FF 3/8"
934202	Copper Straight Fitting FF 7/8"
934203	Copper Straight Fitting FF 1 1/8"
934223	Copper Straight Fitting FF 1 3/8"
934222	Copper Straight Fitting FF 1/2"
934221	Copper Straight Fitting FF 1/4"

Art.	Model
934226	45° Elbow Copper Fitting 1 1/8"
934207	45° Elbow Copper Fitting 1 3/8"
934204	45° Elbow Copper Fitting 1/2"
934224	45° Elbow Copper Fitting 1/4"
934225	45° Elbow Copper Fitting 3/8"
934205	45° Elbow Copper Fitting 5/8"
934206	45° Elbow Copper Fitting 7/8"

Art.	Model
934212	90° Elbow Copper Fitting 1 1/8"
934213	90° Elbow Copper Fitting 1 3/8"
934209	90° Elbow Copper Fitting 1/2"
934227	90° Elbow Copper Fitting 1/4"
934208	90° Elbow Copper Fitting 3/8"
934210	90° Elbow Copper Fitting 5/8"
934211	90° Elbow Copper Fitting 7/8"

Copper Solder Joint TEE



Straight Copper Fittings



45° Elbow Copper Fittings



90° Elbow Copper Fittings



Brazing

"Fire, walk with me!"

Jim Morrison (1943-1971)

TOPLINE – Professional Brazing Torch

Brazing, Soft Soldering, Heat Shrinking, Heating



Professional TOPLINE welder

- Precise flame adjustment
- Anti flare systems allows to operate in all positions
- Reliable piezoelectric flame ignition

Flame Temperature	>2000 °C
Max diameter (brazing)	up to Ø 16 mm
Max diameter (soft soldering)	up to Ø 35 mm
Gas Cartridge Connection	7/16"
Cartridge Life	up to 2,5 hours
Weight	0,36 Kg
Gas Cartridge (not included)	Art. 938082

Art.	Model	Pack
938015	TOPLINE Professional Brazing Torch	1
938082	MAPP Gas Cartridge Disposable 7/16" 385 gr. Type K	12

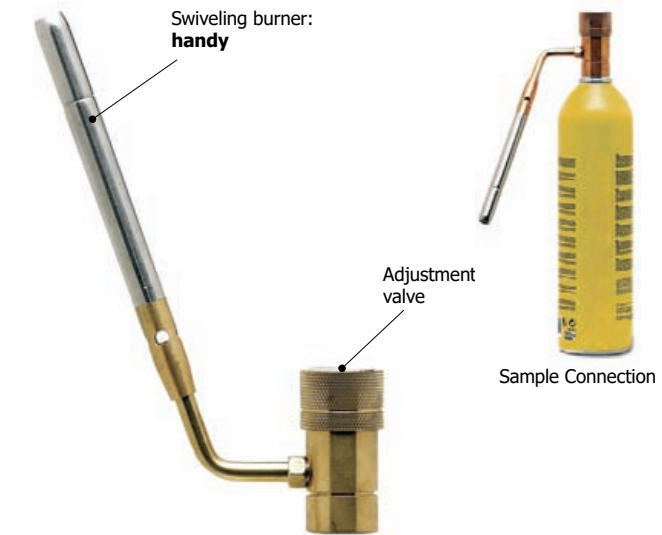
TOPLINE Professional Brazing Set

Professional brazing set supplied in plastic case with foam insert, including:

- TOPLINE Brazing Torch
- Two burners (pin-point burner and cyclone burner)
- Two MAPP gas disposable cartridges (art. 938082)

Max diameter (brazing)	up to Ø 16 mm
Max diameter (soft soldering)	up to Ø 35 mm
Gas Cartridge Connection	7/16"
Cartridge Life	up to 2,5 hours
Weight	2,8 Kg

Art.	Model	Pack
938017	TOPLINE Professional Brazing Set	1
938082	MAPP Gas Cartridge Disposable 7/16" 385 gr. Type K	12



F16 Swiveling Brazing Torch

- Precise adjustment of the flame with a fine valve
- Rugged brass body
- Anti flare system allows all positions operation

Flame temperature	1980 °C
Max diameter (brazing)	up to Ø 18 mm
Max diameter (soft soldering)	up to Ø 35 mm
Bottle connection	7/16"
Weight	0,36 Kg

Art.	Model
938085	F16 Swiveling Brazing Torch

MAP/OXY Torch Set

Brazing, Soldering, Light Welding and Cutting

MAP/OXY Torch Set

2,5 times more convenient than standard systems. This set allows to achieve very high welding temperatures due to the presence of MAPP gas in the mixture. It is possible to adjust the mixing of oxygen and MAPP, and hence the temperature of the flame.

Flame temperature >3100 °C

The kit includes

- Disposable oxygen cartridge 110 bar 950ml (Art. 938165)
- MAP gas cylinder (Art. 938070)
- Pressure regulator for oxygen from 0 to 4 bar
- Eye glasses
- Welding torch with anti-flare and 1,5m hoses
- Two sizes nozzles (fine and standard)

Art.	Model
938087	MAP/OXY Torch Set
938165	Oxygen Cartridge 110 bar connection 12x1 950mL
938070	MAPP Cartridge EU connection 7/16" 450g



Butane / Propane Soft Soldering

Brazing and Soft Soldering Torch

Equipped with fine adjusting valve. Working in all positions

Flame Temperature 1200 °C
Max Diameter (brazing) 14 mm
Max Diameter (soft soldering) 22 mm
Upside-down Work Time 5 s
Cartridge Connection EU 7/16"

Art.	Model	Weight
938009	Buthane/Propane Brazing and Soft Soldering Torch	0,20 Kg



Piezo Soldering and Brazing Torch

- Brazing and soft soldering torch with EU 7/16" connection
 - Ergonomic handle with automatic piezo ignition
 - Fine flame adjustment
- Flame Temperature: 1.200°C
Max Diameter (brazing): 8 mm
Max Diameter (soft soldering): 22 mm

Art.	Model	Weight
938000	Piezo Soldering and Brazing Torch	0,25 Kg



Soft Soldering Unit

- High grade torch with pre-heating and fine flame adjustment
- Works also upside-down
- For use with disposable cartridges
- Automatic piezoelectric ignition (only art. 938010)

Flame Temperature 1200 °C
Max Diameter (brazing) 14 mm
Max Diameter (soft soldering) 22 mm
Consumption: 86 g/h

Art.	Model	Weight
938010	Soft Soldering Unit w/Piezo Ignition	0,39 Kg
938011	Soft Soldering Unit wo/Piezo Ignition	0,35 Kg



Gases for Welding, Brazing and Soldering



Art. 938070



Art. 938069



Art. 938082

MAP Gas in Disposable Cartridges

Exclusive blend of **Methyl Acetylene - Propadiene Propane**, enriched with additives that concur to reach a flame temperature over 2200 °C (>3000°C with oxygen contribution). Ensures short brazing times.

Unlike other blends our MAP is not toxic and it does not produce backfires.

Art.	Model	Pack
938070	MAP Disposable Cartridge EU 7/16" (450g)	12
938069	MAP Disposable Cartridge USA (400 g)	12
938082	MAP Disposable Cartridge EU 7/16" (385g) Type K	12

POWERGAS Disposable Cartridges

Exclusive blend that approximates the results of the oxy acetylene brazing, with top class performances (much better than standard propane-butane blends).

Connection	7/16"
Content	330 g (600 ml)

BUTANE 65% PROPANE 35% Cartridge

Exclusive system ensures operation also in upside-down position

Connection	7/16"
Content	210 g

Art.	Model	Pack
938068	POWERGAS Disposable Cartridge EU 7/16"	24
938062	Butane 65% + Propane 35% Disposable Cartridge	12



Art. 938068



Art. 938062

BUTANE 70% + PROPANE 30% EU 7/16"

Connection	7/16"
Content	220 g

BUTANE 70% + PROPANE 30%

Connection	Pierceable Cartridge
Content	190 g

Art.	Model	Pack
938065	Butane-Propane Disposable Cartridge EU 7/16"	24
938066	Butane-Propane Disposable Pierceable Cartridge	36



Art. 938066



Art. 938065

Oxygen Disposable Cartridges

Volume	930 ml / 950 ml
Pressure	100 bar / 110 bar
Size	Ø 90 x 300mm
Connection	see table below

Art.	Model	Pack
938064	Oxygen Disposable Cylinder 930mL - M10x1 – 100 bar	12
938165	Oxygen Disposable Cylinder 950mL - M12x1 – 110 bar	12
938164	Oxygen Disposable Cylinder 950mL - M15x1 – 110 bar	12



Art. 938064



Art. 938165



Art. 938164

Brazing Rods

- Brazing rods made with special solder alloys, excellent for brazing copper pipes in sanitary and plumbing water systems and HVAC/R industry
- Excellent for capillary brazing in copper pipes

Super 94 CP 204

High melting point alloy, excellent for high resistance brazing and standard brazing on copper pipes

Weight	0,037 Kg
Melting Point	710-825°C
Mechanical Strength	500 N/mm ²
According to	DIN EN 1044:2001 CP 204

Super 94 CP 202

High melting point alloy, excellent for high resistance brazing and standard brazing on copper pipes

Weight	1 Kg
Melting Point	710-925°C
Mechanical Strength	500 N/mm ²
According to	DIN EN 1044:1999 CP 202

Super 1 CP 201

High melting point alloy, excellent for standard brazing on copper pipes

Weight	1 Kg
Melting Point	710-750°C
Mechanical Strength	450 N/mm ²
According to	DIN EN 1044:1999 CP 201

Super 2 CP 105

High melting point alloy, excellent for high resistance and standard brazing on copper pipes, with silver, perfect for capillary welding

Weight	1 Kg
Melting Point	645-825 °C
Mechanical Strength	550 N/mm ²
According to	DIN EN 1044:1999 CP 105

Super 5 CP 104

High melting point alloy, excellent for high resistance and standard brazing on copper pipes, with silver, perfect for capillary welding

Weight	1 Kg
Melting Point	645-815 °C
Mechanical Strength	550 N/mm ²
According to	DIN EN 1044:1999 CP 104

Super 34

High melting point alloy, standard brazing on copper pipes, with silver, perfect for capillary welding

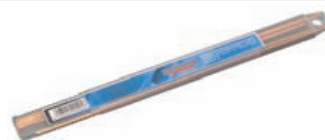
Weight	0,040 Kg
Melting Point	710 °C
Mechanical Strength	400 N/mm ²
According to	DIN EN 1044:2001

Super 5

High melting point alloy, excellent for high resistance and standard brazing on copper pipes, with silver, perfect for capillary welding

Weight	1 Kg
Melting Point	700-850 °C
Mechanical Strength	450 N/mm ²

- Brazing rod size: 2x250 mm (only *art. 938031* and *art. 938038*)
- Brazing rod size: 2x500 mm (remaining codes)
- Manufactured according to standards **DIN EN 1044: 2001**



Art.	Model
938031	Copper alloy / Phosphorus (6 pcs)



Art.	Model
938032	Copper 93% / Phosphorus 7% 1 Kg



Art.	Model
938033	Copper 92% / Phosphorus 8% (high rate) 1 Kg



Art.	Model
938035	Copper 91,5% / Phosphorus 6,50% / Silver 2% 1 Kg



Art.	Model
938037	Copper 89% / Phosphorus 6% / Silver 5% 1Kg



Art.	Model
938038	Copper alloy / 5% covered Silver (8 pcs)



Art.	Modello
938041	Copper 93,6% / Phosphorus 6% / Silver 0,4% 1Kg

CERCOFLAM ULTRA

Professional Plumbing Torch



CERCOFLAM ULTRA KIT

Professional plumbing torch, excellent for brazing and soft soldering, thanks to the flame temperature up to 2400°C.

For brazing without oxygen.

Ergonomic torch handle with fast action lever.

Hose connection thread **M18x1**.

Flame Temperature	2400°C
Hose-Cylinder Connection	3/8"L (left)
Torch Weight	0,46 Kg
Size	21 cm

Set supplied in case, including:

- Brazing Torch
- Burner Ø17mm (*art. 938059*)
- Burner Cercoflam Ø20mm (*art. 938076*)
- Hose (1,5m) with cylinder connection (*art. 938077*)

Art.	Model
938006	Cercoflam ULTRA Brazing Set
938007	Cercoflam ULTRA Plumbing Torch
938077	Cercoflam ULTRA Plumbing Torch Hose 1,5m

Torch Burners for CERCOFLAM ULTRA

High quality and duration

Made in Italy, patented products.

Art.	Model	°C	g/h	cm
938056	ULTRA Roofer Soldering Burner	1400	190	18
938058	ULTRA Torch Burner Ø15	1460	150	16
938059	ULTRA Torch Burner Ø17	1500	180	16
938060	ULTRA Torch Burner Ø20	1600	500	20
938076	Cercoflam Burner Ø20	2400	310	21
938072	Cercoflam Burner Ø40	2400	490	24

Hoses for CERCOFLAM ULTRA

Gas hoses with strong and handy swiveling nut, for gas cylinder

Art.	Model
938077	Plumbing Torch Hose 1,5m, Connection 20x14L
938078	Plumbing Torch Hose 5m, Connection 20x14L
938079	Plumbing Torch Hose 9m, Connection 20x14L

CERCOFLAM Brazing Torch

CERCOFLAM Brazing Set

Professional brazing set, handy and robust, complete with torch, standard burner, cercoflam burner and flat burner.

Excellent for brazing and soft soldering, flexible in use thanks to burners included.

Allows brazing and soldering in every position (360°)

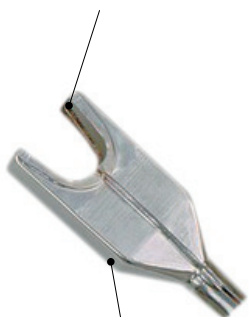
Suitable for Brazing	yes
Flame Temperature	1400 °C
Torch	with adjustment
Burner	steel
Weight	0,46 Kg
Size	27 cm

Each CERCOFLAM Brazing Set includes:

- Brazing Torch
- Burner Ø 20 mm
- Cercoflam Burner Ø 20 mm
- Flat Burner 60 mm
- Hose 1,5m - connection 20x14L
- Disposable blister packaging

Art.	Model
938002	Cercoflam Brazing Set
938004	Cercoflam Brazing Torch
938002D	Standard Burner Ø 20
938012	Cercoflam Burner Ø 20
938077	Cercoflam pipe 1,5m 20x14 SIN, also for cercoflam ULTRA
938078	Cercoflam pipe 5 m 20x14 SIN, also for cercoflam ULTRA
938079	Cercoflam pipe 9 m 20x14 SIN, also for cercoflam ULTRA

Cercoflam burner Ø 20 mm:
excellent brazing

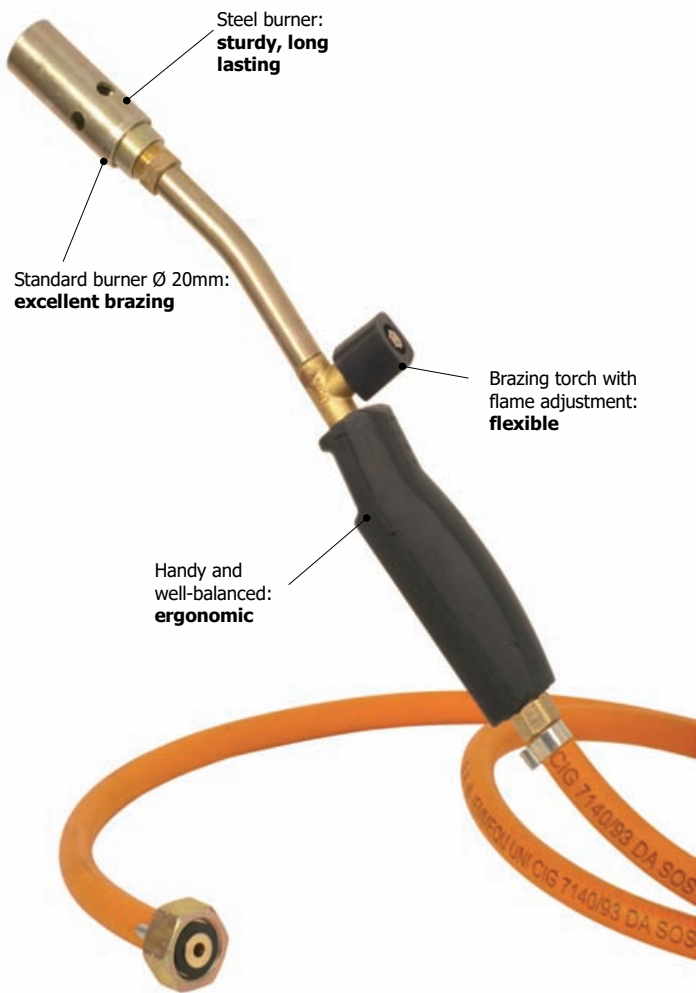


Small, light and sturdy

Excellent gas hose up to standards



Gas hose: including swiveling nut for gas cylinders



Art. 938002 brazing set including hose, 3 burners and torch: **complete**

The standard burner 20mm fits directly on the burner with the built-in adapter: **easy and fast**

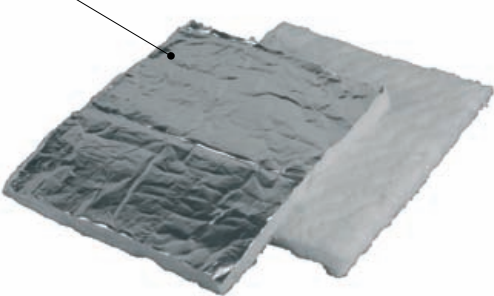


Brazing Equipment



Excellent insulation:
can be hand used

Practical and reusable:
indispensable



No toxic fibers



Improves the brazing quality:
reduces the oxidations



Suitable for all torches
with USA connection:
universal



Thermal Protection

Silica fibers (minimum 96%) and glass fibers. Not containing asbestos or ceramic.

- Professional product for the best thermal resistance
- 10 times longer lasting than standard protectors
- Preserves objects near the pipe being brazed
- High flexibility and bending resistance
- Reusable and recyclable
- Not containing asbestos, ceramic or toxic fibers

Size	200x250 mm
Thickness	13 mm
Weight	0,25 Kg

Art.	Model
938020	Flame Thermal Protection

Thermal Protection

- Protection without toxic fibers or asbestos
- Practical fire retardant felt firewall
- Essential to protect the walls in tin soldering
- Very flexible
- Up to 1000°C
- Pack containing 3 flame

Art.	Model
938022	Firewall

Universal Brazing Flux

- Universal flux for brazing with silver alloys on copper, copper alloys and steel
- Does not influence the brazing process
- Easy removal of residuals

Content	250 g
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Art.	Model	Pack
938043	Universal Brazing Flux	50

Cartridge Adapter USA → EU 7/16"

- Adapt your old brazing torch with a U.S. connection for use with EU 7/16" gas cartridges
- Remains mounted on the torch, so it doesn't requires additional efforts
- The 7/16" EU cartridges are bigger and more convenient
- Allows stocking of a single type of cartridges

Art.	Model
938008	Cartridge Adapter USA → EU 7/16"

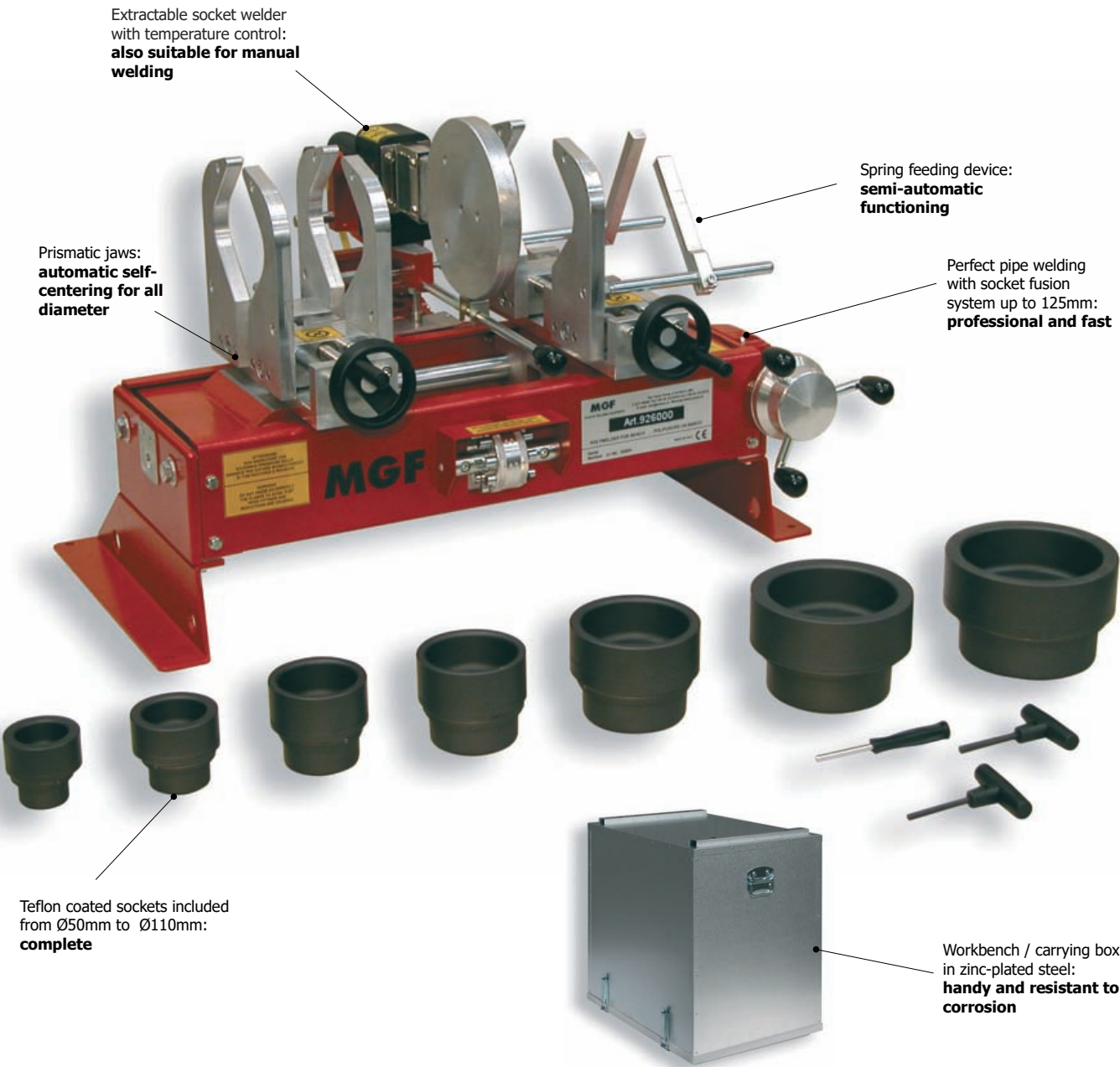
Plastic Welding

"God invented the atom, fusion energy, the DNA, the photosynthesis, the gravitational force... And he is still waiting for his Nobel prize."

Ennio Cavalli (1947-)

POLIFEMO 125

Socket Fusion Machine for Welding up to 125 mm



Extractable socket welder
with temperature control:
**also suitable for manual
welding**

Prismatic jaws:
**automatic self-
centering for all
diameter**

Spring feeding device:
**semi-automatic
functioning**

Perfect pipe welding
with socket fusion
system up to 125mm:
professional and fast

Teflon coated sockets included
from Ø50mm to Ø110mm:
complete

Workbench / carrying box
in zinc-plated steel:
**handy and resistant to
corrosion**

- ✓ Excellent for welding pipes and fittings with the socket welding system from 32mm to 125mm
- ✓ Suitable for many different plastic materials (i.e. PP or PVDF), presetting accordingly the welding temperature and choosing the right sockets (TAB A or TAB B)
- ✓ Ensures weldings compliant to **DVS 2208**
- ✓ Each machine includes: machine, socket welder, carrying box/workbench, pipe support, sockets from Ø 50 to Ø110mm

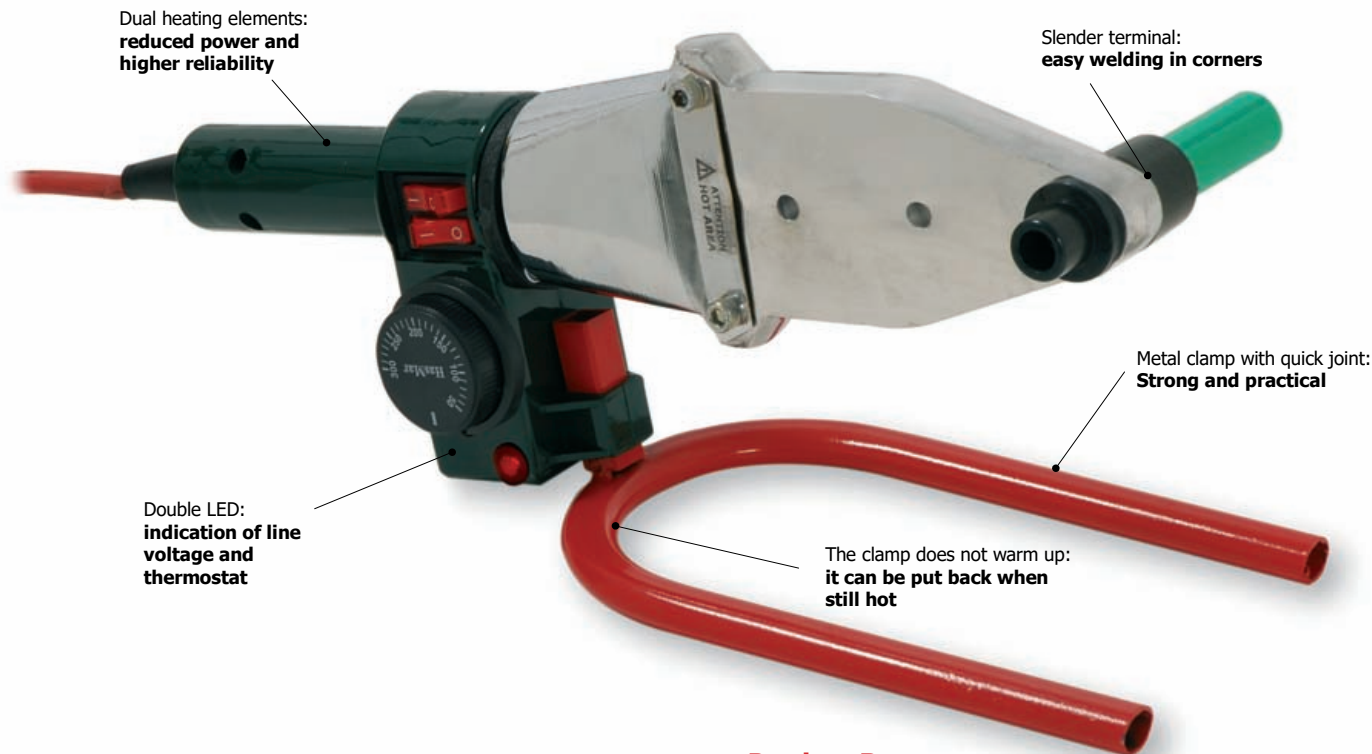
Art.	Model	Weight
926000	Polifemo 125 – Socket Welding Machine	80,00 Kg
926000M	Polifemo 125 (machine only)	49,50 Kg
926000B	Carrying box / Workbench	30,50 Kg
926000T	Polifemo 125 Socked Welder	2,20 Kg

Technical Features

Sockets Included	Ø 50 mm ÷ Ø 110 mm
Machine Range	Ø 32 mm ÷ Ø 125 mm
Socket Welder Range	Ø 16 mm ÷ Ø 125 mm
Machine Weight	49,5 Kg
Total Weight	80 Kg
Size	520 x 720 x 360 mm
Case Size	580 x 800 x 740 mm
Power Supply	230 V ~ 50/60 Hz
Power Requirements	1400 W
Working Temperature	260°C (preset for PP)
Adjustable Temperature	on demand

POLIFEMO

Socket Welder for Plastic Pipes up to 63mm



Product Range

Art.	Model	Kg
926099	POLIFEMO Welding Socket Welding Unit + Welding Sockets 20, 25, 32, 40 mm	7,8
926098	POLIFEMO Welding Socket Welding Unit + Welding Sockets 20, 25, 32, 40, 50, 63 mm	9
926097	POLIFEMO Welding Socket Welding Unit (without case and Welding Sockets)	1,5
926094	POLIFEMO Welding Socket Welding Unit + Welding Sockets 20, 25 mm	2,3
926093	POLIFEMO Welding Socket Welding Unit + Welding Sockets 20, 25, 32 mm	2,5
320399	Welding Socket 16 mm	0,04
320382	Welding Socket 16 mm TAB B (Recommended for GF pipes)	0,04
320395	Welding Socket 20 mm	0,05
320396	Welding Socket 20 mm TAB B (Recommended for GF pipes)	0,05
320394	Welding Socket 25 mm	0,07
320397	Welding Socket 25 mm TAB B (Recommended for GF pipes)	0,07
320393	Welding Socket 32 mm	0,12
320383	Welding Socket 32 mm TAB B (Recommended for GF pipes)	0,12
320392	Welding Socket 40 mm	0,15
320384	Welding Socket 40 mm TAB B (Recommended for GF pipes)	0,15
320391	Welding Socket 50 mm	0,42
320390	Welding Socket 63 mm	0,57
320389	Welding Socket 75 mm (only for Polifemo 125)	0,75
320388	Welding Socket 90 mm (only for Polifemo 125)	0,93
320387	Welding Socket 110 mm (only for Polifemo 125)	1,1
320386	Welding Socket 125 mm (only for Polifemo 125)	1,3

Technical Features

Working Range	Ø 16 mm - Ø 63 mm
Machine Weight	0,8 Kg
Power Supply	230 V ~ 50/60 Hz
Power Required	1200 W
Temperature (Adjustable)	50 °C – 300 °C

HERCULES Butt Welding Hydraulic Field Machine

Plastic Pipes Welding up to 1200mm

On demand up to 1200 mm

40mm thickness dual jaws in aluminum on both sides: **better pipe clamping and alignment**

Adjustable third jaw: **handy for fittings, elbows and TEEs**

Anti-drip quick fittings: **easy set-up without oil spills**

Tempered and chrome-plated sliding guides: **resistant to corrosion and to wear and tear**

Butterfly valve and joystick to control the jaws stroke and pressure drain: **easy life**

Art. 926051 Case in zinc-plated steel for milling cutter, supplied with the machine (540 x 230 x 300 mm): **full optional**

Technical Features

- Excellent for on-the-field butt welding of plastic pipes and fittings made in: PE, PP and PB.
- Butt welding according to DVS standards
- Suitable for welding in the building site with a strong hydraulic unit
- Double pressure adjustment for milling and welding
- Electronic welding temperature control
- Teflon-coated extractable heating plate with remote temperature control

Standard Equipment

- Basic machine
- Hydraulic power unit
- Hydraulic flexible hoses
- Milling cutter
- Extractable heating plate
- Temperature control box
- Galvanized steel case

Technical Features and Standard Equipment

	Hercules 160	Hercules 250	Hercules 315
Art.	926050	926040	926030
Welding Range	Ø 40 mm - Ø 160 mm	Ø 90 mm - Ø 250 mm	Ø 90 mm - Ø 315 mm
Total Weight (with adapters)	115,2 Kg	166 Kg	208 Kg
Size with adapters	1200 x 800 x 740 mm	1200 x 800 x 740 mm	1200 x 800 x 840 mm
Power Required	2550 W	3050 W	3800 W
Power Supply	230 V ~ 50/60Hz	230 V ~ 50/60Hz	230 V ~ 50/60Hz
Service Class	S1	S1	S1
Butt Welding Machine	926050B	926040B	926030B
Weight	39 Kg	56 Kg	65 Kg
Total Thrust Area	353 mm²	510 mm²	510 mm²
Sliding Guide Stroke	160 mm	165 mm	165 mm
Removable Heating Element	926050T	926040T	926030T
Power Required	1000 W	1500 W	2500 W
Power Supply	230V ~ 50/60 Hz	230V ~ 50/60 Hz	230V ~ 50/60 Hz
Temperature	50° - 300°C	50° - 300°C	50° - 300°C
Milling Cutter	926050F	926040F	926030F
Power	800 W	550 W	550 W
Motor	with brushes	asincronous	asincronous
Power Supply	230V ~ 50/60 Hz	230V ~ 50/60 Hz	230V ~ 50/60 Hz
Temperature Control Box	926001T	926001T	926001T
Power	2500 W	2500 W	2500 W
Temperature Range	50° - 300°C	50° - 300°C	50° - 300°C
Insulation Category	IP55	IP55	IP55
Hydraulic Unit	926001C	926001C	926001C
Working Pressure	150 bar	150 bar	150 bar
Power	750 W	750 W	750 W
Pump Flow Rate	1,58 L/min	1,58 L/min	1,58 L/min
Oil	ISO 68 – 1,5 L	ISO 68 – 1,5 L	ISO 68 – 1,5 L
Hydraulic Pipes	926001U	926001U	926001U
Weight	1,5 Kg	1,5 Kg	1,5 Kg
Lenght	4 m	4 m	4 m
Max Pressure	250 bar	250 bar	250 bar

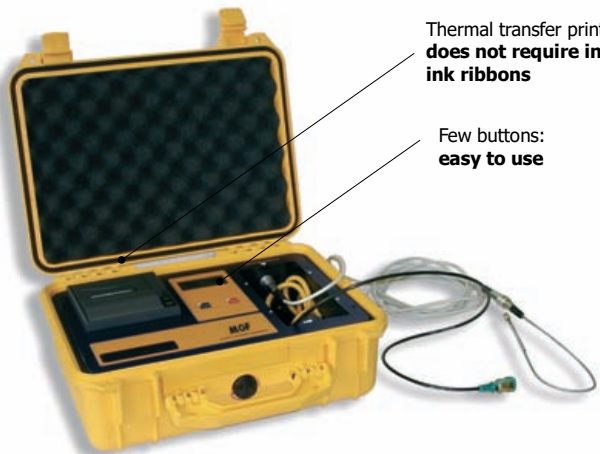


BACKUP – Butt Welding Parameters Recorder (opt.)

Technical Features

Working pressure	0-150 bar
Weight	5,4 Kg
Size	410 x 330 x 175 mm
Power	200 W
Power Supply	230 V ~ 50/60 Hz

Art.	Model
926001B	BACKUP – Butt Welding Parameters Recorder



Hercules 160 Optionals

Spindles, Adapters and Jaws

Art.	Description	Weight
926052	H160 Spindle for Butt Welder	3,5 Kg
926053	Chamfered Upper Jaw Ø160	0,5 Kg
926054.40	Adapters 40 mm (8 Jaws)	3,5 Kg
926054.50	Adapters 50 mm (8 Jaws)	3,4 Kg
926054.65	Adapters 65 mm (8 Jaws)	3,2 Kg
926054.75	Adapters 75 mm (8 Jaws)	3,0 Kg
926054.90	Adapters 90 mm (8 Jaws)	2,9 Kg
926054.110	Adapters 110 mm (8 Jaws)	2,5 Kg
926054.125	Adapters 125 mm (8 Jaws)	2,3 Kg
926054.140	Adapters 140 mm (8 Jaws)	1,7 Kg

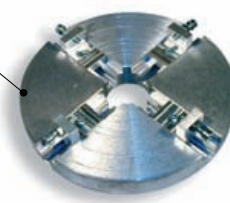


Art. 926053:
Chamfered upper jaw

Hercules 250 Optionals

Spindles, Adapters and Jaws

Art.	Description	Weight
926042	H250 Spindle for Butt Welder	7,5 Kg
926043	Chamfered Upper Jaw Ø250	1,5 Kg
926044.90	Adapters 90 mm (8 Jaws)	7,2 Kg
926044.110	Adapters 110 mm (8 Jaws)	6,4 Kg
926044.125	Adapters 125 mm (8 Jaws)	6,4 Kg
926044.140	Adapters 140 mm (8 Jaws)	5,6 Kg
926044.160	Adapters 160 mm (8 Jaws)	5,2 Kg
926044.180	Adapters 180 mm (8 Jaws)	4,8 Kg
926044.200	Adapters 200 mm (8 Jaws)	5,8 Kg
926044.225	Adapters 225 mm (8 Jaws)	3,2 Kg

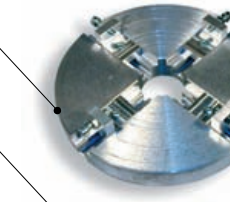


Art. 926043:
Chamfered upper jaw

Hercules 315 Optionals

Spindles, Adapters and Jaws

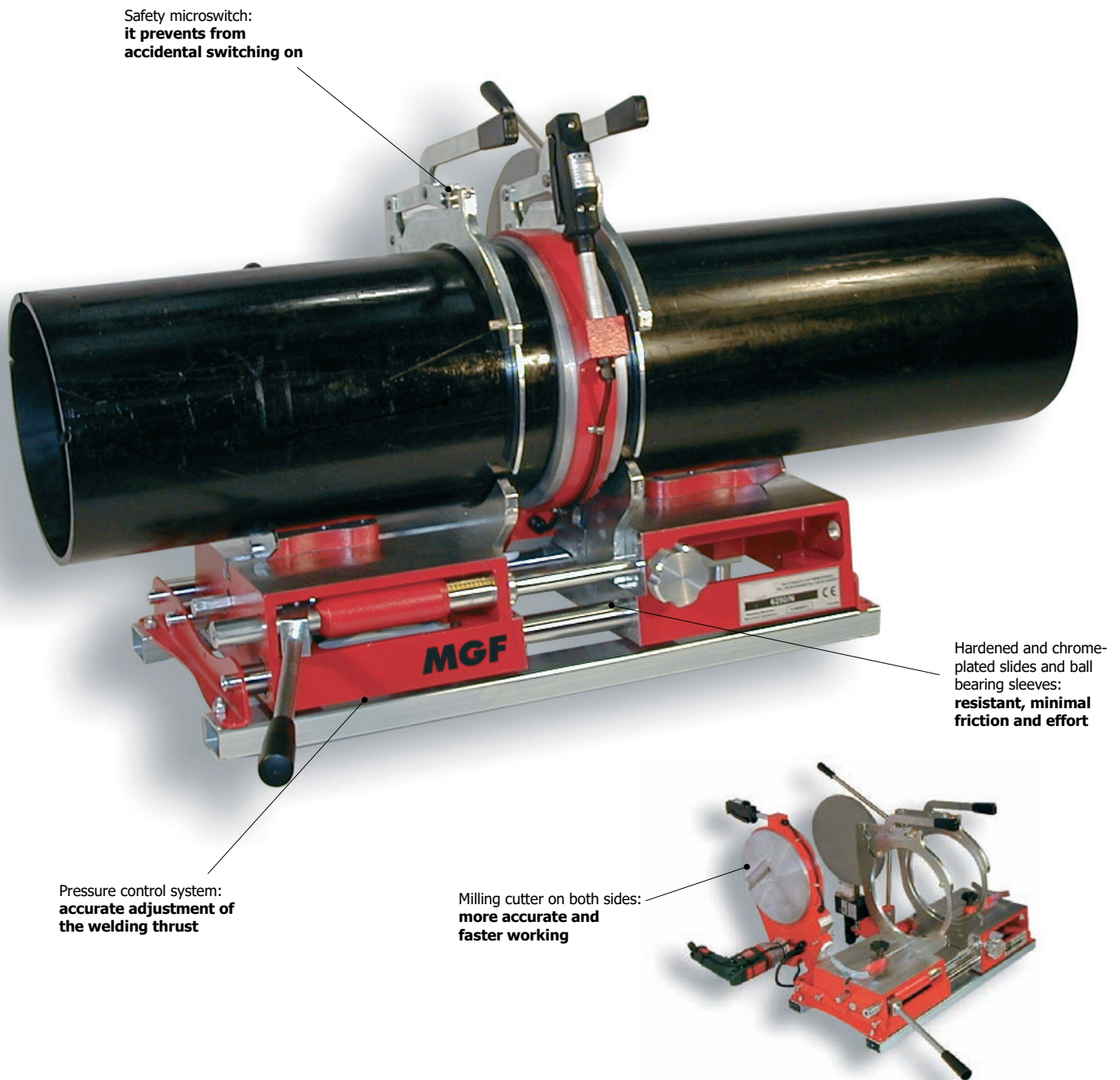
Art.	Description	Weight
926032	H315 Spindle for Butt Welder	10,5 Kg
926033	Chamfered Upper Jaw Ø315	2,0 Kg
926044.90	Adapters 90 mm (8 Jaws)	7,2 Kg
926044.110	Adapters 110 mm (8 Jaws)	6,4 Kg
926044.125	Adapters 125 mm (8 Jaws)	6,4 Kg
926044.140	Adapters 140 mm (8 Jaws)	5,6 Kg
926044.160	Adapters 160 mm (8 Jaws)	5,2 Kg
926044.180	Adapters 180 mm (8 Jaws)	4,8 Kg
926044.200	Adapters 200 mm (8 Jaws)	5,8 Kg
926044.225	Adapters 225 mm (8 Jaws)	3,2 Kg
926034.250	Adapters 250 mm (8 Jaws)	7,1 Kg
926034.280	Adapters 280 mm (8 Jaws)	7,0 Kg



Art. 926033:
Chamfered upper jaw

DEDALO 250

Butt Welding Machine for Plastic Pipes up to 250 mm



- ✓ Excellent for butt welding plastic pipes and fittings made in: PE, PP, PB and PVDF
- ✓ Welding thrust adjustment and control for butt welding according to DVS standards
- ✓ Teflon-coated heating element controlled by adjustable temperature switch for perfect welding
- ✓ The kit includes: machine, heating plate, steel adapters, electric milling cutter and carrying case/workbench in zinc-plated steel

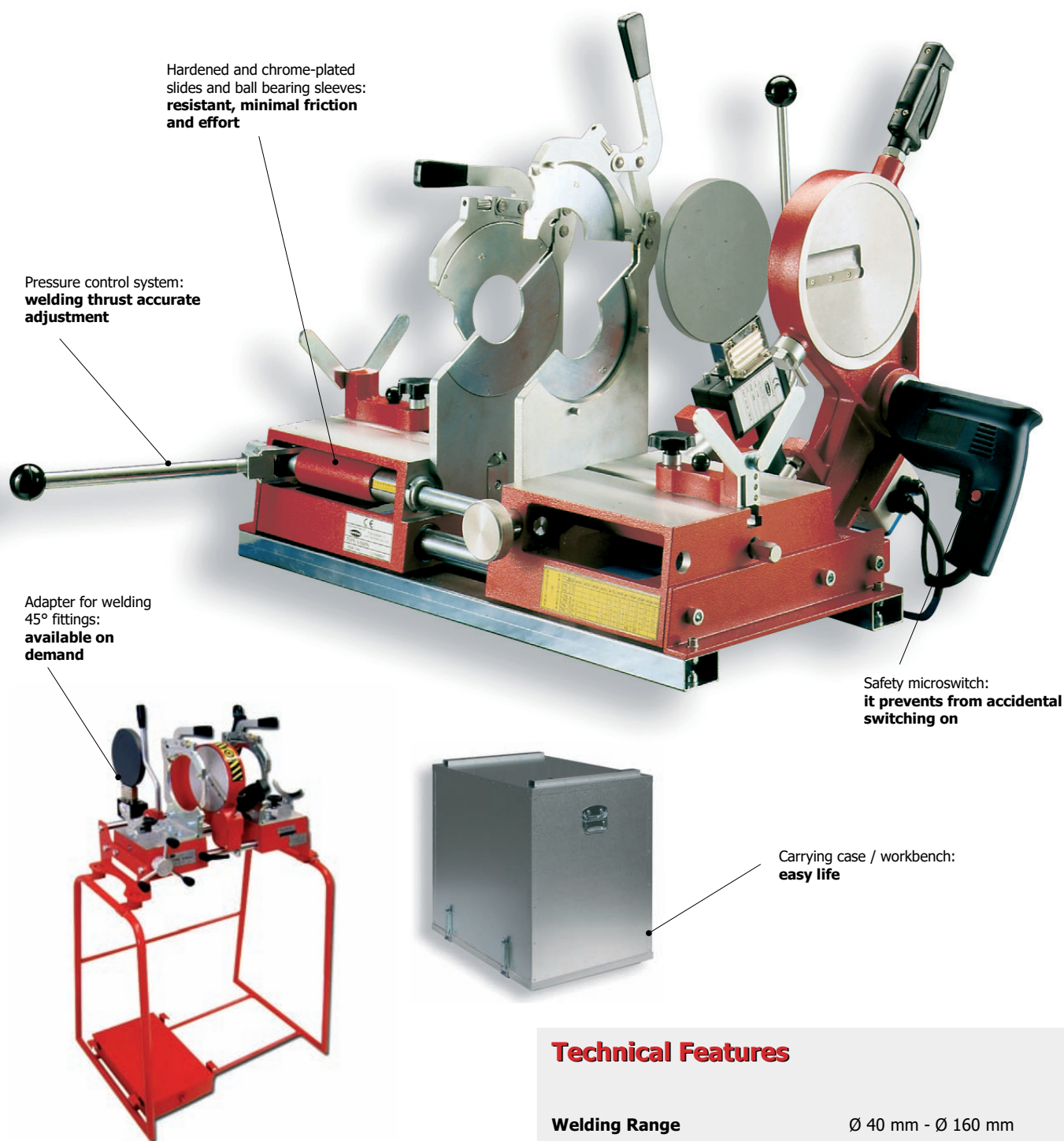
Art.	Model
926010	Dedalo 250

Technical Features

Welding Range	Ø 50 mm - Ø 250 mm
Machine Weight	69,5 Kg
Total Weight	105,0 Kg
Machine Size	550 x 800 x 660 mm
Case Size	580 x 880 x 740 mm
Power Required	2200 W
Power Supply	230 V ~ 50/60 Hz
Maximum Stroke	130 mm

DEDALO 160

Butt Welding Machine for Plastic Pipes up to 160 mm



- ✓ Excellent for butt welding plastic pipes and fittings made in: PE, PP, PB and PVDF
- ✓ Welding thrust adjustment and control for butt welding according to DVS standards
- ✓ Teflon-coated heating element controlled by adjustable temperature switch for perfect welding
- ✓ The kit includes: machine, heating plate, steel adapters, electric milling cutter and carrying case/workbench in zinc-plated steel

Technical Features

Welding Range	Ø 40 mm - Ø 160 mm
Machine Weight	54.5 Kg
Total Weight	90,0 Kg
Machine Size	550 x 800 x 660 mm
Case Size	580 x 800 x 740 mm
Power Required	1460 W
Power Supply	230 V ~ 50/60 Hz
Maximum Stroke	130 mm

Art.

926020

Model

Dedalo 160

Optionals and Spare Parts for DEDALO 160 and DEDALO 250

Carrying Case / Workbench

In zinc-plated steel.

Supplied with DEDALO butt welding machines, it is used as carrying case as well as a workbench and support for the welder.

Total Weight	35,5 Kg
Size	580 x 800 x 740 mm

Art.	Model
926002B	Carrying Case / Workbench for DEDALO

Heating Elements Ø 180 – 280 mm

Power Supply	230 V ~ 50/60 Hz
Welding Temperature	180 °C – 300 °C
Heating Element Ø 280 mm	
Size	550 x 60 x 330 mm
Power	1400 W
Heating Element Ø 190 mm	
Size	400 x 60 x 190 mm
Power	900 W
Heating Element Ø 120 mm	
Size	340 x 100 x 110 mm
Power	500 W

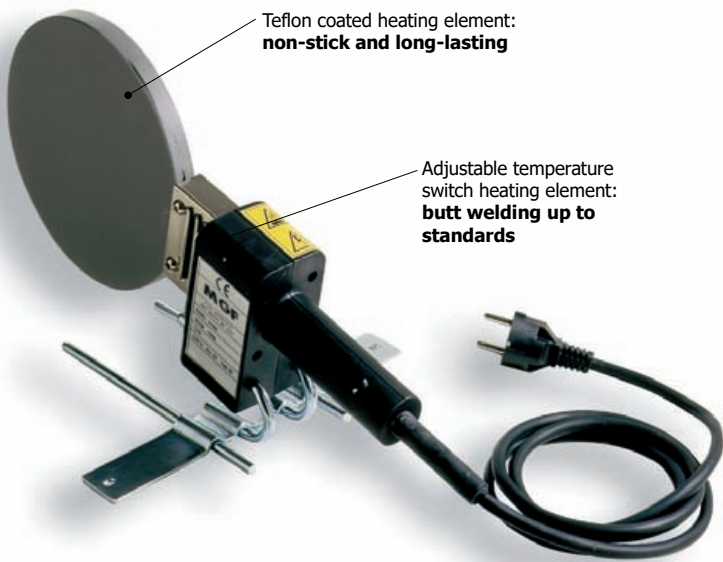
Art.	Model	Weight
926002C	Heating Element Ø 280 mm	3,30 Kg
926002D	Heating Element Ø 190 mm	2,40 Kg
926002F	Heating Element Ø 120 mm 30° sloping	1,50 Kg
926002G	Heating Element Ø 120 mm	1,30 Kg

Steel Jaws for Drains and Adapters (optionals)

Size	DEDALO 160		DEDALO 250	
	Jaws	Adapter	Jaws	Adapter
40 mm	926020E.40	926020F.40	926020E.40	926020F.40
50 mm	926020E.50	926020F.50	926020E.50	926020F.50
56 mm	926020E.56	926020F.56	926020E.56	926020F.56
63 mm	926020E.63	926020F.63	926020E.63	926020F.63
75 mm	926020E.75	926020F.75	926020E.75	926020F.75
90 mm	926020E.90	926020F.90	926020E.90	926020F.90
110 mm	926020E.110	926020F.110	926020E.110	926020F.110
125 mm	926020E.125	926020F.125	926020E.125	926020F.125
140 mm	926020E.140	926020F.140	926020E.140	926020F.140
160 mm	926020E.160		926020E.160	926020F.160
180 mm			926010E.180	926010F.180
200 mm			926010E.200	926010F.200
225 mm			926010E.225	926010F.225
250 mm			926010E.250	



Carrying case made in zinc-plated steel: sturdy



Teflon coated heating element: non-stick and long-lasting

Adjustable temperature switch heating element: butt welding up to standards



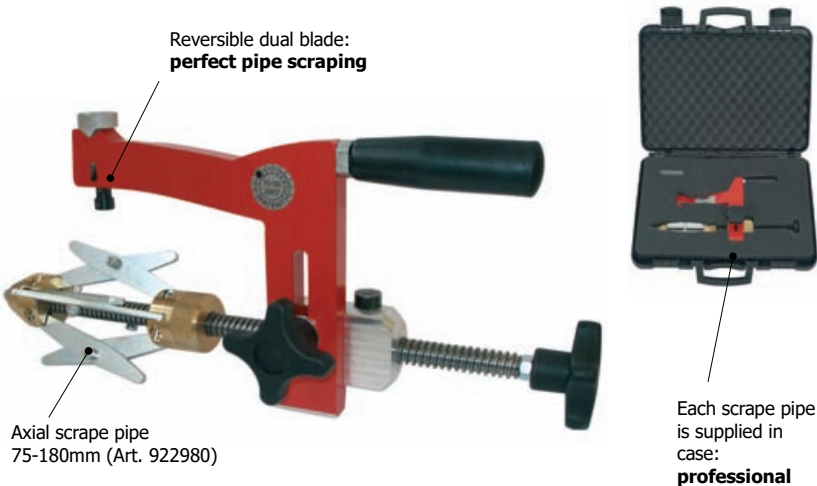
Adapters for welding smaller diameters and easily adjust to the machine jaws.

Both the jaws and the adapters can be provided in kit or single piece (jaws are provided in pairs, right and left).

Art.	Model	Weight
926010E	Jaws Kit for DEDALO 250 (Ø 50 – Ø 250 mm)	9,0 Kg
926020E	Jaws Kit for DEDALO 160 (Ø 40 – Ø 160 mm)	7,5 Kg
926010F	Adapters Kit for DEDALO 250 (Ø 50 – Ø 250 mm)	9,0 Kg
926020F	Adapters Kit for DEDALO 160 (Ø 40 – Ø 160 mm)	7,5 Kg

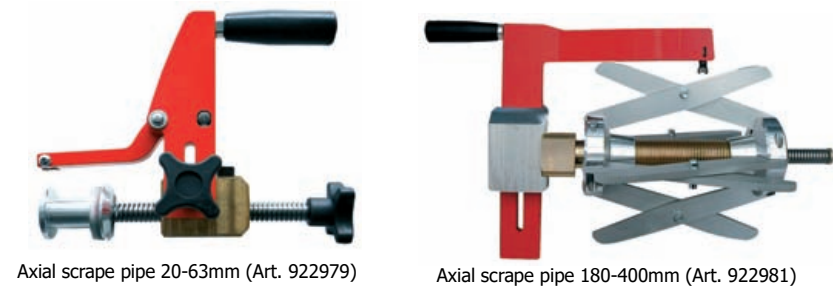
Butt and Socket Welding Tools

Professional Rotary Pipe Scraper for PE, PE-X, PP and PP-R pipes



Technical Features

- Excellent for outer surface layer removing on pipes and fittings before welding
- Dual blade reversible
- Included with art. 922979 all the **adapters for scraping all the diameters** between Ø20mm and Ø63mm and all SDR (diameters) on European market
- Items art. 922980 and art. 922981, thanks to compact and robust design, don't require any adapter for all diameters or other optionals, because on all sizes 8 locking points are easily available with the adjusting knob. A stable and reliable locking of the scraper inside the pipe is so ensured.
- The constant scraping diameter ensures a perfect layer removing, according with UNI 10521 and other European Standards
- Perfect for saddles scraping
- Each **MGF** rotary pipe scraper is supplied in a **molded plastic case with foam insert and service tools for blade replacement**



Spare Blades Kit (art. 922978)

- Including:
- ✓ Reversible dual blades (3 pcs)
 - ✓ Stainless steel screw (1 pcs)
 - ✓ Torx Wrench
- Suitable for all 3 models

Art.	Model	Weight
922979	Rotary Pipe Scraper 20-63mm	1,3 Kg
922980	Rotary Pipe Scraper 75-180mm	2,1 Kg
922981	Rotary Pipe Scraper 180-400mm	4,7 Kg
922978	Spare Blades Kit	0,08 Kg

Universal Plastic Pipe Beveler Ø25mm to Ø168mm



Technical Features

- Professional tool for 15° beveling the plastic pipes up to Ø 168 mm, before inserting them into electrical couplers or plug-in joints.
- Double adjustment (diameter and thickness) to adapt to any pipe: universal
- Teflon support surface to reduce friction during beveling

Working Range	Ø25-168mm
Maximum Pipe Thickness	12 mm
Weight	0,82 Kg

Art.	Model
922983	Universal Plastic Pipe Beveling Tool Ø 25-168mm
922982	Spare blades for Pipe Beveler art. 922983

Threading Machines

"Everybody knows a certain thing is unrealizable until somebody unaware of this comes and invents it."

Albert Einstein (1879-1955)"

GIOTTO 1 1/4"

Electric Threading Machine



Technical Features

Machine Weight	5,67 Kg
Threading Speed	32 rpm
Power	1700 W
Power Supply	230VAC ~ 50Hz
Threading Range	from 1/2" to 1 1/4"

Supplied with

- Threading machine
- Pipe clamp
- Threading spray oil
- Die heads set
- Metal painted case

Art.	Model	Weight
901495	Threading machine complete with die heads 1/2", 3/4", 1", 1 1/4" BSPT (R)	13,4 Kg
901497	Threading machine complete with die heads 3/4", 1", 1 1/4" BSPT (R)	12,7 Kg
901499	Threading machine complete with die heads 1", 1/14" BSPT (R)	12,2 kg
901475	Giotto 1 1/4" (Threading machine only)	5,67 kg
640002	Carrying case for Giotto Threading Machine	4,30 kg
Suggested model		

GIOTTO 2"

Only 6 Kg to Thread up to 2"



Technical Features

Weight	6 Kg
Threading Speed	32 rpm
Power	1700 W
Power Supply	230 VAC ~ 50 Hz
Threading Range	from 1/2" to 2"

Supplied with

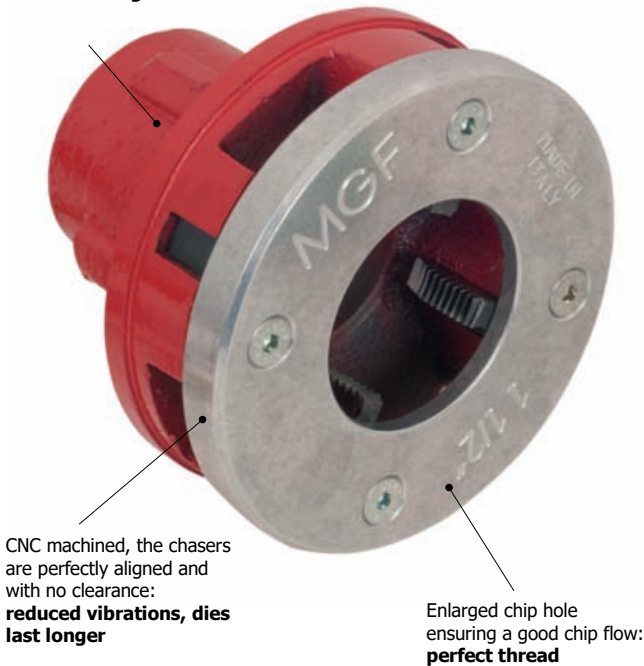
- Threading machine
- Pipe clamp
- Spray oil for threading
- Dies set
- Painted metal carrying case



Art.	Model	Weight
901481	Threading Machine complete with die heads from 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" BSPT (R)	21,9 Kg
901483	Threading Machine complete with die heads 3/4", 1", 1 1/4", 1 1/2", 2" BSPT (R)	21,5 Kg
901485	Threading Machine complete with die heads 1", 1 1/4", 1 1/2", 2" BSPT (R)	21,4 kg
901487	Threading Machine complete with die heads 1 1/4", 1 1/2", 2" BSPT (R)	21 Kg
901489	Threading Machine complete with die heads 1 1/2", 2" BSPT (R)	20,5 kg
901474	Giotto 2" (Threading Machine)	6 kg
640002	Painted metal carrying case for Giotto	4,30 kg
Suggested model		

Spare Parts for GIOTTO Threading Machines

Lengthened pipe guide, the pipe is centered on its axis:
excellent threadings



CNC machined, the chasers are perfectly aligned and with no clearance:
reduced vibrations, dies last longer

Enlarged chip hole ensuring a good chip flow:
perfect thread

Threading Dies Heads

- Compatible with GIOTTO and Manual threading machines
- Made in die-cast steel and CNC machined aluminium
- Epoxy powder painted

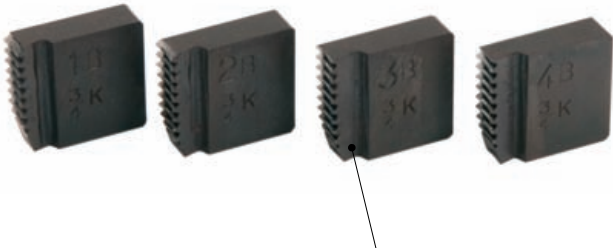
BSPT dx	Ø	Weight
323005M	1/2"	0,64 Kg
323007M	3/4"	0,55 Kg
323009M	1"	0,81 Kg
323011M	1 1/4"	0,92 Kg
323015M(*)	1 1/2"	1,92 Kg
323017M(*)	2"	1,88 Kg

(*) Large octagon, it does not require an adapter.

Threading Dies

- Compatible with GIOTTO and Manual threading machines
- Made in special steel for tools: 9Cr2 (F-5230)

BSPT dx	Ø	Die Weight
324001	1/4"	0,64 Kg
324003	3/8"	0,59 Kg
324005	1/2"	0,64 Kg
324007	3/4"	0,55 Kg
324009	1"	0,81 Kg
324011	1 1/4"	0,92 Kg
324013	1 1/2"	1,92 Kg
324015	2"	1,88 Kg



Dies made in special hardened steel:
long-lasting, perfect thread

Can be used pure or diluted:
saving without waste

Spare Parts

Art.	Model	Pack
320052	Small die heads octagonal adapter GIOTTO	1
790003	Oil for threading 100 ml	10
790005	Spray oil for threading 400 ml	12
790006	Spray oil for threading 600 ml	12
320054	GIOTTO Terminal stops	1



Art.320052

Art.790005
790006

Art.790003

Art.320054

MANUAL Ratchet Threading Tool

from 1/4" to 2"



Technical Features

1 1/4" Ratchet Threading Tool Weight	1,5 Kg
2" Ratchet Threading Tool Weight	3,0 Kg
Threading Tool Size	620 x 110 x 50 mm
Working Range	1/4" - 2"



Available Ratchet Threading Tools Sets

Supplied in plastic molded case, bushes, 100ml oil and ratchet with screw-in lever.

BSPT (R)	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	Weight
901098			•	•	•				5,50 Kg
901198		•	•	•	•				6,00 Kg
901100		•	•	•	•	•			6,80 Kg
901000			•	•	•	•			6,30 Kg
901196	•	•	•	•	•				6,60 Kg
901096	•	•	•	•	•	•			7,50 Kg
901298							•	•	8,40 Kg
901296						•	•	•	9,80 Kg
901200			•	•	•	•	•	•	13,00 Kg
901300		•	•	•	•	•	•	•	13,60 Kg
901396	•	•	•	•	•	•	•	•	14,20 Kg

Spare Parts for MANUAL Threading Tools

Lengthened centering pipe guide, the pipe is kept on its axis:
excellent quality threading



CNC machined die head, the dies are perfectly aligned and with no clearance:
reduced vibrations, the dies last longer

Wide head hole for chips:
perfect thread



Dies made in high-speed steel:
long-lasting, perfect geometry of the thread

Threading Tool Die Heads

- Compatible with GIOTTO and Manual threading machines
- Made in die-cast iron and aluminum, CNC machined
- Epoxy powder painted

Art.	Model	Weight
323001M	Die Head 1/4" BSPT (R)	0,6 Kg
323003M	Die Head 3/8" BSPT (R)	0,6 Kg
323005M	Die Head 1/2" BSPT (R)	0,6 Kg
323007M	Die Head 3/4" BSPT (R)	0,6 Kg
323009M	Die Head 1" BSPT (R)	0,9 Kg
323011M	Die Head 1 1/4 BSPT (R)	0,9 Kg
323015M	Die Head 1 1/2" BSPT (R)	1,9 Kg
323017M	Die Head 2" BSPT (R)	1,9 Kg

Threading Tool Dies

- Compatible with GIOTTO and Manual threading machines
- Made in special steel for tools: 9Cr2 (F-5230)

BSPT dx	Ø	Die Head Weight
324001	1/4"	0,64 Kg
324003	3/8"	0,59 Kg
324005	1/2"	0,64 Kg
324007	3/4"	0,55 Kg
324009	1"	0,81 Kg
324011	1 1/4"	0,92 Kg
324013	1 1/2"	1,92 Kg
324015	2"	1,88 Kg

Spare Parts and Optionals For Ratchet Threading Tools

Art.	Model	Kg	Pack
320050	Threading Tool Ratchet 1 1/4" wo/Lever	1,5	1
320057	Ratchet Threading Tool 1 1/4" Lever	0,5	1
320051	Threading Tool Ratchet 2" wo/Lever	3	1
320056	Ratchet Threading Tool 2" Lever	0,5	1
3200V0	Ratchet Thr.ing Tool 1 1/4" Carrying Case	1	1
3200V1	Ratchet Threading Tool 2" Carrying Case	1	1
790003	Oil for Threading 100 ml	0,1	10
790005	Spray Oil for Threading 400 ml	0,4	12
790006	Spray Oil for Threading 600 ml	0,6	12



Threading machine on the field:
accurate, up to standards

MGF Threading Oil:
sharp and fast threads

MGF – Return Merchandise Authorization (RMA)

To fill in and send via fax to +390521818202 – Or get in contact with us, we will fill in it at your place

Once you will receive the authorisation, put this document on the external packaging before sending

To be filled in by the Customer

Retailer	Reference name from Retailer	
Final Customer References (If necessary Company name, Name and Cell phone)		
MGF item code	Registration number (if available)	
Description		
Number and date of invoice document and/or purchasing transport document of Retailer		
Encountered Problem / Special situation in which it occurs		
Is the defect listed in the instruction manual?	YES	NO
Request of repair under warranty	YES	NO
Transport costs to be charged to	MGF	Customer

Conditions of the technical assistance service (SAT). Read carefully before signing.

1. Binding information for the preparation of the return

The products to be sent back must be prepared for transport in accordance with the specifications provided in the User's Manual. Take care to clear or make hermetic oil tanks and other chemical product tanks, to prevent leakage for which **MGF** will not be liable. Topping up will be charged even if the repair is under warranty.

The goods must be shipped in their original packaging or in a similar type, quality and durability. The product must always be placed in a sturdy cardboard and suitably protected from bumps and drops. Products weighing more than 10 kg must be supported and rigidly fixed on a pallet.

The goods travel at the customer's risk and possible damage during transport are to be charged exclusively to the customer regardless of the warranty on the product and of the type of transport.

Stick on each individual item the coupon that will be sent following the authorization of the Technical Assistance Service (SAT) **MGF**, cutting it out from the bottom of the page. In any case, the packages shipped without written permission from the staff SAT **MGF** will be rejected.

2. Warranty conditions

For the application of the guarantee a document showing the date of purchase less than 2 years (if purchased with ticket) or 1 year (if purchased with invoice). This document must be sent by fax to +39 0521/818202 or at assistenza@mgftools.com. Otherwise it will refer to the production date printed on the product (if available where required by law). The application of the warranty is excluded in case of improper use or use not in accordance to the manual of use and maintenance, in the absence of documents proving the date of purchase, for components subject to normal wear (eg seals, lubricants, batteries, nozzles ...)

3. Repair procedure

If necessary, after the acceptance of this document we will arrange collection. Even when the withdrawal takes place by means of our employee, the assessment on the product guarantee will only happen in our laboratories, following accurate technical analysis.

Upon receipt of the package, we will inspect the product, to make sure everything is consistent with the information provided and we will repair / replace the product or component, whether under warranty.

If a repair is out of warranty, we will send you a quote. In case of rejection of the quoted budget, the product will be returned dismantled, and € 40 will be charged for product verification, transport excluded that will be estimated in a quote.

In case of no response from you, we first agreed to scrap the product within one month from the third written reminder.

Stamp and signature for conditions acceptance, data collection and goods availability

MGF GENERAL SALES CONDITIONS

This catalogue cancels and replaces the previous ones.

MGF has the right to modify without notice its products in order to improve their efficiency and functionality.

Selling of **MGF** products is regulated by the following conditions, unless exceptions with written agreement signed from both sides. Accepting them the recipient accepts these conditions for all the involved persons or companies (retailers, agents, installers, designers, final users ...) involved in the selling, design, installation and use of the system made with offered **MGF** products.

1. PRICES

Prices are meant for the goods FCA Mezzani and do not include V.A.T.

Any price variation without notice may occur and we will inform the customer with an order confirmation.

2. OFFERS

Offers are valid for 30 days. In case of custom-made services, the price only refers to all the services specified in the offer. Any additional service will be quoted and balanced according to the current price list.

3. DELIVERIES

All the articles in the catalogue are generally available in the stock, except for what is already sold and "upon request" or "custom" items. Orders are elaborated immediately after receipt.

After the receipt an order confirmation with delivery date is sent to the customer for approval.

Also in case of delays or difficulty in the elaboration of the order (i.e. inconsistency of codes or prices), a written confirmation of the order, containing information on the order and on the date of delivery, will be sent.

In case of delay **MGF** will immediately inform the customer. Shipment delays can't motivate the missing or delayed payment of the customer, and **MGF** shall not be responsible since now for damages of any nature caused by the delayed delivery. Eventual fees for late delivery must be signed from both sides in the sales contract.

MGF is responsible for damages occurred during deliveries only if the material was sent with its carrier, if the goods acceptance is made with reserve and if the customer immediately informs **MGF** of the damages when he receives the goods. In any case the customer can cancel a line of the order if the relevant item has more than 7 days delay calculated starting from the previous agreed delivery date.

4. DESIGN

Except what offered, **MGF** srl is not responsible of the whole system engineering, as well its risk assessment, that is at customer or at installation company charge and must be made by a specialized technician. Sales agents visits, needed only for the correct elaboration of the commercial offer, has not to be considered as a executive project, to be quoted separately.

5. INSTALLATION AND MAINTENANCE

They are completely charged to the Customer. After the delivery, the installation, the tests and maintenance of the goods, in conformity with our instructions and with current regulations for machines. Electric and plumbing systems must be assembled in conformity with technical regulations and by professional technicians. **MGF** is not responsible for damages due to missing or bad design or engineering.

6. RECESS

All the orders are planned and sent upon customer demand. Unilateral termination to the contract is not accepted and also the cancellation of orders is not accepted without **MGF** prior consent. According to Italian regulations **MGF** can decide to stop the order and to withdraw from the sales contract, if the economic conditions of the Customer, existing or occurring, do not offer enough financial guarantees.

7. PAYMENT

The modalities of payment are as indicated in the invoice and as agreed in the offer.

For payment through cash order, the handling charges will be charged on the buyer. For direct payment, rounding off or withholding are not allowed. Once the agreed payment deadline has expired, **MGF** is entitled to charge for interest and to interrupt any current order.

8. RETENTION OF TITLE

The property of goods will be transferred only after the complete payment of the order. Until this time the Customer has to use the goods with the diligence of a good father and can't sell it in use, lease or loan to a third part. He also has to protect the goods and inform **MGF** of eventual prejudices to goods and modify or limit **MGF** rights on them. Costs of installation, maintenance and use are at the customer charge. More precisely the costs for the wearing parts have to be charged to the Customer independently from hours of use: gaskets, nozzles, filters, lubricants...

9. TRANSPORT

The goods are transported at the buyer's own risk, even if sold carriage free. Packages are packed on pallets or cases depending on the ordered goods. It is advised to check the quantity and the status of the packages at the moment of delivery.

Complaints for transport damage will be considered valid only for goods accepted conditionally, if written in the transport document. Written complaints have to be made to the carrier the same day of the goods receipt.

10. FAULT AND DEFECT

Dissimilarity, faults or defects in the goods has to be reported in writing using the form on the catalogue on our website www.nebulizzare.com or www.mgftools.com within 8 days from the delivery of the goods. Eventual disputes do not exempt the customer from the payment of the order. The warranty on the products is of 12 months from the delivery, but **MGF** responsibility is limited, also in the warranty period, to repair and substitution of goods, after thorough inspection and verification. Returning back of "used material" is not possible without **MGF** approval. **MGF** responsibility is excluded for any event, included costs or damages to persons and things, following the wrong use of the goods, in conditions different from what is specified on catalogs, offers and manuals. In case of substitution of goods under warranty transport costs are included up to the delivery address indicated in the order, but costs of what is installed or dismantled from other parties is excluded. Warranty does not cover costs and delays due to downtime and to what is not expressly indicated.

11. DOCUMENTS

The material is supplied complete with manuals of use and maintenance and of its relevant documents. The customer has to read and make people reading this documents before the installation and in case of doubts or requests has to call **MGF** assistance service before the installation of the system.

12. RETURNED MATERIAL

The delivered material can't be sent back without a written authorization by **MGF**. The return of the material can be authorized only by the technical assistance (SAT) that will send, after the reporting and the receipt of documents showing the purchase, marks to put on products to be returned, even in case the withdrawal is made by an agent. In any case, the material sent back will be accepted and the relevant amount will be accredited, only after the checking of the assistance and the relevant report, showing the real integrity or defect.

13. LIMITATION OF RESPONSABILITY

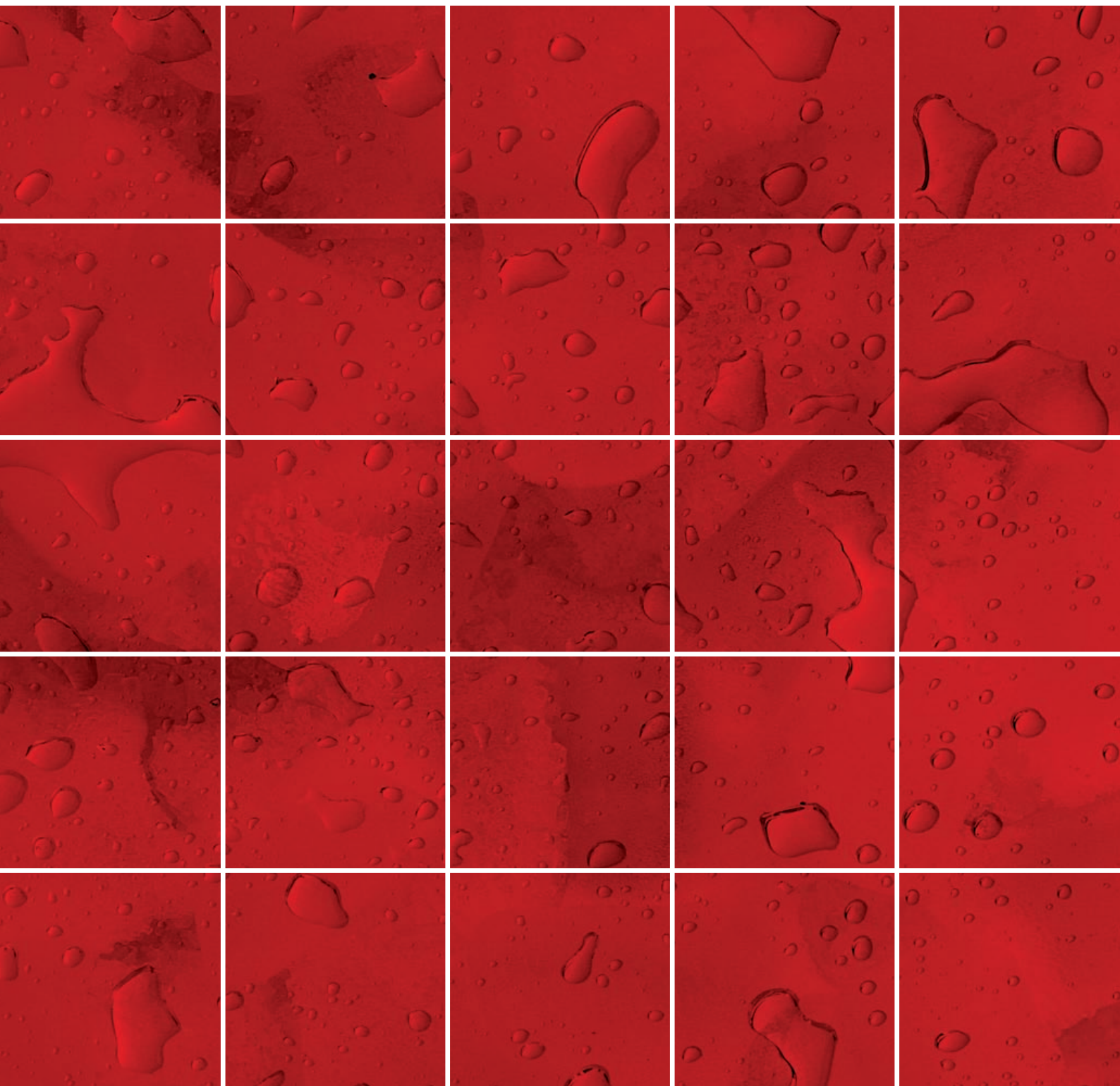
MGF is not responsible for damages to persons or objects caused by insalubrious water or from the voluntary or involuntary misting of dangerous substances for health and for surrounding equipment. **MGF** is not responsible for damages caused by bad installation, tampering or bad use of the product. **MGF** is not responsible for decisions about installation unless it performs a complete and executive project of the plant, as well its risk assessment.

14. FORCE MAJEURE

MGF srl is not responsible for defaults or delays caused by extreme weather events, strikes or labor unrest, accidents, wars, insurrections or any other cause independent from the Company will.

15. LEGAL VENUE

For any dispute, the legal venue is the PARMA court. The Italian laws shall apply.



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