

Lorch MIG-MAG torches

Gas and water cooled – from 150 A to 500 A.

The MIG-MAG torches from Lorch are ideally suited for use on Lorch welding power sources and therefore guarantee the maximum performance and reliability of the system. The MIG-MAG torches from Lorch provide optimum welding results and are also available in the Powermaster version, which gives the user remote control of the power source directly at the torch handle.

- ✓ optimum torch cooling
- ✓ long service life
- ✓ ergonomic torch handle recess
- ✓ light and flexible hose packages
- ✓ optimum handling in all positions
- ✓ fast torch change due to euro central connection
- ✓ robust design

MIG-MAG Powermaster torch

Gas-cooled	ML 1500 PM	ML 2400 PM	ML 3800 PM	ML 4500 PM
Load CO ₂	180 A	250 A	360 A	450 A
Mixed gas	150 A	220 A	320 A	400 A
Duty cycle	60%	60%	60%	60%
Wire ø (mm)	0.6 - 1.0	0.6 - 1.2	0.8 - 1.6	0.8 - 1.6
Hose package length (m)	3/4/5	3/4/5	3/4/5	3/4/5

Water-cooled	MW 5300 PM	MW 5500 PM	MW 5800 PM
Load CO ₂	300 A	500 A	500 A
Mixed gas	270 A	450 A	500 A
Duty cycle	100%	100%	100%
Wire ø (mm)	0.8 - 1.2	0.8 - 1.6	0.8 - 2.4
Hose package length (m)	3/4/5	3/4/5	3/4/5

MIG-MAG Standard torch

Gas-cooled	ML 1500	ML 2400	ML 2500	ML 3800	ML 4500
Load CO ₂	180 A	250 A	230 A	360 A	450 A
Mixed gas	150 A	220 A	200 A	320 A	400 A
Duty cycle	60%	60%	60%	60%	60%
Wire ø (mm)	0.6 - 1.0	0.6 - 1.2	0.8 - 1.2	0.8 - 1.6	0.8 - 1.6
Hose package length (m)	3/4/5	3/4/5	3/4/5	3/4/5	3/4/5

Water-cooled	MW 5300	MW 5500	MW 5800
Load CO ₂	300 A	500 A	500 A
Mixed gas	270 A	450 A	500 A
Duty cycle	100%	100%	100%
Wire ø (mm)	0.8 - 1.2	0.8 - 1.6	0.8 - 2.4
Hose package length (m)	3/4/5	3/4/5	3/4/5

New torch holders

The new torch holders from Lorch for MIG-MAG welding systems increase workplace safety and efficiency. They help to keep the torch always ready to hand and stored safely. Accidental button presses, damage to the torch or damage due to hot gas nozzles are now things of the past. The torch holders are available either for left-hand or right-hand side mounting for the M-Pro, C, P, S and S-SpeedPulse Series systems.

Productivity by the push of a button

Machine control directly at the torch

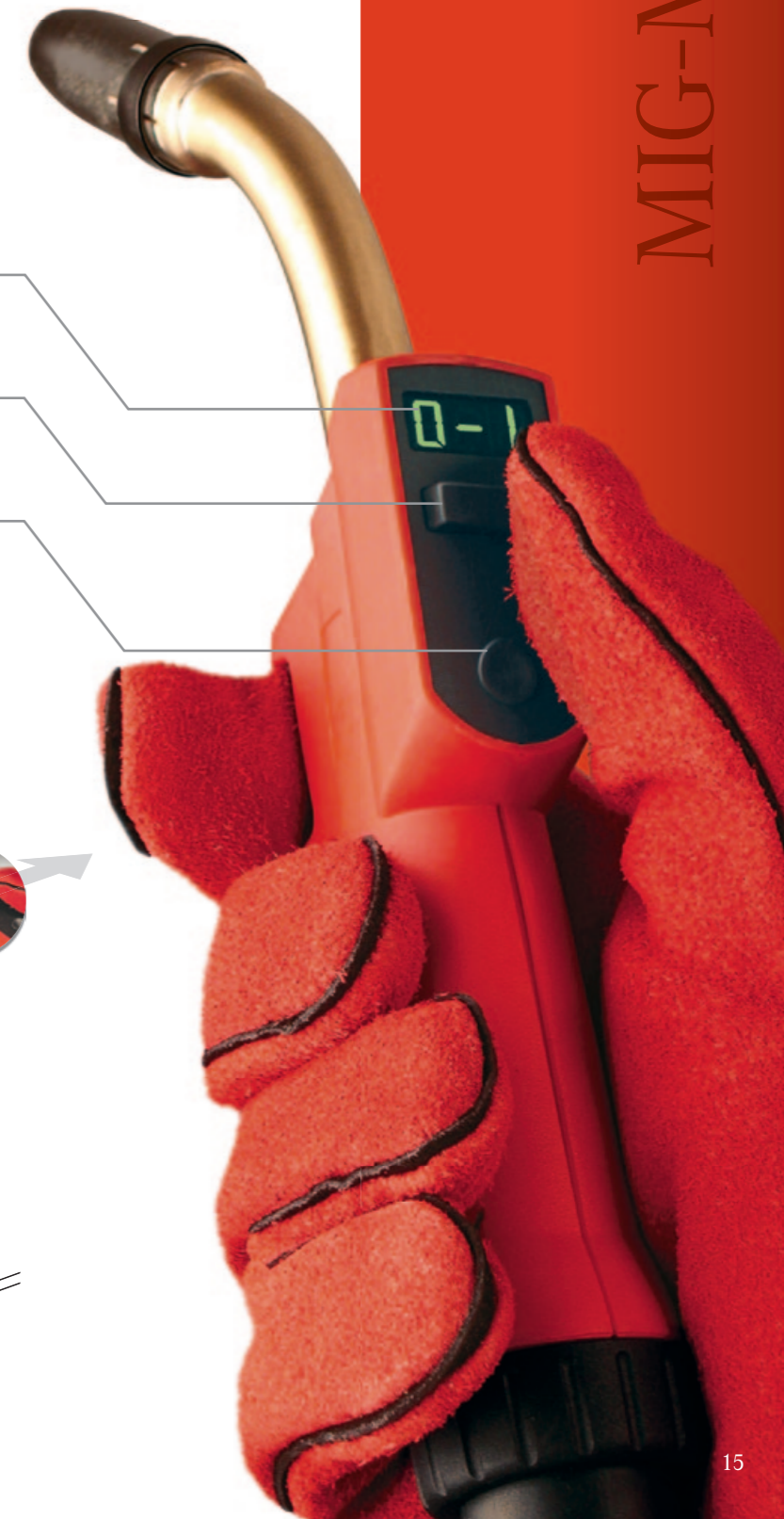
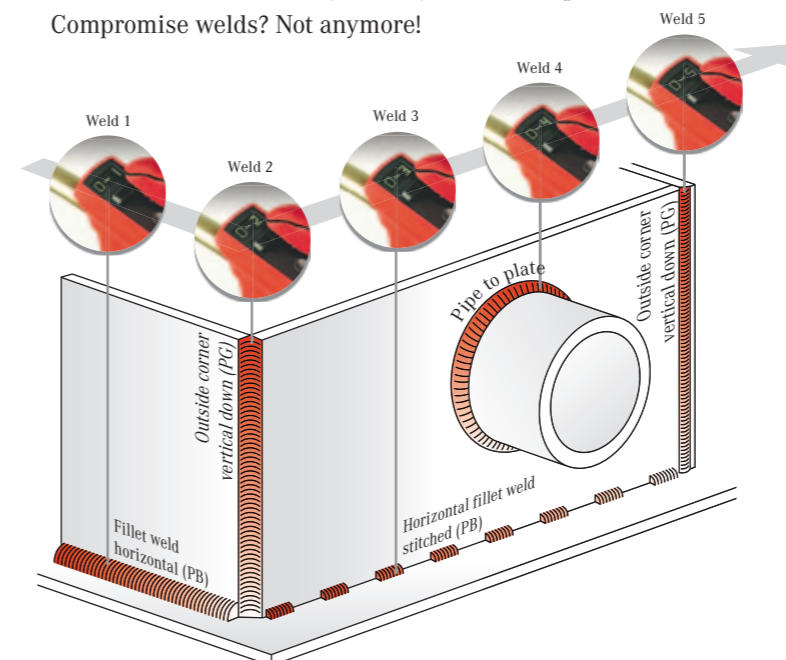
What others are still dreaming of is already a standard for Lorch. For all newer MIG-MAG devices, you have the opportunity to use the innovative Lorch Powermaster technology. You can access all important parameters with this directly using the control panel at the torch. The time consuming moving between machine and workpiece for parameter optimisation can be eliminated. Even complex welding tasks where different weld seams have to be repeatedly produced can be perfectly controlled and replicated with the remote control torch. You simply call up all required work values one after the other from the Tiptronic job memory.

Powermaster remote control operator panel

- **Display:** Display of the welding current, material thickness, wire feed speed or arc length correction (identical to the digital display of the power source). The current job numbers are displayed when Tiptronic mode is activated.
- **Rocker switch:** For changing the various welding parameters. And for changing the jobs in Tiptronic mode.
- **Mode button:** For changing between the various welding parameters. For selecting the job set in Tiptronic mode.

Tiptronic

A workpiece with different weld seams must be produced repeatedly. Using the Tiptronic facility, you simply save the ideal setting for each weld in the required sequence. And then call up to 100 work values one after the other from the machine memory directly at the workpiece. Compromise welds? Not anymore!



The Lorch NanoFeeder

The innovative MIG-MAG PushPull solution for greater range and maximum degrees of freedom.

From Push-Pull to the NanoFeeder.

The wire feeder unit of the MIG-MAG welding power source is combined with other, separate wire-feed systems for the push-pull principle. The NanoFeeder takes over the role of an intermediate drive. It is a full wire feeder – but in a revolutionary Nano format. The Lorch welding power source takes over the matching of the wire feed systems automatically, using the optional, digital Push-Pull controller.

In this way, a complex and also expensive external additional controller is completely unnecessary.



The diameter of the NanoFeeder in the gas-cooled variant is only 92 mm. With the optional plastic coating for the protection of the torch water-cooling cables, the maximum external dimensions are only 10.5 cm.



Advantage NanoFeeder.

In contrast to conventional intermediate drive and case solutions, the NanoFeeder is much lighter and smaller. The extremely compact design is exceptionally light and easy to use. The unit, which is very robust, can simply be pulled along.

The NanoFeeder system is particularly suitable for continuous use. The welder does not have to handle large feeder systems and heavy push-pull torches. The welder simply uses his light and easy to handle standard torch. Another plus point: The NanoFeeder can also be used in combination with Lorch Powermaster torches. Including remote control technology directly at the torch.

Ingeniously simple – simply ingenious.

The NanoFeeder is probably best compared to an extension cable. On the one hand, it does not restrict the welder's freedom of movement and on the other hand it increases his working range enormously. With its diameter of only 10.5 cm, it even passes through narrow openings and generally increases the welder's mobility on the workpiece.

When using the NanoFeeder, the benefits of the innovative Lorch Powermaster torch technology are also completely utilised. The time consuming moving between machine and workpiece to achieve the optimum setting of your welding system is completely unnecessary. Because with the Powermaster torch technology, you regulate all important welding parameters directly at the torch.

Quality without compromise.

Where the NanoFeeder is used, full quality is required. The NanoFeeder components satisfy the most demanding requirements and ensure a long service life. The case is made of special, glass-fibre reinforced plastic. Inside, the finest technology is at work: Precision transmission and high-quality motor which are normally used in robotics and aerospace, e.g. in the Mars Global Surveyor. Additionally, all pressure and tension clamps are made of high-strength, anodised aluminium for extremely great tensile strength and optimal corrosion resistance.



Suitable for combination with Lorch Powermaster remote control torch technology

How far would you like to go – with your MIG-MAG torch?

Depending on the welding process and the wire used, the maximum range of the system is up to 50 m. The NanoFeeder itself is available for gas and water cooled torches in lengths of 10, 15, 20 or 25 m, this is

in addition to the base range of the MIG-MAG torch. To bridge greater distances a separate wire feeder case can also be used.



Power source



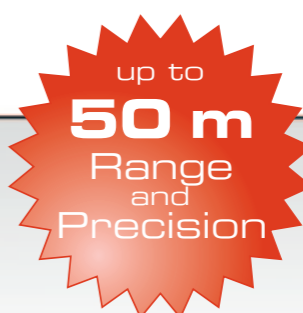
push Feeder

up to 20 m

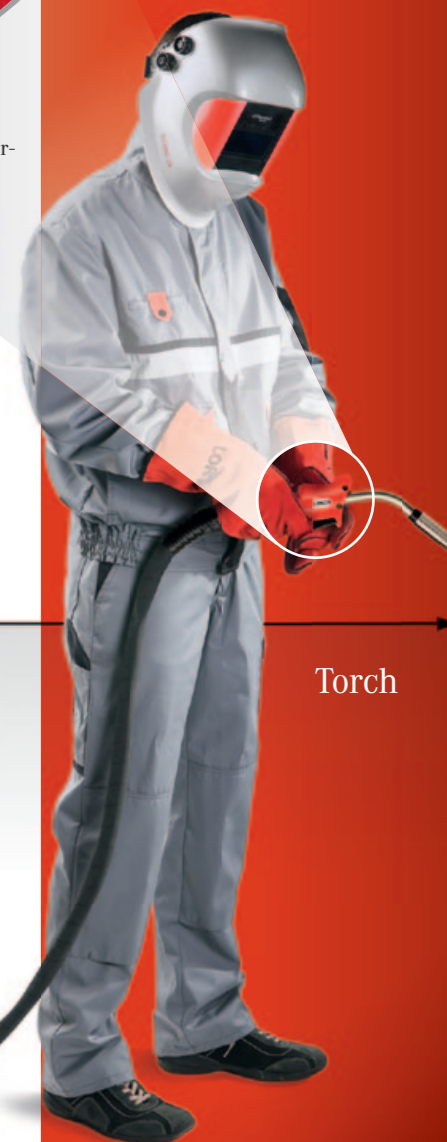


pull NanoFeeder

up to 25 m



up to 5 m (aluminium, max. 3 m)



Torch

The MIG-MAG PushPull solution

For simply much more range.

The wire feeder unit of the MIG-MAG welding power source is combined with an automatic pull system in the torch for the push-pull principle. In this way, feeding ranges of 8 m are possible even for soft aluminium wires. When using a separate wire feeder even more than 20 m is achievable. With an additional separate intermediate drive, up to 43 m overall distance between power source and welder can be bridged – with absolutely reliable and precise wire feeding. An exact synchronisation of the wire feeder units involved is crucial for a faultless welding process. The Lorch welding power source takes care of this synchronisation using the optional Push-Pull facility. In this way, the complex and also costly, additional external controller is completely unnecessary.

LorchPP – Standard Push-Pull Controller

With the analogue controller, the wire feeder of the welding power source and the independent pull system in the torch are permanently matched with each other. The parameters are permanently based on the welding process. This Push-Pull controller option is not torch-specific and has a maximum range including case hose package of 28 m.



The Lorch Push-Pull Torch
ML 3600 PM (gas-cooled) or
MW 5400 PM (water-cooled).
Can be used with the Lorch
PP-Standard controller and
the Lorch DigiPP controller.

Push-pull torch	Gas-cooled ML 3600 PM	Water-cooled MW 5400 PM
Load CO ₂	270 A	350 A
Mixed gas	250 A	320 A
Duty cycle	60 %	100 %
Wire ø (mm)	0.8 - 1.6	0.8 - 1.6
Hose package length (m)	6 / 8	6 / 8

LorchDigiPP – Completely digital Push-Pull control for maximum precision

The wire feeder units used are exactly synchronised. The synchronisation is monitored during the welding process and deviations are automatically adjusted. As it can control up to three feed units, the digital Push-Pull facility can be used as a standalone Push-Pull version (with a max. range of 28 m) or as a Push-Pull version with intermediate drive for a range of up to 43 m. The completely digital Push-Pull control provides optimum results for the given torch. The result is impressive.



The easiest way to increase productivity. Due to its special, extremely compactly designed drive technology the Lorch PP 04 W Planetary Gear Push-Pull Torch (water-cooled) is comparable in weight and size with standard MIG-MAG torches. In addition with the low weight it is therefore ideally suitable for continuous use. Ideal in combination with the completely digital Lorch DigiPP Push-Pull controller due to the very precise controllability.

Planetary Gear Push-pull Torch	water-cooled PP 04 W
Load CO ₂	380 A
Mixed gas	
Duty cycle	100 %
Wire ø (mm)	0.8 - 1.6
Hose package length (m)	8

- + particularly gentle handling of soft wires
 - + Wire is straightened and leaves the contact tip straight
 - + significantly reduced friction in the hose pack
- ⇒ up to 10 times less abrasion
- ⇒ for significantly fewer wire delivery faults and continuous welding
- ⇒ for a longer service life

How far would you like to go – with your PushPull torch?



Power source with Lorch DigiPP

20 m



push Feeder

15 m



push Intermediate drive (optional)

8 m

up to
43 m
Range and Precision



Torch pull