



Series
GreenMIG
PURE EFFICIENCY



EVERYTHING COMES AS A STANDARD FOR PERFECT WELDS

Improving excellent welding technology to a higher level is our intention. For 60 years and for all applications, we have repeatedly set standards for the future of welding. Just like with the completely new developed series GreenMIG.



But what makes the new **GreenMIG** so unique?

It is the combination of:

- Intuitive, language-independent operating concept
- Special welding processes included
- Excellent price-performance ratio

THE NEW TOUCH PANEL

Control your welding processes just as you like. The new **GreenMIG** is offering all options with its multicolored and intuitive operation panel.

Due to the easy-to-use and language-independent operation, you practically do not need the operation manual.



Easy operation of the touch panel with a tap. Absolutely reliable with and without gloves...



... alternatively, all functions can be operated via the rotary switch.



PARAMETER DIVERSITY

The ease of use continues in the various parameter settings. The desired values can be set at the individual positions by the tip of the finger.

For an even more precise setting the parameters can be adjusted with the rotary switch and confirmed by the push button.



A multitude of additional parameters can be selected in the settings menu and adjusted as required.



Choke inductance, wire inching and burn-back, gas pre- and post-flow time as well as start and final current and downslope time are adjustable.

GreenMIG:

EVERYTHING UNDER PERFECT CONTROL!

The new GreenMIG not only shines with a touch panel and a maximum cost-effectiveness, but also with convincing detailed solutions.

Everything is designed for the user for highest functionality and first-class welding results.



GreenMIG

The **GreenMIG** with its integrated welding processes stands for fast and almost spatter free welding.



GreenMIG – the professional welding system that leaves nothing to be desired.

SPECIAL WELDING „ALL INCLUSIVE PACKAGE“

The new **GreenMIG** is coming with the special welding processes DeepARC, ColdMIG and HighUP as a standard.



Switch on, adjust and start - that's how fast welding can be today.

THE PRICE-PERFORMANCE RATIO

In addition to higher performance and individual, intuitive operation, the good price-performance ratio is another important aspect.



Highest profitability with inverter welding units.

MMA/STICK ELECTRODE WELDING



A socket for MMA/stick electrode welding with electrodes up to 6 mm is installed. Hotstart, arcforce and antistick are coming as a standard.

WATER COOLING MODULE



The integrated water cooling module is mounted service-friendly in a drawer and is operated by a powerful water pump.

Perfect wire feeding with fast wire exchange:

THE 4-ROLLER WIRE

1. Precise 4-roller gear with 4 motorized wire feed rollers. Wire feed speed 0.5 – 25 m/min (model DV-26) or high performance drive 0.5- 30 m/min (model DV-31).
2. Big wire feed rings allow a constant wire feed speed at a low pressure. 2 grooves for 2 different wire diameters.
3. Change of the wire feed rings without any tools.
4. Easy wire insertion due to superb accessibility and snap lock mechanism.
5. Dust-tight drive motor guarantees a constant wire feed speed.
6. Euro torch connector as a standard, directly mounted without need for alignment.
7. Pressure adjustment of both rollers.
8. Wire straightening device for perfect and constant wire feeding (DV-31).
9. Cut away side panels facilitate easy insertion of the wire spool.
10. Insulated interior, gas and water hoses and all cables are well protected from environmental damage due to a unique closed case design.
11. 2 x 4 rubber feet ensure operation in both, vertical and horizontal position.



Mobile version with 4 wheels.



Optional suspension device, electrically isolated.



Asymmetrical swiveling axis at the rear allows a wide working area.

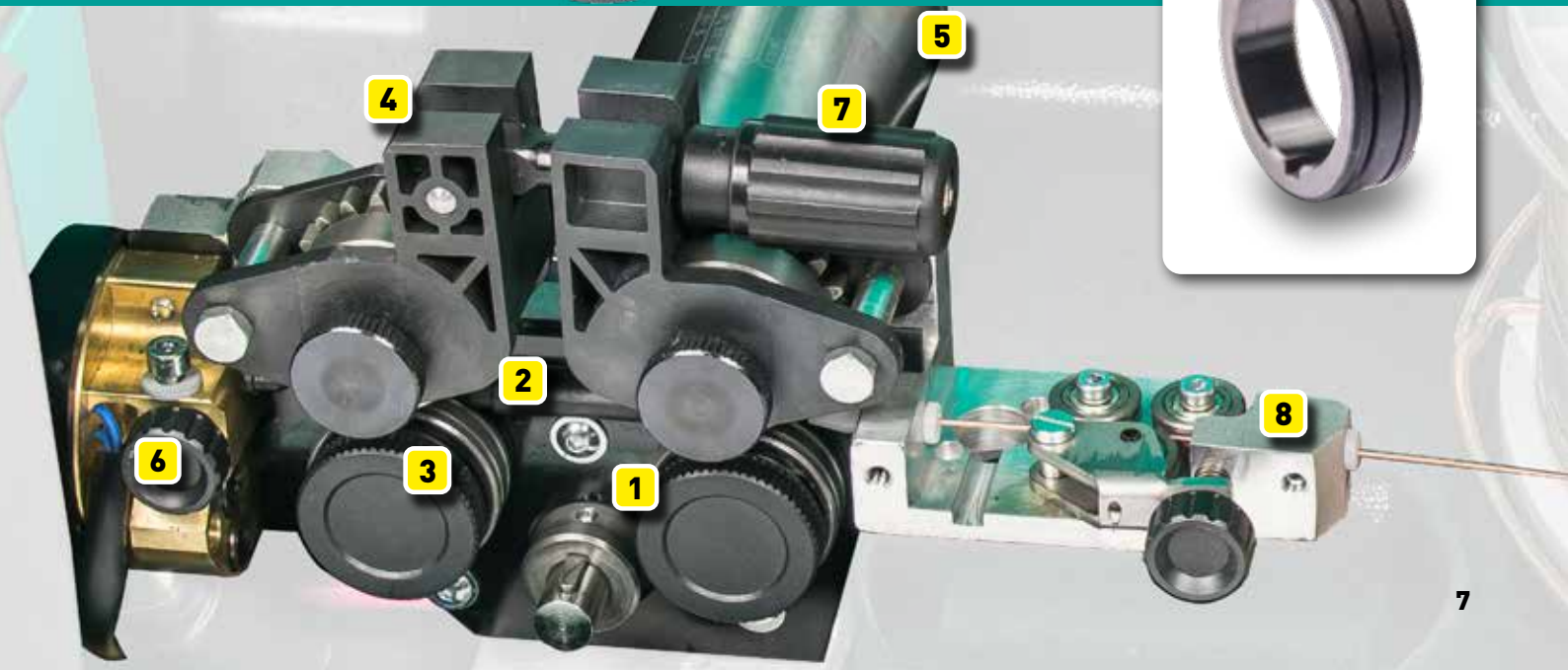


Vertical mounting of the wire feed device can be achieved within seconds.



Fold-out carrying handle, 2 x 4 rubber feet on the lower and long side.

FEEDER!



That's the way to weld today:

SPECIAL PROCESSES ALL INCLUSIVE!

This makes welding particularly efficient and economical.

Because in the new GreenMIG the Merkle welding processes DeepARC, ColdMIG and HighUP are already on board as a standard.



ColdMIG

The Merkle ColdMIG process sets new standards in welding with up to 30 % less heat input. Thin metal sheet welding (0.6 – 3.0 mm) is achieved to perfection in manual and automated operation.

Its high gap bridging capacity, the low heat input and the optimum welding facility of mixed materials and coated sheet metals are other world class features. The ColdMIG process is available for all **GreenMIG** machines as a standard.

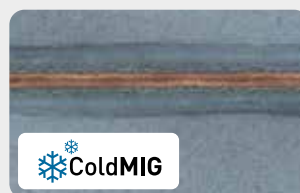
Merkle ColdMIG.
Welding with minimum heat input!

- 30 % less heat input
- 100 % gap bridging
- 100 % perfect for brazing



 ColdMIG

Welding of thin metal sheets



 ColdMIG

MIG brazing of galvanised sheet metals



 ColdMIG

High gap bridging capability

DeepARC

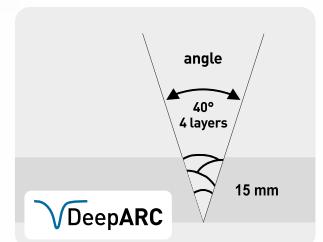
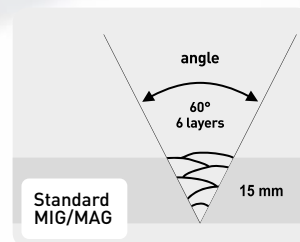
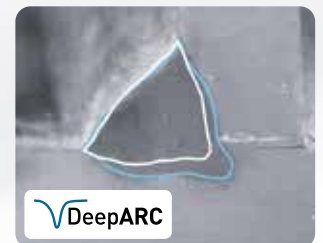
Witness the new high speed formula of MIG/MAG welding yourself! An extremely narrow welding arc (similar to a plasma arc) is achieved through a highly dynamic voltage control system.

This new welding arc defines itself through several characteristics. The DeepARC process is perfect for use with mild and stainless steel as well as for aluminum and aluminum alloys. The DeepARC process is available as a standard.

There is a multitude of application advantages with the DeepARC process: 30 % deeper penetration, excellent root penetration, no problem of undercut and up to 100 % faster welding speed. Due to the concentrated arc the opening angle of thick work pieces can be reduced and the welding can be done with significantly fewer layers. The small, low-energy spatters do not stick to the work-piece.

Merkle DeepARC.
Faster welding with deep penetration!

- 30% deeper penetration
- 100% faster welding
- 100% no spatter adherence



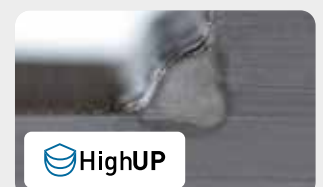
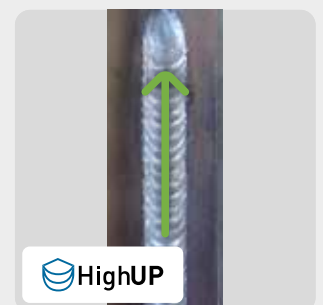
HighUP

HighUP is the Merkle process enabling a total elimination of the difficult to use, triangular weave method (TWM) of vertical up welding. Because the HighUP process allows vertical up welding up to 100 % faster with a safe penetration and an amazingly easy handling.

The Merkle HighUP process combines a hot high current phase and a lower current phase and enables a very easy to use, and to control, welding process.

Merkle HighUP.
Vertical-up welding made easy!

- Up to 100 % faster welding
- 100 % safer penetration
- 100 % easier to control



TEDAC®-SYSTEM

DIRECT CONTROL AT THE TORCH!

The Merkle TEDAC system offers continuous energy control where it counts – directly on the torch itself. Using the slide switch mounted on the top of the TEDAC torch handle, the energy can be adjusted during the welding process.

Using a visible, multicolour LED indicator any energy modifications will be shown directly on the TEDAC torch.

The TEDAC torches are perfect for any work in difficult to reach positions due to the fact that the operator can control the welding process from the TEDAC system and does not need to return to the power source to change settings. Thanks to the standard Euro connector no additional control wires are required.



Precise, stepless power control by a slide switch mounted in the handle of the torch indicates the currently set energy through the stepless color change of a multicolor LED.

The colors change continuously from green (minimum setting) to yellow (low setting), orange (medium setting) to red (maximum setting).



The multi-coloured LED shows the selected energy or program (job).



Standard Euro connector, no further control cables are necessary.



Ergonomically formed handle, torch trigger with a micro switch for guaranteed more than 10 mio. operations.

TECHNICAL DATA



	GreenMIG 400 KW	GreenMIG 400 DW	GreenMIG 500 KW*	GreenMIG 500 DW*
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Primary:

Power supply	3 x 400 V		3 x 400 V	
Frequency	50 Hz		50 Hz	
Continuous power	13.8 kVA		14.8 kVA	
Continuous current	20 A		26 A	
Max. current	25 A		38 A	
cos phi	0,98		0,96	

Secondary:

Open circuit voltage	70 V		70 V	
Welding voltage	15,5–34 V		15,5–39 V	
Welding current	30–400 A		20–500 A	
Duty cycle 40% (10 min.)	-		500 A (40 °C)	
Duty cycle 60% (10 min.)	400 A (40 °C)		430 A (40 °C)	
Duty cycle 100%	360 A (40 °C)		380 A (40 °C)	
Protection class	IP 23			
Cooling	AF			
Arc length	automatic control			
Programs	MIG/MAG, MMA/stick electrode, MIG brazing, ColdMIG, DeepARC, HighUP			
Program selection	material, wire diameter and gas at the display			
Wire feed	synergic wire feed control			
Operation modes	2-stroke, 4-stroke, interval, stitch			
Energy control	control at the machine, wire feed unit, TEDAC® torch, job mode			
Adjustable parameters	choke inductance			
Power source	inverter			
Digital display	current, voltage, wire feed speed and material thickness, throat thickness			
Jobs	100 jobs			
Wire feeder unit	4-roller-drive DV-26, optional: DV-31, separate			
Torch cooling	integrated water cooler			
Norm	EN 60974-1“S”/CE			
Gas bottle holder	10 - 20 - 50 l cylinders			
Weight	KW: 109 kg	DW: 135 kg	KW: 109 kg	DW: 135 kg
Dimensions L x W x H:	KW: 1210 x 430 x 880	DW: 1210 x 430 x 1200	KW: 1210 x 430 x 880	DW: 1210 x 430 x 1200

Technical changes reserved.

We are currently optimising the parameters of the GreenMIG 500 KW/DW! All technical specifications are therefore subject to change.



CREATE YOUR FUTURE SUCCESSFULLY.

With Merkle. Your specialist for welding units, welding machines, torches and intelligent automation systems.

With own subsidiaries and Merkle dealers in Germany, Europe and many other countries throughout the world.

Welcome to Merkle.

PRODUCT RANGE

- MIG/MAG Welding Units
- Synergic Pulse Welding Units
- TIG Welding Units
- MMA / Stick Electrode Welding Units
- Plasma Welding and Cutting Units
- Turntables and Roller Drive Units
- Welding and Cutting Torches
- Automation Components and Solutions
- Merkle Robotics



Merkle Schweissanlagen-Technik GmbH

Industriestr. 3 | D-89359 Koetz | Germany

Phone: +49 8221 915-0 | Fax: +49 8221 915-40

Email: info@merkle.de

www.merkle.de