

NEW!

MIG/MAG PULSE WELDING
MEGA.PULS FOCUS 300 – 500



The best MEGAPULS ever



The new MEGA.PULS *FOCUS*: You will not find a better MIG/MAG system.

The new benchmark in the MIG/MAG sector:
No matter what challenge you are facing.
The MEGA.PULS *FOCUS* is the most cost-effective way of creating perfect welds.
Pleasing your customers – and your wallet.



MEGA.PULS FOCUS



MEGA.fast
MEGA.easy
MEGA.reliable
MEGA.economical

MEGA.PULS FOCUS

The perfect solution for all applications and materials

With its five integrated welding processes, the MEGA.PULS *FOCUS* is the perfect solution for all applications and materials. POWER.ARC and FOCUS.ARC, FOCUS.PULS and POWER.PULS UI and POWER.PULS II – all controlled by a single machine.

From conventional arcs and pulsing to double pulsing, from E-Hand to our special ignition, welding or crater fill programs (selectable for each material), the MEGA.PULS *FOCUS* has everything on board. It makes your work easier – with superb ignition, virtually spatter-free welding with a higher deposition rate and less heat input, all combine to make the perfect welding seam.

More speed

An optimised welding process results in an increased deposition rate and thus a higher welding speed. This guarantees a precision arc with a super-fast reactive, precise arc length control ensuring a constant arc length at all times. The arc stays exactly in the root. An absolute must when working with steel.

MEGA.fast

- With the FOCUS.PULS you can weld up to 30 % faster than comparable systems from our competitors
- All characteristic curves available quickly, no time lost setting up the equipment

MEGA.easy

- Everything in view with the simplest, clearest operation on the market
- The perfect characteristic curve for every task can be selected directly and quickly
- Easy and simple remote control of up to four operating points or jobs (RT4) with the REHMtronic torch

MEGA.reliable

- Five processes in one machine together with 170 optimal characteristic curves for CrNi, FE, AL and MIG brazing guarantees perfect results
- The arc of the MEGA.PULS *FOCUS* is always exactly where you want it, precise, focused and stable at all times
- Start error-free and safe thanks to the perfect ignition process of MEGA.PULS *FOCUS*

MEGA.economical

- Save up to 30 % energy with the super-efficient FOCUS.PULS arc
- Avoid costly rework and delays with the right cold FOCUS.PULS
- Increase your output with welding processes running up to 30 % faster

FOCUS.PULS



FOCUS.PULS

Quick and efficient

The new FOCUS.PULS pulse arc is the World No. 1 in terms of deposition rate and the resulting welding speed. When combined with the UI arc length control, the result is revolutionary!

FOCUS.PULS: The low-energy but highly concentrated pulse arc is specially suited to steel, so you always have the choice:

- Weld as fast as a conventional spray arc but with up to 30 % less arc power and thus up to 30 % lower energy costs.
- Weld up to 30 % faster without higher energy consumption and costs compared to a conventional spray arc.

But no matter which way you go – with the MEGA.PULS FOCUS you are always on the winning side.

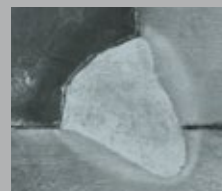
Standard arc



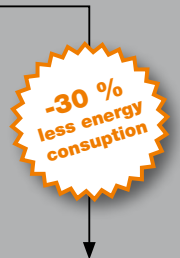
VD 10.0 m/min with
8100 W arc performance



Faster with
FOCUS.PULS



VD 13.1 m/min with
8000 W arc performance



More efficient with
FOCUS.PULS



VD 10.0 m/min with
5740 W arc power

MEGA.PULS FOCUS



Absolutely reliable – even at 3.8 m/min

At a constant wire feed, conventional pulse arcs start going wrong very quickly as welding speed increases. The weld seam is interrupted, and material starts to be deposited in an irregular manner. This is known as the humping effect. Only the UI-controlled FOCUS.PULS can always deliver perfect results up to a welding speed of 4 m/min. If you want reliable results, depend on the comprehensive reliability of FOCUS.PULS UI.

Up to
**50%
greater
reliability**

Competitors'
humping
at 2.1 m/min

REHM FOCUS.PULS
at 2.1 m/min

REHM FOCUS.PULS
at 3.8 m/min

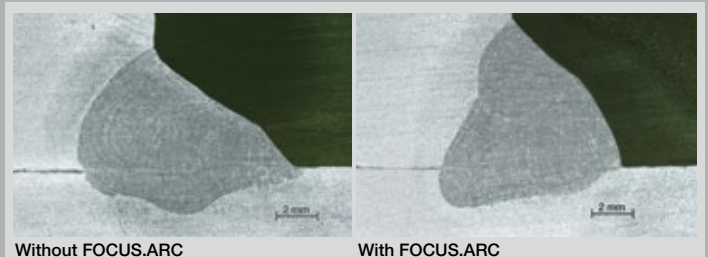
FOCUS.ARC

As a focused, conventional arc the FOCUS.ARC is the unpulsed brother of FOCUS.PULS. It shares its basic advantages.

- Reliable root formation
- Exceptionally deep penetration
- Reduced heat transfer
- Reliable edge formation
- Reduced undercutting
- Less weld preparation
- Welding in confined spaces with a short, powerful arc

The highly focused arc alters penetration substantially, decreasing the seam opening angle and enabling innovative welded seam geometries to be produced, reliably.

FOCUS.ARC is ideal for applications that depend on deep penetration and reliable root formation.



POWER.ARC, POWER.PULS II and POWER.PULS UI



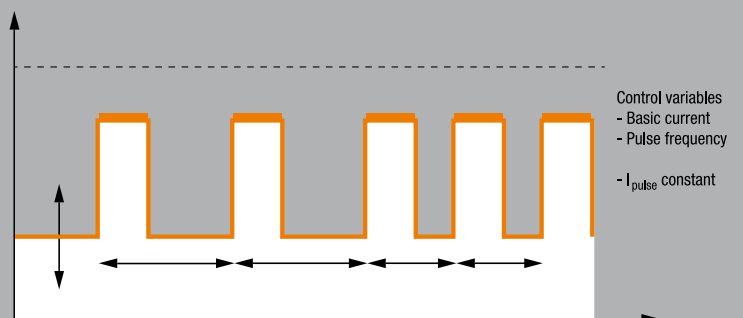
POWER.ARC – The specialist for thin steel plates

This conventional arc has exceptional directional stability and is thus more powerful than the usual short and spray arcs. It can be used universally, is safe to use and has been specially optimised for manual welding: thanks to the wide penetration, it is very easy to compensate for tolerances.

POWER.ARC is ideal for weld seams that require a higher energy input.

POWER.PULS II – The specialist for Al and CrNi

This directionally stable pulse arc is frequency controlled for both AL and CrNi: a universal arc with a wide range of applications. With its fast control and variable drop frequency, it provides superb flow behaviour and reliable edge-zone wetting.



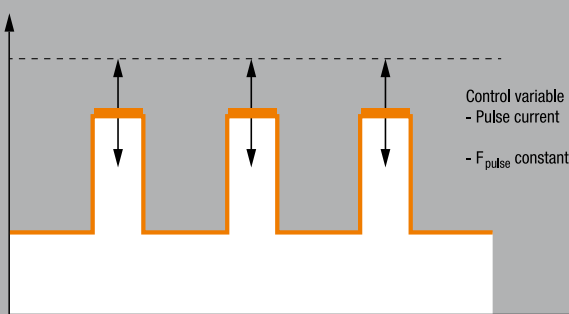
The II control

MEGA.PULS FOCUS



POWER.PULS UI – The specialist for steel

Its perfect and ultra-fast control with variable drop volume make this directionally stable pulse arc the universal arc for welding steel. It is the best arc for welding steel at a high deposition rate.



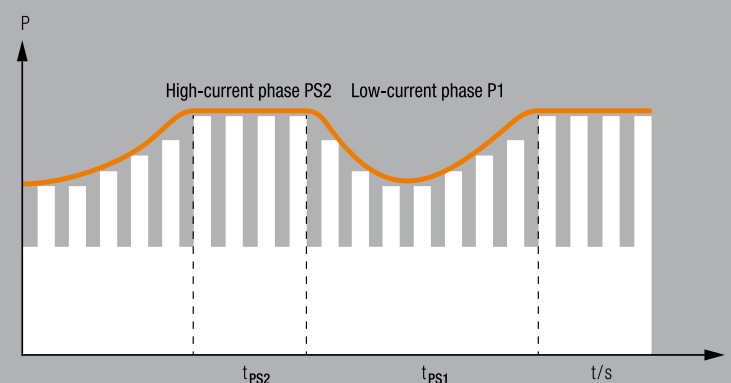
The UI control

What double pulsing and synergy control do so well

The double pulse for TIG-like weld seams

The standard superimposed "double pulse" pulse means you have full control over the process and the weld pool. With precise control of root penetration, weld ripples and heat input without manual intervention. This brings more energy into the melting phase, less energy during the cooling phase and only one droplet of filler material with each pulse. The double pulse is particularly insensitive to external influences such as magnetic fields.

- Perfect ripples
- For TIG-like weld seams
- Perfect for vertical up welding of aluminium
- Minimal blowout effect



The smooth transition from high-current phase PS2 to low-current phase PS1 significantly improves the weld properties

What the new MEGA.PULS FOCUS does so well



Comprehensive benefits as standard

Perfect from start to finish

Quick, low spatter ignition, super fast and stable welding mode, and at the end the wire is prepared for the next ignition. And the entire process occurs again every time – exactly as it should!

Easy to operate

Thanks to its easily understandable user interface, it couldn't be easier to control the MEGA.PULS FOCUS. Just let the machine suggest the optimal parameters – and you will be producing top quality weld seams time after time.

High quality – time and time again

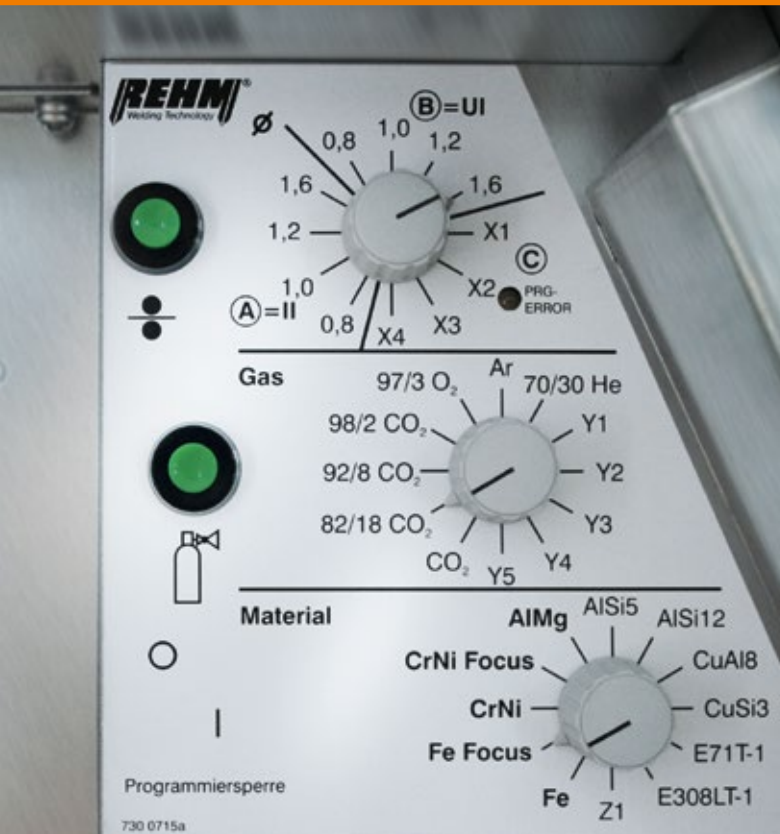
The MEGA.PULS FOCUS has an extensive library of 170 characteristic curves, enough to satisfy every need. In addition to this, individual settings corresponding to welding parameters, and in particular the arc characteristics, can be saved immediately for subsequent jobs. In this way, up to 63 application-specific jobs complete with stored characteristic curves and parameters are always available.

A machine that adapts itself to you

Only very occasionally is a welder able to carry out work with the same general conditions every time. With the MEGA.PULS FOCUS, you can relax because it adjusts automatically:

- It is not affected by input voltage variations and is therefore ideally suited for use with power generators, long flexible cables and unstable supply networks.
- It gives you the freedom to widen your working range with intermediary hose packages, and automatically adjusts the voltage-dependent values of the synergy welding characteristics to the selected length of the hose package.
- It has the necessary power reserves to be able to react to external interference or power variations and always keep the arc 100 % stable.

MEGA.PULS FOCUS



Easy to control – even at a distance

Tiptronic – easy control with a standard torch

Using the torch button, up to four saved working points can be cycled through during welding – with a standard welding torch.

Go one step further with a SYNERGIC welding torch

You can also directly change the arc power or the arc length using the adjuster on the SYNERGIC welding torch.

The REHMtronic welding torch (RT4) – the best kind of remote control

Set up to four working points during welding via an additional switch on the welding torch. Or just call up the set values. RT4 torches are not only up to 50 % cheaper to buy than most commercially available display torches, but their clearly thought-out construction makes them safer, easier to use and

significantly more robust. Storing or retrieving working points or switching between jobs is significantly faster than alternative remote control options. With an RT4 torch, the machine itself does not need any additional interface.

Useful expansion options

REHM Alu Special

For welding aluminium materials, you can fit the welding torch with a special protective gas supply and cover.

A second wire feed unit

Ideal for flexible work with different gases and materials without torch, wire-spool and gas changeover. For example for CrNi steel joints using MIG brazing and MIG pulsing welding processes.

What the new MEGA.PULS FOCUS can do

CrNi

- Extremely fine droplet transfer (controlled and reliable drop transfer)
- Even edge zone wetting
- Reduced heat input (visible from the tarnishing of the base material and the surface of the seam)
- Spatter free
- Outstanding flow behaviour with optimal edge formation (wetting)
- Very directionally stable arc -> drops go directly to the root



Al

- Fine, uniform ripples
- Very even and good edge binding (edge zone wetting)
- Narrow, uniform cleaning zone
- No undercuts
- No seam curvature
- No spattering
- Optimal ignition process
- Less hot cracking by using double pulsing



Steel

- Five types of arcs:
- Deep penetration
- Reliable root formation
- Adjustable heat input
- Short powerful arc
- Spatter free / reduced



Perfect behaviour with CrNi, Al, and of course steel

Whether thick or thin materials, whether butt welds, fillet welds, corner welds or overlap welds – the MEGA.PULS FOCUS delivers first-class results in every welding application.

Welding process	Alu	CrNi	Fe up to 2 mm	Fe 3 - 8 mm	Fe > 8 mm
POWER.ARC			++	0	+
POWER.PULS II	++	++			
POWER.PULS UI			+	+	+
FOCUS.ARC				0	+
FOCUS.PULS UI			0	++	++

0 = suitable + = very suitable ++ = recommended by REHM

MEGA.PULS FOCUS



TECHNICAL DATA

Type		MEGA.PULS FOCUS 300 L/W	MEGA.PULS FOCUS 400 L/W	MEGA.PULS FOCUS 500 W
Stepless adjustment range	[A]	10 - 300	10 - 400	10 - 500
Duty cycle (DC) at I max. (10 min) at 40 °C	[%]	80	60	45
Welding current at 100 % DC at 40 °C	[A]	270	310	350
Open circuit voltage	[V]	75	75	75
Power supply	[V]	3 x 400	3 x 400	3 x 400
Fuse (slow)	[A]	20	25	35
Torch cooling		L = air-cooled, W = water-cooled	L = air-cooled, W = water-cooled	water-cooled
Protection rating		IP 23	IP 23	IP 23
Weight of power source	[kg]	150	165	175
Weight of wire feed unit	[kg]	25	25	25
Dimensions of power source (LxWxH)	[mm]	820 x 440 x 975	820 x 440 x 975	820 x 440 x 975
Dimensions of wire feed unit (LxWxH)	[mm]	390 x 235 x 590	390 x 235 x 590	390 x 235 x 590

Type	300 L	300 L DK	300 W	300 W DK	400 L	400 W	400 W DK	500 W	500 W DK
Article number	1306017	1306018	1306015	1306019	1306517	1306515	1306519	1307015	1307019

Subject to technical changes. Additional equipment for the units shown is available at extra cost. All units carry the CE and S marks and meet EN 60 974-1

REHM - Setting the pace in welding

THE REHM PERFORMANCE PROGRAM

■ REHM MIG/MAG inert gas units

SYNERGIC.PRO²® gas and water cooled up to 450 A
SYNERGIC.PRO²® water cooled from 500 A to 600 A
MEGA.ARC²® steplessly variable up to 450 A
PANTHER 202 PULS impulse welding machine with 200 A
MEGA.PULS FOCUS® pulse welding machines up to 500 A

■ REHM TIG inert gas welding units

TIGER® 170 and 210 A, single phase
INVERTIG.PRO® and INVERTIG.PRO® *digital* 240 up to 450 A, three-phase
INVERTIG.PRO COMPACT and INVERTIG.PRO COMPACT *digital* 240 to 450 A, three-phase

■ REHM manual arc welding unit

BOOSTER 140, BOOSTER.PRO 170 and 210, single phase
BOOSTER.PRO 240 to 450 A, three-phase

■ Welding turntables

■ REHM plasma cutters

■ Welding accessories and materials

■ Welding fume extractors

■ Technical welding advice

■ Torch repair

■ Service



REHM Uchingen

REHM Service Hotline:

Phone: +49 (0) 71 61/30 07-77

Fax: +49 (0) 71 61/30 07-60

REHM online:

www.rehm-online.de

REHM GmbH u. Co. KG Schweißtechnik

Ottostrasse 2 · D-73066 Uchingen

Phone: +49 (0) 71 61-30 07-0

Telefax: +49 (0) 71 61-30 07-20

Email: rehm@rehm-online.de

Internet: www.rehm-online.de

Your dealer: