



MEGA.ARC P 300-450 WS

CONTINUOUSLY ADJUSTABLE – FOR PERFECT MIG / MAG WELDING RESULTS



similar picture

GA.ARC

FOCUS ! ARC

Just better welding

Whether increasing performance or quality improvement – with the fully digital controlled welding processes FOCUS.ARC you ensure all advantages.

Faster

- More meters of welding seam per hour
- Less rework



Better

- Better arc control
- Less faults
- Higher quality



Healthier

- Eliminated pollution from welding sprays
- 80 % less grinding dust



**FOCUS.ARC is not just a promise, it proves its performance capability.
Because only the result counts – please turn over!**



similar picture

SIRIUS

The benchmark in operating welding machines

SIRIUS is an innovative digital machine interface. With SIRIUS you get a futureproof intuitive operating system with full I 4.0 connection, which is open for all systems. SIRIUS makes complexity easy.

Ingenious

- Simplifies the control of complex digital welding processes
- Graphically dynamic and transparent visualization
- Highest application expertise



Flexible

- Ready for I 4.0
- Easy integration in manufacturing systems and networks
- Free configurable interfaces

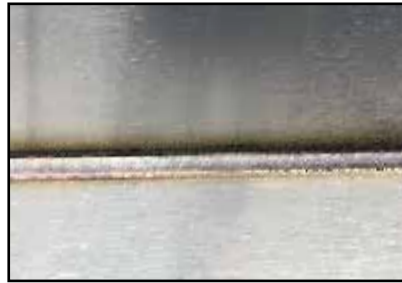


SIRIUS offers you endless prospects – more information can be found on page 06 / 07

Welding seams MEGA.ARC P – the result counts



■ CrNi fillet weld PB | 1.0 mm
POWER.ARC



■ CrNi fillet weld PB | 2.0 mm
POWER.PULS



■ CrNi fillet weld PF | 5.0 mm
POWER.PULS (as a double pulse)



■ Aluminium fillet weld PB
1.5 mm | POWER.ARC



■ Aluminium fillet weld PB
5.0 mm | POWER.PULS



■ Aluminium fillet weld PF
3.0 mm | POWER.PULS
(as a double pulse)



■ Steel fillet weld PB | 8.0 mm
FOCUS.ARC



■ Steel fillet weld PB | 5.0 mm
POWER.PULS



■ Steel fillet weld PF | 5.0 mm
POWER.PULS (as a double pulse)



■ Steel butt weld PG | 2.0 mm
FOCUS.ROOT



■ Steel fillet weld PB | 2.0 mm
POWER.PULS



■ Steel fillet weld PB | 10.0 mm
FOCUS.ARC

Digitally controlled welding processes for all applications

POWER.PULS

Very good modulation of the welding process for steel, stainless steel and aluminium

- Faster welding of stainless steel with weld seam surface almost similar to TIG
- Very little temper colour, electrochemically eliminable
- Adjustable heat input
- Welding seams in TIG optic, by using double pulse
- Overweldable spots
- The arc-length adjustment either via voltage or wire

FOCUS.ROOT

Almost spatter free welding process for thin materials and root welding

- Very good bridging of gaps
- Significant weld speed increase at down welding
- Root welding also with reduced seam opening angle
- Save penetration
- No spatters

POWER.ARC

Standard welding process

- Quiet, stable arc
- High arc stability
- High energy arc

FOCUS.ARC

Welding in unmatched dimensions

- Welding with a short, powerful arc
- Safe root detection
- Particularly deep penetration
- Safe edge detection
- Reduced penetration

REHM recommendation:

Welding processes for different materials and material thicknesses

	mm	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Fe	Nonpuls	FOCUS.ROOT			Mixed arc	POWER.ARC										
		POWER.ARC				FOCUS.ARC										
	Puls	POWER.PULS														
CrNi	Nonpuls										POWER.ARC					
	Puls	POWER.PULS														
Alu	Puls	POWER.PULS														

Advantages of the REHM FOCUS welding processes*:

Digitally controlled welding processes

- Controlled particle transfer
- Controlled short circuit resolution
- Controlled heat input

Increased quality

- Better controllability of the arc
- Less welding failures

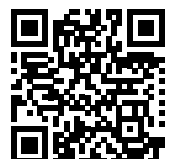
Reduction of rework

- The rework can be reduced up to 80 %

Improving health protection

- Up to 80 % reduction of grinding dust
- Up to 100 % reduction of welding spray contamination

Application examples www.rehm-online.de/en/application-reports



*Information only applies in conjunction with REHM FOCUS.PULS

SIRIUS opens up new potentials

SIRIUS simplifies the operation of complex welding processes by visualization and assist functions.

Modern digitally controlled machines offer multiplicity ways of improvement, which need to be utilized in the industrial production. Increase your competitiveness, by making unused potential transparent with SIRIUS.

- SIRIUS ensures the easy and fast access on unutilized potentials
- SIRIUS supports the performance and quality with it's clear structures and simplifies the work of the welder
- SIRIUS is multilingual
- SIRIUS provides a clear overview like never before and leads to outstanding welding results



The SIRIUS display shows everything at a glance – in day and night modus



Parameters to be optimized are transparent and graphic-dynamic visualized



The relevant parameters are always in the foreground, which can be recognized from distance by the operator

SIRIUS

SIRIUS* with *Open Connect* is fully Industry 4.0 capable

The possibilities to communicate digitally through SIRIUS are endless.
The interface architecture of SIRIUS can be configured and expanded in any way.



Easy embedding into existing systems via integrated server module. SIRIUS communicates via all established interfaces like Ethernet, USB, CAN-bus, LAN, W-LAN, 2,4 GHz Wireless technology.

- SIRIUS is not an single application, only for the documentation of welding data
- SIRIUS offers full embedding in the workflow processes
- SIRIUS creates easy embedding to CAD or workflow software
- SIRIUS comes with free programmable interfaces
- SIRIUS digitises and communicates machine and process data into all networks

A first idea about our easy and self explanatory machine interface you can find here:
www.rehm-online.de/de/technologie/sirius.html



Technology you can count on - robust, durable and state of the art! Made in Germany by REHM.

Robust control panel

- The display is protected by a shock proved transparent cover
- The control knob is specially designed for tough conditions

Ergonomic control panel

- Perfect working height
- Perfect angle of the display for the best view of the worker



Excellent communication skills (optional)

- **Integrated web server** with all established interfaces



Power station

- Ultrafast **inverter poor of inductivity**
- Own processor control for quick reaction in the arc
- Contains PFC (Power Factor Controller)
- Wide range input voltage
- 450 amperes out of 9 kg weight
- Intelligence beats weight



Undercarriage Advanced

Big wheels

- Front 160 mm with fixing brake
- Rear 260 mm

Gas bottle mount

- Robust mount for up to 50 l

Wheel arches in the back

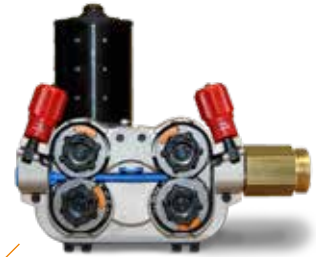
- Prevents the power cords to be squeezed while moving





Everything under control

- Ergonomic designed handle bars for save steering



Wire feeder

- Digital controlled precise and powerfully 4-wheel drive
- Feeder rolls are according to the wire diameter coded by colours
- Quick change system for feeder rolls without tools
- Contact pressure for inlet and outlet independently adjustable

Intelligent water cooling unit

- Circular pump for high output flow
- Energy management only cools on demand based on temperature sensing of coolant
- Conserves resources
- Increases live time of all components

Main board

- The control centre of the MEGA.ARC
- High integrated unit with main processor coordinates all procedures and processes
- Controls the communication intern and extern



Loading rack for gas bottles

- Protection for intervertebral disk
- Avoids work accidents

Integrated crane hooks

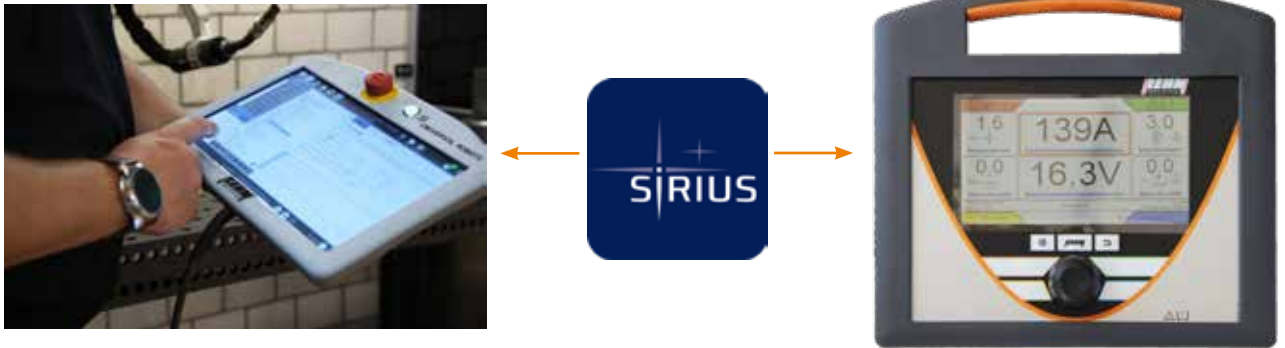
Breaks on the front wheels

- Avoid rolling of the machine at transport and exchanging the gas bottle



A strong team REHM COBOT and MEGA.ARC P

The simple operation of the REHM COBOT is a perfect match for SIRIUS, the most modern operating and communication system for welding machines.



THAT SPEAKS FOR THE REHM COBOT SYSTEM:

- Short payback period
- Reduction of manufacturing costs
- Higher productivity (24/7)
- Prevents a shortage of skilled workers and relieves the qualified employees
- Problem-free integration into operational processes
- System is configured according to customer requirements
- Compact design saves expensive production space
- Offers attractive new task
- Easy to use
- Consistent welding quality all times



You will find more information about our COBOT System here:



Features MEGA.ARC P

There is the right variant for every requirement, with the always suitable equipment.

EQUIPMENT	MEGA.ARC P
SIRIUS operating and communication system	✓
Job memory	500
Welding process FOCUS.ARC	✓
Welding process POWER.ARC	✓
Welding process FOCUS.ROOT	✓
Welding process POWER.PULS	✓
MIG / MAG procedure	✓
MMA procedure	✓
Gouging procedure	for machines from 350 A

CONTROL PANEL MEGA.ARC P 300-450 WS

- 1 Menu button
- 2 Home button
- 3 Return button
- 4 Selection buttons
- 5 R-Pilot encoder



- 6
- Impact protected
full colour display

Self-explanatory
presentation

Dynamic
displays

Smart
Assist function

Compact machines (Choose undercarriage separate)

Machines with separate wire feeder

(Choose undercarriage separate.
Serially operated in the feed case.)

MEGA.ARC P

Machines	Item no.
MEGA.ARC P 300	1307155
MEGA.ARC P 300 W	1307156
MEGA.ARC P 350	1307165
MEGA.ARC P 350 W	1307166
MEGA.ARC P 400	1307175
MEGA.ARC P 400 W	1307176
MEGA.ARC P 450	1307185
MEGA.ARC P 450 W	1307186

Machines	Item no.
MEGA.ARC P 300 S	1307157
MEGA.ARC P 300 WS	1307158
MEGA.ARC P 350 S	1307167
MEGA.ARC P 350 WS	1307168
MEGA.ARC P 400 S	1307177
MEGA.ARC P 400 WS	1307178
MEGA.ARC P 450 S	1307187
MEGA.ARC P 450 WS	1307188



MEGA.ARC P 300

MEGA.ARC P 300 W

MEGA.ARC P 450 WS

Most images are not illustrating the standard equipment

OPTIONS

Item no.

Housing

Operation in the machine	1381153
Upright stand / without undercarriage	1381100
Preparation for trolley	1381385
Trolley including preparation	1381386
Undercarriage Profi 50 I	1381101
Undercarriage Advanced 50 I (with loading rack and fixing brake)	1381102
Top shock proof cover display FOCUS.ARC	1381107
Bottom shock proof cover display FOCUS.ARC	1381108
Toolbox for compact machines	1381143
Air pre-filter	1381144
Crane lifting lugs for wire feed unit	1381146
Drum wire feed-through (wire feed unit)	1381147
Retrofit kit driving carriage for wire feed case	1381150
Holder for torch and hose pack	1180214

UPGRADE EQUIPMENT

Item no.

Interfaces

Interfaces - SET FA to URe series	7504015
Programmed interface including 5m connection cable and installation manual	
Interface FP1 standard 5m	1381285
Start, current flows, two analog values with 5m control line	

POWER FACTOR CONTROLLER (PFC)

The benchmark for efficient welding



- Compliance with the new regulation EU 2019/1784
- Highest energy efficiency
- Worldwide operation
- Clean consumption out of the supply network
- Useable anywhere

You can find everything you need to know about PFC here:



Various undercarriage options are available for the MEGA.ARC P:



TECHNICAL DATA		Undercarriage Advanced	Undercarriage Profi	Trolley
Weight	[kg]	31.5	30	30
Dimensions LxWxH	[mm]	900 x 560 x 1.020	950 x 611 x 1,100	770 x 660 x 1,330
Item no.				
		1381102	1381101	1381386



TECHNICAL DATA		Upright stand	Retrofit kit driving carriage for wire feed case
Weight	[kg]	0.8	3.36
Dimensions LxWxH	[mm]	544 x 30 x 43	480 x 120 x 140
		1381100	1381150

TECHNICAL DATA

TECHNICAL DATA		300	350	400	450
Setting range	[A]	20-310	20-360	20-410	20-460
Duty cycle (ED) at I _{max} .	[%]	80			60
Weld current at 100 % ED	[A]	280	320	370	400
Open-circuit connection	[V]	89		75	
Wire feed	[Ø mm]	1.0 / 1.2			
Mains connection	[V]	3 x 400			
Mains voltage tolerance	[%]	+15 / -25			
Fuse	[A]	32			
Protection type		IP 23			
Power factor	[cos φ _i]	0.99			
Power consumption at I _{max} .	[kVA]	11	13.7	16.8	20.6
Weight without undercarriage	[kg]				
Compact gas-cooled		46		49	
Compact water-cooled (W)		56		59	
With wire feed case gas-cooled (S)		57		60	
With wire feed case water-cooled (WS)		70		73	
Dimensions without undercarriage LxWxH	[mm]				
Compact gas-cooled		650 x 330 x 624			
Compact water-cooled (W)		650 x 330 x 820			
With wire feed case gas-cooled (S)		650 x 330 x 1,100			
With wire feed case water-cooled (WS)		650 x 330 x 1,100			

THE REHM PERFORMANCE PROGRAM

- REHM MIG / MAG welding machines
- REHM TIG welding machines
- REHM MMA electrode inverter
- REHM PLASMA cutting systems
- Welding accessories and consumables
- Welding fume extraction
- Technical welding advice
- Torch repairs
- Service

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