

NEW

THE RESULT COUNTS
FOCUS.ARC P – REVOLUTION IN THE MIG-MAG TECHNOLOGY



FOCUS ! ARC

Just better welding

Whether increasing performance, quality improvement, or a responsible health protection – with the fully digital controlled welding process FOCUS.ARC you ensure all advantages.

Faster

- Up to 50 % more profitability
- More meters of welding seam per hour
- Less rework
- REHM potential analyser



Better

- Better view into the welding process
- Better arc control
- Less faults
- Higher quality



Healthier

- Up to 70 % less welding fume
- Eliminated pollution from welding sprays
- 80 % less grinding dust



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

similar picture

SIRIUS



The benchmark in operating welding machines

SIRIUS is a completely new and 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
- Assist functions
- Highest application expertise



Flexible

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



Smarter

- Load the REHM App and get started
- Communication with all networks and mobile devices
- LAN, W-LAN



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

FOCUS ! ARC

Compared with conventional welding processes concentrates the FOCUS technology the energy in the center of the arc



Previously : Conventional arc
Wide arc with spread energy at the edge



Now: FOCUS.ARC
Concentrated arc with centered energy

Advantage of the REHM FOCUS welding processes:

Digital controlled

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

Reduction of rework

- The rework can be reduced up to 80 %

Increased quality

- Better view into the welding process
- Better controllability of the arc
- Less welding failures

Better health protection

- Up to 70 % reduction of harmful welding fume
- Up to 80 % reduction of grinding dust
- Up to 100 % reduction of welding spray contamination



Previously: Severe smoke development with conventional arc.



Now: Up to 70% reduction of harmful welding fume with the FOCUS.ARC welding process.

Digital controlled welding processes for all applications

FOCUS.PULS **High performance welding process for steel- tank and mechanical engineering**

- Accurate with adjustable head input
- Heat input reduced by 30 %
- Melting disposition rate up to 60 % increased
- Welding with reduced seam opening angle
- Significant improved quality
- Overwetable spots
- REHM generates a profit potential analysis

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 head input
- Welding seams in TIG optic, by using double pulse
- Overwetable 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

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



FOCUS.PULS - More layer welding with reduced opening angle (25°). Highest welding seams safety (see polished cut image). The result counts.

SIRIUS opens new potentials

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

Modern digital 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

SIRIUS



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 with *Open Connect* is fully Industry 4.0 capable

The possibilities of digital communication are endless.

The architecture of the SIRIUS interface allows any configuration and can be extended.

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



SIRIUS is online via *Easy Connect* around the clock

Contains everything which is necessary for communication with other digital devices.



The integrated WEB server includes the necessary software to communicate with any other digital devices. Time consuming preparations or even the need of a service technician is not necessary anymore for:

- Establishing a remote control on tablets or smart phones
- Software updates
- Welding process update
- Adding of special welding processes
- Remote diagnostic

The SIRIUS App guides you through the optimization of the welding technology. Easy Connect connects easily to SIRIUS and the welding machine.

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

- **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 FOCUS.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



Technical Data		FOCUS.ARC P series				
Type		250	300	350	400	450
Setting range	[A]	20-260	20-310	20-360	20-410	20-460
Duty cycle (ED) at I-max	[%]	80				
Weld current at 100% ED	[A]	230	280	320	370	430
Open-circuit voltage	[V]	89			75	
Mains connection	[V]	3 x 400				
Mains voltage tolerance	[%]	+ 15 / - 25%				
Power consumption at I-max	[kVA]	8,4	11	13,7	16,8	20,6
Power factor	[cos phi]	0,95				
Fuse	[A]	16	32			
Protection type	[IP]	IP 23				
Weight inclusive undercarriage						
Compact gas-cooled version	[kg]	46		49		
Compact water-cooled version	[kg]	56		59		
With separate wire feeder gas-cooled version	[kg]	57		60		
With separate wire feeder water-cooled version	[kg]	70		73		
Weight undercarriage						
Undercarriage Advanced	[kg]	31,5				
Undercarriage Profi	[kg]	30				
Dimensions without undercarriage (LxWxH)						
Compact gas-cooled version	[mm]	650x330x624				
Compact water-cooled version (W)	[mm]	650x330x820				
With separate wire feeder gas-cooled version (S)	[mm]	650x330x1100				
With separate wire feeder water-cooled vers. (WS)	[mm]	650x330x1100				
Dimensions with undercarriage (LxWxH)						
Compact gas-cooled version	[mm]	1000x570x780				
Compact water-cooled version (W)	[mm]	1000x570x1000				
With separate wire feeder gas-cooled version (S)	[mm]	1000x570x1300				
With separate wire feeder water-cooled vers. (WS)	[mm]	1000x570x1300				



Undercarriage Advanced



FOCUS.ARC P 300

Compact machines

(choose undercarriage separate)

Machines	Item no.
FOCUS.ARC P 250 0,8/1,0	1307045
FOCUS.ARC P 250 W 0,8/1,0	1307046
FOCUS.ARC P 300 0,8/1,0	1307055
FOCUS.ARC P 300 W 0,8/1,0	1307056
FOCUS.ARC P 350 1,0/1,2	1307065
FOCUS.ARC P 350 W 1,0/1,2	1307066
FOCUS.ARC P 400 1,0/1,2	1307075
FOCUS.ARC P 400 W 1,0/1,2	1307076
FOCUS.ARC P 450 1,0/1,2	1307085
FOCUS.ARC P 450 W 1,0/1,2	1307086

Machines with separate wire feeder

(choose undercarriage separate)

Machines	Item no.
FOCUS.ARC P 250 S 0,8/1,0 Operation in the wire feeder	1307047
FOCUS.ARC P 250 WS 0,8/1,0 Operation in the wire feeder	1307048
FOCUS.ARC P 300 S 0,8/1,0 Operation in the wire feeder	1307057
FOCUS.ARC P 300 WS 0,8/1,0 Operation in the wire feeder	1307058
FOCUS.ARC P 350 S 1,0/1,2 Operation in the wire feeder	1307067
FOCUS.ARC P 350 WS 1,0/1,2 Operation in the wire feeder	1307068
FOCUS.ARC P 400 S 1,0/1,2 Operation in the wire feeder	1307077
FOCUS.ARC P 400 WS 1,0/1,2 Operation in the wire feeder	1307078
FOCUS.ARC P 450 S 1,0/1,2 Operation in the wire feeder	1307087
FOCUS.ARC P 450 WS 1,0/1,2 Operation in the wire feeder	1307088

Options

Housing	Item no.
Operation in the machine	1381153
Without undercarriage	1381100
Undercarriage Profi (50 l)	1381101
Undercarriage Advanced (50 l with loading rack and fixing brake)	1381102
Top shock proof cover display	1381107
Bottom shock proof cover display	1381108



FOCUS.ARC P 300 W



FOCUS.ARC P 450 WS

Most images are not illustrating the standard equipment

REHM GmbH u. Co. KG Schweißtechnik
Ottostraße 2 | 73066 Uhingen | Germany

Tel.: +49 (0) 7161 3007 - 0
Fax: +49 (0) 7161 3007 - 20

E-Mail: rehm@rehm-online.de
Internet: www.rehm-online.de

REHM – The Benchmark for modern welding

