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Arcmetalspray System

OC380 Corr-WF4-OC1

The illustration of the equipment may vary depending on the version

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Power source OC380 Corr

including on-board wire-feed gear WF4

The power source OC380 Corr with the transformer-rectifier-system and its characteristic curve, is specifically designed to meet the requirements of arc metal spraying. Due to generous dimensioned power supply components, a continuous spray operation with 100% duty cycle is guaranteed. The convection ensures sufficient cooling of the power source and metal dust contamination is reduced to a minimum.

The OC380 Corr is equipped with a PLC control, that controls and monitors all spray parameters. In the event of malfunctioning, alerts are indicated by signal lamp codes on the panel of the power source and shown in detail on the PLC display. The power source is equipped with safety devices that switch the equipment in case of overload, overheating or pressure, to drop automatically into a safe operating mode.

The OC380 Corr with its compact design and with its large castors ensures easy maneuvering of the power source under most difficult conditions on construction sites. The large contract surface of the OSUCAS DC power connectors offers a low-loss power transmission with minimum heat generation at the terminals.

The power source with maximum spray current of 380 A (at 100% duty cycle) is convincing with

- its compact and robust construction
- the easy handling with good readable indicators
- the clear layout of control elements on the angled panel
- big castors which guarantee easy maneuverability even on the rough terrain of construction sites
- optimized power connectors for high energy efficiency
- the configuration with the feed gear WF4, which ensures together with the proven rubber roller system, a continuous, trouble-free wire feed

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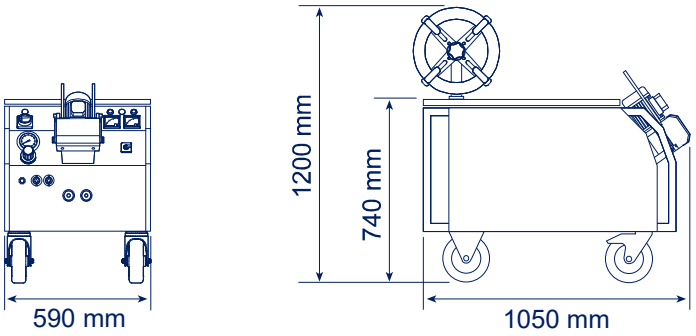
Specifications of power source OC380 Corr



Electrical data	
Mains voltage[1]	3 x 400 V AC
Mains voltage tolerance	±5 %
Mains frequency	50/60 Hz
Connection current	< 23 A
Main fuse	35 A
Connection power	< 15 kVA
Spray current max. (at 100 % duty cycle)	380 A DC
Open-circuit voltage	26 – 39 V DC
Spray voltage	22 – 34 V DC
Spray wires and deposition rates	
Spray wire quality	DIN EN ISO 14919
Spray wire diameter	2,5 mm (other diameter on request)
Sample of authorized spray wires and deposition rates (at 380 A)	Zn 38,0 kg/h ZnAl 33,6 kg/h Al 11,4 kg/h AlMg 10,2 kg/h

[1] Power sources for different mains voltage are available on request

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Compressed air supply	
Required compressed air quality	DIN ISO 8573-1 class 1
Compressed air temperature	Re-cooled to at least 25 °C
Nominal width of comp. air ring line	25 mm (1 inch)
Nominal width of compressed air hose (Connection power source)	25 mm (1 inch)
Connection type	Compressor coupling G1/2”
Inlet pressure max.	10 bar
Consumption compressed air	
• Air motor	25 m³/h
• Atomizer air	60-100 m³/h
Miscellaneous data	
Weight	200 kg
Protection class	IP 21
Cooling	Convection
Mark of conformity	CE

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Spray device OC1

The spray device OC1 with the closed nozzle system is specifically designed to be used in the processing of anti-corrosion wires (e.g. Zinc, Zinc-Aluminium, Aluminium and it's alloys). The special geometry of the nozzle system components allow a very fine atomization of melted particles, achieving a correspondingly fine coating with low surface roughness. This provides a significant savings potential of paint for subsequent topcoats.

The integrated wire feed in the spray device, in combination with the wire feed gear on the power source, allows the use of cable- and hose-packages to a length of up to 20 m.

The OSUCAS DC power connectors offer a low-loss power transmission with minimal heat generation and improved conductivity. Hereby the energy stays where it should be – in the spray process.

Features of spray device OC1

- Housing made from fiber-reinforced materials for a long service life
- Compact design and light weight
- Modern and easy handling (i.a. by the use of dead man´s control with reflection light scanner)
- Optimized power connectors for high energy efficiency
- Possibility to connect to (almost) all OSU power sources
- Reduced demand of wear parts due to a wire feed gear directly driven by air motor

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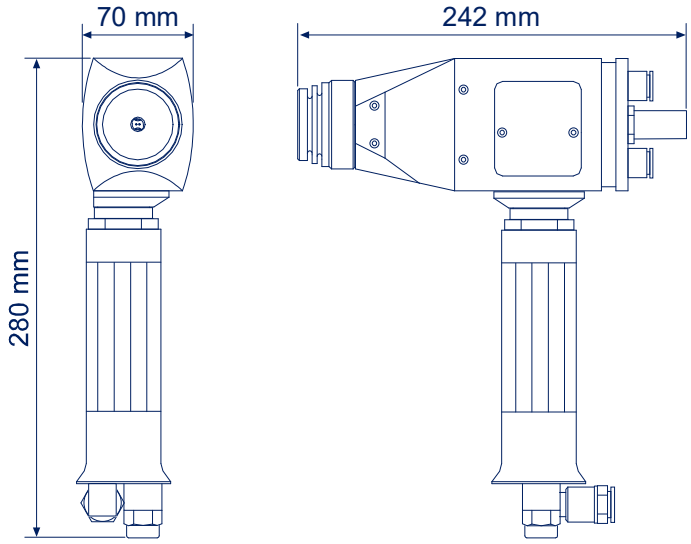
Specifications of spray device OC1



Spray wires and deposition rates	
Spray wire quality	DIN EN ISO 14919
Spray wire diameter	2,5 mm (other diameter on request)
Spray current max. (at 100 % duty cycle)	600 A
Compressed air supply	
Required compressed air quality	DIN ISO 8573-1 class 1
Compressed air temperature	Re-cooled to at least 25 °C
Consumption compressed air	
• Air motor	25 m³/h
• Atomizer air	60-100 m³/h
Miscellaneous data	
Weight	2,4 kg (without cable and hose set)
Power air motor	320 W

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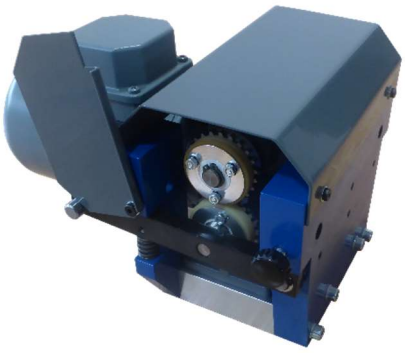
Wire-feed gear WF4 (OC-Speed)

The wire-feed gear WF4 with its rubber roller system is designed to be used for synchronous, trouble-free wire feed in the push-pull process.



The high-performance asynchronous motor is completely maintenance-free and offers a high torque with its fixed speed range. The wire feed gear supports the wire feed in the spray device and thus guarantees a clean and smooth burning arc.

This push-pull principle guarantees trouble-free wire feed to a hose package length of up to 15 m.

Beyond this length, we recommend the use of the wire feed gear OC-Speed with friction clutch principle. This equipment allows an absolute trouble-free wire feeding over long distances. Furthermore, it ensures the processing of "rough-running wires" as well.

Features of wire feed gear WF4

- High-performance, maintenance-free asynchronous motor with high torque
- Feed and pressure rollers made of special rubber materials for synchronous, trouble-free wire feed up to a hose package length of 15 m
- **Wire feed gear OC-Speed**
  Feed and pressure rollers made of hardened steel with integrated friction clutch for synchronous, trouble-free wire feed to a hose package length of up to 20 m and needed for “rough-running wires”

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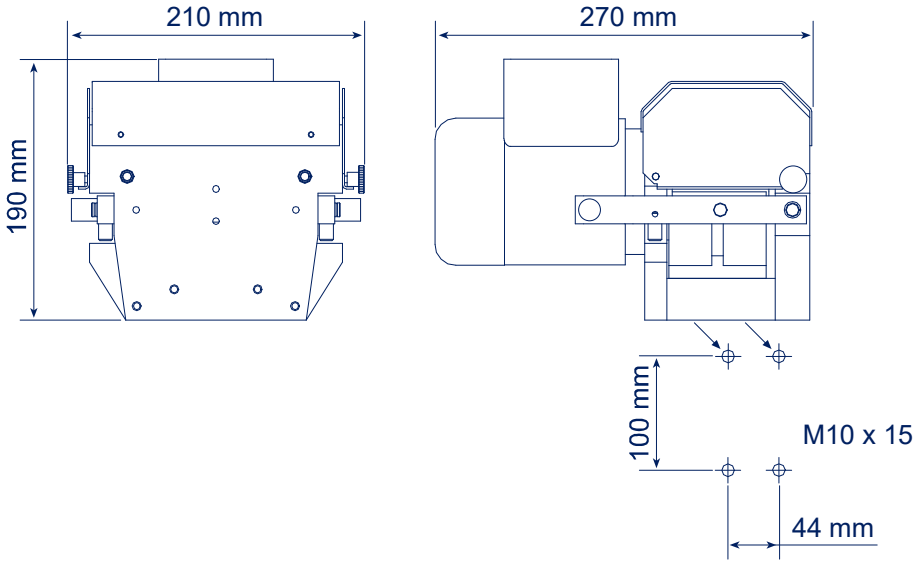
Specifications of wire feed gear WF4



Electrical data	
Connection voltage motor	3 x 400 V AC
Nominal power of motor	90 W
Miscellaneous data	
Weight	12 kg
Gear ratio	20:1

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Optional accessories

Wire dispenser
for processing wires from spools

The wire dispenser is mounted directly on the power source, which allows the mobile use, e.g. on construction sites. Our new multi-purpose wire dispenser gives you the flexibility to use wires from all available spool types (hasp, mig reel and basket spools).

With just a few simple steps, you can convert the wire dispenser to the spool type of your choice at no time.

Drum hood cover with wire dispenser
for processing wires from drums

The drum hood cover protects the wire in the drum against dust and other contamination. The wire dispenser is mounted directly on the hood cover.

The drum hood cover is made from robust, transparent materials that give you a view on the wire inside the drum at any time. An access opening with rubber tab allows easy threading of the wire.

The drum hood cover is available for drum diameters of 505 mm and 574 mm.

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