

PRODUCT DATA SHEET

OSUCAS Arc Spray System OC200Tech · OC300Tech

with Wire Feed Gear WF6
and Support Spray Device Mini/Schub5



The illustration of the system may differ depending on the version.

POWER SOURCE

OC300Tech (OC200Tech)

The power source OC300Tech is built as a transformer-rectifier system whose characteristic curves are specially designed for arc spraying of technical wires. The generously dimensioned power components ensure continuous spraying operation at 100 % duty cycle.

Convection provides sufficient cooling of the power source while reducing contamination by metal dust to a minimum.

Voltage adjustment via 4 coarse and 3 fine steps, together with the switchable choke, allows almost all commercially available spray wires to be processed.

The OC300Tech is equipped with a PLC control system that monitors and controls all spray parameters. Operating faults are indicated by signal lamp codes on the power source panel and displayed in detail on the PLC display inside the power source.

For integration into automated spraying processes, various signals can be output to the higher-level control system as potential-free contacts on request.

The power source is equipped with safety devices that automatically switch the system to a safe operating state in the event of overload, overheating or pressure drop.

The compact design of the OC300Tech, combined with the large swivel and fixed castors, ensures easy manoeuvring of the power source.

Thanks to their large contact surface, the OSUCAS DC power connections provide low-loss energy transfer with minimal heat generation at the connections.



Spray current

300 A (200A) 100 %

Spray wires

Solid wires

Spray device

**OC1 / LDU2
Mini/Schub5**

The power source with a maximum spray current of 300 A (at 100 % duty cycle) stands out for:

- ✓ the processing of almost all commercially available spray wires
- ✓ its compact and robust design
- ✓ the clear arrangement of the controls on the inclined control panel
- ✓ easy handling with clearly legible display elements
- ✓ large swivel and fixed castors for easy manoeuvrability, even in harsh site conditions
- ✓ optimised power connections for high energy efficiency

Depending on the configuration, power sources can be equipped with or without wire feed gear WF1 – see text in the quotation

Electrical Data

Mains voltage	3 x 400 V AC => Other mains voltages available on request
Mains voltage tolerance	± 5 %
Mains frequency	50/60 Hz
Input current	< 23 A
Mains fuse	35 A
Connected load	< 15 kVA
Max. spray current (at 100 % duty cycle)	300A DC (200A DC)
Open-circuit voltage	26 - 39 V DC
Spray voltage	22 - 34 V DC

Spray Wires and Spray Performance

Spray wire quality	DIN EN ISO 14919
Spray wire diameter	1.6 mm (other diameters on request)

Selection of approved spray wires and spray rates at 300 (200) A

Steel	14.1 – 15.3 (9.4 - 10.2) kg/h
Bronze	18.6 – 20.4 (12.4 – 13.6) kg/h
NiCr 80/20	16.2 (10.8) kg/h
Aluminium	9.0 (6.0) kg/h

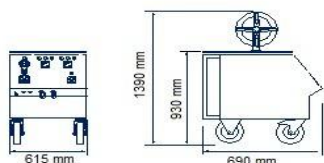
Compressed Air Supply

Required compressed air quality	DIN ISO 8573-1 Class 1
Compressed air temperature	Cooled down to min. 25 °C
Nominal diameter of compressed air ring main	25 mm (1 inch)
Nominal diameter of air hose (power source)	25 mm (1 inch)
Connection type	Compressor coupling G1/2 inch (female thread)
Max. inlet pressure	10 bar
Compressed air consumption – air motor	25 m³/h
Compressed air consumption – atomizing air	60 – 100 m³/h

Other Data

Weight	200 kg
Protection class	IP 21
Cooling type	Convection
Test mark	CE

Dimensions



WIRE FEED

Wire Feed Gear WF6

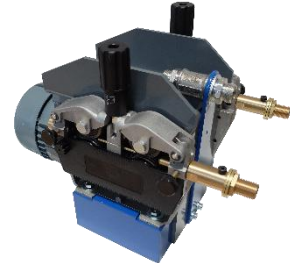
With its 4-roller drive per wire, the wire feed gear WF6 is ideal for use with a spray device that has no wire feed gear of its own.

The powerful asynchronous motor is completely maintenance-free and delivers high torque over almost the entire speed range. This guarantees a constant wire feed, resulting in a clean and steadily burning arc.

The feed and pressure rollers made of hardened steel offer a long service life and are virtually wear-free in combination with soft spray wires (e.g. corrosion protection wires such as zinc, zinc-aluminium and aluminium).

They can be replaced in just a few steps without any tools. With two feed grooves, the feed rollers offer twice the service life.

The pressure levers allow the wire contact pressure to be set very precisely and thus reproducibly.



Cable and hose set
length

4 + 1.5 m

Spray devices

Mini / Schub5

Weight

12 kg

Features of the wire feed gear WF6:

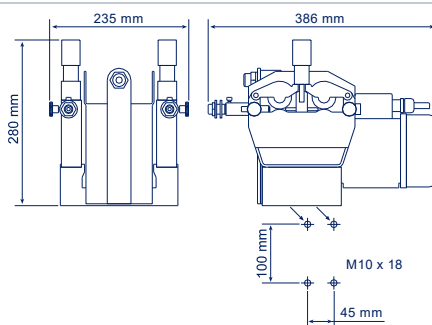
- ✓ powerful, maintenance-free asynchronous motor with high torque
- ✓ Feed and pressure rollers made of hardened steel with a long service life
- ✓ Quick and easy replacement of the feed and pressure rollers

Electrical Data

Motor supply voltage	3 x 230 V AC
Motor rated power	90 W

Other Data

Weight	12 kg
Gear ratio	20:1 (varies depending on application/output)



SPRAY DEVICE

OC-Mini/Schub5 (Support Spray Device)

With its closed nozzle system, the Support Spray Device OC-Mini/Schub5 is ideal for processing corrosion protection wires. The special geometry of the nozzle system components enables very fine atomization of the molten particles, resulting in a correspondingly fine spray coating with low surface roughness.

The spray device OC-Mini is consistently designed for low weight without compromising on durability. In combination with the wire feed gear WF6 and a standard cable and hose set length of 4 + 1.5 m, it is perfectly suited for integration into automated / semi-automated spraying processes.

The OSUCAS DC power connections provide low-loss energy transfer with minimal heat generation and improved conductivity. This keeps the energy where it belongs – in the spraying process.



OC-Mini



Schub5

600 A

Max. current (100 % duty cycle)

4 + 1.5 m

Standard cable/hose length

1.1 kg

without cable and hose set

OC-Mini – compact, light, robust (Support Spray Device):

- ✓ housing made of fibre-reinforced material for a long service life
- ✓ compact design and very low weight
- ✓ Ideal for integration into automated work processes
- ✓ Robust and easily adaptable clamping holder for a reliable spraying process
- ✓ Optimised power connections for high energy efficiency
- ✓ Special wire guides for flawless wire feed
- ✓ Minimal wear part requirements, as no feed unit is needed in the spray device

Spray Wires and Spray Performance

Spray wire quality	DIN EN ISO 14919
Spray wire diameter	2.5 mm (other diameters on request)
Max. spray current (at 100 % duty cycle)	600 A

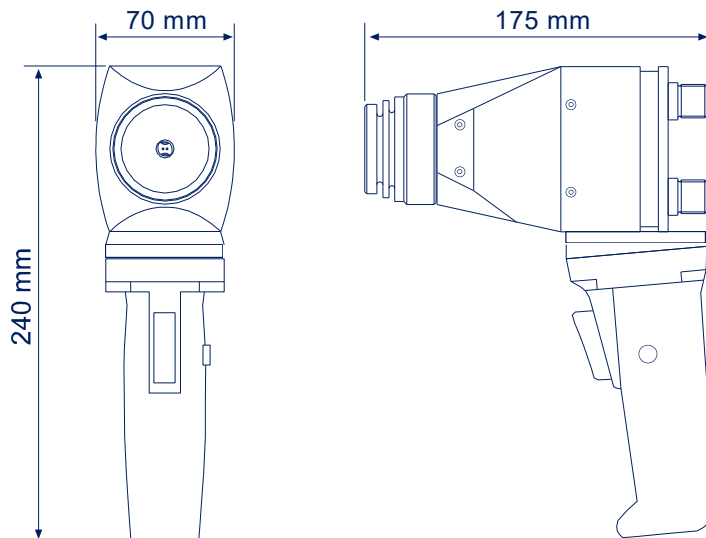
Compressed Air Supply

Required compressed air quality	DIN ISO 8573-1 Class 1
Compressed air temperature	Cooled down to min. 25 °C
Compressed air consumption – air motor	25 m³/h
Compressed air consumption – atomizing air	60 – 100 m³/h

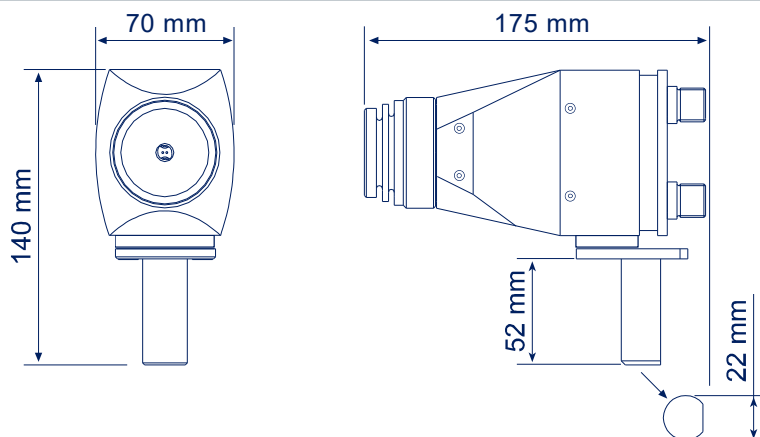
Other Data

Weight	1.1 kg (without cable and hose set)
Air motor power	320 W

Dimensions (hand-held spray device)



Dimensions (Support Spray Device)



ACCESSORIES

Optional Accessories



Combi uncoiling device

for processing wire on spools

The uncoiling device is mounted directly on the power source, enabling mobile use, e.g. on construction sites.

Our new Combi uncoiling device gives you the flexibility to use wires on all available spool types (reel, mandrel and basket spools). With just a few simple steps, you can convert this uncoiling device to the spool type of your choice in no time.



Drum cover with de-coiling device

for processing endless wire from drums

The drum cover protects the wire in the drum from dust and other contamination. The de-coiling device is mounted directly on the cover.

The drum cover is made of robust, transparent material that provides an overview of the amount of wire in the drum at all times. An access opening covered with a rubber flap allows the wire to be threaded in easily.

The drum cover fits drum diameters of 505 - 574 mm (variably adjustable).



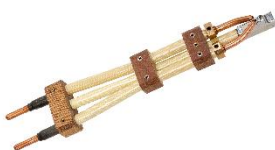
Mobile wire feed trolley

to extend the working radius by up to 40 m

The OSUCAS wire feed trolley with integrated wire feed gear was specially developed for applications that require a large working radius – as is typical in corrosion protection.

Depending on requirements, it is available either with a Combi uncoiling device for spools or for use with wire in drums.

By integrating the wire feed trolley into the respective standard setup of the system, total cable and hose set lengths of up to 40 m can be achieved – depending on the material being processed.



Angled nozzle extension

for coating hard-to-reach areas

The angled nozzle extension is a spray extension for the internal coating of pipes as well as for coatings in hard-to-reach areas. It is attached to the spray device with a suitable adapter (instead of the spray head).

Available in different lengths and with various adapters.