

PRODUCT DATASHEET

OSUCAS Arc Metalspray System OC300TechSF

with hand-held spray device LDU2 and wire feeder WF1



Hand-held spray gun LDU2



Wire feeder WF1

The illustration of the equipment may vary depending on the version.

POWER SOURCE

OC300TechSF

The OC300TechSF power source is a transformer-rectifier system whose characteristic curves are designed specifically for arc metal spraying of technical and cored wires.

Generously dimensioned power components ensure continuous spraying at 100% duty cycle.

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

Voltage adjustment in 12 steps (coarse and fine) and a switchable choke allow processing of almost all commercially available solid and cored spray wires.

The OC300TechSF has a PLC control that monitors and controls all spraying parameters. Faults are indicated by signal lamp codes on the panel and shown 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 as potential-free contacts on request.

Safety devices automatically switch the system into a safe operating state in case of overload, overheating or pressure drop.

The compact design and the large swivel and fixed castors make the OC300TechSF easy to manoeuvre.

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

Spray current

300 A 100 % duty cycle

Spray wires

Solid and cored wires

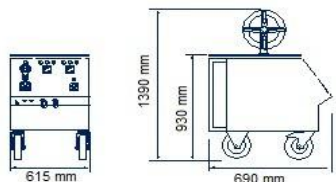
Spray gun

**OC1 / LDU2
Mini/Schub5**

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

- ✓ 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 readable display elements
- ✓ large swivel and fixed castors for easy manoeuvrability, even in rough site conditions
- ✓ optimised power connections for high energy efficiency

Depending on the configuration, the power source can be supplied with or without wire feeder 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)	300 A DC
Open-circuit voltage	29 - 42 V DC
Spray voltage	20 - 41 V DC
Spray wires and spray rate	
Spray wire quality	DIN EN ISO 14919
Spray wire diameter	1.6 mm(other diameters on request)
Selection of approved spray wires and deposition rates at 300 A	
Steel	14.1 – 15.3 kg/h
Bronze	18.6 – 20.4 kg/h
NiCr 80/20	16.2 kg/h
Cored wires	10.2 – 14.7 kg/h
Compressed air supply	
Required compressed air quality	DIN ISO 8573-1 Class 1
Compressed air temperature	Re-cooled to min. 25 °C
Compressed air ring main (nominal diameter)	25 mm (1 inch)
Compressed air hose to power source (nominal dia.)	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 – atomising air	60 – 100 m³/h
Other data	
Weight	230 kg
Protection class	IP 21
Cooling	Convection
Approval mark	CE
Dimensions	
	

Wire feed

Wire feeder WF1

With its rubber roller system, the WF1 wire feeder is used specifically for synchronous, trouble-free wire feeding in the push-pull process.

The air motor used here provides strong support for trouble-free wire transport thanks to its high torque. The wire feeder supports the pull motor in the spray gun and thus guarantees a clean and steadily burning arc.

This push-pull principle guarantees trouble-free wire feeding for all solid wires as well as cored wires.

This feeder enables absolutely trouble-free wire feeding, even of stiff wires.



Features of the WF1 wire feeder

- ✓ Powerful air motor
- ✓ Fine adjustment by easy-to-use control valve
- ✓ Easy-to-fit slip feed rollers
- ✓ Turns an existing pull system into a push-pull system
- ✓ Easy mounting on the wire unwinding device (also as a retrofit)

SPRAY GUN

LDU2

The LDU2 spray gun has proven itself over many years in everyday industrial use. It works reliably in continuous operation, delivers consistent results and is easy to operate. That is why many users have relied on it for a long time.

Its particular strength is the processing of technical spray wires. The LDU2 spray gun feeds and processes the wire evenly and stably. This produces homogeneous, well-adhering spray coatings, e.g. in the field of wear protection. As a rule, the spray gun is equipped with the adjustable closed nozzle system for processing technical wires.

The clamping holder allows use in automated or semi-automated operation.

The range of applications also remains flexible in terms of power supply, as the LDU2 spray gun can be combined with many power sources. Spray gun, nozzle system and power source thus form a solution that fits your application exactly.

This makes the LDU2 a true all-purpose spray gun.



Standard power (Tech)

300 A (100 % duty cycle)

Max. length

4 m

(cable/hose set without intermediate feeder)

Weight

2.6 kg

without cable and hose set

Features of the LDU2 spray gun:

- ✓ Proven many times over in continuous industrial use
- ✓ Perfectly suited for technical spray wires and cored wires
- ✓ Suitable for almost any spray coating requirement
- ✓ Can be combined with many power sources
- ✓ Adjustable closed nozzle system as standard nozzle system

Spray wires and spray rate	
Spray wire quality	DIN EN ISO 14919
Spray wire diameter	1.6 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	Re-cooled to min. 25 °C
Compressed air consumption – air motor	25 m³/h
Compressed air consumption – atomising air	60 – 100 m³/h
Other data	
Weight	2.6 kg (without cable and hose set)

ACCESSORIES

Optional accessories



Combi uncoiling device

for processing wire on spools

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

Our new combination uncoiling device lets you use wires on all available spool types (reel, mandrel and basket spools). It can be converted to the spool type of your choice in just a few simple steps.



Drum cover with decoiling device

for processing wire endless in drums

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

The drum cover is made of robust, transparent material, so the amount of wire in the drum is visible at all times. An access opening with a rubber flap makes threading the wire easy.

The drum cover is variably adjustable for drum diameters of 505 - 574 mm.



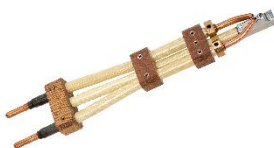
Mobile wire feed trolley

to extend the working radius by up to 40 m

The OSUCAS wire feed trolley with integrated wire feeder was developed for applications requiring a large working radius – typically in corrosion protection.

Depending on requirements, it is available with a combination unwinding device for spools or for use with wire in drums.

Integrating the wire feed trolley into the standard setup allows total hose package lengths of up to 40 m, depending on the material.



Angled nozzle extension

for coating in areas that are difficult to access

The angled nozzle extension is used for the internal coating of pipes and for coatings in areas that are difficult to access. It is attached to the spray gun with a suitable adapter (instead of the spray head).

Available in different lengths and with various adapters.