

PRODUCT DATA SHEET

OSUCAS Arc Spray System OC200Tech · OC300Tech

with Support Spray Machine LDU2-E



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

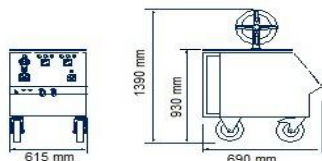
Compressed Air Supply

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



Spray Machine

Support Spray Machine LDU2-E

The Support Spray Machine LDU2-E stands for proven technology in continuous industrial use. It shows its strengths particularly clearly in automated and semi-automated systems, where consistent results over long operating times are crucial.

In combination with a suitable power source, the robust and powerful feed system of the spray machine LDU2-E allows almost all wires to be processed.

The wire is fed evenly and stably. This is the basis for a steady arc and homogeneous, well-adhering spray coatings, e.g. for wear protection. For technical spray wires, the LDU2-E is usually equipped with the adjustable closed nozzle system. Depending on the application and field of use, the open nozzle system and the new closed nozzle system are also available.

You also remain flexible in terms of power supply: the LDU2-E can be combined with many power sources.

Spray device, nozzle system, power source and your automation thus form a solution that fits your application exactly.

This makes the LDU2-E the robust and reliable choice for series coating.



Spray current

up to 1,000 A
100 % duty cycle

Spray wires

**All solid and cored
wires**

Wire Ø

from 1.6 to 3.2 mm (depending on
the power source)

Features of the spray machine HPG:

- ✓ Housing made of fibre-reinforced material for a long service life
- ✓ Use of closed, open or new closed nozzle system
- ✓ Suitable for processing solid and cored wires Ø 1.6 – 3.2 mm
- ✓ Designed for spray currents up to 1,000 A
- ✓ Powerful, maintenance-free electric motor
- ✓ can be connected to (almost) all OSU power sources

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).



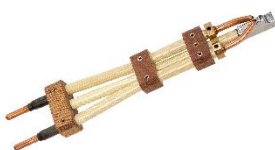
Mobile wire feed trolley

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.