

Discomat-E

Electrostatic disc spraying system



The spraying system Discomat-E with direct high tension charging is an electrical driven high rotation spraying system with a rapidly rotation atomizer – max. 10.000 rpm during application – which is applied to high voltage. In this spraying system, the painting material is drawn and atomized only by the effect of the electric field from the sharp edge of the spray disc.

The colour is centrally introduced into the rotating disc and sprayed electrostatically on the sharp edge of the spray disc.

With the spraying system Discomat-E as an integrated part an entire plant (painting line/painting booth) is achieved by electrostatic charging of the paint a uniform layer thickness on the workpiece.

Due to the fine atomization of the painting material the loss and the overspray is reduced. Finest atomization of the painting material is achieved by the workpiece adapted rotating atomizer.

The flow rate of the painting material depends both on dry and wet atomizing, as well as by the distance to the workpiece. The materials to be painted must be electrostatically conductive.

Besides low weight and compact, maintenance-friendly design of the Discomat-E has all the features that characterizes a modern spray system: colour changing unit with max. 4 valves incl. solvent valve, quick flushing valves for colour change less than 10 seconds and speed control to max. 10,000 rpm.

For 2-component materials is possible to mix the A and B component directly after the colour change unit via a static mixer, thus enabling lowest paint losses.

A selection of tuned disc diameters and geometries to the application allows the processing of solvent-based paints, 2K and 3K paints and water-based paints.

Features

- Accurate speed control for even film build, reduced overspray and highest system availability
- Reduced time for service work for disc change or maintenance due to modular design. Reduced production downtime in case of service
- Reciprocator designed to integrate Discomat-E for less contamination and easy to clean surface.
- Integrated colour change block with disc flush valve for minimum solvent use and quickest colour change times
- Shaft design avoids any problems after disc change



PERFECT FINISH – PAINTED BY THE SPECIALIST.

Technical Data

Discomat-E – Electrostatic disc spraying system

Weight:	approx. 48 kg without disc
Nominal output voltage:	max. 100 kV
Paint flow:	max. 2.200 ml/min, depending on the paint material, speed and disc diameter
Length without support:	1.200 mm without disc
Diameter:	approx. 280 mm without disc
Spray disc diameter:	200/300/400 mm
Speed range:	2.000 - 10.000 rpm
Supplement air pressure:	min. 3 bar
Paint valve pressure control air:	min. 5 bar
Air consumption	supplement air: approx. 20 NL/min. at 1,5 bar approx. 40 NL/min. at 3 bar
Material pressure:	max. admissible 10 bar
Drive	Power servo motor: 1,12 kW Toque servo motor: 2,68 Nm Ex protection servo motor: ATEX II 2G EEx d II B T4 IPB64 Thermo: Thermo switch Feedback: Resolver