



E-SCRUB HIGHLY EFFICIENT ELECTROSTATIC OVERSPRAY REMOVAL

E-SCRUB, THE PROVEN ELECTROSTATIC OVERSPRAY REMOVAL SYSTEM, IS ECO-FRIENDLY AND RESOURCE-EFFICIENT.

The eco-friendly and resource-efficient features of the E-Scrub overspray removal system are valued by Eisenmann customers. This highly efficient electrostatic technology cuts operating costs by up to 30%*. The filterless method leads to energy savings of up to 54%*. Use of specially developed chemicals reduces paint-sludge disposal expense by up to 47%*.

How it works

Overspray-laden exhaust air flows through the intake area to the removal module. As air passes through the module, overspray particles are removed. As the removal rate is very high, spray booth air can be recirculated. A large proportion of the scrubbed air is sucked in by a fan and returned to the booth. Depending on the solvent load of the exhaust air, a certain volume is extracted from the recirculation system and replaced by fresh air.

The removal modules comprise an alternating arrangement of active and passive elements. In the active elements, a corona cloud forms under high voltage, charging all paint particles. These charged particles are then attracted to the passive, grounded separating plate. This is covered with a thin film of liquid separating agent by a coating system installed above it. The paint particles adhere to the separating plate where they are detackified

by the separating agent. The agent with entrained overspray flows into the collection tank below the E-Scrub system. From there, it is returned to the coating system. Some of the agent is scrubbed of overspray by an overflow system and returned to the separating agent circuit.

** compared to Venturi wet scrubbing with recirculating air*



New-generation electrostatic overspray separation system.

E-SCRUB

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High-voltage contact established automatically

All components that create the high-voltage contact for the modules are located at the rear of the E-Scrub system. A simple plug-in mechanism for each individual module automatically connects it to the high-voltage power supply. This ensures a safe work environment and makes the E-Scrub easy to operate.

Simpler supply system for separating agent

E-Scrub is equipped with a flow-optimized and streamlined supply system for separating agent. The chemical is pumped to the overflow pipe and the removal modules, where it forms a thick film that binds and detackifies paint particles. The robust, redesigned overflow pipe prevents soiling from paint particles. In addition, it contains no moving parts or bellows.

Advantages at a glance

- Up to 30% lower operating costs* through resource-efficient overspray removal
- Up to 47% lower disposal costs for paint sludge* thanks to specially developed chemicals
- Up to 54% lower energy consumption* as a result of filterless electrostatic particle removal method
- Safe and easy to operate thanks to automatic high-voltage contact mechanism at the rear of the E-Scrub system
- Less contamination/soiling thanks to robust design and elimination of moving parts in the overspray removal zone

** compared to Venturi wet scrubbing with recirculating air*

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