SENA
WET ELECTROSTATIC PRECIPITATOR FOR CLEANING DRYER EXHAUST GASES

SENA is a single stage wet electrostatic precipitator in which the collecting surfaces are implemented in a honeycomb design. This process is primarily used for applications in the wood based panels industry (particle board, OSB and MDF industries), plywood industry, insulating materials industry and in the pellet industry.

THE ADVANTAGES

High filtration efficiency
- good dust and aerosol filtration (blue haze)
- filtration of organic contents

High availability
- proven system used in actual practice

Low operating costs
- low pressure losses through “bottom up” air flow
- low maintenance costs

Performance range
- approx. 100,000 to 800,000 Am³/h
Quench
In order to guarantee the optimal filtration performance and safety levels, the exhaust gas is injected with circulating water before entering the filter. This saturates the gas with moisture and cools it to the cooling limit temperature.

Scrubber
Water-soluble substances as well as larger dust particles are separated out in the scrubber. In addition, the scrubber ensures a uniform flow distribution across the entire filter cross-section to provide for optimal filtration conditions in the wet electrostatic precipitator.

Wet electrostatic precipitator
Fine dust particles and aerosols (blue haze) are filtered out in a honeycomb-type electrostatic precipitator, which is periodically cleaned by flushing with circulating water.

Water treatment
Besides the efficient cleaning of the exhaust air, we also emphasise the treatment of process water that has become enriched with solid matter and contaminants. Materials separated from the exhaust air into the process water are removed using a combination of sedimentation and a centrifuge, whereby additives and the exfiltration of separated materials optimise this process.