AC Electrostatic Precipitator (AC ESP)

An AC electrostatic precipitator is constructed as a cubicle containing precharger and collecting section units. Precharger and collecting-section units are inserted with the precharger facing the front of the cubicle and the collecting section facing the rear. The dust collection efficiency of such a precipitator is 90% and pressure loss is 200Pa at a processing gas velocity of 9ms. Therefore AC electrostatic precipitators are more efficient than mechanical filters. The collecting section is automatically washed with water from time to time to remove collected particles.

Cubicle with eight units inserted. The picture shows a cubicle for a gas (polluted air) flow of 40m³/s.

Unit consisting of a precharger and collecting section.

Door opened manually through 180°

Direction of gas (polluted air) flow

(Front)

( Rear)

Plan view

Cubicle frame (upper stage)

Protection net

Cubicle frame (lower stage)

Front view

Cross-sectional side view

Dust collection unit

Tube for water for washing collecting section

Door limit switch

Outlet to sewage system

Flush water inlet

This configuration applies to Type 91.