

EUM – ESP



„We care about air“

ETM – ESP

Dry-Electrostatic Precipitator in chamber design

Properties

The ETM-Electrostatic precipitator is designed as dry working, horizontal plate ESP. The ESP is used especially for higher gas temperatures, because of its higher resistance against heat and sparks compared to bag filters. Therefore our ESP are used in following business fields and industries:

- Thermal power stations
- Waste incineration
- Sludge incineration
- Cement and lime industry
- Metal and steel industry
- Chemical and process industry

The ETM-ESP is characterized by:

- low-maintenance design
- low pressure loss
- high temperature resistance up to 420 °C
- ideal separation efficiency up to 95%

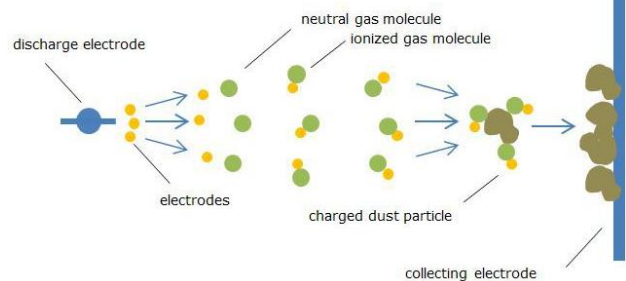
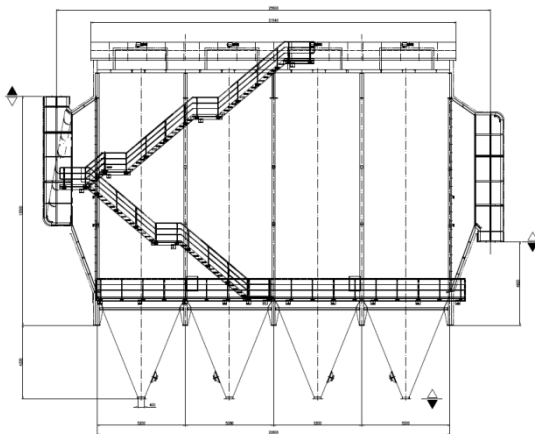
Functional principle

The dust particles enter horizontally into the ESP. To reach an ideal dust separation ratio the filtering area must be used optimally. Therefore gas guiding and distribution plates are installed at the gas inlet to distribute the gas stream evenly.

The dust particles are getting separated by the principle of electrostatic separation. So the particles in the gas stream are getting charged negatively by the electron emitting electrodes. Inside the strong electrical field the dust particles move towards the positive charged collecting plates, getting adsorbed and discharged.

The electrode-systems are rapped on regular basis, thereby the dust falls down into the hopper located underneath the electrode systems and thereafter into the dust discharge system.

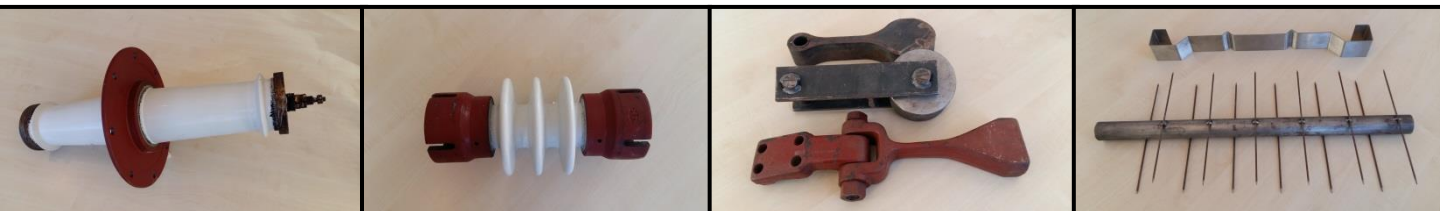
The gas now cleaned from dust leaves the filter horizontally through the exit hoods.



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Accessoires and Spare parts

- **Emitting- and Collecting plates**
- **Electric insulators**
 - Supporting insulators
 - Rotating insulators
 - Pass-through-insulators
- **Rapping – devices for collecting and emitting electrodes**
 - hammers, anvil, knock bars
 - shafts, bearing, clutch
 - Small parts (bushings, bearings, etc.)
- **High Voltage units and its components**
- **Electrical instruments and control units**
- **Heat Tracing**
- **(Dust-) Discharge System**
 - Chain- and Screw Conveyer
 - Rotary feeder
- **Fans and silencer**



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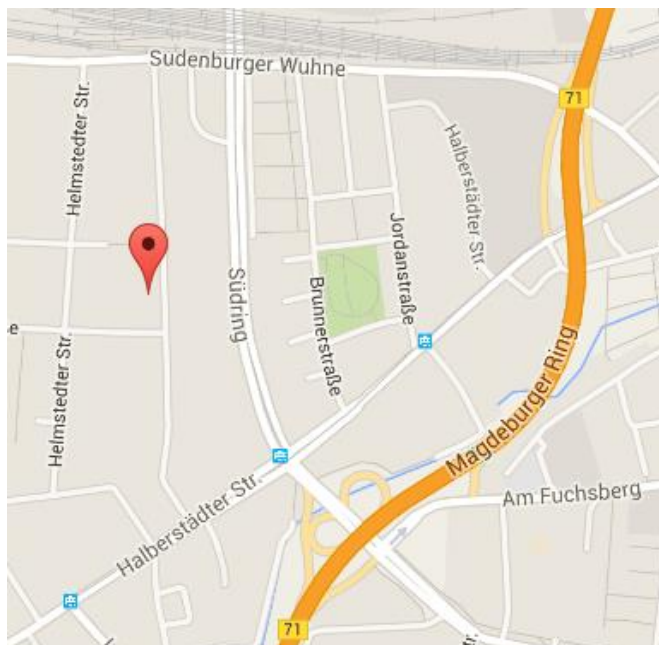
Reference list – short version*

Project	Type of filter	Volumeflow
2015 - 2016 Steel-plant Converter B Salzgitter	Reconstruction of complete Round-ESP with stiff emitting electrodes	130.000 Nm ³ /h
2014 Sludge treatment plant Werdhölzli near Zurich (Switzerland)	2-Zones-Dry-ESP Type: 2x 12 / 5,7-2,5/ 3,0 / 0,4	24.000 Nm ³ /h
2012 - 2013 Steel-plant Converter C Salzgitter	Reconstruction of complete Round-ESP with stiff emitting electrodes	68.000 Nm ³ /h
2008 - 2009 Waste-to-energy plant MK 6 Mannheim	4-Zones-Dry-ESP Type: 4x 22 / 12/ 4 / 0,4	170.000 Nm ³ /h
2008-2009 Biomass incineration Bralitz	1-Zone-Dry-ESP Type: 1 x 8 / 2,6 / 3,5 / 0,3	11.000 Nm ³ /h
2006-2007 Bioenergy plant Pfalzgrafenweiler	1-Zones-Dry-ESP Type: 1 x 8 / 2,6 / 3,5 / 0,3	11.000 Nm ³ /h

*the detailed reference list is available upon request



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