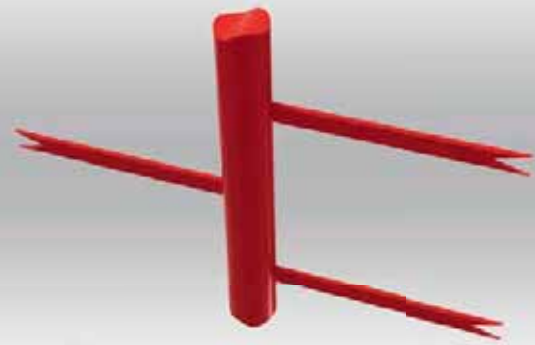


Emitter Electrode



Extremely Low Dust Emissions
High Efficiency
Reduction of Power Consumption

Application	Technical Data	Scope of Supply
<p>Power Plants and Industrial Boilers</p> <p>Dust reduction, extension of fuel range</p> <p>Benefits</p> <ul style="list-style-type: none"> • Reduction of dust emissions • Extension of fuel range • Energy savings by optimized high voltage supply • High availability • Increase of operational flexibility 	<p>Type:</p> <ul style="list-style-type: none"> • Dry Electrostatic Precipitator • Wet Electrostatic Precipitator <p>Emissions:</p> <p>PM < 10 mg/m³ (STP)</p>	<ul style="list-style-type: none"> • Consultancy • Process engineering • Concept design • CFD-simulations of flue gas path and flow optimization • Optimization concepts • Commissioning support
	<p>Fuel Type</p> <ul style="list-style-type: none"> • Bituminous coal • Lignite • Co-firing of biomass • Waste • Oil 	

Reference List Excerpt

Electrostatic Precipitator

Scope	Client
Boiler and ESP design study and know-how transfer for 6x600 MWel, Bituminous Coal, Tutuka PS, South Africa	Eskom Enterprises, Johannesburg, South Africa
Rehabilitation and optimization of ESP, 610.000 m ³ /h (STP), Lignite, Govora PS, Romania	CET Govora, Râmnicu Vâlcea, Romania
Rehabilitation of electrostatic precipitator behind fluidized catalytic cracker plant, 166.000 m ³ /h (STP), Milazzo Refinery, Italy	Raffineria di Milazzo S.C.p.A., Milazzo, Italy
Know-how transfer, design tools and training for firing systems, FGD, DeNO _x (SCR) and ESP for bituminous coal-fired power plants, South Africa	Eskom Enterprises, Johannesburg, South Africa
Rehabilitation of electrostatic precipitator behind fluidized catalytic cracker plant, 90.000 m ³ /h (STP), BP Refinery Gelsenkirchen, Germany	Ruhr Oel GmbH, Gelsenkirchen, Germany
Concept engineering study for the optimization of ESPs, 6x600 MWel, Bituminous Coal, Tutuka PS, South Africa	Eskom Enterprises, Johannesburg, South Africa
CFD-flow simulation and optimization for ESP downstream pyrite roaster in sulfuric acid plant, 30.000 m ³ /h (STP), Haldor Topsøe Plant, Denmark	Ion Blast Ltd., Helsinki, Finland
CFD-flow simulation for ESP, shale oil plant, 119.000 m ³ /h (STP), Eesti Energia Narva, Estonia	Ion Blast Ltd., Helsinki, Finland

Legend:

PS – Power Station
PF – Pulverized Fuel
CHP – Heat and power plant

SCR – Selective Catalytic Reduction
STP – Standard Temperature and Pressure
HRSG – Heat Recovery Steam Generator

FGD – Flue Gas Desulphurization
CFB – Circulating Fluidized Bed
ESP – Electrostatic Precipitator

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