



Tray Basket

Flexible Modular System for Retrofit
Removal Efficiency Increase
Reduction of Power Consumption

Application	Design	Scope of Supply
<p>Power Plants and Industrial Boilers</p> <p>SO₂ reduction, extension of fuel range</p> <p>Benefits</p> <ul style="list-style-type: none"> • Reduction of pollutant emissions (SO₂, SO₃, Dust) • High availability • Increase of operational flexibility • Optimized consumption of limestone • Optimized distribution of oxidation air • Reduction of auxilliary energy consumption 	<ul style="list-style-type: none"> • Wet FGD (also with tray technology) • Spray Dryer Absorption System (SDA) • Circulating Fluidized Bed System (CFB-FGD) • Duct Sorbent Injection (DSI) 	<p>Retrofit, Revamping and New Build FGDs</p> <ul style="list-style-type: none"> • Consultancy • Process engineering • CFD-simulations • Engineering, supply and installation of components - Nozzle position - Tray layer retrofit - Oxidation air distribution • Commissioning
	<p>Technical Data</p> <ul style="list-style-type: none"> • SO_x < 200 mg/m³ (STP) corresponding to removal efficiencies > 98% • Low pressure drop 	

Reference List Excerpt

FGD Systems

Scope	Client
Retrofit of a tray for FGD scrubber upgrade, 2x110 MWel, Lignite, Novaky PS, Slovakia	Slovenské elektrárne, a. s., Bratislava, Slovakia
Retrofit of a tray for FGD scrubber upgrade, 86 MWel, Lignite, Deuben PS, Germany	Mitteldeutsche Braunkohlegesellschaft GmbH, Germany
Revamp and optimization of FGD, 660 MWel, Bituminous Coal, Hemweg PS 8, Netherlands	Nuon Power Generation B.V., Utrecht, Netherlands
Engineering and component supply for a wet FGD, 150 MWel, Lignite, Paroseni PS, Romania	LAB GmbH Germany, for Electrocentrale Paroseni S.A., Paroseni, Romania
Retrofit of a tray for FGD scrubber upgrade, 600 t/h, Fenne PS, Bituminous Coal, Völklingen, Germany	STEAG AG, Saar-Völklingen, Germany
Detail engineering for efficiency increase of FGD scrubber, 2x227 MWel, Lignite, Maritsa East 3 PS, Bulgaria	ContourGlobal, Sofia, Bulgaria
Concept design study for SO _x emissions reduction 200-730 MWel, Bituminous Coal, ESKOM'S fleet, South Africa	Eskom Enterprises, Johannesburg, South Africa
Technical specification for the FGDs, 6x800 MWel, Bituminous Coal, Medupi PS, South Africa	Eskom Enterprises, Johannesburg, South Africa
Study for efficiency improvement of FGD, 4x500 MWel, Bituminous Coal, Ratcliffe PS, Great Britain	E.ON, Ratcliffe-on-Soar, Nottinghamshire, UK
FGD optimization study, 2x110 MWel, Lignite, Novaky PS, Slovakia	Slovenské elektrárne, a. s., Bratislava, Slovakia
License, know-how transfer and cooperation agreement for FGD plants	Guizhou XingYun Environment Protection Co., Ltd., Gyiuang, China
FGD Tender evaluation, 6x800 MWel, Bituminous Coal, Kusile PS, South Africa	Eskom Enterprises, Johannesburg, South Africa

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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