Lignite Combustion Systems

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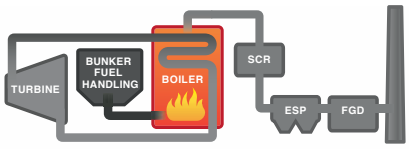
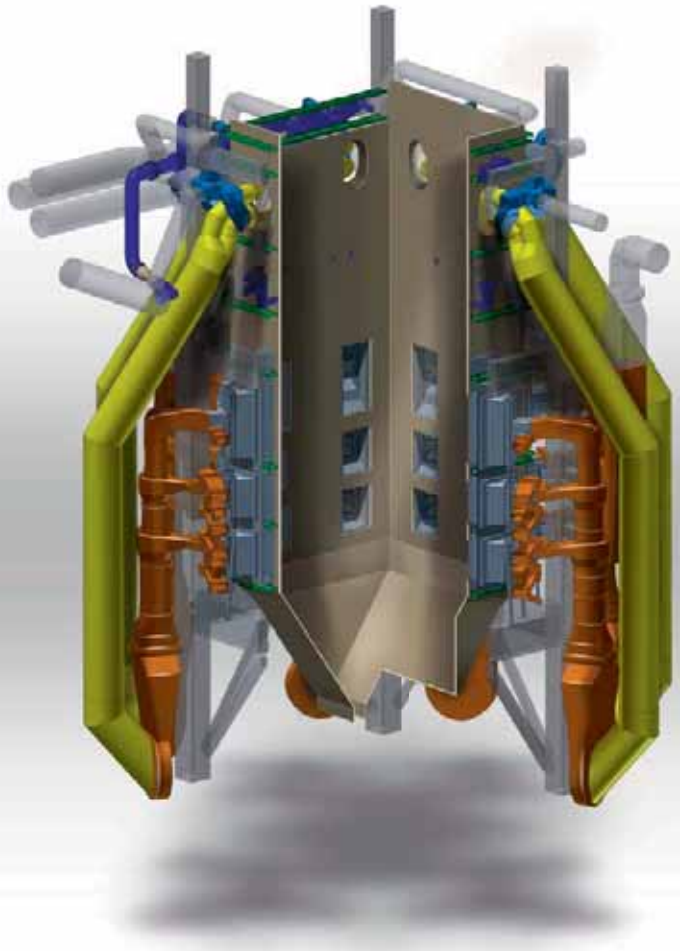
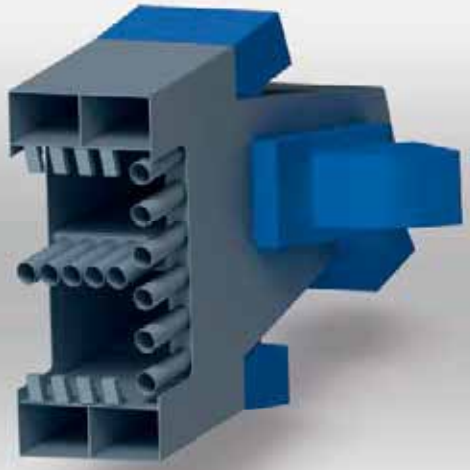




RSM®-Lignite Burner



Low NO_x Emission
Efficiency Increase
Flexible Operation

Application	Technical Data	Scope of Supply
Power Plants and Industrial Boilers NO_x reduction, extension of fuel range, efficiency increase **Benefits** • Optimized engineering based on CFD-simulations calculations without expensive trials • High availability and efficiency • Increase of operation flexibility and capacity • Reliable solution based on decades of experience	Burner Type: RSM®* Lignite Burner Burner Capacity: 30 - 150 MWth Emissions: CO < 200 mg/m³ (STP) NO_x < 200 mg/m³ (STP) **Fuel Type** Lignite Water: 25-70 % ar Ash: 0-50 % ar VM daf: 30-70 % LCV: 3,5-22 MJ/kg	• Consultancy • Process engineering • CFD-Simulations of boiler furnace and combustion system • Design of burners • Supply and installation of firing system components including burners, OFA, etc. • Commissioning • Furnace design • Adaptation of I & C

* ® Registered Trademark **R**adial **S**taged **M**ixing Burner

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Reference List Excerpt

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Scope	Client
Engineering and supply of a Low-NO_x firing system, 350 MWel, Lignite, Kostolac PS B1, PE Industry, Serbia	PE Electric Power Industry, Belgrade, Serbia
Lignite firing system modification, 4x227 MWel, Lignite, Maritza East 3 PS Unit 1-4, Maritza, Bulgaria	ContourGlobal, Sofia, Bulgaria
Engineering for firing system retrofit, 2x600 MWel, Lignite, Niederaußem PS Unit G and H, Germany	RWE AG, Essen, Germany
Wall-air system detail design, 11x250 MWel, Lignite, Jänschwalde PS, Germany	Vattenfall Europe Generation AG & Co. KG, Cottbus, Germany
Basic engineering for Low-NO_x firing system modification, 11x250 MWel, Lignite, Jänschwalde PS, Germany	Vattenfall Europe Generation AG & Co. KG, Cottbus, Germany
Process and basic design for proposal of 500 MWel power plant, Lignite, Turow PS, Poland	Doosan Babcock Energy Ltd., West Sussex, UK
Concept study and engineering for Low-NO_x burner modifications, 2x640 MWel, Lignite, Neurath PS Unit D and E, Germany	RWE Power AG, Essen, Germany
Feasibility study of potential modifications for NO_x reduction by primary measures, 345 MWel, Lignite, Sostanj PS Unit 5, Slovenia	Siemens d.o.o., Ljubljana, Slovenia
Concept study for proposal, for 330 MWel power plant, Lignite, Turceni PS Unit 6, Romania	Doosan Babcock Energy Ltd., West Sussex, UK

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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