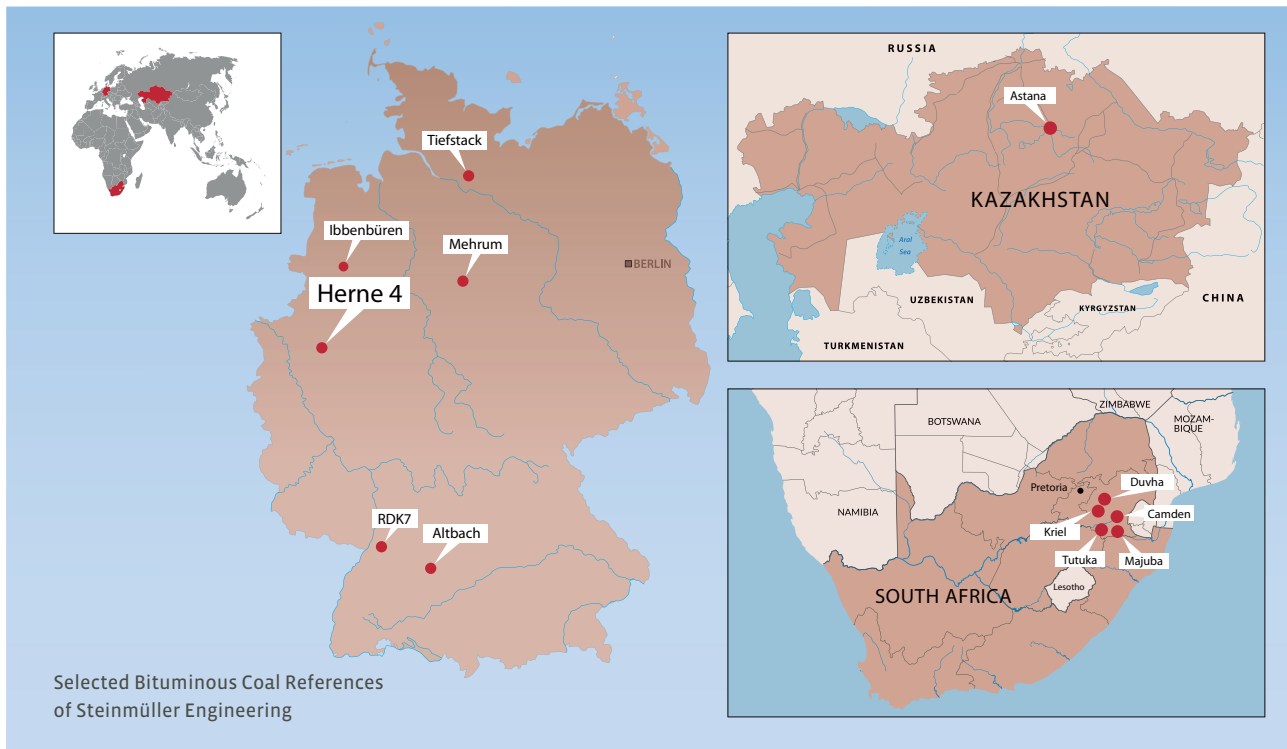


PS Herne Unit 4

500 MWeI, 1512 t/h

LowNO_x Firing System for Bituminous Coal



Achievements:

Widening of applicable coal range to “world coal” and reduction of primary NO_x emissions, reducing OPEX for SCR reagent.

Emission limits: (STP @ 6 % O₂)

NO_x: < 400 mg/m³

CO : < 25 mg/m³

Fuel: World Coal (a.r.)

LCV: 16.7–26.4 MJ/kg (3.9–6.3 Mcal/kg)

w: 7–18% N: 1.2–1.9%

a: 6.0–30% VM: 21–36%

Boiler design: Tower type, Benson boiler with opposed firing system, 12 burners, 1512 t/h, 292 bar, 535/541°C (SH/RH)

- Commissioning: 1989 revamp by Steinmüller Engineering 2013

Scope of Supply:

- Process engineering for LowNO_x firing system
- 3D CFD modelling
- Mechanical design of burners and ductwork
- Manufacturing and installation of 12 LowNO_x burners
- Optimization of pulverized fuel distribution
- Installation of over fire air and side wall air system
- Commissioning and testing

Literature can be provided on request

- 26. Dt. Flammentag 2013 “Modernization of pulverized coal combustion system of steam generator, Unit 4 at Power Station Herne” (in German)

Please contact us for further information.

steinmüller
engineering

Steinmüller Engineering GmbH
IHI Group Company
Fabrikstraße 5 • D-51643 Gummersbach • Germany
Tel: +49 2261 78950-0
Fax: +49 2261 78950-199
info@steinmueller.com
www.steinmueller.com

