

PLANT OPERATOR:

PGNiG
Polskie Górnictwo
Naftowe i Gazownictwo

CLIENT:

Babcock Hitachi K.K., Kure,
Japan

CONSTRUCTION PERIOD:

2010 - 2011 for SCR K10
and K11

up to 2012 for SCR K15
up to 2013 for SCR K14

REAGENT:

24 w% aqueous ammonia

PROJECT KEY DATA:

1 x Unloading Skid
2 x 100%, 1 standby
2 x Storage tanks
2 x 110m³
1 x Transfer Pump Skid
3 x 100%, 1 standby
4 x Vaporizer Skids
each 3 x 100%,
1 standby
4 x Dilution Air Skids
each 3 x 100%,
1 standby
4 x Static Mixer Units
8 x Static Ammonia Mixers
8 x Ammonia Injection
Headers

AMMONIA CONSUMPTION:

per boiler 450 kg/h



AMMONIA SUPPLY SYSTEM FOR SIEKIERKI SCR

WARSAW; POLAND

PLANT DESCRIPTION

SIEKIERKI HEAT AND POWER STATION (POLISH: 'ELEKTROCIĘPŁOWNIA SIEKIERKI') IS A COMBINED HEAT AND POWER PLANT LOCATED IN THE SOUTHWESTERN PART OF WARSAW.

SIEKIERKI HEAT AND POWER STATION, TO WHICH HEAT AUSTRIA ON BEHALF OF BABCOCK HITACHI K.K, SUPPLIES AN AMMONIA SUPPLY SYSTEM, IS COAL-FIRED AND GENERATES A TOTAL OF 622 MW OF ELECTRICITY AND SUPPLIES 2.014 MW OF HEAT, WHICH SUPPLIES 60 % OF WARSAW.

PROJECT DESCRIPTION

HEAT WAS APPOINTED BY BABCOCK HITACHI TO DESIGN AND MANUFACTURE THE COMPLETE AQUEOUS AMMONIA SYSTEM FOR THE SCR RETROFIT OF THE 4 BOILER UNITS. THE SYSTEM COMPRISES THE AMMONIA UNLOADING, STORAGE AND TRANSFER SUB-SYSTEM COMMON FOR THE 4 BOILERS, AS WELL AS THE VAPORIZING, DILUTION AIR CONDITIONING AND AMMONIA-AIR MIXING AND DISTRIBUTION UNITS FOR EACH OF THE 4 BOILERS. THE SINGLE UNITS, INCLUDING INTERNAL ELECTRICAL CONNECTIONS, WERE COMPLETELY ASSEMBLED ON SKIDS IN HEAT'S MANUFACTURING FACILITIES.