Conventional Fossil Fired Boilers

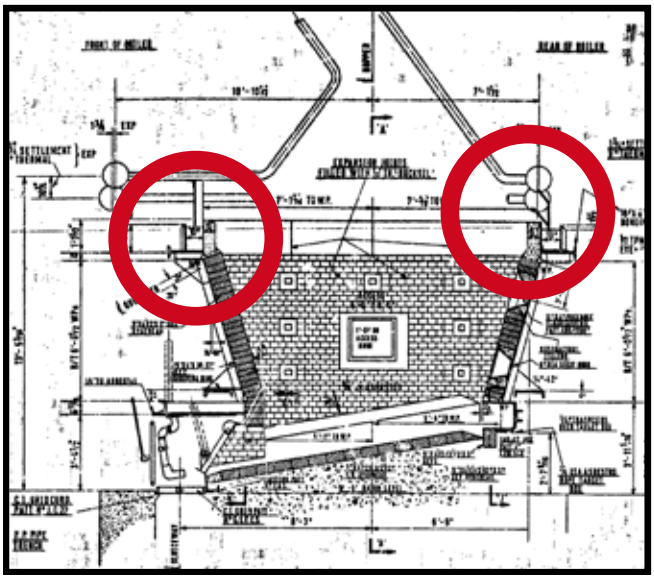
Ash Hopper Joint

The Ferrybridge power plant had installed an original dipper plate into a water trough to seal the bottom of the boiler to the ash hopper.

Regular maintenance problems caused by this problem have been encountered:

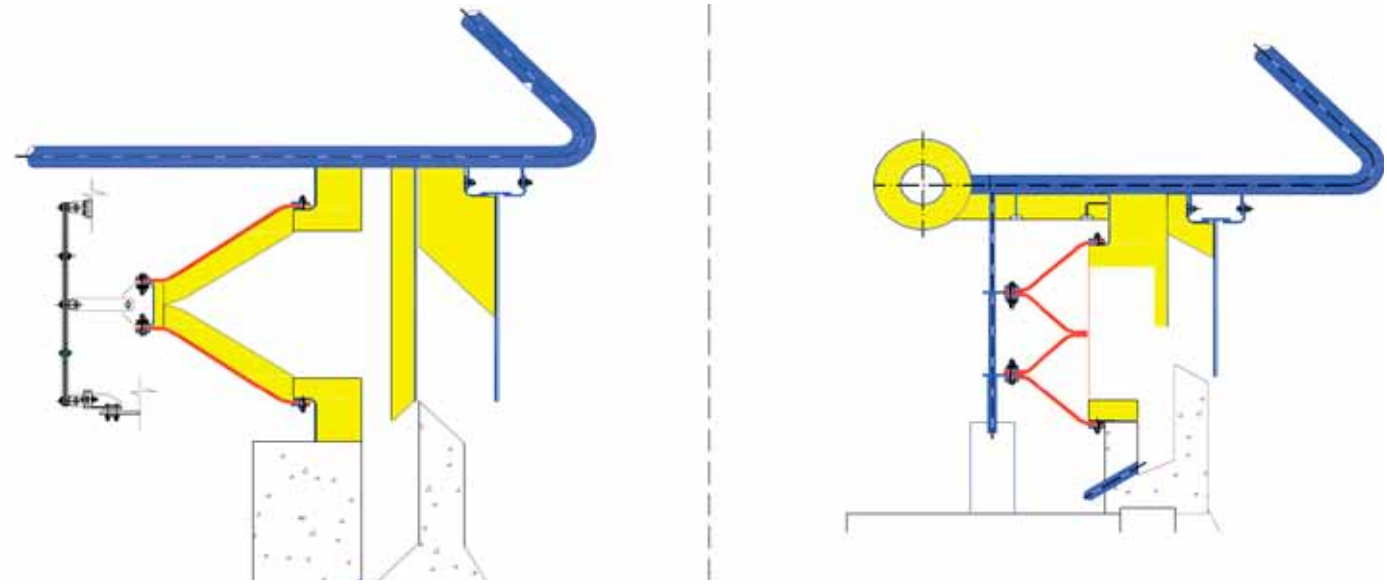
- contact and deformation of the dipper plate
- distortion of the water trough
- water leakage into the boiler house
- pressure loss due to no sealing of water trough
- regular cleaning and maintenance due to ash build up
- efficiency of draught fans

Ferrybridge – Original Design



Ferrybridge orginal design: Sealing system with dipper plate and water through

Two technical solutions proposed by DEKOMTE



Two technical solutions proposed by DEKOMTE

Dimension inside:	**32813 x 9439 mm**
Boiler internal temperature:	**900 C˚**
Temperature at fabric:	**300 C˚**
Pressure static:	**- 1 mbar**
Movement:	**axial: -200 mm** **lateral: 80 mm**

Operating parameters of expansion joint system

DE**KOM**TE proposed a number of standard and high tech solutions to solve the problem.

The solution offered incorporates an internal ash guard, steel frame, fabric joint and fixing system. By offering a complete product scope, DE**KOM**TE can assure a long life and reliability in service.

The fabric solution installed, gives a gas tightness which maintains boiler efficiency and integrity.

Installation

Removal of steel parts

Repair of boiler wall and refractory

Installation of DE**KOM**TE steel parts

Installation of DE**KOM**TE internal insulation bolster

Installation of DE**KOM**TE fabric joint

Joint in operation