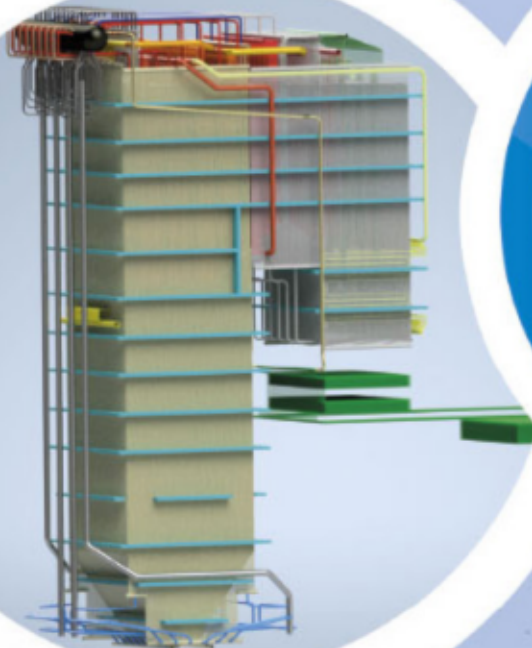




BOILER ENGINEERING DESIGN OFFICE JOINT-STOCK COMPANY



**Department
of Boilers**

The boiler engineering office has a team of experienced designers and constructors with decades of experience in the design and implementation of boilers in the power industry and heating industry, which guarantees services at the highest level.

The boiler engineering office offers the preparation of documentation projects and analyzes of steam, water and recovery coils in the scope of:

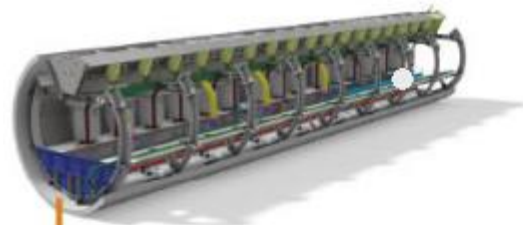
- Calculations:
 - boiler heat
 - strength pressure elements
 - aerodynamic and hydraulic circulation
 - mechanical and structural
 - static

- Documentation:
 - pressure part of the boiler from the supply node to the defect or steam outlet manifold from the boiler
 - connecting pipelines
 - pipelines within the boiler
 - steam coolers
 - steam air heaters
 - installation of ash blowers

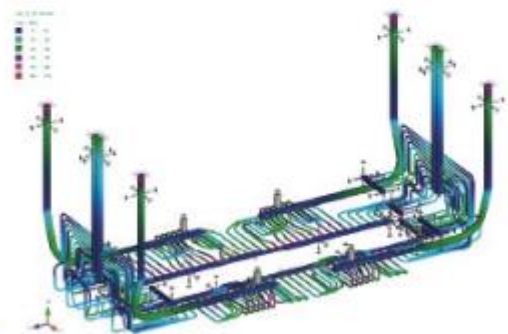
- Analyzes:
 - the possibility of redesigning boilers coal-fired boilers fired with other fuels, e.g. gas, alternative fuels, etc.
 - improper operation of boilers and devices, giving reasons and guidelines for correct operation
 - compensation of pipelines with a set of suspensions



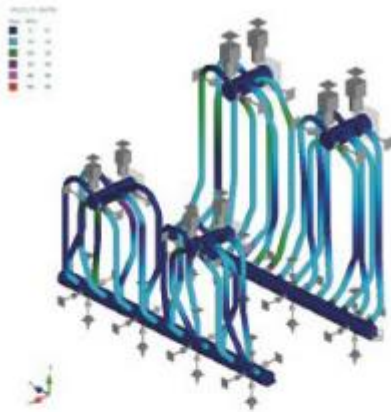
OP 215 Boiler



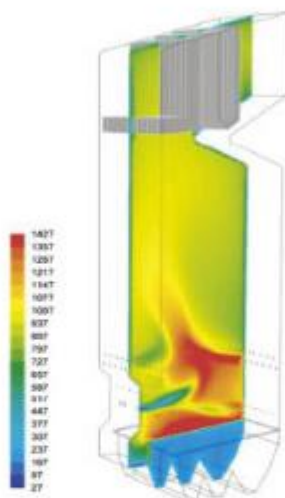
Partially assembled internal boiler drum hardware



Pipeline Compensation Calculations



Part of the OP 130 boiler



Temperature distribution in the boiler's furnace chamber

Some work done in recent years

Preparation of the Technical Design and executive documentation for the task entitled "Turnkey execution" of a comprehensive modernization of the OP 215 boiler No. 2 together with the installation for selective catalytic reduction of nitrogen oxides and auxiliary installations in **ZA Puławy "**

•

Implementation of a multi-sector revitalization project for the OP130 steam boiler at **PCC Rokita S.A. in Brzeg Dolny**. As part of the task, a technical design, as well as executive and concession documentation were prepared.

•

Comprehensive modernization of the OP650b boilers No. K1 and K2 at the **Pątnów Power Plant** as part of the "Turnkey modernization" task of the K1 and K2 boiler together with the construction of NOX emission reduction installations for these boilers at the **Pątnów Power Plant"**

•

Completion of a multi-sector project of comprehensive modernization of the OP140 boiler at Energetyka Dwory Oświęcim as part of the "Modernization of the OP140 boiler at **Energetyka Dwory Oświęcim"**.

•

Technical design, executive documentation and concessions modernization of the OP140 K1, K2, K3 boiler in IP Kwidzyń in order to ensure the optimal temperature window of the flue gases for the task. "Execution SCR installation project for KW1, KW2 and KW3 coal boilers at **International Paper Kwidzyń "**

•

Technical design, detailed documentation for the modernization of the OOG320 K1, K2, K3 and OOG420 K4, K5, K6, K7 boilers at PKN Orlen in order to ensure the optimal temperature window of the flue gas for the task: "Turnkey implementation of the installation of the catalytic denitrification plant and dedusting of combustion gases from boilers in **Power Plant PKN Oren S.A. Production Plant in Płock"**

•

Technical design, supervision over the delivery and assembly, expansion of the internal accessories of the drums, OP 230 boilers no. K7 and K9 in **PGE Energia Ciepła Oddział Wybrzeże EC Gdańsk** as part of a major overhaul of boilers.



BOILER ENGINEERING DESIGN OFFICE JOINT-STOCK COMPANY

ul. OPOLSKA 23
42-600 TARNOWSKIE GÓRY

tel. +48 32 285 46 21
fax +48 32 285 26 37
cbkk@cbkk.com.pl

GPS: N 50° 26' 49.9" ; E 18° 50' 57.8"

Department of Boilers

Kierownik: mgr inż. Ryszard Gwiazdowicz
Tel. +48 519 077 214
Centrala: +48 32 285 46 21
Fax: +48 32 285 26 37
e-mail: rgwiazdowicz@cbkk.com.pl

www.cbkk.com.pl