



Design & Engineering Services

COMPANY PRESENTATION

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April 2019

The Company

UCC PLAKON GmbH

- ✦ Engineering Services Provider & Plant Engineering and Construction
- ✦ Based in Moers/Germany
- ✦ Founded in 1991 as “Ingenieurbüro PLAKON oHG”
- ✦ Since 01st July, 2015 owned by United Conveyor Corporation, Waukegan/USA
- ✦ On the 01st July, 2017 UCC Europe GmbH & PLAKON GmbH have merged and are acting now as UCC PLAKON GmbH
- ✦ Core businesses are the general industrial plant design including all required calculations and detail engineering & supply and construction of complete ash & material handling plants



Fields of Service

The variety of our services is as diverse as the requirements of our customers.

Planning and Design

- ✦ Industrial & Plant Engineering
- ✦ Mechanical Engineering/Steel Structure
- ✦ Technical Documentation
- ✦ Design of Special Machines

Engineering

- ✦ Definition of Technology
- ✦ Process Design

Acquisition, Sales and Consulting

- ✦ Tender Preparation

Project- and Order Execution

- ✦ Project Management and Coordination
- ✦ Contract and Claim Management
- ✦ Purchasing and Logistics
- ✦ Manufacturing, Erection & Supervision

After Sales Management

- ✦ Customer Support

Our Tools

All working places are consisting of the required IT facilities of a modern engineering service provider.

Calculations

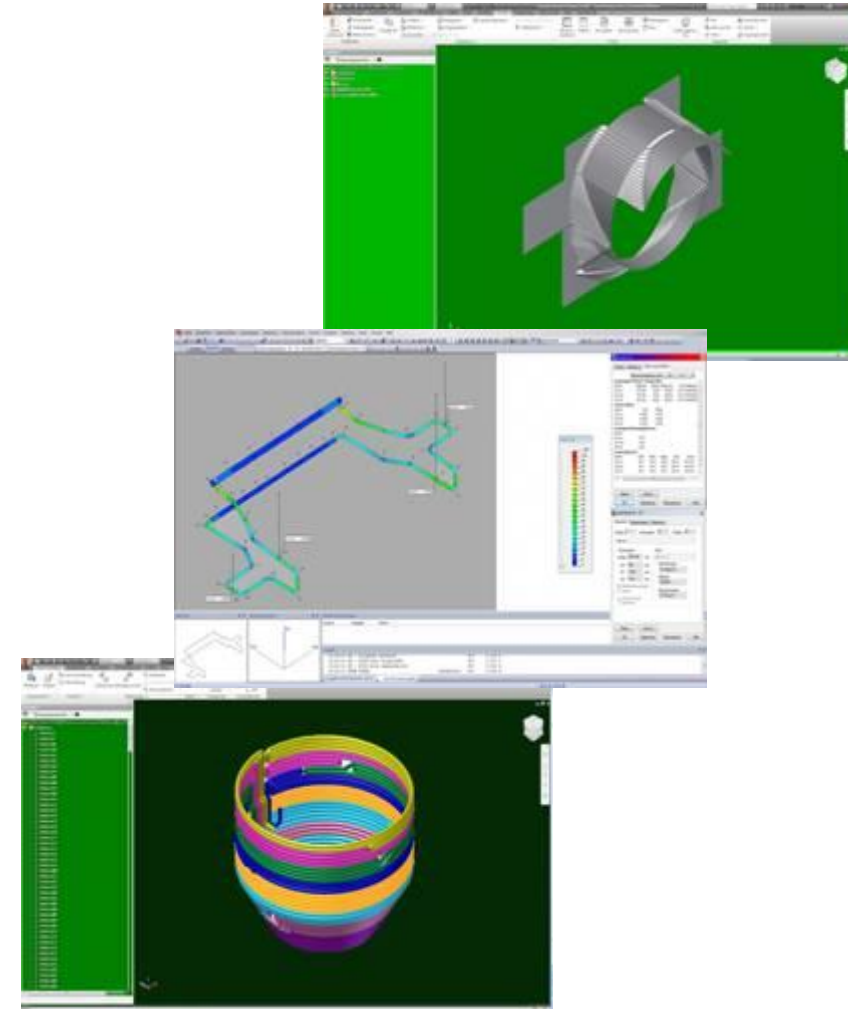
- ✦ „Probad“ (pressure acc. to TRD, EN and „Druckgeräterichtlinie“)
- ✦ „Rohr 2“ (pipe stress)

Design and engineering

- ✦ MicroStation
- ✦ AutoCAD
- ✦ Inventor
- ✦ „ROBI“ (pipe bendings)

Project Execution

- ✦ MS-Office Professional incl. PowerPoint & MS-Project



Scope of Services

Technical 1 Steam Generator Power Stations

- Engineering and design of:
- steam boilers for power plants
 - steam boilers for utility plants, power and thermal energy and for industrial plants
 - hot water boilers
 - waste heat boilers
 - CO-Boiler
 - boiler for coal gasification plants
 - waste heat plants behind gas turbines (GUD)
 - refuse incinerators for municipal and industrial waste

Technical 2 Combustion Plants

- Engineering and design of:
- combustion equipment for solid, liquid and gaseous fuels
 - circulating fluidized bed plants.

Steel Plate and Steel Structure Construction

- Engineering and design of:
- steel construction for steam generator plants
 - cold and hot air ducts
 - chutes and hoppers for coal handling plants
 - flue gas ducts
 - coal dust pipe
 - coal hopper

Technical 3 Vessel and Device Engineering

- Engineering and design of:
- vessels and apparatus for steam generator plants
 - industries and chemical plants

Technical 4 Ash and Material Handling

- Engineering and design of:
- complete ash handling plants and/or sections like dry and wet ash conveyor
 - hydraulically conveying systems (low & high density)
 - pneumatical & mechanical fly ash handling systems
 - mill rejects conveying systems
 - ash disposal & storage and other required single components
 - crusher

Technical 5 Piping Systems

- Engineering and design of:
- Piping systems, in particular high and middle pressure
 - cooling water for thermal and nuclear power stations
 - piping systems for chemical plants
 - piping systems for industrial use
 - pipeline components such as bends, collectors, manifolds, reducers, supports, structural steelwork; spray type at temporators, silencers, start-up and drain flash tanks

Boiler Construction

Boiler - Engineering

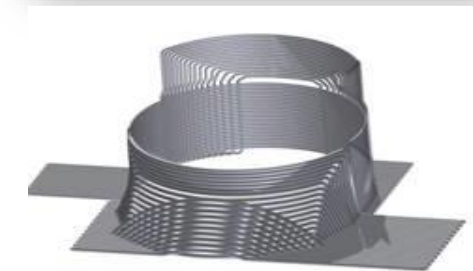
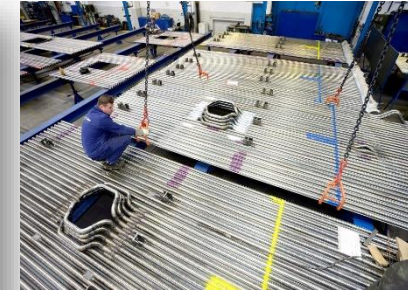
- ✧ Converter waste heat boiler
- ✧ Slag tap boiler
- ✧ „Benson“ boiler
- ✧ Boiler with natural draught
- ✧ Industrial boiler
- ✧ Waste heat boiler
- ✧ Fluidised bed boiler
- ✧ Waste incineration boiler
- ✧ Biomass boiler



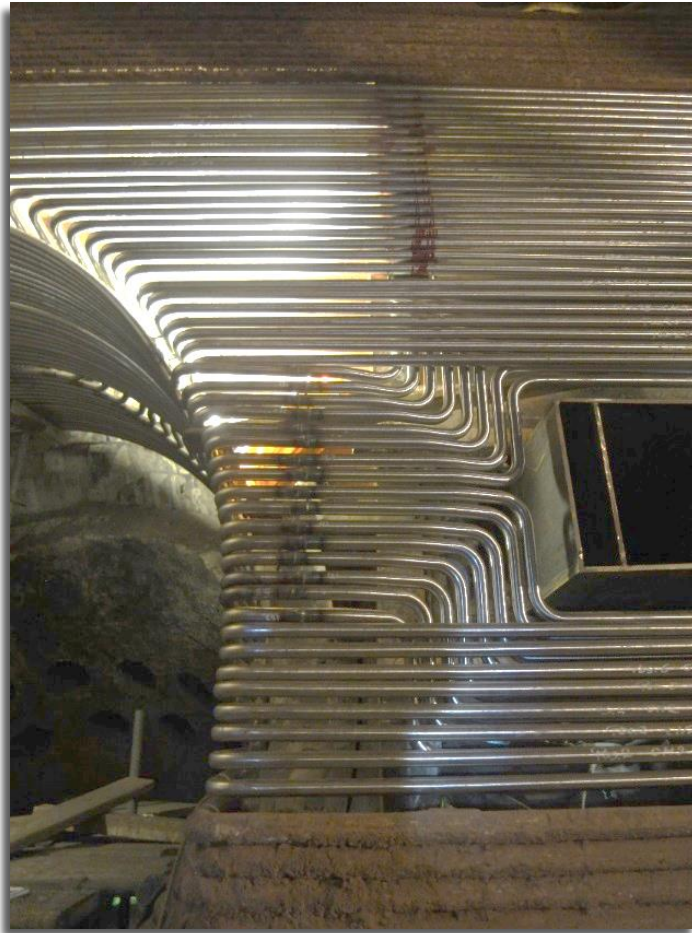
Boiler Construction

Pressure Parts

- ✦ Header
- ✦ Membrane walls
- ✦ Bendings for access-doors, sootblower, nozzles, etc.
- ✦ Slag screens
- ✦ Tube coils, supporting tubes
- ✦ Cyclones
- ✦ Drums / feed water tanks
- ✦ Connecting pipe systems



Boiler Construction



Boiler Construction

Buckstays

- ✧ Complete buckstays including fixed and loose points
- ✧ Buckstays corners
- ✧ Pendulum points

In addition, all necessary hangers and supports for header, supporting tubes for tube coils, etc. will be designed and engineered.

All necessary plate casings as for example for access doors, inspection openings and header sealing (made out of plates) are also executed by us.

All necessary pipe bending part lists, welding schedules and part lists are part of our scope of documentation.



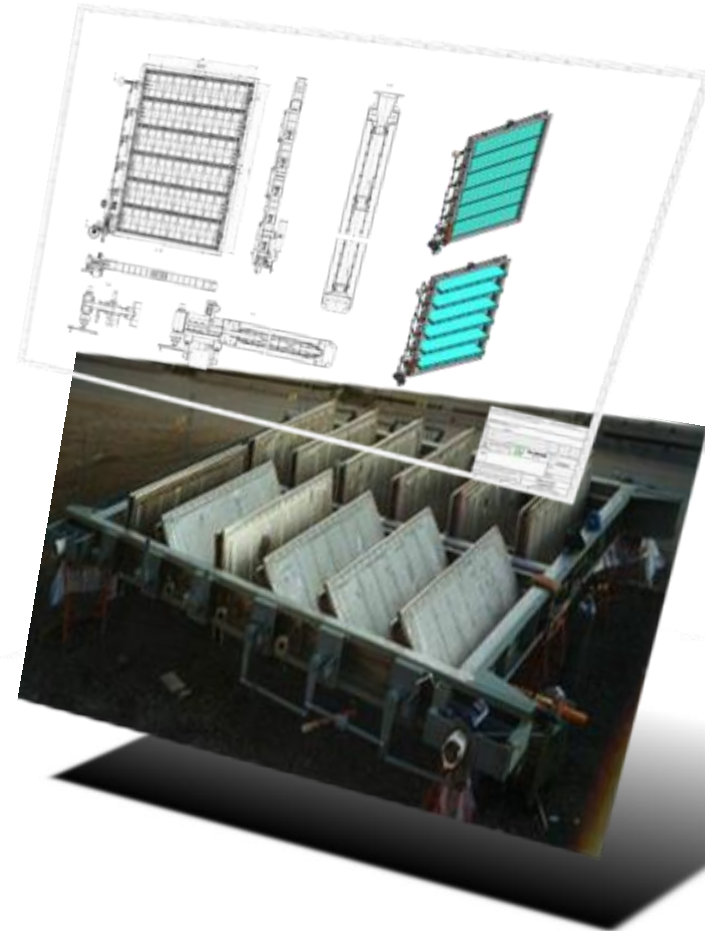
Steel Plate Construction and Dampers

Flue gas cleaning and loading systems

- ✦ Damper (various designs and types)
 - Louvre damper
 - Tandem louvre damper
 - Double louvre damper
 - Guillotine valves

- ✦ Flue gas ducts

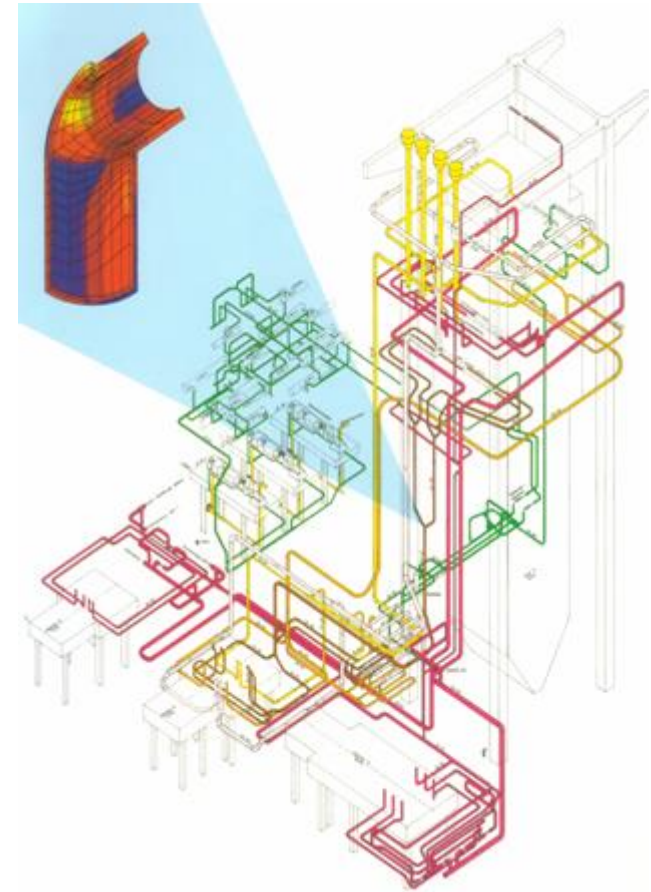
- ✦ Bunkers



Piping Systems

Pipeline systems and devices

- ✧ Dewatering systems and stations
- ✧ Piping systems for machines
- ✧ Re-cooling units
- ✧ Header
- ✧ Preheater / gasifier
- ✧ Pump stations
- ✧ Pressure piping systems
- ✧ Supporting structure
- ✧ Suspensions



Our Customers



Our Customers



ThyssenKrupp Steel



Questions

