

# Leading-edge technology solutions

Global leader in technical, engineering, project services and equipment supplier. Connected excellence in all we do.



# Comprehensive support for the life of an asset from development to decommissioning

Wood offers a full range of steam generator equipment, clean air technologies, aftermarket products and services to the power, industrial, and waste-to-energy sectors.

WoodIP global engineering, manufacturing, and procurement network delivers high-quality, cutting-edge products and services cost competitively, no matter where the project is located.

Our experience comes from designing, servicing and improving generating plants that have successfully and reliably logged over 200 million hours of operation. Wood Industrial Power operates major centers in Spain and United States.



## OUR STEAM GENERATORS



### Grate Boiler Biomass and MSW Solutions

- For utility power, industrial steam and biofuels production
- Grate technologies
- Widest fuel experience in the industry
- More than 325 biomass boilers



Fátima - Pakistán (2x60 MWe)

### Heat Recovery Steam Generators (HRSG)

- More than 450 HRSGs in the field
- Offering horizontal and vertical HRSGs for all applications ranging from large utility combined cycle plants to small cogeneration and industrial facilities



Noreste - México (2x465 MWe)

### Package Boilers

- Supplied more than 490 package boilers worldwide
- Units up to 280 tph steam capacity
- Standard and custom designs
- Proven efficient and reliable designs



Sturgeon - Canada (3x35 MWe)

### Industrial Oil & Gas Boilers (SD, MD)

- Supplied more than 300 SD and MD boilers worldwide
- Units up to 450 tph steam capacity
- Proven efficient and reliable designs



Louisiana Project - USA (75 MWe)

### Utility Oil & Gas Boilers

- More than 330 units sold
- Units in service for over 35 years logging over 25 million hours of operation
- High availability demonstrated



Port Said - Egypt (2x341 MWe)

## OUR THERMAL PRODUCTS



### Condensers

- Proven experience with more than 250 condensers sold worldwide
- Water and Air Cooled
- Operating at thermal, coal, biomass, combined cycle, oil/gas, and nuclear plants
- Ranging from 80-1,600 MWe



Yambu - KSA (5x620 MWe)

### Circular Condensers

- Standard or custom solution with proven reliability
- Operating at thermal, coal, biomass, combined cycle, oil/gas, and cogeneration plants
- Ranging from 10-80 MWe



SPP Gulf - Thailand (95 MWe)

### Feedwater Heaters

- Proven experience with more than 500 feedwater heaters sold worldwide
- Operating at thermal, coal, biomass, combined cycle, oil/gas, and nuclear plants
- Ranging from 10-1,600 MWe



Hassyan - UAE (4x600 MWe)

### Thermosolar Steam Generators

- Proven experience with more than 1 GWe sold worldwide
- Integrated design including equipment (preheaters, evaporators, superheaters and reheaters), piping, instrumentation and control



Reference Unit - ME (100 MWe)

### Solar Heat Exchangers

- Heat exchangers of steam generation system for Thermosolar Plants
- Thermal oil - Molten salt heat exchangers



Duba Green - KSA (50 MWe)



# Complete plant service and clean air solutions

## ... For utility and industrial applications

### Comprehensive Plant Service

We have improved the efficiency, availability, environmental performance and productivity of thousands of utility and industrial plants while extending their lives well into the future. We offer a full spectrum of services and equipment upgrades for boilers and air pollution control equipment.

With environmental legislation becoming increasingly stringent and competitive energy market situation, we deliver solutions for our clients by applying our detailed knowledge of the energy, utility and process industries and our design, engineering and construction expertise to deliver products, technologies and services that help our clients solve their environmental challenges.

We offer a complete range of specialist services and industry-leading products to help our clients meet their environmental objectives.

## OUR ENGINEERING AND AFTERMARKET SERVICES



### Upgrading Engineering & Retrofits

- Life extension
- Conversion to new fuels
- Upgrading and derating
- Efficiency improvements
- Boiler and heat exchanger retubing

### Environmental Upgrades

- Low NOx burners
- FGR systems
- Over fire air systems
- Retrofits AQCS (EPS, FFs)

### I&C System

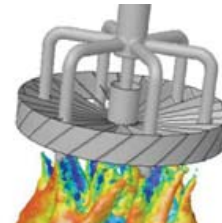
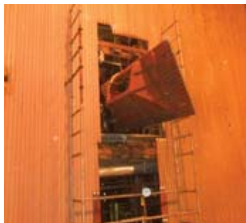
- Burner protection / Boiler management system
- Systems upgrades
- DCS systems (optimization and tuning control loops)

### Boiler Services

- Engineer feasibility studies
- Boiler inspection / condition assesment
- Support maintenance and permits procurations
- Optimization and tuning

### Replacement Parts

- Pressure parts
- Drums internals
- Auxiliary equipment
- Valves and instrumentation
- Burner's components



## OUR CLEAN AIR TECHNOLOGY



### Acid Gas and Metal Control

- Spray Dryer Absorbers
- Dry Sorbent Injection
- Wet Flue Gas Desulfuration

### Particulate Control

- Dry Electrostatic Precipitators
- Wet Electrostatic Precipitators
- Fabric Filters
- Cartridge Collectors

### NOx Reduction

- Selective Catalytic Reduction

### AQCS Services

- Renewal Parts
- Performance Enhancements
- Specialty Products
- Process Assessments



Freeport - McMoRan, Miami Smelter - AZ, USA



PPL, Montour - PA, USA (2x750 MWe)



AEP, Muskingum River - OH, USA



ESP Rebuild, USA