# ANSALDO C A L D A I E s.p.A.



# ABOUT US

With more than 1000 units accounting for about 80 GWe installed worldwide, Ansaldo Caldaie is in leading position in design, manufacturing and supply of Utility Boilers. The Company has also extensive experience with Heat Recovery Steam Generators and has installed over 100 units in Italy and abroad. Ansaldo Caldaie has its own proprietary technology for utility boilers, as well as for vertical and horizontal HRSGs, and is a Siemens licensee for the Benson Once-Through design.

# PRODUCTS AND SERVICES

Utility boilers, sub-critical and supercritical, coal, oil and gas fired

HRSGs operating downstream large gas turbines up to the maximum ratings

Biomass and Waste to Energy Boilers

In-furnace NOx emission reduction solutions (low NOx coal/gas/oil burners, OFA, Reburning injectors, Flue Gas Recirculation systems)

Rehabilitations, Fuel conversions, Retrofits of existing Steam Generators



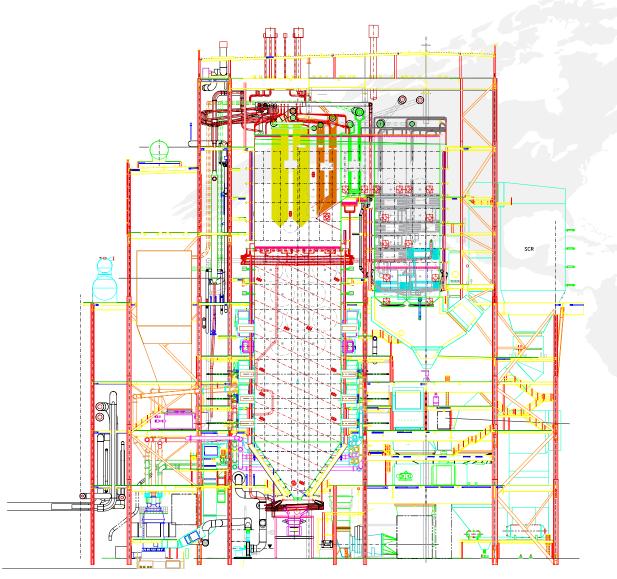
# MANUFACTURING

Own manufacturing facilities located in Gioia del Colle (BA) — Italy Overall area 300,000 sq. mt., 72,000 of which covered



# ULTRA-SUPERCRITICAL AND SUPERCRITICAL BOILERS









# TORREVALDALIGA NORTH P.P. (ITALY)

3x660 MW

Ultrasupercritical, coal fired boilers

SH Flow: 1,918 t/h

SHO pressure: 252 bar

SH/RH outlet temperature:

604/612 °C

# SUBCRITICAL BOILERS

# ULTRA-SUPERCRITICAL AND SUPERCRITICAL DESIGN

- Once-Through Benson
- Two-Pass arrangement
- Pressure above 250 bar
- SH and RH outlet temperature above 600° C for Ultrasupercritical design
- Coal Firing and/or Oil & Gas Firing
- Opposed Wall Firing Low NOx type
- · Divided Back Pass for RH Control for Coal Firing
- · Gas recycling for Oil & Gas Firing

Ansaldo Caldaie has supplied Once-Through Supercritical Boilers since 1962 and has been a Benson licensee since 1995.

### TWO PASS DESIGN FOR COAL FIRING

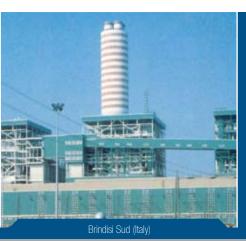
- Drum type
- Natural circulation
- High sub-critical pressure up to 180 bar





Mejillones Power Plant (Chile) 1x528 t/h coal fired boiler





BRINDISI SUD P.P. (Italy)

4x660 MW coal/oil/gas fired boilers Supercritical Once-Through

FARAKKA P.P. (India)

2x1,675 t/h coal fired boilers

RAMAGUNDAM P.P. (India)

3x690 t/h coal fired boilers

NEYVELI P.P. (India)

2x690 t/h lignite fired boilers



-arakka (India)

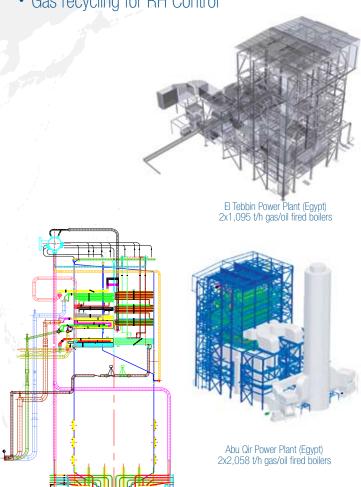
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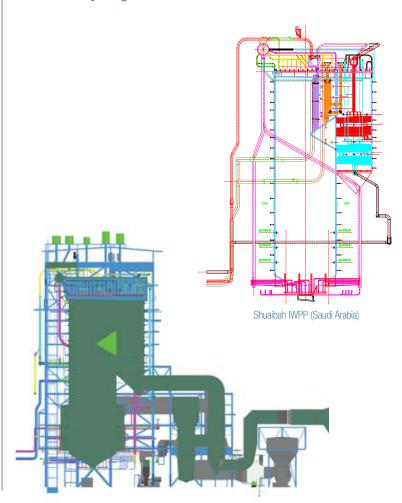
## **BOX DESIGN FOR OIL & GAS FIRING**

- Drum type
- Natural circulation
- · High sub-critical pressure up to 180 bar
- Oil & Gas Opposed Wall Firing Low NOx type
- Gas recycling for RH Control



## TWO PASS DESIGN FOR OIL & GAS FIRING

- Drum type
- Natural circulation
- High sub-critical pressure up to 180 bar
- Oil & Gas Opposed Wall Firing Low NOx type
- Gas recycling for RH Control



EL TEBBIN P.P. (Egypt)

2x1,095 t/h gas/oil fired boilers YANBU P.P. (Saudi Arabia)

1x422 t/h gas/oil fired boilers SHUAIBAH IWPP (Saudi Arabia)

3x2.018 t/h crude oil fired boilers













e-mail: factory@ansaldoboiler.it