

# RAJ BOILERS

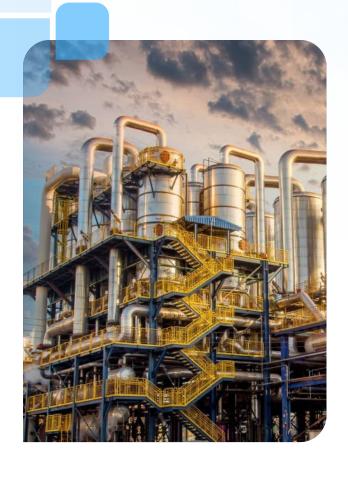












## World-Class Equipment With Best -In-Class Technology

RAJ Process Equipment & System Pvt. Ltd., established in 2003, is a rapidly growing engineering company specializing in process equipment & systems. We offer design, engineering, manufacturing, & export services, including turnkey projects. Our expertise includes Distillery, Dehydration Technology, Evaporators, Condensate Polishing Units, Spray Dryers, Rotary Dryers, Granulation Plants, Powder Handling Systems, & more. We have a reputation for delivering optimal solutions to various industries across Asia and beyond. Our focus on Technology, Service, and Customer Satisfaction drives our Success.

## **Energy Efficient Next Generation Boilers**

Raj Boilers has emerged as a renowned name in the industry, known for its commitment to excellence and delivering premium boiler solutions. Our IBR Boilers combine safety, efficiency, and reliability in a compact package. Through innovative design and engineering, we have developed combustion systems, heat transfer mechanisms, and insulation techniques that maximize heat utilization and minimize heat loss. Durability and longevity are paramount when it comes to boiler selection, and Raj Boilers excels in this regard. We source high-quality materials and employ robust construction techniques to ensure that our boilers withstand the harshest working conditions. Our commitment to sturdy construction guarantees years of reliable service, minimizing downtime and maximizing productivity for your business.



## **Package Boilers**

## **Multi Fuel Package Boiler with External Furnace**

Raj Manufacturing specializes in high-quality package boilers with external furnace made of four-sided membrane wall construction suitable for the firing of Agro Waste/Bio Mass.

The Furnace is attached to a shell-type fire tube boiler with three pass wet back arrangement to transfer the heat and generate steam. The capacity range is as below



#### Capacity

5 TPH to 25 TPH



#### **Pressure**

10.5 kg/cm2 (g) to 32 kg/cm2 (g)



#### **Temperature**

Dry and saturated steam and even 10°c to 120°c superheated steam can be provided.



#### **Fuels**

Coal, Agro Waste/ Bio Mass like wood chips, Bagasse, Saw Dust, Coconut Shells, Ground Nut Shells, Rice husk, Coffee Husk, Palm Shell, Cotton Waste etc.



At Raj, we also manufacture package boiler with smoke tubes, three pass, wet back design boilers.



#### **Features**

- Imported burners with intelligent management systems for liquid and gas fuel firing.
- Boilers with economizer/Air pre-heater
- Manual/Automatic Fuel Feeding system
- Design ensures complete combustion of fuel in furnace



#### Capacity

1 TPH to 6 TPH



#### **Pressure**

10.5 kg/cm2 (g) To 17.5 kg/cm2 (g)

10.5 kg/cm2 (g) To 17.5 kg/cm2 (g)



#### **Fuels**

Capable of firing/LDO, HSD, FO, LSHS, Natural Gas, LPG, Biogas etc.

Capable of firing Solid fuel, Coal, Briquette, Wood, agro waste etc.





## Oil Fired Boilers/ Waste Heat Recovery Boilers

Our Company cover various types of waste heat recovery boilers to handle waste gases from oil and gas, minerals, ferrous metals, Non-Ferrous metals, Glass, cement, etc.

All these boilers are custom-made and capable of giving steam and power. RAJ offers boilers for blast furnace gas, lean gas, and Fired Boilers for the steel industry.



Capacity 100 TPH



Pressure
Up to 45 kg/cm2 (g)



**Temperature** up to 520 deg C



**Fuels**Blast Furnace Gas, Coke Oven
Gas, LD gas and other lean gases.

## **Captive Plant High Capacity Boilers**

At RAJ, we offer Single drum/Bi-Drum design boilers. With membrane wall construction, horizontal drain able type super heater/ vertical coil type super heater convective type. These boilers are capable of firing LDO, FO, HSD. LSHS, Natural gas, LPG etc. The travelling grate type boilers and fluidized bed technology are offered for solid fuels with high ash content like Indian Coal, agro waste and biomass fuels. Dumping grate boilers are offered for low ash content fuels like Bagasse, Rice Husk etc.

#### **Features**

- Fully automatic DCS operated drum level and Combustion Control System Leading to minimum operating staff.
- Fast responding to load variations
- Top supported boiler with expansion allowed at the bottom and hence very effectively sealed boilers with minimum refractory. Hence low maintenance of refractory
- Pneumatic spreading/ Mechanical spreading of fuel on the Firing equipment which ensures effective burning of fuel.
- Provided with primary and secondary air to ensure proper turbulence in furnace and allow suspension burning of fuel due to proper air-fuel mixing. The range is as below



Capacity
Up to 150 TPH



Pressure
Up to 105 kg/cm2 (g)

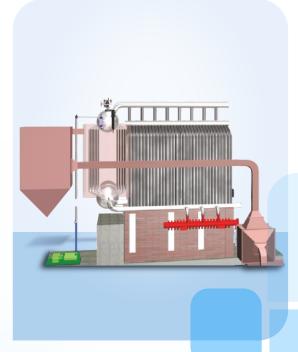


Temperature up to 540 deg C



#### **Fuels**

Coal, Bagasse, Rice Husk, Ground nut shells, Coconut Shells, Cotton Waste, Palm Shell etc. LDO, FO, LSHS, Natural Gas, LPG Bio Gas etc.



## **Turnkey Co-Generation Power Plant**

Raj Industries undertake turnkey co-generation power plants up to 30MW Capacity.

Our experienced engineers provide innovative and costeffective solutions on basic and detailed engineering for steam, combustion, and combined cycle facilities. Engineering, Procurement and Construction services combined as a single point responsibility for highest quality.





## Thermic Fluid Heater And Hot Water Boiler

RAJ Manufactures offer thermic fluid heaters and hot water boilers required for various process heat transfers. We cover wide range of heat output ranging from 0.1 Million KCal/Hr to 6.0 Million KCal/Hr

## **Boiler Accessories**

- Multicyclon Dust Collector
- Wet Scrubber
- Venture Scrubber With Vertical Cyclonic Seprator
- Pressure Reducing Station
- PRDS
- Chimney
- All Type Of Ducting
- Traveling Grate
- Pulseting Grate / Pin Hole Grate
- Dumping Grate

- Stone Seprator System
- Reciptocating Grate
- Fuel Feeding
- Screw Feeder
- Bucket Elevator
- Hopper / Bunker
- Slat Conveyor
- Coal Crusher / Coal Speader
- Bagasse Rotary / Screw Feeder
- Sliding Gate

## **Our Other Offerings**

## **Turn- key Plants**

- Distillery Plant Molasses & Grain Based
- Zero Liquid Discharge Plant
- CBG Plant
- Guar Gum
- Starch and Glucose
- Detergent Powder Plant
- MCCP
- Nutraceutical Powder Plant
- Milk Powder Plant
- Herbal Extraction Plant
- Thermal Desorption Unit
- Fruit and Vegetable Processing

## **Dryers**

- Spray Dryer
- Rotary Dryer
- Spin Flash Dryer
- Flash Dryer
- Rotary Vacuum Dryer
- Paddle Dryer
- Continuous Fluid Bed Dryer
- Steam Tube Bundle Dryer
- Cone Screw Dryer
- ATFD

## **Evaporators**

- Falling Film Evaporator
- Forced Circulation Evaporator
- Integrated and Hybrid Evaporator
- Standalone Evaporator
- MVR Based Evaporator
- Solvent Stripper
- ATFE

#### **Mixers**

- Cone Screw Mixer (Nauta Mixer)
- Ribbon Blender
- Paddle Mixer
- Continuous High Speed Mixer
- Double Cone Blender
- Plough Shear Mixer
- Conical Blender
- Conche Mixer

## **Process Equipments**

- Heat Exchanger
- Reactors
- Fermenter
- Dust Collection System
- Wet Scrubber
- Bag Filter
- Screw Conveyor
- Pressure Vessel
- Silos
- Crystallizers
- Blowers

## **Manufacturing Facility & Infra**

We have 5 Manufacturing facilities across Maharashtra, India with origin and corporate office in Pune, India. Our Company is Certified with ISO 9001 -2015, ISO14001:2015, BS OHSAS 18001:2007, ASME 'U' Stamp, 'S' Stamp, National Board 'R' Stamp.













### **State of Art Facility**

Our state-of-the-art facility is equipped with advanced machinery, including CNC drillings, CNC Turning, laser cutting machines, VMC machines, Hydraulic press, Laser welding and many other. These cutting-edge machines allow us to produce high-quality products with precision and efficiency.

















## **Customers We Served**





















































































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