

AMBRID BOILER

ABOUT AMBRID

The Ambrid boiler with its high performance and automatic modern styling confirms to the most exacting standards of safety, performance and efficiency. This boiler is manufactured with the latest engineering techniques, modern production equipment and with the expertise of highly skilled engineers and workers. The most critical parts used in ambrid are the best in the world by any standards.

The performance of Ambrid depends not only on your own alertness and on familiarity with the boiler and its components, but on its mechanical installation, running attention, and maintenance as well. Our efficient, highly qualified specially trained service personnel are available for guidance in installation, operation and maintenance of this boiler.

Ambrid Boiler is available in the Range of 3.0TPH to 10 TPH with pressure ranging from 10.54 kg/cm²(G) to 17.50 kg/cm²(G).



MULTI SOLID FUEL FIRED WATER CUM SMOKE TUBE HYBRID FBC STEAM BOILER...

The Ambrid boiler is a hybrid smoke & water tube design boiler, with the combustor based on the principal of fluidized bed combustion (FBC). The fuel bed is fluidized by the injection of air from the bottom of the bed, through a set of air nozzles, using a FD fan, This produces a fuel bed resembling a boiling fluid, which helps to achieve uniform mixing and efficient combustion.

This Ambrid –FBC Range of boiler, the higher turbulence levels, better residence time, low excess air and uniform distribution of air and fuel improve overall combustion efficiency better response to steamload.

This Ambrid FBC Boiler also offer the flexibility of firing wide variety of low cost solid fuel ie, coal, husk, agrowaste,biomass,woodchips etc, efficiently.

Singnificant user Benefits...

LARGE HEATING SURFACE AREA:-



This Ambpack boiler has extra large heating surface decreases thermal stresses on tubes resulting in long life of the boiler tube. Large heating surface reduce friction of the flue gas resulting in negligible erosion of the smoke tubes.



LARGE WATER HOLDING CAPACITY..

This AmBrid Boiler has Large steam and water space results in excellent quality of steam, Typically dryness friction of steam is 0.98 which cannot be matched by any other boile. Dry steam reduces the processing time, saves steam and improves quality of processed goods.

BED NOZZLES MATERIAL

All given nozzles are bar from forged cast steel then machined to give an operating life of over 15 years in FBC system.



MEMBRANE PANEL ASSEMBLY.

Ambrid boiler has adequate feature & Design. The panel design thought the less maintenance against high water volume. Due to high water volume has no leakage chances in membrane tube & Less thermal losses.



The Membrane panel will be made from Boiler tube of 2.5" dia meter ERW tube. & notches provided at end of tubes.

Controls & Safetys.

Law water:-

A Automatic water level controlling device (Mobray) is provided with each boiler to start & stop the water feed pump automatically with respect to water level in the water.



High Steam Pressure cut off.

In case of high steam pressure two given safety valve of top of the shell are provided to relieve the excess steam pressure and automatically shut off when relies excess steam from steam drum. Also automatic controlling device (Pressure switch) provided to maintain the steam pressure as want and cut off the ID fan automatically at set pressure.

Stack Temperature Meter.

Stack temperature meter provided due to water level goes down & mobray can not work. So that the temperature of the stack will be increase so it is help to cutoff the ID fan.

FUSIBAL PLUGE.

Fusible plug is installed two nos. in front tube plate & boilers between furnace and boiler water drum for protection of

boiler while lower water level in drum.

Failure of water supply in drum due to any fault results in lower level of water in drum, resulting in accumulation of the steam in upper part of the drum and further combustion in the furnace leads to super heating of the steam.

When water level reduces lower than predefined level, the higher temperature of the steam melts the lead of fusible plug so water from the drum falls in to the furnace and shell of boiler, wetting the fire tube and disrupting combustion in the furnace and thus preventing any damage to the boiler.

HOOTER(Alarm)

Hooter is provided inside the panel enhance the low water level in the boiler drum.

CONTROL PANEL

AMBRID has unique design & controlling parameters with provided good quality of devices.

The panel will be total Automatically on PLC Based with electrical drives. Drive enhance the low power consumption &

better result to moving parts. i.e ID Fan, F.D fan.

HIGH QUALITY

During welding procedure provide the dp testing it enhance the has no porosity & Good quality joint.



After all done weld 100% radiography examination for longitudinal & circumferential seams of shell is carried out. It enhance the better quality of joint either no defect in weld.

Easy Maintenance

Ambrid boiler Has designed as easy to operate & maintenance. Both Front & Rear Hinged doors provided for the cleaning smoke tube & Smoke box. Ash chamber provided at bottom of back side of the shell for easy to handling ash.

Also Provided Manhole & Hand Hole to cleaning the inner surface of shell.