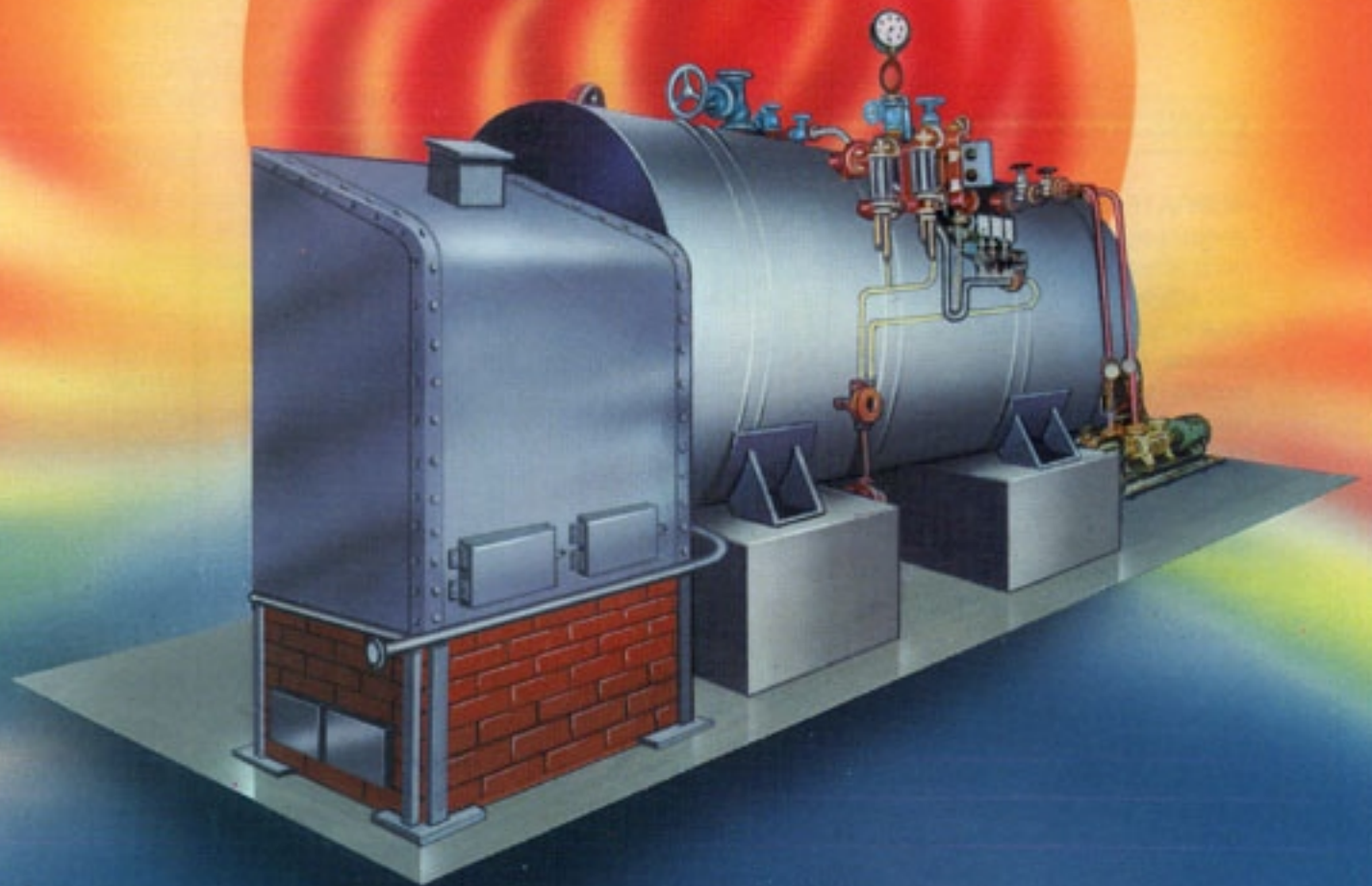


# Amba Enterprises

## STEAM BOILER





## DESIGN

Steam Boiler is a versatile, fuel efficient, multifuel, three pass, multi-tubular boiler specially designed to cater for practically any fuel.

Boiler is a perfect combination of unique dependable design, manufactured as per latest IBR Regulations, made of approved quality steel and of fully welded construction.

## CONSTRUCTION

Boiler is generously dimensioned for complete combustion of fuel and efficient transfer of Radiant heat in a gas tight water cooled furnace. A completely water cooled vertical Furnace in which flames can reach their fullest extent without coming into contact with cold surfaces ensures optimal transfer of radiated heat. Optimum refractory lining keeps the combustion temperature at the right level.

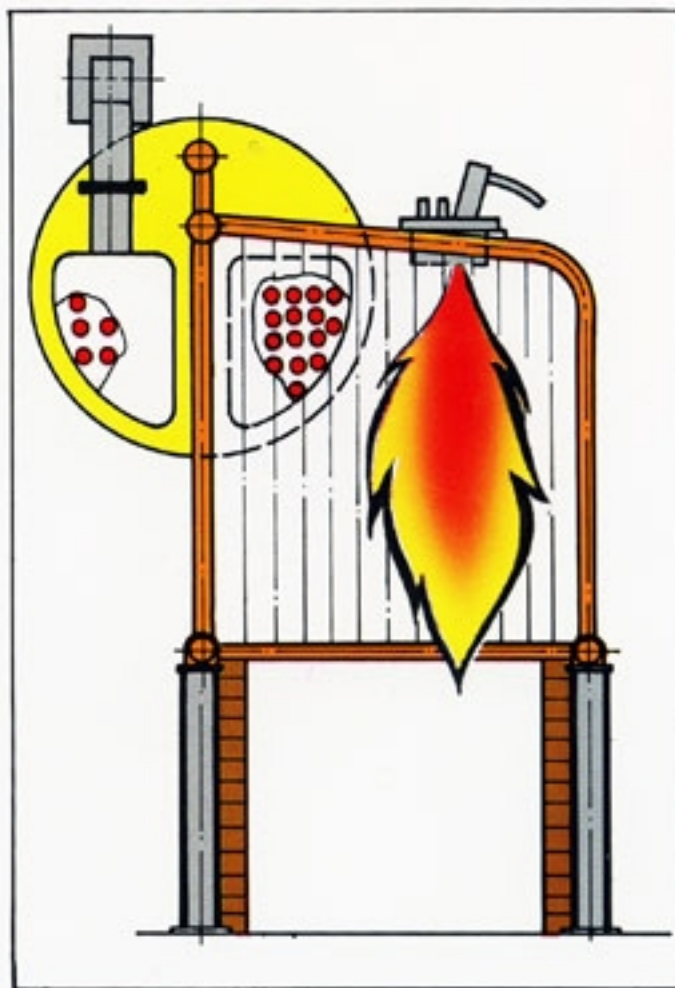
A carefully selected gas velocity guarantees an optimal transfer of heat from the gases as they pass through the second & third pass horizontal tubes. Special gas agitators inside the tubes increase the heat transfer further. boiler is insulated carefully on all sides to prevent radiation losses.

## LONG LIFE

Boiler is built from international quality boiler steel as per IBR Regulations. Perfect internal water circulation system guarantees even expansion, increasing the life of boiler. Extremely strict quality control during construction, Hydraulic tests, individual assembly tests & overall inspection of boiler on completion provides trouble free operation & longer life.

## OPERATION & MAINTENANCE

The large charging doors gives access to furnace and front end of tubes. Front Radiant furnace can be totally removed for cleaning & maintenance. Removable covers at both ends make tube cleaning/ replacement easy.



OIL FIRING





## MULTIFUEL FLEXIBILITY

Large water cooled Radiant Furnace can easily be adopted to practically any fuel.

## OIL FIRING

Forced draft, Fuel efficient pressure jet burner is mounted on top of the furnace. Flame travels downward & then reverses back to enter smoke tubes. Fuel pumping & heating unit, combustion blower and control panel is kept at operating level for easy operation and Maintenance.

## COAL - WOOD FIRING

Fuel is burnt on stationary grate for manual firing or travelling grate stoker for auto firing. Large firing doors at side facilitates for manual firing. FD fan air enters the furnace from below the grate and in the process cools the grate increasing its life. ID fan at the gas outlet maintains the correct draft in the furnace. Large ash doors at the bottom facilitates to remove the ash easily. Overfire draft is provided by secondary air fan.

## HUSK FIRING

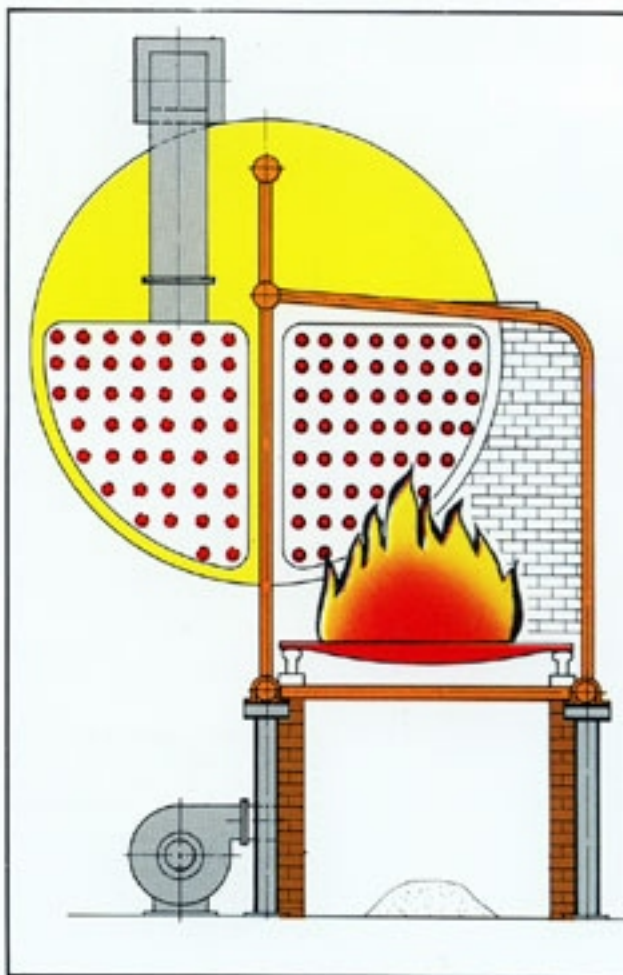
Fuel is burnt on step grate furnace initially and finally burnt on straight grate positioned at the end of step grate. ID fan at the gas outlet, maintains the correct draft in the furnace. Husk can be fed manually or automatically. Flue gas travel upward in the furnace and then enter the second pass smoke tube.

## SAFE

Boiler is equipped with boiler fittings, water level controller, low level control, steam safety valve, level indicators and necessary control equipment for safe operation. The induced draft in furnace prevents blow backs. Fail safe trips provides maximum protection to boiler. No explosion risk since furnace is made from water tubes.

## DRY STEAM

The large steam volume in the shell above the tube level ensures a steady & dry steam. Dryness Fraction of the order of 0.98 is achievable.



COAL - WOOD FIRING



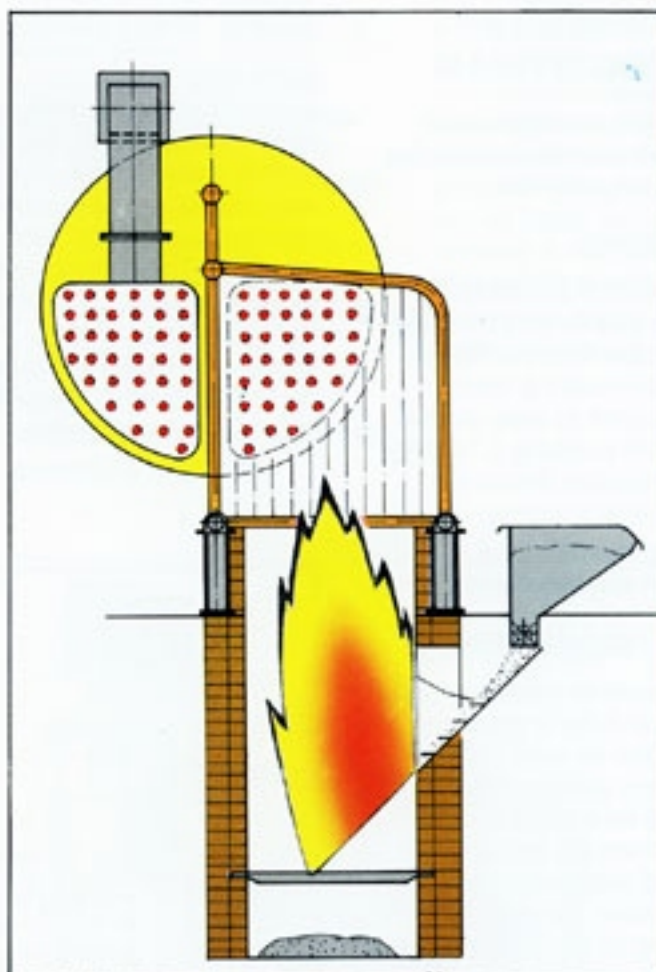
## STANDARD MODELS

steam boilers are available in 8 standard models with a working pressure of 10.54 kg/cm<sup>2</sup>g (150 psig) (F & A 100°C)

Model	Capacity
ST-10	1000 Kg/h
ST-20	2000 Kg/h
ST-30	3000 Kg/h
ST-40	4000 Kg/h
ST-50	5000 Kg/h
ST-60	6000 Kg/h
ST-70	7000 Kg/h
ST-80	8000 Kg/h
ST-100	10000 Kg/h

## OTHER RANGE OF PRODUCTS

Non-IBR Boilers, Thermic Fluid Heaters, Air Heaters, Hot water Boilers, Dryers, Heat exchangers, Waste heat boilers.



HUSK FIRING



# Amba Enterprises

C- 130, Station Plaza Basement, Station Road,

Bhandup (W), Mumbai - 400 078 Tel: 022-2566 3569

Fax: 022-2566 3550 Email: [ambaenterprises@mtnl.net.in](mailto:ambaenterprises@mtnl.net.in)

Website: [www.ambaenterprises.net](http://www.ambaenterprises.net)