



STEAMTHERM
BOILERS PVT. LTD.

STEAMTHERM
BOILERS PVT. LTD.

Advanced Process Heating Solutions
for Modern Industry

41+
YEARS OF
ENGINEERING
EXCELLENCE

COMBIMAX-FBC

**MULTI SOLID FUEL FIRED, WATER WALL MEMBRANE TYPE
STEAM BOILER WITH FLUIDISED BED COMBUSTOR**

**HIGH
EFFICIENCY**

**FUEL
FLEXIBILITY**

**LOWER
EMISSIONS**

**ROBUST
CONSTRUCTION**

**EASY OPERATION
& MAINTENANCE**



CAPACITY RANGE
1000 Kg/hr
to 20000 Kg/hr



STANDARD DESIGN PRESSURE
10.54 & 21.0
Kg/cm²(g)

www.steamthermboilers.in

BUILT STRONG. BUILT TO PERFORM.

ABOUT COMBIMAX-FBC

The COMBIMAX-FBC is a hybrid smoke tube and water tube type design boiler, with the combustor based on the principle of Fluidised Bed Combustion (FBC). The fuel bed is fluidised by the injection of air from the bottom of the air plenum chamber, through a set of air nozzles using an FD fan. This produces a fuel bed resembling a boiling fluid, which helps achieve uniform mixing and efficient combustion.

In this COMBIMAX-FBC range of boilers, the higher turbulence levels, better residence time, low excess air and uniform distribution of air and fuel improve overall combustion efficiency.

COMBIMAX-FBC boilers also offer the flexibility of firing a wide variety of low cost agro-waste and other low grade solid fuels efficiently.

KEY FEATURES & BENEFITS

- Higher combustion efficiency with uniform mixing and better turbulence
- Wide fuel flexibility – low cost agro-waste and solid fuels
- Low excess air operation for fuel saving
- Water wall membrane panels for superior heat transfer
- Lower emissions and environmental friendly
- Robust construction with long service life
- Easy operation and maintenance

APPLICATIONS



DESIGN HIGHLIGHTS



THREE SIDE DESIGN

MEMBRANE PANEL ASSEMBLY

- Special four side membrane panel assembly for optimized heat transfer in radiation zone
- In-bed tubes for higher circulation and water velocity
- Reduces the number of gaskets and stress concentration on shell tube plate
- Optimized distance between membrane panel and bed for effective heat transfer
- Tube-strip-tube construction ensures higher heat transfer and avoids phase stratification



TECHNICAL SPECIFICATIONS

Model	Steam Flow Capacity (Kg/hr)	DIMENSIONS (mm) (Approx.)			Furnace Volume (m ³) (Approx.)	Weight (MT) (Approx.)	
		L	W	H		Operation	Dry
CMX-40	1000	657	342	322	39/33	38/40	36/38
CMX-60	2000	876	456	429	30/23	48/50	39/49
CMX-80	3000	1059	570	536	53/73	69/73	58/62
CMX-100	4000	1314	684	643	90/92	90/92	75/77
CMX-120	6000	1752	912	858	109/119	109/119	90/100
CMX-140	8000	2190	1140	1073	135/139	135/139	114/118
CMX-160	10000	2628	1368	1287	171/178	171/178	149/157

Fuel Calorific Value Considered (Kcal/Kg)

Husk (NCV-2900)	Coal (NCV-5500)	Lignite (NCV-5800)	Wood (NCV-2800)
-----------------	-----------------	--------------------	-----------------

Note : Design Std-IBR. Efficiency is calculated based on NCV of Husk as 2900 kcal/kg. Above mentioned weight & dimensions may vary with actuals. Please refer to offer document for more details.



SUITABLE FUELS



STEAMTHERM
BOILERS PVT. LTD.

176, Sector-H, Govindpura
Industrial Area, Bhopal,
Madhya Pradesh – 462023

+91 9827606514
infosteammtherm@gmail.com
www.steamthermboilers.in



SCAN TO VISIT
OUR WEBSITE

High Efficiency

Fuel Flexibility

Low Emissions

Rugged Construction

Easy Maintenance

Long Service Life