



**FABCON**  
DESIGN & ENGINEERING (PVT) LTD.

# Oil & Gas Fired **FIRE TUBE BOILERS**

— OGFP Boilers

# Product Overview

**FABCON** manufactures OGFP boilers to fulfill the requirements of steam in many different process plants and industries all over the country. Our oil & gas fired package type boiler represent state of the art and innovative solution for low steam demands.

## Construction

This module includes horizontal internal combustion, two / three pass, complete wet back fire tube boilers. After fuel is atomized by burner, flame is full of the wave furnace and transfer heat via furnace wall, called 1st pass; the high temperature flue gasses are collected in reversal chamber and then enter 2nd pass, which is tube bundle area through heat convection, air temperature gradually falls and flows to front smoke box and enter 3rd pass, which is done in the another tube bundle area, and then through back smoke box lead to stack and exhausted to the atmosphere.

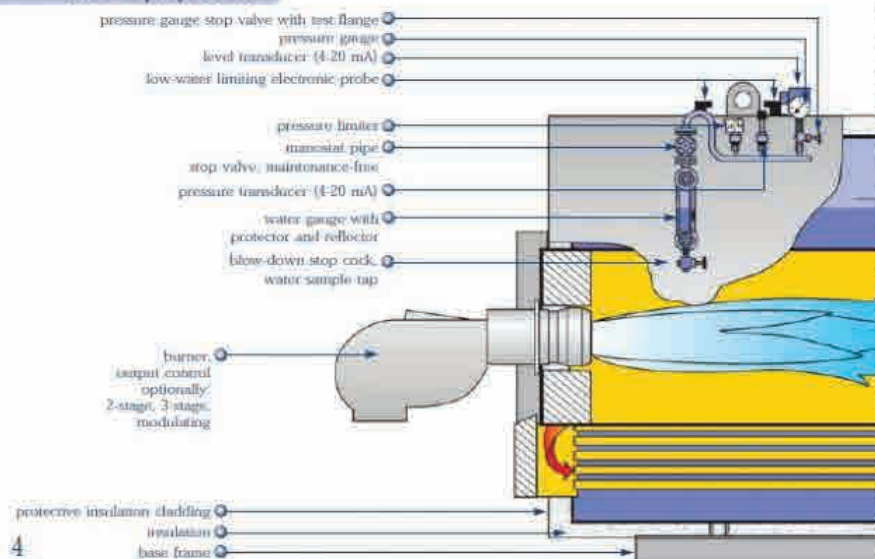
It has compact structure, small volume, strong load adaptability and low water quality requirement. It is a proprietary high tech product based on imported technology, as an integration of electronics, combustion and heat exchange. Our design offers safe, extremely efficient, reliable, high quality steam boiler built for the long term and ease of maintenance. Our boiler saves space with aesthetic appearance. After assembly, all accessories are fixed onto it. Such as blower, smoke and air ducts, meters, valves etc. In this way much time and investment is saved. The boiler is easy to manage, economical and silent, stable, quick in increasing temperature and pressure, full tonnage in stea production, it can use wide varieties of fuels in gas and oil mediums.



## Combustion and fuel

Gas is burnt in burner duct and tube-panel in the drum absorbs the heat of the flame and smoke turns water in the drum into steam. Hot gas runs through convection tubes into chimney, and open air. Burner can be designed to fire either gas or oil or both.

### The equipment

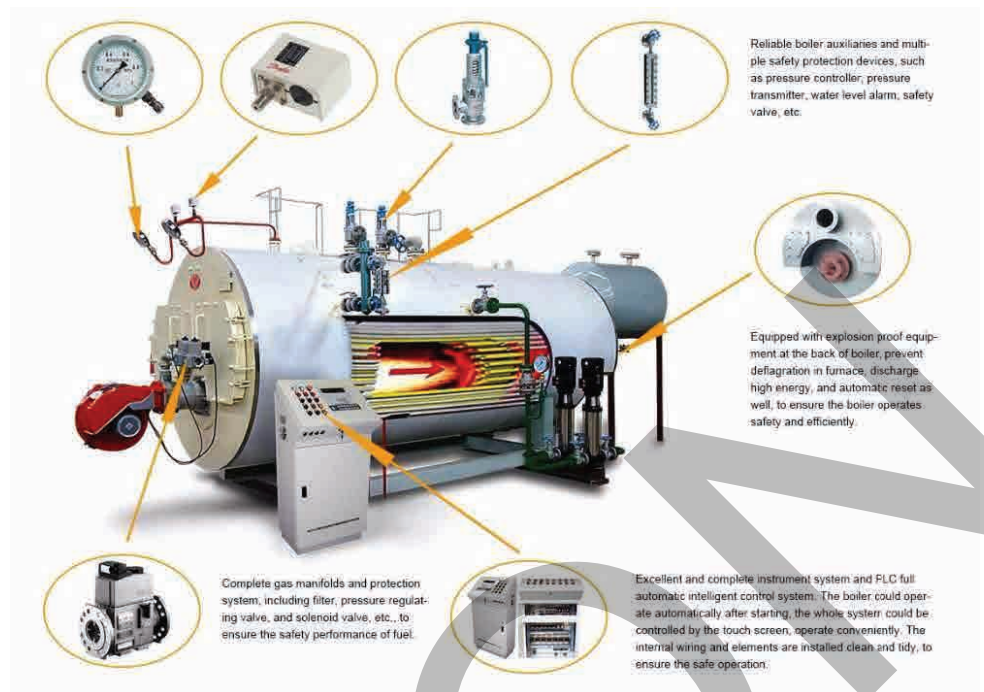


## Air System

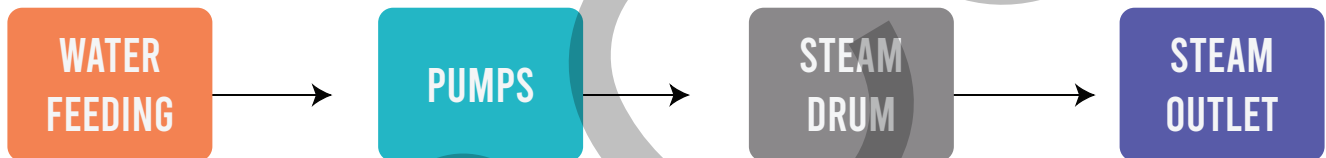
A built-in draft fan is provided with burner to provide air for fuel burning and overcome pressure drops during passes.

## Control

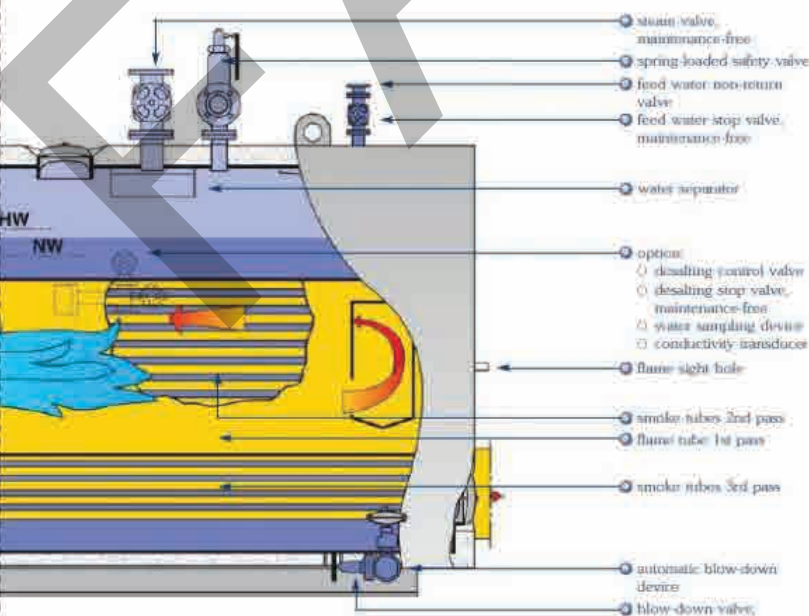
Our boiler is fitted with all necessary thermo-monitoring meters assembled on cabinet. Boiler water is fed automatically, max high and minimum low levels gauge and over pressure alarm safety protection.



## Water Scheme



## Water Scheme





# Boiler Modules



Module / Parameter			GFP/1-1.25	GFP/2-1.25	GFP/4-1.25	GFP/6-1.25	GFP/8-1.25	GFP/10-1.25	GFP/15-1.25	GFP/20-1.25
Rated capacity	t/h		1	2	4	6	8	10	15	20
Operation pressure	Mpa		1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Steam temperature	°C		194	194	194	194	194	194	194	194
Water-inlet temperature	°C		25	25	25	25	105	105	105	105
Heating efficiency	%		90	90	90	90	90	90	90	90
Heating Area	Body	m <sup>2</sup>	25	60	113	181	198	232	346	467
	Economizer	m <sup>2</sup>	5	10	16	25	25	30	46	62
Steam valve diameter		mm	PN1.6 DN50	PN1.6 DN80	PN1.6 DN125	PN1.6 DN125	PN1.6 DN150	PN1.6 DN150	PN1.6 DN200	PN1.6 DN200
		mm	PN1.6 DN25	PN1.6 DN25	PN1.6 DN50	PN1.6 DN50	PN1.6 DN50	PN1.6 DN50	PN1.6 DN65	PN1.6 DN65
Natural Gas	m <sup>3</sup> /h		85	165	325	450	645	810	1,190	1,595
Diesel	kg/hr		70	135	260	390	520	645	965	1,300
Boiler Body Assembly Size		m	1.7×1.9×3.6	1.9×2.2×4.2	2.2×2.5×4.8	2.6×3.0×5.5	2.8×3.2×6.5	2.9×3.4×6.8	3.2×3.6×7.2	3.4×3.8×8.2
Water supply	Capacity	m <sup>3</sup> /h	1.25	2.5	5.5	7.5	9	12	18	25
	Motor power	kW	7.5	7.5	7.5	10	15	18.5	22	30
Electric Load	Natural Gas	kW	2.5	6.5	13	20	22	32	51	77
	Diesel	kW	7	20	27	42	50	58	87	120

## Boiler Modules

This module has typical applications in:

- Textile Mills
- Medicine Industry
- Chemical Industry
- Garment Industry
- Food Processing Industry
- Wood Processing Industry

## Main part supply

The main parts supply includes:

Fuel Burner

Burning Chamber

Steam Drum

Evaporator

Platform

Supporting Frames

Insulation Layer

Inspection doors

Economizer

Draft Fan

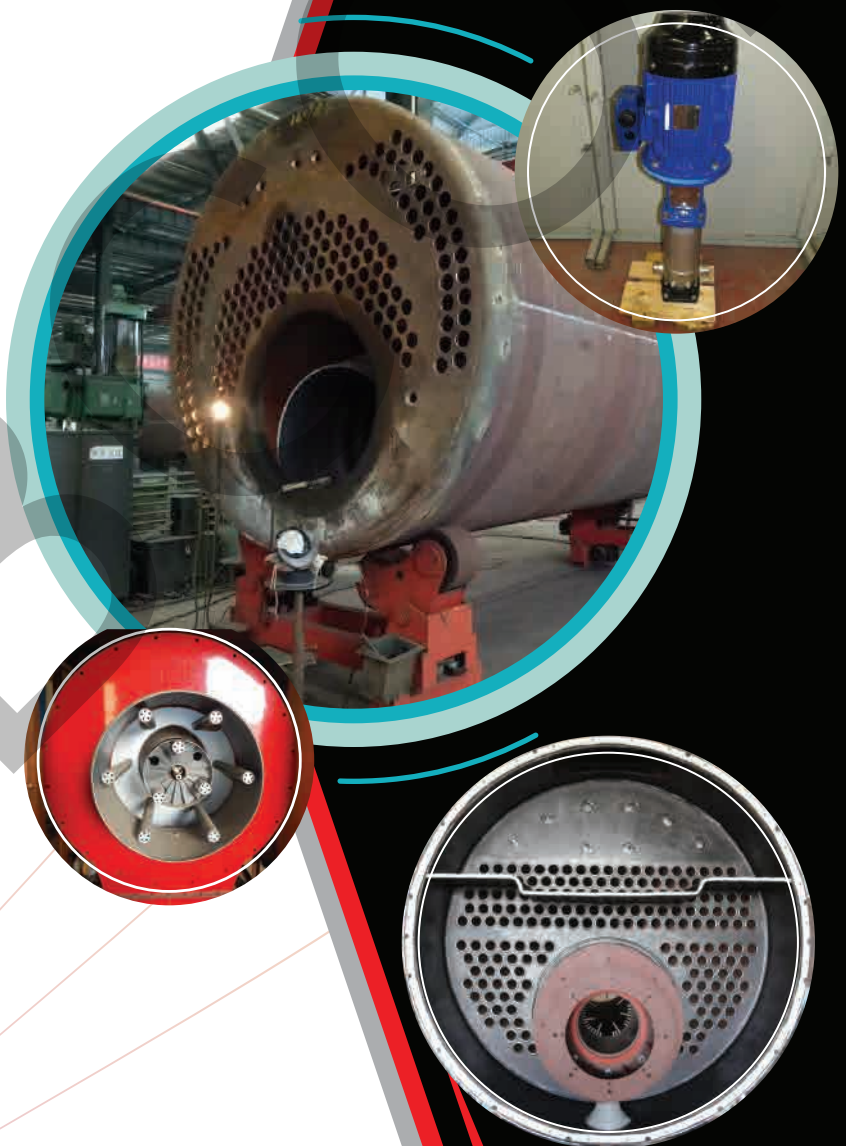
Control Panel

Feed Water Pump

Valves

Pipe Fittings

De-aerator





## Advantages:

- 1 Standard Design: Designed as per international standards and codes
- 2 Cost Efficient: Cost efficient solution due to low investment cost, minimum installation at job site and high efficiency
- 3 Ecologically Effective: Environment friendly due to low  $\text{NO}_x$  and  $\text{CO}_2$  emissions
- 4 Easy to Maintain: Maintenance and inspection of boiler is simple due to easy access through boiler front door and less costly
- 5 Safe & Durable: Safe and durable design of boiler having a long life with no parts subjected to corrosion
- 6 High Efficiency: High efficiency of about 90% due to large heating surface and state of the art design
- 7 Small Foundation: Both boiler and its accessories are assembled on minimum area with height shorter than ever hence providing small foundation area
- 8 Large Heating Surface: A large amount of heating surface provides increased efficiency, long boiler life and minimizes chances of scaling.



**Get in Touch  
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