

# MULTIPAC

The 3 pass, high efficiency, solid fuel fired Integral Furnace Boiler



## Technical specifications

Description	Unit	IFB-06D	IFB-10D	IFB-15D	IFB-20D	IFB-30D	IFB-40D
<b>PERFORMANCE</b>							
Max. Steam Output (F & A 100°C)	kg/h	600	1000	1500	2000	3000	4000
Pressure (Safety Valve Set Pr.)	kg/cm <sup>2</sup>	10.54 / 17.5					
<b>FUEL - 1</b>							
Wood, Calorific Value 3500 kCal/Kg (25% Moisture)							
Without Heat Recovery Unit	%	68				69	
With Heat Recovery Unit (APH or WPH)	%	NA	74			77	
With HRUs (APH + WPH)	%	NA				80	
<b>FUEL - 2</b>							
Coal, Calorific Value 4500 kCal/kg (10% Moisture)							
Without Heat Recovery Unit	%	70				71	
With Heat Recovery Unit (APH or WPH)	%	NA	76			78	
With HRUs (APH + WPH)	%	NA				81	
<b>FUEL - 3</b>							
Lignite							
Without Heat Recovery Unit	%	69				70	
With Heat Recovery Unit (APH or WPH)	%	NA	75			77	
With HRUs (APH + WPH)	%	NA				80	
<b>OVERALL DIMENSIONS</b>							
Length	mm	3450	3950	4450	4480	5000	4600
Width	mm	3100	3400	35900	4170	4360	5300
Height	mm	3100	3400	3600	3900	4300	4650

Note : \*As per BS 845 Part 1 indirect method.

## Options for increased savings

### Water Pre-heater

- Recovers maximum heat from boiler flue gas
- Faster steam generation
- Easy to maintain

### Air Pre-heater

- Recovers maximum heat from boiler flue gas
- Improves combustion of fuel having high moisture content
- Easy to maintain

## Pollution control

### Mechanical Dust Collector

- Efficiently extracts dust from flue gas
- Low power consumption of ID fan
- Easy removal of dust/ ash
- Space saving design

## 1 High steam purity

Multipac delivers high purity steam which increases usable heat to the process, thus reducing fuel costs. This comes from having sufficient freeboard height and large disengaging surface area. The result - dryness fraction of 98% and above

## 2 Wet back design

No refractory maintenance hassles as in dry back designs. Also, radiation loss reduced.

## 3 Protected gauge glass

Tubular gauge glass for water level monitoring.

## 4 Triple grate bar block

- Strong and sturdy - does not get easily damaged due to overheating.
- Easy to replace.

## 5 Refractory wall in reversal chamber

Re-radiation heat ensures complete combustion.

## 6 Combustion air fan

- Balanced draft system provided for coal, lignite & briquettes.
- Induced draft system for wood.
- Energy efficient, sturdy design provides primary and secondary air for combustion.

## 7 Multiple ash drain points at front & rear

- Easy ash removal from multiple points - hence no choking
- Properly sealed to ensure no heat losses nor air leakage into furnace.

## 8 Front door

Ideally designed to provide adequate access for fuel charging.

## 9 Complete combustion of fuel

- Large furnace diameter and volume for better fuel charging and higher residence time for combustion.
- Lower grate area loading allows fuel to be burnt completely & thus meet sudden demand for steam.
- Bigger reversal air chamber ensures better heat radiation and complete combustion of volatiles.

## Trouble-free operations

Imported feed water pumps, with stainless steel internals.

## Fuel flexibility

Without having to replace the boiler, with just a few modifications, it can fire coal, lignite, briquettes, wood etc.

## Engineered for reliability

Design & manufacture, using best engineering practices, ensure superior quality and uninterrupted steam to process.