**INS Model – INTECH – (Semi-Wet Back)**

* Boiler with furnace, reversal chamber & smoke tubes manufactured, tested & certified as per the IBR (Semi-wet back design)
* Front & Rear smoke boxes
* One set Induced draft fan with motor
* Two sets of Feed Water system comprising motorized feed water pump and feed water line
* One set of grate bars for fuel firing.
* One set Control panel - dust proof & pre-wired with necessary starters, MCB’s, contactors, relays, etc
* Platform, Ladder & Smoke Chamber at Boiler Shell
* One Set of the IBR quality boiler mountings comprising:
  + - 1 No. Main Steam Stop valve
    - 1 No. Blow down valve
    - 1 No. Level controller drain vlave
    - 1 No. Air vent valve
    - 2 Nos. Level controller isolation valves
    - 2 Nos. Sinlge post spring loaded safety valves
    - 2 Nos. Non-return valves in feed line
    - 2 Nos. Globe valves in feed water line
    - 2 Sets Water level gauges with glass tube
    - 1 No. Isolation valve for Pressure gauge
    - 2 Nos. Isolation valves for feed line pressure gauges
    - 1 No. drain valve for AWLC
* Instruments, Controls And Safeties:
  + - 1 Set Automatic Water Level controller for Pump On/Off
    - 1 Set Steam Pressure Gauge with siphon, on Boiler Shell
    - 1 Set Steam Pressure Switch, on Boiler Shell
    - 2 Sets Pressure gauges for feed water line
    - 1 Set Manual Control Switches for Feed Pumps/ID Fan
    - 2 Nos. Fusible Plugs
    - Alarm for Abnormal Operating conditions

**ADDITIONAL SUPPLY**

* Air Pre-heater:
  + Shell & Tube type Air pre heater
  + Ash discharge hopper
* FD Fan:
  + FD fan with motor
  + Inlet damper
* Pollution Control Equipment
  + Cyclone dust collector
  + Ash discharge hopper

## BATTERY LIMITS

* Outlet of main steam stop valve
* Outlet of water level controller drain valve
* Outlet of blow down valve
* Outlet of gauge glass drain valve
* Outlet of safety valve discharge port
* Suction and exhaust of I. D. fan
* Flue gas outlet of main boiler
* Electrical terminal connections on control panel, motors & instruments.

**EXCLUSIONS**

* Main Chimney and Flue-gas Ducting
* Raw Water, Soft water Storage and Service Tanks.
* Steam, Water Drain and blow-down piping up-to/from our terminal points.
* All civil and structural work for installing the Boiler.
* Insulation of boiler.
* Electrical work in Boiler house up-to / from our terminal points and Interconnecting cable.
* Labour, tools and tackles, utilities (water, power, air, gas etc.) and consumables required for assembling and erection.
* Water softening plant, water and drain piping.
* IBR inspection, registration and approval at your site.
* Fuel and water for the boiler; instruments and accessories for performance testing.
* Any other item not specifically mentioned in our offer.