



TYPICAL SCOPE - PACKAGE BOILERS

- Watertube Package Boiler
- Burner System with Windbox, Burner, Fuel Train and BMS
- Forced Draft Fan and Motor
- Combustion Control System
- Valves and Trim
- NRV
- Attemperator (if required for superheat)
- Sootblowers (if required for heavy oil)
- Economizer
- Support Steel
- Air Ducting
- Flue Gas Ducting
- Expansion Joint
- Dampers
- Stack
- Walkways
- Startup or Erection Supervision

EXPANDED SCOPE

- SCR for Nox Control
- CO Catalyst for CO Control
- Deaerator
- Feedwater Pumps
- Blowdown Tanks

SCOPE EXCLUDED

- Piping System to and from the Boiler System
- Interconnecting Wiring, Conduit and Raceways
- Chemical Feed Tank
- Foundations
- CEMs
- Installation/Erection of Equipment



TYPICAL SCOPE – HRSGs

- Modular Heating Surface
- Register Burner Systems with Fuel Train and BMS
- Combustion Control Instruments
- Valves and Trim
- NRV
- Attemperator (if required for superheat)
- Sootblowers (if required for heavy oil or dirty gas applications)
- Economizer
- Support Steel
- Air Ducting
- Flue Gas Ducting
- Expansion Joint
- Dampers
- Stack
- Walkways
- Startup or Erection Supervision

EXPANDED SCOPE

- SCR for Nox Control
- CO Catalyst for CO Control
- Deaerator
- Feedwater Pumps
- Blowdown Tanks

SCOPE EXCLUDED

- Piping System to and from the Boiler System
- Interconnecting Wiring, Conduit and Raceways
- Chemical Feed Tank
- Foundations
- CEMs
- Installation/Erection of Equipment



TYPICAL SCOPE – SOLID FUEL BOILER SYSTEMS

- Boiler System Proper with Furnace, Screen, Superheater and Evaporator
- Combustion System with Stoker or Fluidized Bed
- Register Burner Systems with Fuel Train and BMS
- Combustion Control Instruments
- Valves and Trim
- NRV
- Attemperator (if required for superheat)
- Sootblowers (if required for heavy oil or dirty gas applications)
- Economizer
- Support Steel
- Air Ducting
- Flue Gas Ducting
- Expansion Joint
- Dampers
- Stack
- Walkways
- Startup or Erection Supervision

EXPANDED SCOPE

- SCR for Nox Control
- CO Catalyst for CO Control
- Scrubbers
- Baghouse / ESP
- Deaerator
- Feedwater Pumps
- Blowdown Tanks

SCOPE EXCLUDED

- Piping System to and from the Boiler System
- Interconnecting Wiring, Conduit and Raceways
- Chemical Feed Tank
- Foundations
- CEMs
- Installation/Erection of Equipment



TYPICAL SCHEDULE

The following is the delivery schedule from an approved purchase order to FOB point of manufacture.

Package Boilers:

- Steam Flow up to 70,000 pph = 26 to 29 weeks
- Steam Flow 70,001 to 150,000 pph = 28 to 31 weeks
- Steam Flow > 150,001 pph = 30 to 33 weeks

HRSGs:

- Small CT HRSG = 31 to 38 weeks
- Large Dirty Flue Gas Waste Heats = 41 to 45 weeks

Solid Fuel Boilers:

- Small 60,000 pph wood VL = 28 to 32 weeks
- Small 80,000 pph coal Two Drum = 39 to 42 weeks
- Big 200,000 pph wood / coal Two Drum = 46 to 49 weeks



TYPICAL PERFORMANCE GUARANTEES

Indeck will typically provide the following performance guarantees:

- A. Steam Flow at a Steam Pressure
- B. Efficiency based on HHV of the fuel
- C. Steam Purity leaving the steam drum
- D. Steam Temperature for Superheated Units
- E. Emissions including Nox, CO, VO, Sox, PM/PM10

Alternate Guarantees could include:

- F. Noise Levels – near and far field
- G. Ramp Rate – from stand-by to full load
- H. Power Consumption – kW used by the fan motors and pump motors