Industry Leader in Boiler Parts, Manufacturing and Industrial Tube Bending
IST Boiler was established in 1975 as a certified ASME manufacturing facility and was acquired by Canerector Inc. in June of 2018.

IST Boiler manufactures and supplies boiler tubes and all parts in and around the boiler:

- Lower Furnaces / Waterwall Panels
- Superheater Sections
- Generator Banks
- Headers and Manifolds c/w Tube Stubs
- Screen Tube Sections
- Economizers
- Tube Port Openings
- Custom Tube Bending
- Pressure Parts

Our specialty is boiler parts for emergency repairs and planned outage maintenance projects. With over 150 years of in-house industry experience IST Boiler sets the Industry standards for quality, service and supply.

- Experience- IST Boiler has been in continuous operations since 1975
- Supplying boiler pressure parts for all areas of the boiler
- In plant operations minimizing the number of field operations during installations
- Extensive inventory of tubing and attachments for major boiler manufacturers available for immediate shipment, as well as manufacturing capabilities
- State of the art manufacturing technology providing maximum consistency and certified quality.
- IST Boiler is authorized to use the American Society of Mechanical Engineers (ASME) certification PP, S and U designators. IST is also authorized to use the National Board of Boiler & Pressure Vessel Inspectors authority to register, all in accordance with the applicable Code.

- 24 Hour emergency service available.
  Call 1.604.940.1556
  Email info@istboiler.com
Headers

Headers form an important part of all types of boilers. Boiler tubes that are not connected to drums are connected to headers. They collect water and steam to distribute to other parts of the boiler. Headers are typically made of carbon or alloy steel, generally of the same grade as the boiler tubes connected to them.
Ports and Openings

IST Boiler manufactures replacement waterwall opening assemblies for industrial boilers. Recently completed projects include a partial lower furnace wall replacement which consisted of burner and air port openings. Inspection ports, camera ports, and access doors of all configurations and custom tube bending is also available.
SUPERHEATER & SCREEN TUBES

- **Screen Tubes**
  The primary purpose of the furnace screen is to protect the front of the superheater from overheating. Water circulates rapidly through the screen tubes, protecting the superheater from direct furnace radiation and blocking boiler fly ash to help prevent its carryover into the superheaters platens and generating bank tubes. Screens also provide some gas cooling otherwise provided by the waterwalls.

- **Superheaters**
  Superheaters usually consist of several banks of tubes with various arrangements. Steam from the drum passes to the superheater platens, where it is heated above its saturation temperature until the maximum required operating temperature is achieved. The superheated steam then finally flows to the high-pressure turbine. Because superheater tubes operate at higher temperatures than other boiler tubes, they are often made of high alloy steels. See also side note in Generating banks/tubes.
24 Hour Emergency Service Available
Generating banks/tubes

The generating bank is a natural circulating steam generator consisting of a mix of water and steam. Fuel is burned inside the furnace creating hot gas which heats the water/steam in the front tubes of the bank. These generating tubes then carry the steam upwards while water flows down in the back tubes of the bank. Bending of these tubes is generally to a larger radius and requires the need for tube bending expertise to ensure a long life of the tubes and efficient operation of the boiler. IST Boiler has the bending expertise to deliver generating tube replacements to various industries quickly, with or without swaged ends.

Side note: larger boilers rely on the water-filled tubes that make up the waterwalls of the furnace to generate steam. The heated water rises into the drum. Here, saturated steam is drawn off the top of the drum. In most large industrial services, the steam will re-enter the furnace through a superheater to become superheated. Superheated steam is steam that has been heated to a very high temperature so that a majority of the moisture content has been removed. This then becomes a dry gas that can be used to drive the turbine.
Waterwalls

Waterwalls are the water filled tubes located around the outside of the furnace and form the walls of the furnace. The heat from the furnace is transferred to the water tubes. The hotter and less dense water flows upwards. Waterwalls are fed water from downcomers, which are pipes connected to the drum. IST Boiler has the ability to manufacture high quality waterwall panels, as well as floor and roof tube panels of various configurations using carbon steel or composite materials.
We meet our customers boiler and tube replacement needs, scheduled or in an emergency with the largest in-shop inventory of tubing in Canada and the Western United States. We’ve got the edge on our competition with 250,000’ of tubing inventory. We have in-stock tight bends, boiler parts and our fabrication dies allow us to provide everything from superheater elements to single bends.
CONTACT US

24 Hour Emergency Service Available

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604.940.1556
www.ISTBoiler.com

We are just a phone call away . . .

Whether your boiler is down and in need of emergency repair, or it requires a scheduled refit, call us at IST Boiler Inc. We’ll be there to answer any questions you may have, talk you through the process and work with you to get your boiler up and running as promised, on time, and with quality parts you can be confident will serve you well.