

FurnXpert software simplifies the job of designing and simulating industrial furnaces. The software has been developed to help furnace manufacturers/users optimize the furnace design/furnace operations by performing what-if analyses.

FurnXpert Continuous Heat Treat Pipes Application

FurnXpert Continuous Heat Treat Pipes version offers the ability to design and simulate Roller Hearth furnaces primarily used in heat treating of tubular products. The charges simulated in the software are pipes with various diameters and thicknesses.

KEY FEATURES:

Furnace Configurator: The Furnace configurator module provides users the ability to create a virtual furnace with the following parameters:

- ✓ Furnace Dimensions - Length, Width, Height of the individual zones as well as the entire furnace
- ✓ Furnace Insulation – Users can configure insulation from a list of refractory
- ✓ Furnace Muffles - Muffles shapes and dimensions
- ✓ Heating Type - The type of heating can be either electrical or gas fired
- ✓ Fuel Type – For gas fired the user can select from list of fuels
- ✓ Cooling Zones – Length, cooling gas flow, cooling gas type etc.

Charge Module: Charge can be configured by supplying new dimensions of pipes. The dimensions are diameter and thickness of pipes. The material properties are selected from a list of materials supplied with the software.

Place Charge: The center-to-center distance between the pipes must be specified. The charge orientation is end-to-end along the furnace length.

Process Parameters: The user has the ability to vary process parameters such as setpoint temperatures, Roller Speed, and process gas flows.

Results: Results include Time/Distance-Temperature profile of the furnace and pipes. Zone wise thermal loading and heat requirement are also a part of the report.

Heat Audit/Power Calculations: Calculates heat to part, refractory loss, heat to gases, and heat and energy/power consumed in different zones.

Reports: Results from each calculation can be displayed in report form, printed to a local printer or saved as a PDF file. Time-Temperature profile along with heat inputs can be exported to an **Excel file**.

Property Data: Provides the user a tool to create new charge materials, new refractory materials and new fuel parameters.

Price of the software: USD \$990 - This is a **SINGLE USER** license.

FurnXpert – Annual technical support and software maintenance

The technical support package entitles the user to help-desk support via telephone or e-mail for a period of 1 year from the date of purchase. During this period the user will also be provided with free software upgrades, as they become available.

Discounts: 5 – 10 license – 10% discount, more than 10 licenses – 15% discount