FurnXpert Heat Loss Software – Insulation Design Module



Specialisis in Thermal Applications

www.furnxpert.com



FurnXpert Refractory Heat Loss software offers the ability to run Heat Loss calculations through multiple layers of refractory. The results constitute temperature profile from the hot surface to the cold surface, Junction Temperatures, Heat Flux and Heat Storage. The analysis can be performed on a straight or curved surfaces. Transient analysis to determine temperature rise with time can also be performed with the Transient module.

We have come up with a new module *FurnXpert Insulation Design* which extends the software to perform insulation design for various applications. The design criteria takes into account safe outside skin temperatures, target heat flow rate, energy savings, and economics.



The presentation is prepared to demonstrate the capabilities and features of Insulation Design Software. The slide indexing are as follows

- Slide 4 6 The over view of the original software
- Slide 7 The over view of the new module
- Slide 8 9 Cases for Target Outside Temperature Criteria 1.
- Slide 10 11 Cases for Target Heat Flow Rate Criteria 2.
- Slide 12 Case for Fuel Costs and Savings Criteria 3.

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Unit System Metric Watt ~ Select Unit Accuracy High ~	t System – Only before creating a new Analysis
Gas Convection on Hot Side SETUP FURNAC Check this to enable Gas Convection On Hot Side ULA NAC ULA NAC CompAS Controls, Inc. P O Box 61825 Sunnyvale, CA 94085 Ph: (724) 388-0577 info@furnxpert.com www.furnxpert.com Were Lice	T E of SETTING UP and SIMULATING industrial furnaces. The software has been developed to aid process engineers and furnace operators configure their furnaces, select parts, and run what- if analysis to determine the best furnace operating parameters. Cosystems CompAS Controls, two body furnaces, written
ANALYSIS # CUSTOMER	EQUIPMENT
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Surface Name Wall Porous Gas Air Surface Orientation Vertical	Refractory List Manufacturer Product Class Max Lim D 1 B & W SR 99 (3300F) B & W Firebrick 1815 30 2 B & W 80 B & W Firebrick 1538 22
Hot Side Temp 1315 °C Surface Type Ambient Temp 32 °C °C Inside Radius 1100 mm Surface Area m²	Curved and Straight wall can be analyzed in the same form just by changing selection
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