



Tube Seal

- Reformers, (SMR, SNR)
- Coker Heaters
- Vacuum Heaters
- Convection Heaters

- Reduce energy spend
- Improve performance
- Improve safety
- Increase reliability



COLD AIR INGRESS IS NOW AVOIDABLE

Advanced Sealing & Supply Inc is pleased to present our engineered tube seal product. The above pictures show major improvements over competitor's products offered for this service. Unlike "Velcro" styles that often gap, our full top-to-bottom zipper ensures full and constant closure during thermal cycling. In addition, our fabric choices are more reliable and will not crumble due to heat exposure.

Design Features:

- Hot Side - Alumina fabric for temperatures >2,000 °F
- Middle Insulation Layer - 1/2" thick needled silica blanket
- Outside - Heat treated glass cloth, eliminates shrinkage
- Top and bottom hem protected with abrasion resistant Silica Tape
- Two spring steel strength hoops protected with abrasion coating

The use of our improved zipper closure, combined with Maxsil's needled blanket (non-crumbling due to absence of a carrier) assures long life and maximum value. Weatherproof materials are available where temperatures and environment permit.

Advanced Sealing and Supply Company Inc. **Fuel costs to offset cold air ingress on heater tubes**

Customer Name: **KNPC - MAB** Date: 9/15/2012
 Unit Description: **Iso Max #245A**

Input Values	
Number of tubes	30
Size of opening	5.750 (inches)
OD of tube	5.030 (inches)
Draft Pressure	0.29 (inches of water)
Incand Temperature	1600 (degrees Fahrenheit)
Fuel Rate	\$5.00 (dollars per MM BTU)

Calculated Output Values	
Air space at each tube penetration	6.10 (square inches)
Total open area	0.85 (square feet)
Velocity of air at penetration	15.92 (miles per hour)
Unbinned air flow into heater	1186.93 (cubic feet per minute)
Total pounds of air to heat	46.79 (million pounds)
Temperature rise required	1490 (degrees Fahrenheit)
BTUs required to heat air (annually)	16,801.01 (MM BTU)
Annual Cost to Heat Air	\$ 84,005.04

We'll analyze your heater to determine your annual energy cost savings by eliminating cold air.

Let us show you how much money you can save!