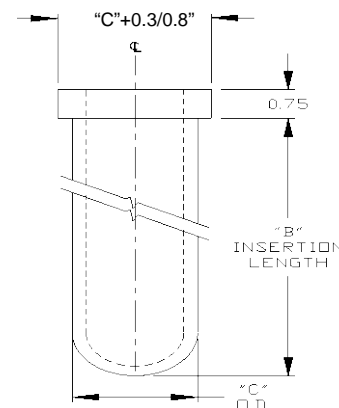


MODEL HRW REFRACTORY WELL

For use with Model HTP & HTX Claus Reaction Furnace Thermocouples

BENEFITS

- Protects thermocouple element well from thermal shock and shifting refractory.
- Prevents reaction gases from circulating into the thermocouple mounting nozzle
- Formulated material blends provide enhanced resistance to corrosion, temperature, and thermal shock



APPLICATIONS

The Model HRW Refractory Well protects the thermocouple's smaller pressure containing element well from physical damage. The HRW is placed in a hole through the refractory lining of a Claus Thermal Reaction Furnace. Its main function is to provide physical protection of the element well, a critical component of the thermocouple. This is accomplished by preventing refractory materials from encountering and damaging the element well as the refractory shifts relative to the vessel shell and mounting nozzle.

The HRW also acts to prevent thermal shock damage to the element well by partially insulating it from sudden severe changes in gas temperature, such as may be produced by steam quenching.

Several material formulations are offered. Each one enhances various physical characteristics; the various blends are formulated for characteristics of mechanical strength, resistance to thermal shock, and the ability to withstand very high temperatures.

SPECIFICATIONS

Model HRW1

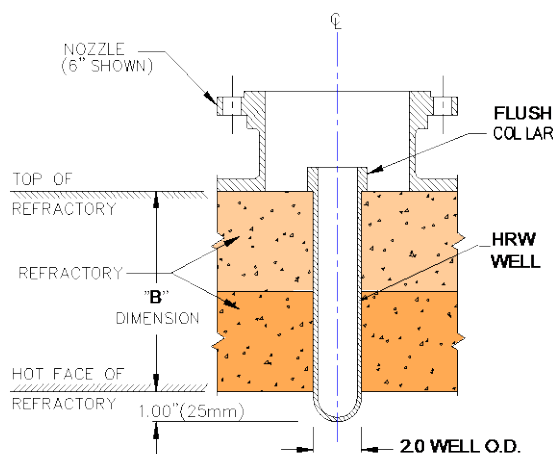
Service:	For general-purpose
Attributes:	Good mechanical strength, very good for thermal shock, good at high temperature
Temperature:	2800°F (1550°C) continuous 2900°F (1600°C) intermittent
Material:	Alumina blended with shock resisting agents
Insertion "B":	35 inches (900 mm) maximum
Well O.D.:	2.0" (51mm)

Model HRW2

Service:	For high temperatures
Attributes:	Excellent mechanical strength, good for thermal shock, excellent high temp
Temperature:	3000°F (1650°C) continuous 3200°F (1750°C) intermittent
Material:	Alumina blend; re-crystallized
Insertion "B":	35 inches (900 mm) maximum
Well O.D.:	2.0" (51mm)

Model HRWZ

Service:	Difficult and unusual applications
Temperature:	To 4000°F (2200°C) maximum



Cutaway view of Model HRW 1& HRW2 basic size installed in ANSI 4" and larger flange sizes