

Tube Furnace Atmosphere Retorts

Lindberg/MPH 59400 tube furnace atmosphere retorts are ideal for a wide range of controlled atmosphere processes. Designed for use with Lindberg/MPH tube furnace and control console systems, these retorts provide maximum operational convenience, reliability and process repeatability.

Unique construction allows maximum heated chamber size for Lindberg/MPH tube furnaces. High temperature alloy provides for maximum continuous use temperature of 1090°C (1994°F). O-ring seal embedded in a machined groove allows positive seal between door plug and retort top plate. Toggle clamps for positive plug seal and fast opening. Custom designed retorts are available for individual applications.

These versatile retorts are available in both single and double-ended models. The single-ended retorts come equipped with one removable insulated end plug and have the opposite end plugged with an atmosphere outlet pipe. These retorts can be used in both solid and hinged type tube furnaces.

Double-ended models are equipped with two removable insulated end plugs and are designed for use only in hinged type tube furnaces. All retorts are designed so that removable insulated end plugs extend from furnace ends to insure the longest possible seal life.

End plugs of larger retorts (3-inch OD and larger) are provided with an atmosphere inlet and outlet tube and one thermocouple port each. End plugs for smaller retorts (2-inch OD and smaller) are equipped with an inlet and outlet tube.

Features/Benefits

- Models to fit single and three-zone Lindberg/MPH tube furnaces
- Heliarc-welded heavy gauge stainless steel construction
- Fast, convenient fixturing of insulated end caps
- Silicone rubber O-rings end seals (optional Viton seals are also available)
- Atmosphere sealed chamber
- Combustible and non-combustible atmosphere gases

Options

- Cooling section
- Inert atmosphere flowmeters
- Retort thermocouples
- Retort locks after automatic locking of the retort plug for combustible atmospheres. Must be used in conjunction with atmosphere control system.
- When working with combustible atmospheres, a automatic-combustions, atmosphere safety system must be used. See Atmosphere Control System
- 57-inch-long, water-cooled retort section



Specifications

1200°C Tube Furnace Retort - Single End (1090°C Max. Retort Temp.)					
Model*	Retort ID (in)	Retort Depth (in)	Furnace Dia. (in)	Furnace Depth (in)	57" Cool Section
594-2X12-1	1.610	12	2.0	12	5942CS
594-2X18-1	1.610	18	2.0	18	5942CS
594-2X24-1	1.610	24	2.0	24	5942CS
594-2.5X12-1	2.067	12	2.5	12	5943CS
594-2.5X18-1	2.067	18	2.5	18	5943CS
594-2.5X24-1	2.067	24	2.5	24	5943CS
594-2.5X36-1	2.067	36	2.5	36	5943CS
594-3X12-1	2.469	12	3.0	12	5944CS
594-3X18-1	2.469	18	3.0	18	5944CS
594-3X-24-1	2.469	24	3.0	24	5944CS
594-3X36-1	2.469	36	3.0	36	5944CS
594-4X24-1	3.068	24	4.0	24	5945CS
594-4X36-1	3.068	36	4.0	36	5945CS
594-5X24-1	4.026	24	5.0	24	5946CS
594-5X36-1	4.026	36	5.0	36	5946CS
594-6X24-1	5.750	24	6.0	24	5947CS
594-6X36-1	5.750	36	6.0	36	5947CS
594-7X24-1	6.750	24	7.0	24	5948CS
594-7X36-1	6.750	36	7.0	36	5948CS
594-9X24-1	8.750	24	9.0	24	5949CS
594-9X36-1	8.750	36	9.0	36	5949CS

*For Double End, change end of model number from "1" to "2"

Retort Cooling Section			
Model	Retort ID (in)	Retort Depth (in)	Furnace Diameter (in)
5942CS	1.610	57	2.0
5943CS	2.067	57	2.5
5944CS	2.469	57	3.0
5945CS	3.068	57	4.0
5946CS	4.026	57	5.0
5947CS	5.750	57	6.0
5948CS	6.750	57	7.0
5949CS	8.750	57	8.0

1500°C Tube Furnace Retort - Single End (1090°C Max. Retort Temp.)					
59423	1.610	12	2.0	12	5942CS
59425	1.610	24	2.0	24	5942CS
59443	2.469	12	3.0	12	5944CS
59445	2.469	24	3.0	24	5944CS
59447	2.469	36	3.0	36	5944CS
59455	3.068	24	4.0	24	5945CS
59457	3.068	36	4.0	36	5945CS
59465	4.026	24	5.0	24	5946CS
59467	4.026	36	5.0	36	5946CS
59475	5.750	24	6.0	24	5947CS
59477	5.750	36	6.0	36	5947CS

