



RELIABILITY, EXPERTISE, SERVICE & SELECTION

SOLITAIRE CONVEYOR BELT FURNACES

Solitaire Conveyor Belt Furnaces are named for their compact design and popularity for brazing and bright annealing of jewelry pieces. The Solitaire is manufactured and shipped as a single piece, fully assembled, with single point connections for power, water and atmosphere. Installation couldn't be simpler.

With a standard 6" wide wire mesh belt, the Solitaire can be supplied for operation to 1800°F or 2100°F, and heated lengths to 72." Though compact, the Solitaire is a workhorse. Belt loading is variable, dependent upon production requirements, with 6 lbs per square foot standard.

PROCESS FLEXIBILITY

These furnaces are capable of performing a wide variety of process applications, including:

- Annealing
- Hardening
- Brazing
 - Glass to Metal Seeling Soldering

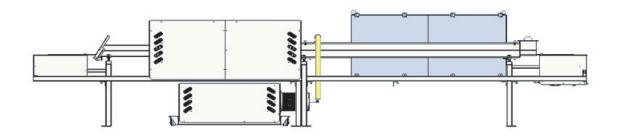
FURNACE DESIGN

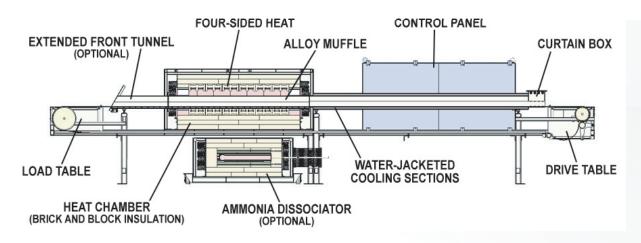
The Solitaire Furnace is engineered with process and maintenance considerations in mind. Great uniformity is achieved across the belt by a robust brick/block insulation package (high heat storage) and a set of elements that are positioned on all four sides of the heating chamber. A metallic muffle extends through the heating chamber, which further enhances temperature uniformity across the belt. Consumables are designed for dependability and a long service life. Heating elements may be replaced without unpacking the furnace, and the muffle/cooling sections may be replaced with minimal downtime. Optionally, the furnace may be equipped with an integral ADL Ammonia Dissociator that would be positioned beneath the main furnace heating chamber. Built on casters, it too is designed for ease of maintenance.



Sintering







SPECIFICATIONS	LAC-MB-030627/ADL	LAC-MB-040654/ADL
Height (Above Belt)	3" (76mm)	4" (101mm)
Width (Across Belt)	6" (152mm)	6" (152mm)
Length (Heating Chamber)	27" (685mm)	54" (1371mm)
Hearth Level	36" (914mm)	36" (914mm)
Maximum Operating Temperature	1800-2100°F (982-1148°C)	1800-2100°F (982-1148°C)
Furnace Heating Elements	6-Metallic Ribbon	6-Metallic Ribbon
Dissociator Heating Elements	6-Metallic Ribbon	6-Metallic Ribbon
Connected Load	33 KW	54 KW
Power Supply	230/3/60	230/3/60
Conveyor Belt Material	314 Stainless Steel	314 Stainless Steel
Conveyor Belt Type	Flat Mesh	Flat Mesh
Maximum Belt Loading	6#/Sq. Ft.	6#/Sq. Ft.
Conveyor Drive	Variable (0-20"/min)	Variable (0-20"/min)
Muffle and Retort	Inconel	Inconel
Cooling Section	Water-Cooled	Water-Cooled
Maximum Backpressure	5 PSIG	5 PSIG
Ammonia Dissociator Output	150 CFH	250 CFH
Floor Space Requirements	65"H x 27"W x 177"L	55"H x 33"W x 270"L
	(1651mm x 685mm x 4495mm)	(1397mm x 838mm x 6858mm)