THERMTRONIX®

NON-CRUCIBLE FURNACE

SOLID STATE GAS FIRED MELTING



THERMTRONIX® Non-Crucible furnace was designed for both continuous and batch melting aluminum operations as a durable refractory lined furnace that eliminates the use of crucibles.

THERMTRONIX® Non-Crucible furnace uses a dry hearth charging chamber. This unique feature on a small to medium size melting furnace eliminates the safety issue of operators placing cold, wet, or moisture bearing charge materials into a molten bath of aluminum. It substantially improves the operating efficiency by capturing exhaust energy to preheat and melt the new charge. It improves metal quality by leaving the slag, dross and residuals from the melt on the dry hearth where they can be easily removed. The result is less post melt processing because contaminants never enter the molten aluminum.

THERMTRONIX® Non-Crucible furnace provides full access to the entire melt chamber diameter through a manually operated top access cover. Providing operator friendly easy access for melt chamber cleaning assures the necessary routine cleaning and maintenance will be performed to extend the useful service life of all refractories.









PRODUCT BULLETIN 7502

THERMTRONIX®

ALUMINU

NON-CRUCIBLE FURNACE **SOLID STATE GAS FIRED TECHNOLOGY**

NON-CRUCIBLE MELTING FURNACE

ADDED VALUE, A STANDARD FEATURE WITH EVERY THERMTRONIX® FURNACE

- •THERMTRONIX® LOW NOx + POWER + BURNER™
 - MECHANICALLY OPERATED CHARGING DOOR
 - SAFE DRY HEARTH NON-CONTACT MELTING
 - UL LISTED FLAME SAFETY CONTROLS
 - FILTERED & DEGASSED ALUMINUM

MODEL NUMBER	ELECTRIC SERVICE 3 PHASE 60/50Hz VOLTS — AMPS *	NATURAL GAS MINIMUM LOAD @ 1.5 psi	MELT RATE LB/HR KG/HR	STANDARD ALUMINUM CAPACITY LB/KG
GC-900	240 / 480	500 SCFH	200 / LB/HR	900 LB
	10 / 5	14 SCMH	90 / KG/HR	400 KG
GC-1200	240 / 480	700 SCFH	260 / LB/HR	1200 LB
	10 / 5	20 SCMH	120 / KG/HR	550 KG
GC-1500	240 / 480	900 SCFH	330 / LB/HR	1500 LB
	14 / 7	25 SCMH	150 / KG/HR	680 KG
GC-2000	240 / 480	1000 SCFH	440 / LB/HR	2000 LB
	14 / 7	28 SCMH	200 / KG/HR	900 KG
GC-2500	240 / 480	1300 SCFH	550 / LB/HR	2500 LB
	18 / 9	37 SCMH	250 / KG/HR	1135 KG
GC-3000	240 / 480	1500 SCFH	660 / LB/HR	3000 LB
	18 / 9	43 SCMH	300 / KG/HR	1360 KG

- Other voltages available for worldwide operation consult factory.
- Melt rate will vary with type of charge material (i.e., ingot, scrap, etc.). Melt rates assume a clean dense charge, hot furnace, doors closed and proper operation.

THERMTRONIX® Non-Crucible furnace is factory equipped with a bonded particle vertical gate filter located between the melt chamber and dip-well that assures only clean, filtered aluminum enters the dip-well area. Top access allows for ease of cleaning and replacement.

THERMTRONIX® Non-Crucible furnace has a factory installed inert gas pressure regulator with flow control and adjustment to operate with our factory installed ceramic degassing device. This continuous, controlled degassing system operates at the metal entrance of the dip-well and assures superior quality aluminum is available when required.

THERMTRONIX® Non-Crucible furnace is available with an optional factory installed Safety-Tap™. This mechanical metal transfer assembly is the same device used worldwide with our larger High-Bay " furnaces. It allows the operator to stand safely behind the flow of molten metal while transferring large quantities of aluminum from the dip-well directly to a pouring ladle. The Safety-Tap™ eliminates the need for a tilting style furnace and assures clean molten aluminum is withdrawn below the surface of the molten bath.

DESIGN AND SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE

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THERMTRONIX® Top Access for Cleaning



THERMTRONIX®

Clean, Safe, Dry Hearth Melting



THERMTRONIX®

Clean Filtered Aluminum Dip-Well



Underwriters Laboratories Inc. ®

SOLID STATE FLAME SAFETY **FURNACE** CONTROLS

