ALUMINUM NON-CRUCIBLE FURNACE
SOLID STATE GAS FIRED MELTING

ENERGY SAVER

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.
# ALUMINUM

## 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

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>ELECTRIC SERVICE 3 PHASE 60/50Hz VOLTS — AMPs *</th>
<th>NATURAL GAS MINIMUM LOAD @ 1.5 psi</th>
<th>MELT RATE LB/HR KG/HR</th>
<th>STANDARD ALUMINUM CAPACITY LB/ KG</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC-900</td>
<td>240 / 480 10 / 5</td>
<td>500 SCFH 14 SCMH</td>
<td>200 / 90 LB/HR KG/HR</td>
<td>900 LB 400 KG</td>
</tr>
<tr>
<td>GC-1200</td>
<td>240 / 480 10 / 5</td>
<td>700 SCFH 20 SCMH</td>
<td>260 / 120 LB/HR KG/HR</td>
<td>1200 LB 550 KG</td>
</tr>
<tr>
<td>GC-1500</td>
<td>240 / 480 14 / 7</td>
<td>900 SCFH 25 SCMH</td>
<td>300 / 150 LB/HR KG/HR</td>
<td>1500 LB 660 KG</td>
</tr>
<tr>
<td>GC-2000</td>
<td>240 / 480 14 / 7</td>
<td>1000 SCFH 28 SCMH</td>
<td>400 / 200 LB/HR KG/HR</td>
<td>2000 LB 900 KG</td>
</tr>
<tr>
<td>GC-2500</td>
<td>240 / 480 18 / 9</td>
<td>1300 SCFH 37 SCMH</td>
<td>500 / 250 LB/HR KG/HR</td>
<td>2500 LB 1135 KG</td>
</tr>
<tr>
<td>GC-3000</td>
<td>240 / 480 18 / 9</td>
<td>1500 SCFH 43 SCMH</td>
<td>600 / 300 LB/HR KG/HR</td>
<td>3000 LB 1360 KG</td>
</tr>
</tbody>
</table>

* 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 filler 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.**

**THERMTRONIX® Corporation**

17129 Muskrat Avenue • Adelanto, CA, USA 92301 • (760) 246-4500 • FAX (760) 246-4560