

# THERMTRONIX®

## GAS-FIRED SOLID STATE ALUMINUM MELTING & HOLDING FURNACES

**THERMTRONIX®** furnaces are recognized worldwide as the **"Gold Standard"** in aluminum melting technology and can be found wherever **QUALITY** is the key word in aluminum melting.

**THERMTRONIX®** high efficiency combustion burner systems represent the leading edge of technology in gas-fired aluminum melting furnaces. The IRI type fuel train includes UL Listed and approved gas pressure switches and dual gas blocking valves, a zero governor proportional control valve, high efficiency burner, fully proportional control valve with drive motor for automatic energy efficient operation, a pilot by-pass system with automatic solenoid valve and long life flame rod. All items are factory installed, pre-plumbed and wired in the rear furnace enclosure and all Thermtronix® furnaces are system tested and shipped ready for operation.

**THERMTRONIX®** industrial control panels are built to the very highest quality and safety standards, they have earned the UL Mark of Safety. All flame safety control panels are Listed and Classified to UL Standards of Safety by Underwriters Laboratories Inc. (UL).



**THERMTRONIX®** builds added value into every furnace with standard features such as a computer designed four-component refractory insulating system for maximum energy efficiency and durability in a high performance melting furnace. All refractories are factory installed in a heavy duty fabricated steel shell for structural integrity and extended service life. Our unique "Lip Seal" design prevents flame impingement over the crucible lip, thus reducing metal contamination and dross formation from exposure to combustion by-products. A pneumatically operated insulated furnace lid with operator foot valve further reduces energy loss and surface metal exposure to the atmosphere.

**THERMTRONIX®** crucible type furnace design allows for easy alloy changes while the speed of gas-fired melting permits rapid metal breakdown and quick temperature adjustments. A refractory lined flue extension enhances the working environment and operator comfort by reducing noise levels and moving heat and fumes above operator level.

- \* **HIGH PERFORMANCE** \*
- \* **ENERGY EFFICIENT** \*
- \* **ALUMINUM MELTING** \*

**THERMTRONIX®** 100% solid state power and flame control is your guarantee for years of trouble-free operation with the most energy efficient high performance aluminum melting furnaces available on the market today. Added value can be found in every **THERMTRONIX®** solid state power control panel with standard features such as a three-point door closing mechanism interlocked to an industrial fused disconnect switch to assure electrical power isolation when operators door is opened. A flame safety monitoring system that checks for proper ignition, pilot flame, and provides a preprogrammed purge cycle before opening main gas valves. System continuously monitors for proper flame, safety interlocks, gas pressure, air pressure, electrical control power and displays both normal operating and diagnostic messages on an easy to read display mounted on the operators front panel. A solid state micro-processor based dual-display P.I.D. process temperature controller assures that only the exact amount of fuel required is used to achieve and maintain precise temperature control.

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**ADDED VALUE, A STANDARD FEATURE WITH EVERY THERMTRONIX® FURNACE**

- \* HIGH PERFORMANCE COMBUSTION SYSTEM \*
- \* FULLY AUTOMATIC POWER & TEMPERATURE CONTROL \*
- \* UL LISTED & CLASSIFIED FLAME SAFETY CONTROLS \*
- \* COMPUTER DESIGNED INSULATING SYSTEM \*
- \* ENERGY SAVING PNEUMATIC LID \*

GS SERIES MODEL NO.* LBS./AL CAPACITY	ELECTICAL SERVICE ** 3 PHASE 60/50Hz VOLTS-AMPS	NATURAL GAS SERVICE MIN. CONN. LOD 15" - 28" W/1.5 S.F.	MELT RATE LBS./HR. *** (KGS/HR.) ALUMINUM 1300F (700)	APPROXIMATE SHIPPING WEIGHT. LBS. (KGS)
GS-300	240/480 10/5	500-SCFH	100/150 LBS./ HR.(45/68 KGS)	3140 LBS (1425)
GS-500	240/480 10/5	750-SCFH	175/250 LBS./ HR.(80/113 KGS)	3635 LBS (1650)
GS-700	240/480 14/7	1000-SCFH	240/350 LBS./ HR.(110/160 KGS)	4320 LBS (1960)
GS-900	240/480 14/7	1300-SCFH	300/450 LBS./ HR.(135/205 KGS)	4560 LBS (2070)
GS-1000	240/480 14/7	1500-SCFH	350/500 LBS./ HR.(160/225 KGS)	4660 LBS (2115)
GS-1500	240/480 18/9	2000-SCFH	500/750 LBS./ HR.(225/340 KGS)	5410 LBS (2450)
GS-2000	240/480 18/9	2500-SCFH	665/1000 LBS./ HR.(300/450 KGS)	6190 LBS (2810)

\* MODEL NUMBER EQUALS CAPACITY IN POUNDS OF ALUMINUM.

\*\* MOST FURNACES AVAILABLE FOR OPERATION WITH SINGLE PHASE 120 VOLT OR 240 VOLT SERVICE AND THREE PHASE 380 VOLT AND 575 VOLT 50 HERTZ SERVICE - CONSULT FACTORY FOR DETAILS.

\*\*\* MELT RATE WILL VARY WITH TYPE OF OPERATION (I.E. TAP AND CHARGE OR BATCH MELT). MELT RATES ASSUME HOT FURNACE, CLEAN CRUCIBLE, DENSE CHARGE, LID CLOSED AND MAXIMUM POWER.

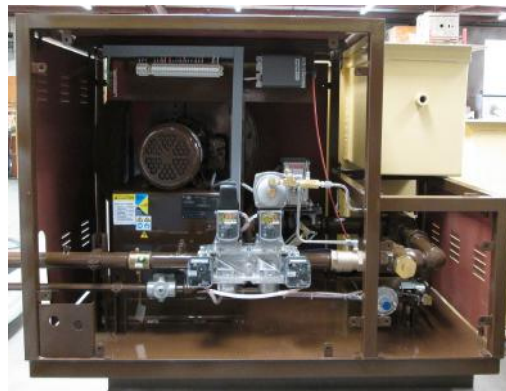
**THERMTRONIX®**, a recognized worldwide industry standard for quality aluminum melting systems now makes advanced solid state technology, precise temperature and quality control, energy efficient high performance melting available in Gas-Fired furnaces. No furnace melts faster, more efficiently, or more reliably than **THERMTRONIX®**.

DESIGN AND SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE

PRODUCT BULLETIN 1703

Web Site <http://thermtronix.com>

### HIGH EFFICIENCY COMBUSTION BURNER SYSTEM



**MAXIMUM EFFICIENCY  
HIGH PERFORMANCE MELTING**

### FACTORY ASSEMBLED PRE-TESTED AND SHIPPED READY FOR OPERATION



**HIGH PERFORMANCE  
QUALITY ALUMINUM MELTING**



**SOLID STATE POWER**  
Underwriters Laboratories Inc.  
LISTED



**THERMTRONIX®** the recognized worldwide "industry standard" for solid state aluminum melting.