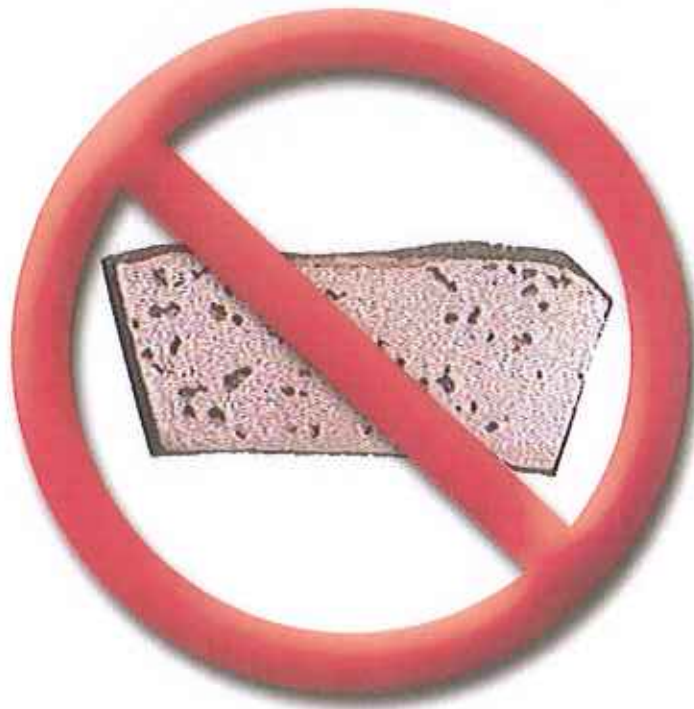


THERMTRONIX®
THE FUTURE IN ALUMINUM MELTING

Designed, Engineered, Manufactured & Owned in the USA

Q-SERIES™
QUANTITATIVE
ALUMINUM POROSITY
MEASUREMENT SYSTEM



**TAKE THE GUESS WORK OUT OF
POROSITY MEASUREMENT**

THERMTRONIX® THE FUTURE IN ALUMINUM MELTING

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System is a computerized testing device that digitally measures, displays and records, in real time, the precise level of hydrogen porosity in a sample of molten aluminum.

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System components are enclosed in a 14 gauge steel enclosure mounted to a mobile cart. The heavy duty cart uses nine inch pneumatic casters, with wheel brakes, to assure air-cushioned transport on rough floors. Included is a lower, secondary shelf with a non-conductive, non-slip surface, a 15 amp UL Listed power strip with six grounded outlets and a lockable utility drawer for ancillary supplies.

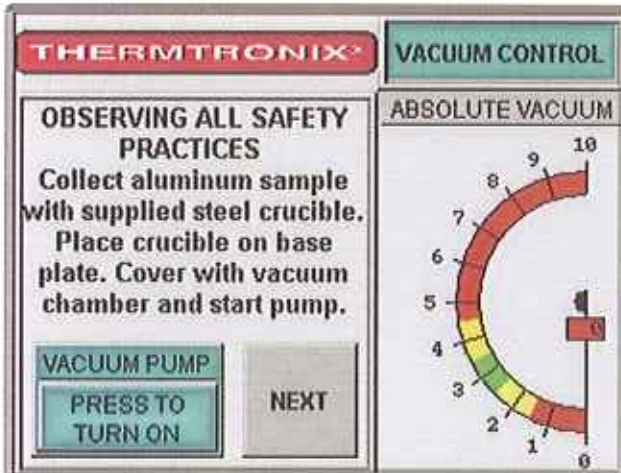


Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System utilizes an integral solid state vibration monitoring system. This monitoring device alerts the operator to external interference, further enhancing the accuracy and repeatability of test results.

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System assures digital accuracy by solidifying the molten aluminum sample in a micro-processor controlled vacuum chamber linked to the absolute pressure scale system. Using the scale of absolute pressure provides consistent measurements that are not affected by physical location, climate, local atmospheric conditions, altitude and other environmental variables.

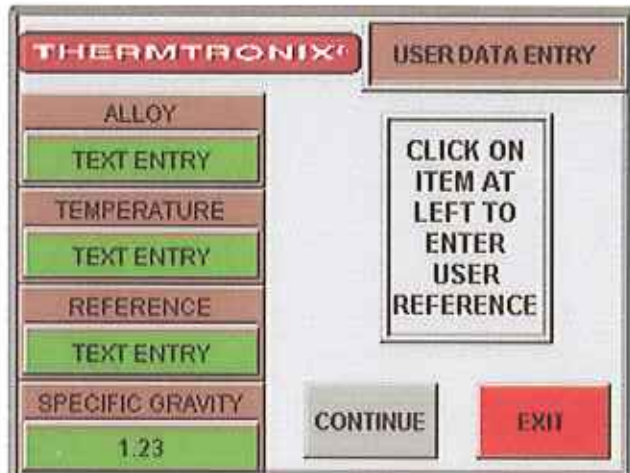
Thermtronix® Q-Series™

Quantitative Aluminum Porosity Measurement System uses a large, interactive, LCD touch screen display with system programming available in English, Spanish and French. Computer controlled, proprietary programming assures a specific sequence of events are followed for precise, consistent, digital accuracy in determining the percentage of hydrogen porosity in molten aluminum.



Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System programming assures an uninterrupted specific time frame for the sample to solidify at a measured vacuum level.

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System utilizes a deep hinged protective cover with oil-resistant perimeter gasketing and a clear polycarbonate window for easy viewing of touch screen controls. A single-point slotted latch assures a tight seal and ease of access to all operator controls.



Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System represents a generational leap in the scientific detection and quantitative measurement of hydrogen porosity in molten aluminum alloys. Previously supplied technology relies heavily on qualitative, individual interpretation of test results. This breakthrough technology provides precise, scientific, repeatable, quantitative and verifiable test results. It is not affected by geographic location or atmospheric conditions. It provides both printed and digital data for record keeping and integration into your quality control systems.

Q-SERIES™

QUANTITATIVE ALUMINUM POROSITY MEASUREMENT SYSTEM

THERMTRONIX®
THE FUTURE IN ALUMINUM MELTING

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System programming assures an uninterrupted specific time frame for the sample to solidify at a measured vacuum level.

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System uses a unique stainless steel scale fixture that allows for the sample weight to be measured in free air and completely submerged in water without reconfiguration. The computerized, digital, measurement system electronically converts the unitless ratio value of specific gravity to a precise percentage of aluminum porosity.

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System uses a large, interactive, touch screen with control programming to assure a specific sequence of events are completed in order to obtain consistent, accurate, measurements.

Thermtronix® Q-Series™ Quantitative Aluminum Porosity Measurement System uses a self-contained, bi-directional, serial impact, dot matrix printer. The printer is fully enclosed behind a gasketed, heavy steel door with a quarter turn latch for ease of access. Operator friendly touch

screen controls provide a large (3 inch wide, 7 inch long) self-ejecting, printed receipt for each tested sample.

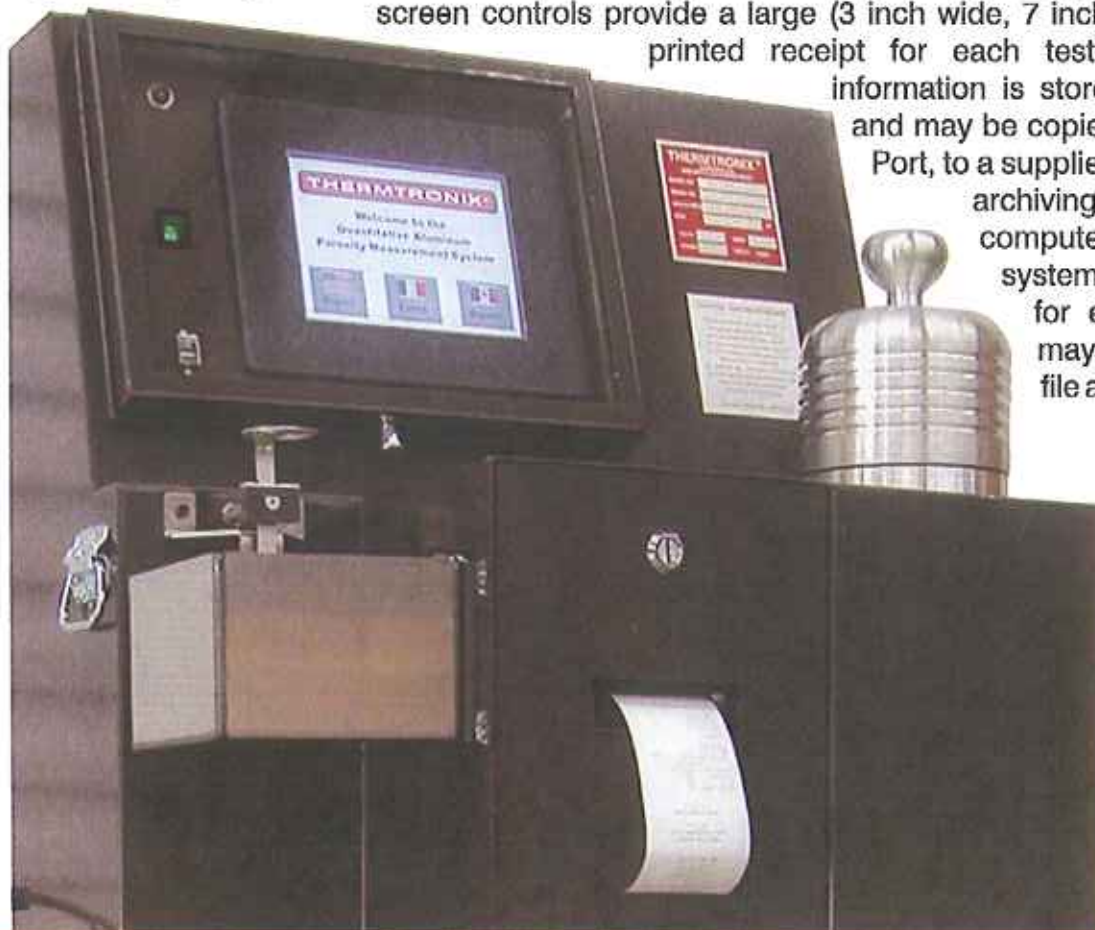
This information is stored in local memory and may be copied, via a built-in USB

Port, to a supplied flash drive for data archiving, transfer to office

computers and/or ancillary systems. All captured data

for each tested sample may be saved as a text

file and/or a jpeg image.





Thermtronix® Q-Series™

Quantitative Aluminum Porosity Measurement Systems' touch screen controls enable the printing of an individual receipt (shown below in actual size) for each sample tested. Printed test information such as heat numbers, alloy and pouring temperature are user selectable. Additional space is provided for stamps and hand written references.

THERMTRONIX CORPORATION QUANTITATIVE ALUMINUM POROSITY MEASUREMENT SYSTEM S/N 20199	
QUALITY ALUMINUM FOUNDRY ANYTOWN, IL, U.S.A.	
REFERENCE NUMBER:	123456789
ALLOY:	A356
TEMPERATURE:	1320 F
SAMPLE WAS VACUUM SOLIDIFIED AT 2.5384 INCHES Hg Abs	
VIBRATION LEVEL (IN/SEC)	0.02132
DATE: xx/xx/xx	
TIME 10:39:37	
AIR WEIGHT	139.7752g
WATER WEIGHT	73.2461g
SPECIFIC GRAVITY	2.13836
S.G. REFERENCE	2.7
% POROSITY	22.2147%
END OF REPORT *****	
(ACTUAL SIZE)	

Thermtronix® Q-Series™

Quantitative Aluminum Porosity Measurement System has a surface mounted USB port on the control panel and is factory supplied with a flash drive for data transfers.



Thermtronix® Q-Series™

Quantitative Aluminum Porosity Measurement System captures all test data and stores it in a digital format to local memory that may be displayed, printed and/or transferred to a USB flash drive. All captured data for each tested sample may be saved as a text file and/or a jpeg image.



Thermtronix® Q-Series™

Quantitative Aluminum Porosity Measurement Systems are supplied with a 120g, precision machined, serial numbered, aluminum sample for system certification and calibration.

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Thermtronix® Q-Series™
Quantitative Aluminum Porosity Measurement System is supplied with a Certificate of Calibration traceable to the U.S. Bureau of Standards.



THERMTRONIX CORPORATION

17129 MUSKRAT AVE.
ADELANTO, CALIFORNIA 92301
PHONE 760-246-4500
FAX 760-246-4550

Certificate of Calibration

Product Identification

Product: Thermtronix Q-Series
Model: Q-1000

Model: Q-1000

Certificate Information

Product: Q-1000

Model: Q-1000

Calibration Summary

Weight	Volume	Density	Porosity
10.0g	1.0000 cm ³	10.0000 g/cm ³	0.0000
20.0g	2.0000 cm ³	20.0000 g/cm ³	0.0000
30.0g	3.0000 cm ³	30.0000 g/cm ³	0.0000
40.0g	4.0000 cm ³	40.0000 g/cm ³	0.0000
50.0g	5.0000 cm ³	50.0000 g/cm ³	0.0000

This equipment has been calibrated with standards traceable to the National Institute of Standards and Technology (NIST) and is accurate to within 0.1%.

Thermtronix Corporation is a certified ISO 9001:2000 manufacturer.

Calibration Authority: National Institute of Standards and Technology (NIST) and NIST-recognized calibration laboratories.



Wetter Water
Specific Gravity Fluid

Thermtronix® has developed Specific Gravity Fluid to improve the accuracy of specific gravity measurements through the use of surface tension modifiers. Bacteriostatic compounds have been added to inhibit the growth of Algae and Odor causing bacteria. This Specific Gravity Fluid also aids in the prevention of lime scale and mineral build-up.

THERMTRONIX CORPORATION
17129 MUSKRAT AVE.
ADELANTO, CA 92301
(760) 246-4500
MADE IN USA

Thermtronix® Q-Series™
Quantitative Aluminum Porosity Measurement System includes a specially formulated surface tension modifier that provides "Wetter Water" for increased accuracy of specific gravity measurements.

NO MATTER WHERE YOU ARE LOCATED IN THE WORLD **THERMTRONIX®** IS NO FURTHER AWAY THAN YOUR TELEPHONE, FAX OR E-MAIL. VISIT US ON THE WORLD WIDE WEB.

<http://www.thermtronix.com>

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Toll Free: 800-309-6337 • Tel: ++ 760-246-4500 • Fax: ++ 760-246-4550

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INTERNATIONAL MANUFACTURING: THERMTRONIX (INDIA) PRIVATE LIMITED, CHENNAI, INDIA 600 102