Accurate Thermal Systems
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Product Catalog Index

A) FTBLL12E Fluidized Temperature Bath
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Accurate Thermal Systems
Fluidized Temperature Baths

APPLICATIONS

Thermal cleaning of tooling including:

-breaker plates
-dies
-nozzles
-tips
-screens
-metal filters
-flanges
-hardware
-paint hooks
-hardware
-and many more…….

General heat treatment of devices & materials

Heating of reactors

BENEFITS

Large working volume – 8.3” diameter by 12” depth in parts basket

4500 watt heat capacity for fast heat up

Safer to the operator and tooling versus other methods

Designed and manufactured in USA

Model FTBLL12E
Fluidized Temperature Bath

- Our most economical system
- Easy to operate for quick results
- Built rugged for years of reliable operation
- Uses safe and inert aluminum oxide sand
- Fast and efficient cleaning of tooling and parts

With over 25 years of experience with Fluidized Bath technology we have developed a range of products that offer outstanding performance, safety, features and value that are unmatched. Unlike competing Fluidized baths our systems have a seam welded tank to eliminate media loss and extend heater life.

Fluidized Temperature Baths have been the large capacity heat source of choice for over 40 years by many leading Fortune 500 companies. The thermal cleaning process breaks down all polymers and is not abrasive to immersed objects.

You too can benefit from Fluidized Bath safety, cleaning efficiency and reduced labor in your extrusion operation and tool room.

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

MODEL FTBLL12E

WHAT'S INCLUDED

-Fluidized Bath
-100 pounds of bath media
-Instruction manual

WHAT DO I NEED TO RUN THE SYSTEM

-240 VAC, 50/60hz, 20 amp supply power
-Clean dry air supply that can deliver a fixed 40 PSI at a max flow of 3.5 CFM
-Exhaust hood for ventilation

SERVICES AVAILABLE

-Technical support
-Application support
-Installation and setup
-Maintenance

V4 917

Features and Specifications

The model FTBLL12E Fluidized Temperature Bath has an easy to use dial controller for setting the bath from 100 to 1000°F. The heater light shows heater status and once flashing you allow an hour for the system to fully reach operating temperature.

Fluidizing air is manually controlled by a valve on the side of the unit. The air will need to be adjusted a few times when heating from ambient to higher cleaning temperatures and vice versa when cooling down. The bath is well insulated and safe as well as easy to use. Visit our website for videos and details on how Fluidized baths operate.

Specifications

FTBLL12E	
Temperature range	100 to 1000°F
Working volume, inches in parts basket	8 3/8" diameter x 12 depth
Overall all volume	9 1/2" diameter x 12 depth
Maximum tool cleaning capacity per batch	25 pounds
Heat up time ambient to 1000°F	140 minutes
Cool down time – 1000 to 400°F	180 minutes
Heater Power – 240 VAC	4500 watts
Air pressure & flow required, max	40 PSI, 3.5 CFM
Overall footprint, H x W x D - inches	27 x 21 x 21
Total shipping weight with aluminum oxide	185 lbs
Warranty	1 year
Order code	ATS1011
ACCESSORIES	
Retort lid	ATS1020
Parts basket	ATS1022
100 pound pail of Aluminum oxide	ATS1027
Air filter – regulator	ATS1026

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Accurate Thermal Systems
Fluidized Temperature Baths

Model FTBLL12, FTBLL26 & FTBLL12W
Fluidized Temperature Baths

- Fully automatic Fluidizing air control
- Independent over-temperature protection
- Advanced PID temperature controller for optimum results
- Built rugged for years of reliable operation
- Cleans most tooling in under 60 minutes
- Removes all types of polymer, paint, adhesives and resins

With over 25 years of experience with Fluidized Bath technology we have developed a range of products that offer outstanding performance, safety, features and value that are unmatched. Unlike competing Fluidized baths our systems offer fully automatic Fluidizing air control and an advanced PID temperature controller for thermal performance. Fluidized Temperature Baths have been the thermal cleaning source of choice for over 40 years by many leading Fortune 500 companies. The cleaning process is thermal which breaks down all polymers and is not abrasive. You too can benefit from Fluidized Bath safety, fast cleaning and reduced labor in your extrusion operation and tool room.

APPLICATIONS

Thermal cleaning of Extrusion tooling including:

-breaker plates
-dies
-nozzles
-tips
-screens
-metal filters
-feed pipe
-hardware
-or any other part with tough to remove material

General heat treatment of devices & materials

Heating of reactors

BENEFITS

Large working volume – up to 8.3” diameter by 26” depth in parts basket depending on model

Up to 6500 watts of heat capacity for fast heat up

Safer to the operator and tooling versus other methods

Designed and manufactured in USA

CE marked

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

MODEL FTBLL12 & FTBLL26

FEATURES AND SPECIFICATIONS

WHAT'S INCLUDED

-Fluidized Bath
-full charge of bath media
-Instruction manual

WHAT DO I NEED TO RUN THE SYSTEM

-240 VAC mains, 50/60 Hz, 20 amps for FTBLL12
30 amps for FTBLL26 & FTBLL12W
-Clean dry air supply that can deliver a fixed 40 PSI at a max flow of 4.0 CFM
-Exhaust hood for fumes

SERVICES AVAILABLE

-Technical support
-Application support
-Installation and setup
-Maintenance

V7 318

The model FTBLL12 and FTBLL26 use a PID temperature controller that has four control zones for improved thermal results. Independent over temperature protection will disable heat if the temperature exceeds 615°C or in the event of a system failure. The systems are double fused for improved safety and include an RS485 computer interface for connection to a PC with downloadable software from our website.

Fluidizing air is automatically controlled by a four step process that adjusts the air flow as the system ramps up and cools down making our systems turn-key and easy to use. The flow rates can be visually verified by the front panel air flow meter.

Contact us today to request a quotation or for application assistance.

Specifications & Ordering info

	FTBLL12	FTBLL26	FTBLL12W
Temperature range	50 to 605°C (122 to 1121°C)		
Working volume in parts basket - dia. X depth	8 3/8" x 12"	8 3/8" x 26"	12 3/8" x 13"
Stability at 500°C, better than -	±1.0	±1.5	±1.5
Heat up time to 600°C, 240V supply	150 minutes	180 minutes	200 minutes
Cool down time – max to 200°C	150 minutes	210 minutes	180 minutes
Power consumption – 240 VAC	4500 watts	6200 watts	6500 watts
Air pressure & flow required, max	50 PSI, 4 CFM	50 PSI, 4 CFM	60 PSI, 8 CFM
Overall footprint, H x W x D - inches	27 x 24 x 21	41 x 24 x 21	37 x 30 x 26
Operating weight with aluminum oxide (pounds)	210	360	350
Cleaning Capacity (pounds)	25	50	60
Order code	ATS1012	ATS1013	ATS1017
Warranty	1 year		
STANDARD ACCESSORIES			
Retort lid	ATS1020		ATS1087
Extraction collar/ exhaust port	ATS1021		Included
Standard parts basket	ATS1022	ATS1024	ATS1088
Basket for use with extraction collar	ATS1023	ATS1025	N/A
Aluminum oxide – 100 pound pail	ATS1027		
Parts basket cooling stand & sieve	ATS1041		

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Accurate Thermal Systems
Fluidized Temperature Baths

APPLICATIONS

Thermal cleaning of small Extrusion tooling and Polymer Rheometer and Melt Flow Indexer parts

Nitinol stent shape setting

Temperature sensor and system calibration

Reactor Heating

General heat treatment of devices & materials

BENEFITS

Compact working volume – 5.3” diameter by 6” depth

Portable – only 45 lbs with aluminum oxide

Flexible lid for immersing parts basket and temperature probes for calibration

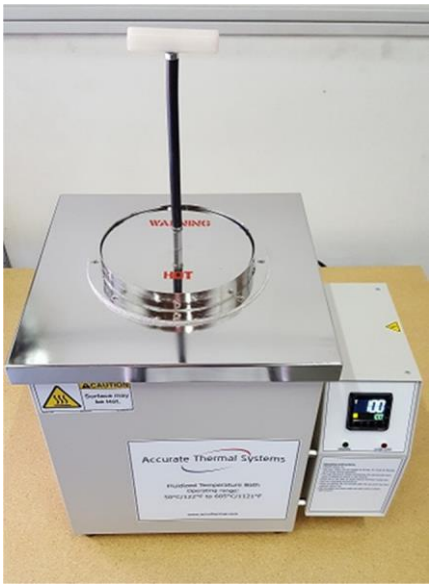
1900 watt heat capacity

Excellent stability, uniformity & accuracy

Designed and manufactured in USA

CE marked

Model FTBSL6 Laboratory Fluidized Temperature Bath



- Fully automatic Fluidizing air control
- Cover and lid design that minimizes media loss
- Independent over-temperature limit protection
- Fast heat up
- Compact size for placement on standard lab benches
- RS485 interface for PC connection & downloadable Windows software

With over 25 years of experience with Fluidized Bath technology we have developed a range of products that offer outstanding performance, safety, features and value that are unmatched. Unlike competing Fluidized baths our systems have a smaller footprint, include advanced features and cost thousands of dollars less. They are much safer than salt baths with thermal response that is 2 to 3 times faster than ovens.

Fluidized Temperature Baths have been the heat source of choice for over 20 years by many leading Fortune 500 Plastics and Medical Device manufacturers as well as companies who require fast heat up of their immersed devices, sensors and materials with minimal quenching.

ACCURATE THERMAL SYSTEMS

BETTER BY DEGREE

MODEL FTBSL6
FLUIDIZED TEMPERATURE BATH

WHAT'S INCLUDED

-Fluidized Bath
-20 pounds of media
-Bath cover and Lid
-Instruction manual

WHAT DO I NEED TO RUN THE SYSTEM

-120 VAC mains, 50/60hz - 20 amp supply or 240 VAC mains, 50/60hz 10 amp supply
-Clean dry air supply at a fixed 30 PSI, max flow of 1.8 CFM

SERVICES AVAILABLE

-Technical support
-Application support
-Installation and setup
-Maintenance

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Features and Specifications

Unique bath cover and lid design that minimizes media loss. Media is either blocked by the lid or collected on the cover flange which then drops back into the system.

The included lid with handle is lowered into the Fluidized Bath for cleaning parts, heat treating or calibrating temperature sensors as shown.

An eyelet is added to the lid for suspending an optional basket for parts cleaning or device heat treatment.

The optional probe support will suspend temperature sensors and thermometers into the Fluidized Bath for calibration. The probe holder immersion depth can be adjusted for added flexibility. Drill holes into the lid for the diameters you require.

The lid is easily modified for immersing apparatus, assemblies and small reactors for heating.

Bath Lid with Probe support

Bath Lid with Parts Basket

FTBSL6 Specifications & Ordering

Temperature range	50 to 605°C	
Working volume	5.3" dia x 6" depth (134mm x 152mm)	
Typical stability thru operating range	±0.3°C	
Dead bed stability (5 minute period)	±0.04°C	
Calibrated accuracy	±2.0°C	
Heat up time to 600°C from ambient	70 minutes	
Cool down time – 600 to 200°C	130 minutes	
Heater Power – 1 phase, 50/60 hz	1920 watts	
Air pressure & max flow required	30 PSI, 1.8 CFM (2.1 bar, 50 lpm)	
Overall footprint, H x W x D	15"x17"x13" (381mm x 432mm x 330mm)	
Total unit weight with aluminum oxide	45 lbs (20kg) (unit only 32 lbs, 14.5kgs)	
Warranty	1 year	
Catalog number	ATS2016– 120VAC	ATS2018 -240 VAC
Recommended spare lid	ATS1078	
Parts Basket – 3.0" ID x 4.6" depth, 1.5 lbs max capacity	ATS1080	
Parts Basket – 3.8" ID x 2.4" depth, 1.5 lbs max capacity	ATS1089	
20 pound box of Aluminum oxide	ATS1076	
Probe support – 4" OD x 6" depth	ATS3082	

Accurate Thermal Systems
Fluidized Temperature Baths

APPLICATIONS

Nitinol stent shape setting

General heat treatment of devices & materials

Temperature sensor and system calibration

Heating of reactors

Thermal analysis of circuits & components

BENEFITS

Large working volume – 7.3” diameter by 15” and 25” depth

4000 and 6000 watt heat capacity

Excellent stability and uniformity throughout operating range

Designed and manufactured in USA

CE marked

Accurate Thermal Systems

Model FTBSL15 & FTBSL25
Fluidized Temperature Baths

Model FTBSL15 with particulate collar

- Fully automatic Fluidizing air control
- Advanced 4 temperature zone PID controller
- Cover and lid design that controls and minimizes media loss
- Independent over-temperature limit protection
- Included RS485 computer interface with Windows PC control and scheduling software
- Optional interface for control from any PC on the corporate network

With over 25 years of experience with Fluidized Bath technology we have developed a range of products that offer outstanding performance, safety and value that are unmatched. Unlike competing Fluidized baths our systems have a smaller footprint, include advanced features and cost thousands of dollars less and are much safer than salt baths with thermal response that is 2 to 3 times faster than ovens. Our systems offer a versatile and open workspace while providing excellent temperature stability and uniformity.

Fluidized Temperature Baths have been the heat source of choice for over 20 years by many leading Fortune 500 medical device manufacturers and research companies who require fast heat up of their immersed devices and materials with minimal quenching.

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

MODEL FTBSL15 & FTBSL25

WHAT'S INCLUDED

-Fluidized Bath
-bath media
-Bath cover and Lid
-RS485 interface, cable and Windows PC software
-Instruction manual
-particulate extraction collar

WHAT DO I NEED TO RUN THE SYSTEM

-240 VAC mains, 50/60hz - 20 amp supply (FTBSL15)
-30 amp supply (FTBSL25) - Clean dry air supply at a fixed 50 PSI, max flow of 3.5 CFM

SERVICES AVAILABLE

-Technical support
-Application support
-Installation and setup
-Maintenance

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Features and Specifications

Accurate Thermal Systems have developed an innovative cover and lid system that minimizes media loss out of the bath opening keeping the operating area cleaner and media loss to a minimum. Media is either blocked by the lid or collected on the cover flange which drops back into the system. The included particulate exhaust collar when used with an exhaust blower and cyclone will capture media when it rises out of the bath.

The lid that is placed onto the cover contains a handle that is elevated above the lid away from heat. The lid can be easily modified by customers to suspend devices, mandrels or apparatus for immersion of devices into the bath or can be used with the optional parts basket. Thermo- wells can also be added for calibration of a quantity of temperature sensors and systems.

Lid with optional parts basket

Specifications

Model	FTBSL15	FTBSL15	FTBSL25	FTBSL25
Temperature range	50 to 605°C			
Bath media	Brown Aluminum oxide	White Activated alumina	Brown Aluminum oxide	White Activated alumina
Working volume, inches	7.25 x 15	7.25 x 15	7.25 x 25	7.25 x 25
Typical stability at 500°C	±0.3	±0.15	±0.6	±0.4
Calibrated accuracy -	±3.0	±3.0	±3.0	±3.0
Radial uniformity at 500°C (depth, inches)	0.6° (10)	0.2° (10)	1.0° (15)	0.5° (15)
Axial uniformity at 500°C (over 9 inch range)	1.0°	0.8°	1.5°	1.2°
Heat up time to 500°C, 240V supply	135 minutes	65 minutes	180 minutes	100 minutes
Cool down time – 500 to 200°C	215 minutes	195 minutes	215 minutes	200 minutes
Power – 240 V, single phase, 50/60 hz.	4000 watts	4000 watts	6000 watts	6000 watts
Air pressure & flow required, max	50 PSI(3.4 bar), 3.5 CFM (100 lpm)			
Overall footprint, H x W x D - inches	27 x 24 x 21	27 x 24 x 21	41 x 24 x 21	41 x 24 x 21
Total weight with aluminum oxide	210 lbs	165 lbs	360 lbs	270 lbs
RS485 USB interface & PC software	Included			
Catalog number	ATS2019	ATS2022	ATS2021	ATS2023
Optional Accessories				
Recommended spare lid	ATS1040			
Parts basket – 6.5" diameter x 6.5" D	ATS1086			
Tiered basket – 1.5" deep x 6.7"W (Qnty)	ATS1098 (2)	ATS1098 (2)	ATS1096 (4)	ATS1096 (4)
Parts catch basket	ATS1099	ATS1099	ATS1097	ATS1097

Accurate Thermal Systems
Fluidized Temperature Baths

Model FTBLL27 & FTBLL47
Fluidized Temperature Baths

- Fully automatic Fluidizing air control
- Independent over-temperature protection
- Advanced PID temperature controller for optimum results
- Built rugged for of reliable operation
- Cleans most tooling in under 60 minutes
- Removes all types of polymer including paint, adhesives, resins and plastic

With over 25 years of experience with Fluidized Bath technology we have developed a range of products that offer outstanding performance, safety, features and value that are unmatched. Unlike competing Fluidized baths our systems offer fully automatic Fluidizing air control and an advanced PID temperature controller for thermal performance. Fluidized Temperature Baths have been the thermal cleaning method of choice for over 40 years by many leading Fortune 500 companies. The cleaning process is thermal which breaks down all polymers and is not abrasive. You too can benefit from Fluidized Bath safety, fast cleaning and reduced labor in your extrusion operation and tool room.

APPLICATIONS

Thermal cleaning of Extrusion tooling including:

-breaker plates
-dies
-nozzles
-tips
-screens
-metal filters
-flanges
-hardware
-and many more…….

General heat treatment of devices & materials

Heating of reactors

BENEFITS

Large working volume – up to 15.8” diameter by 47” depth in parts basket depending on model

Up to 18kW heat capacity for fast heat up

Safer to the operator and tooling versus other methods

Designed and manufactured in USA

CE Marked

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

MODEL FTBLL27 & FTBLL47

WHAT'S INCLUDED

-Fluidized Bath
-full charge of bath media
-Instruction manual

WHAT DO I NEED TO RUN THE SYSTEM

-480 Volt, 50/60 Hz, 3 phase power - Wye configuration, 15.5 amps per leg for FTBLL27 & 21.5 amps per leg for FTBLL47
-Clean dry air supply that can deliver a fixed 70 PSI at a max flow of 15 CFM
-Exhaust hood for fumes

SERVICES AVAILABLE

-Technical support
-Application support
-Installation and setup
-Maintenance

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Features and Specifications

The model FTBLL27 and FTBLL47 use a PID temperature controller that has four control zones for improved thermal results. Independent over temperature protection will disable heat if the temperature exceeds 610°C or if the air supply pressure drops below 60 PSI. Fluidizing air is automatically controlled by the system. The remote control box includes an RS485 computer interface for connection to a PC with downloadable software from our website.

The control box is mounted on an articulating arm so it can be moved out of the way for improved access to the bath. The horizontal and vertical position of the arm can be changed as well as angle for easy viewing. It is connected the main control box via a 15 way cable. An air flow meter mounted on the main control box displays Fluidizing air rates.

Contact us today to request a quotation or for application assistance.

Specifications & Ordering info

	FTBLL27	FTBLL47
Temperature range	50 to 605°C	
Working volume in parts basket	15.8" x 27"	15.8" x 47"
Stability at 900°F, better than -	±5.0	±10.0
Heat up time to 900°F	210 minutes	240 minutes
Cool down time – max to 400°F	240 minutes	300 minutes
Power consumption – 480V, 3 phase	12.9 kW	18 kW
Air pressure & flow required, max	70 PSI, 10 CFM	90 PSI, 12 CFM
Overall footprint, H x W x D - inches	53 x 36x 31	72 x 36 x 31
Unit weight without aluminum oxide	600 lbs	800 lbs
Aluminum oxide required / supplied	400 / 450 lbs	650 / 700 lbs
Cleaning capacity	130 lbs	200 lbs
Order code	ATS1016	ATS1015
Warranty	1 year	
STANDARD ACCESSORIES		
Retort lid	ATS1031	
Standard parts basket	ATS1053	ATS1030
Three tiered basket	ATS1065	ATS1059
Aluminum oxide – 100 pound pail	ATS1027	
Aluminum oxide – 400 pound drum	ATS1028	

DRY BLOCK TEMPERATURE CALIBRATORS

From Accurate Thermal Systems

Model ThermCal400 Temperature Calibrator

- Laboratory performance at an economical price
- Lightweight and portable for use in the field
- Removable probe inserts for flexibility & many probe sizes
- Adjustable ramp rate for testing thermal switches
- CE marked for safety

With over 25 years of experience designing, manufacturing and supporting Dry Block Temperature Calibrators we have developed two units that offer outstanding performance, features and value that are unmatched. These units have a small footprint, fast heat up and cool down and are light weight for both field and laboratory use. Unlike many competing lower cost models that only offer a fixed block our units accept inserts for probe size flexibility in addition to fixed holes.

APPLICATIONS

Temperature sensor calibration including:

-RTD's/PRT's
-Thermocouples
-LIG thermometers
-Thermal switches
-Dial thermometers
-Hand held digital indicators
-Data loggers & recorders
.. and many others

BENEFITS

Fast heat up & stabilization

Operates ambient +5°C to 400°C/752°F

Lightweight

RS485 interface for PC connection

CE marked

Designed & manufactured in the USA

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

ThermCal400

Features and Specifications

WHAT'S INCLUDED

-ThermCal400 calibrator
-multiwell insert to accept 1/8", 3/16", 1/4", 5/16", & 3/8" diameter probes
-Carrying strap
-Insert removal tool
-Mains cable
-Traceable calibration certificate

WHAT DO I NEED TO RUN THE SYSTEM

-120 or 240 VAC mains supply 50/60hz
-8 amp supply (120 volt)
-4 amp supply (240 volt)

SERVICES AVAILABLE

-Technical support
-Application support
-Installation and setup
-Maintenance

V4 917

The ThermCal400 controller offers a large, bright and easy to read display. This controller has advanced 5 zone PID control for optimum performance and adjustable ramp rates for proper testing of thermal switches. The unit is switchable between °F and °C along with the ability to easily adjust unit calibration using your own temperature standards.

Independent limit control is incorporated into the unit to prevent operation and/or fault conditions above 425°C. A cooling fan keeps the internal components and controller cool at all operating temperatures.

ThermCal400 includes everything you need to operate it straight out of the box. We offer several optional inserts and carrying case listed below.

Specifications and Ordering

ThermCal400	
Temperature range (22°C ambient)	27°C (80°F) to 400°C (752°F)
Accuracy	±0.4°C or ±0.7°F
Stability	±0.05°C/±0.09°F
Radial uniformity (same sized wells)	0.025 at 400°C
Heat up time – ambient to max	12 minutes
Cool down time – max to 100°C	20 minutes
Probe well depth & insert diameter	4.5" depth by 1.5" diameter
Power consumption	900 watts
Overall dimensions	8" H x 8" W x 8" L
Weight with insert	11 pounds
Warranty	2 years
Ordering information	120 volt model: ATS3010 240 volt model: ATS3020
Optional Accessories	
Insert 5 x 1/4" wells – ATS3043	1 x 9/16" & 1 x 1/4" wells – ATS3048
Insert 2 x 1/4" & 2 x 3/8" wells – ATS3044	Insert 1 x 5/8" & 1 x 1/4" wells – ATS3049
Insert 2 x 1/4" & 2 x 1/2 " wells – ATS3045	Insert 1 x 11/16" & 1 x 1/4" wells – ATS3050
Insert 1 x 1/4" wells – ATS3046	1 x 3/4" & 1 x 1/4" wells – ATS3051
Insert blank – ATS3047	Soft sided carrying case – ATS3052

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DRY BLOCK TEMPERATURE CALIBRATORS

From Accurate Thermal Systems

Model ThermCal130 Temperature Calibrator

APPLICATIONS

Temperature sensor calibration including;

-RTD's/PRT's
-Thermocouples
-LIG thermometers
-Thermal switches
-Dial thermometers
-Hand held digital indicators
-Data loggers & recorders
.. and many others

BENEFITS

Fast heat up & stabilization

Operates -20°C/-4 °F to 130°C/266°F

Ramp rate setting feature

Designed & manufactured in the USA

Only 17 lbs with insert

- Laboratory performance at an economical price
- Lightweight and portable for use in the field
- Removable probe inserts for flexibility & many probe sizes
- Ramp rate feature for accurate testing of temperature switches
- CE marked for safety

With over 25 years of experience designing, manufacturing and supporting Dry Block Temperature Calibrators we have developed two units that offer outstanding performance, features and value that are unmatched. These units have a small footprint, fast heat up and cool down and are light weight for both field and laboratory use. Unlike many competing lower cost models that only offer a fixed block our units accept inserts for probe size flexibility in addition to a fixed 1/4" reference hole.

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

ThermCal130

Features and Specifications

WHAT'S INCLUDED

-ThermCal130 calibrator
-fixed 1/4" reference hole
-Carrying strap
-Insert removal tool
-Mains cable
-Traceable calibration certificate

WHAT DO I NEED TO RUN THE SYSTEM

-120 or 240 VAC mains supply 50/60hz
-2 amp supply (120 volt)
-1 amp supply (240 volt)

SERVICES AVAILABLE

-Technical support
-Application support
-Installation and setup
-Maintenance

V7 917

The ThermCal130 controller offers a large, bright and easy to read display. Adjustable ramp rates for testing of thermal switches. The unit is switchable between °F and °C along with the ability to adjust unit calibration using your own reference standard. Up to 8 set points can be saved for quick recall.

In addition to the heat sink cooling fan a small chassis cooling fan keeps the internal components and controller cool at all temperatures for years of reliable operation.

ThermCal130 includes everything you need to operate it straight out of the box. We offer several optional inserts and carrying case listed below.

Specifications and Ordering

ThermCal130	
Temperature range (ambient of 20°C)	-20°C (-4°F) to 130°C (266°F)
Accuracy	±0.4°C/±0.7°F
Stability	Better than ±0.05°C/±0.09°F
Heat up time -20 to 130°C	8 minutes
Heat up time 20 to 100°C	3 minutes
Cool down time 20 to -20°C	9 minutes
Cool down time 130 to 20°C	4 minutes
Probe well depth & insert diameter	4" depth by 1/2" diameter
Power consumption	150 watts
Overall dimensions	10.2" H x 9" W x 8" L
Weight with insert	17 pounds
Warranty	2 years
Ordering information	120 volt model: ATS3080, 240 volt model: ATS3081
Optional Accessories **The unit includes a fixed 1/4" reference hole**	
Insert 1 x 1/8" well – ATS3074	Insert 1 x 3/8" well – ATS3078
Insert 1 x 3/16" well – ATS3075	Insert blank – ATS3079
Insert 1 x 1/4" well – ATS3076	Soft sided carrying case – ATS3052
Insert 1 x 5/16" well – ATS3077	Metric sizes available upon request

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

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Hainesport, NJ 08036 USA
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Precision Secondary Standard Temperature Probes and Digital Readouts/Indicators

Accurate Thermal Systems LLC 4104 Sylon Blvd
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AM8010 Handheld Digital THERMOMETER

HIGHLIGHTS

- ✓ **Accuracy up to ±0.03°C**
- ✓ **Resolution 0.01°C**
- ✓ **Dual power supply**
- ✓ **USB interface with PC for real time data saving and displaying on PC**

OVERVIEW

AM8010 is a handheld digital thermometer with high accuracy, fast readings and great stability. This readout is perfect for field applications as well as lab measurement. Though small in size, AM8010 is powerful when it comes to accuracy, which can be as high as 0.03 °C at 0 °C. A USB interface allows user to log and display real time data on a PC.

AM8010 digital thermometer allows users to choose ITS-90, IEC-751 (DIN), or Callendar-Van Dusen conversion methods to response various PRTs. All probe constants and coefficients can be keyed in through front panel.

This portable readout is a powerful device with relative small price.

FEATURES

- High accuracy: ±0.03 °C at 0 °C
- High resolution: 0.01 °C over the full range
- Temperature range: -200 °C to 850 °C
- Work with PRTs with α=0.00385 and α=0.003925
- ITS-90, CVD, IEC-751
- 2.7 inch OLED display
- Full-size Touchpad for function control
- Temperature can be displayed in °C, °F or ohm.
- Flexible interface with user key-in coefficients
- USB interface with PC for real time data saving and displaying on PC
- Dual power supply with batteries or external power adaptor/computer USB interface

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AM8010 Handheld Digital THERMOMETER

SPECIFICATIONS

Temperature Range	-200°C to 850°C, depending on PRT used
Accuracy (meter only)	±0.04°C @ -200°C ±0.03°C @ 0°C ±0.04°C @ 232°C ±0.05°C @ 420°C ±0.06°C @ 660°C ±0.07°C @ 850°C
Resolution	0.01°C (0.001 Ω) over full range
Stability	±0.01°C
Probe	100 Ω RTD, PRT or SPRT
Characterizations	ITS-90 coefficients, Callender Van Dusen coefficients, IEC-751 (DIN 385)
Sample Interval	1 second
Display	2.7 inch OLED
Display Units	°C, °F, Ω
Excitation Current	1 mA, reversing
Operation Range	15 °C to 35 °C
Thermometer Input Connectors	5-pin plug
Power Requirements	100-240 V
Dimension	141mm (L) X 25 mm (H) X 89 mm (W)
Weight	0.2 kg (0.5 lbs)

OPTIONAL ACCESSORIES

Model	Description
1610-12/9	Precision Industrial PRT, -60°C to 160°C
1620-12/9	Precision industrial PRT, -60°C to 300°C
1640-12	Precision industrial PRT, -200°C to420°C
1660-12	Precision industrial PRT, -200°C to 670°C
1730-12/9	Secondary Reference PRT, -200°C to 420°C
1750-12/20	Secondary Reference PRT, -200°C to 670°C
1850-100	Metal-sheath SPRT, -200°C to 500°C
1860-100	Metal-sheath SPRT, -200°C to 670°C

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AM8040 PRECISION THERMOMETER

HIGHLIGHTS

- ✓ **Accuracy up to ±0.008°C**
- ✓ **Resolution 0.001°C**
- ✓ **Data storage into USB flash disk**
- ✓ **Wireless data transfer to PC**

OVERVIEW

AM8040 Precision Thermometer provides the best values with high standard performance. It features high accuracy, fast readings and great stability. It operates with a wide range of Platinum Resistance Thermometers (PRTs). All of the readings can be stored in a USB flash disk or transferred to PC through an USB cable or a wireless module.

AM8040 Precision Thermometer allows users to choose ITS-90, IEC-751 (DIN), or Callendar-Van Dusen conversion methods to response to various PRTs. Users can also choose to key in calibration data of each PRT to ensure the best accuracy.

AM8040 is the solution for precision temperature measurement and calibration at a very attractive price.

FEATURES

- High accuracy: up to ±0.008 °C at 0 °C
- High resolution: 0.001 °C over the full range
- Temperature range: -200 °C to 850 °C
- ITS-90, CVD, IEC-751 conversion methods or key in coefficients of PRTs
- 2.7 inch OLED display
- Full-size Touchpad for function control
- Data storage into USB flash disk
- Data transfer to PC using an USB cable
- Wireless data transfer to PC with an optional wireless module

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AM8040 PRECISION THERMOMETER

SPECIFICATIONS

Temperature Range	-200°C to 850°C, depending on PRT used
Accuracy (meter only)	±0.01°C @ -200°C ±0.008°C @ 0°C ±0.009°C @ 232°C ±0.01°C @ 420°C ±0.015°C @ 660°C ±0.025°C @ 850°C
Resolution	0.001°C (0.0001 Ω) over full range
Probe	Nominal Rtpw: 25 Ω or 100 Ω RTD, PRT or SPRT
Characterizations	ITS-90 coefficients, Callender Van Dusen coefficients, IEC-751 (DIN 385)
Sample Interval	1 second
Display	2.7 inch OLED
Display Units	°C, °F, Ω
Excitation Current	1 mA, reversing
Operation Range	15 °C to 35 °C
Thermometer Input Connectors	Spade plug or bare wire
Power Requirements	100-220V
Dimension	180 mm (W) X 65 mm (H) X 200 mm (D)
Weight	0.3 kg (0.7 lbs)

OPTIONAL ACCESSORIES

Model	Description
8000-WLM	Wireless module for AM-8040 and AM-8060 precision thermometer
1610-12/9	Precision Industrial PRT, -60°C to 160°C
1620-12/9	Precision industrial PRT, -60°C to 300°C
1640-12	Precision industrial PRT, -200°C to420°C
1660-12	Precision industrial PRT, -200°C to 670°C
1730-12	Secondary Reference PRT, -200°C to 420°C
1750-12/20	Secondary Reference PRT, -200°C to 670°C
1850	Metal-sheath SPRT, -200°C to 500°C
1860	Metal-sheath SPRT, -200°C to 670°C
1950	Quartz-sheath SPRT, -200°C to 500 °C
1960	Quartz-sheath SPRT, -200°C to 670 °C

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AM8060 PRECISION THERMOMETER

HIGHLIGHTS

- ✓ **Accuracy up to ±0.008°C**
- ✓ **Resolution 0.001°C**
- ✓ **Dual channels**
- ✓ **Data storage into USB flash disk**
- ✓ **Wireless data transfer to PC**

OVERVIEW

AM8060 Precision Thermometer provides high accuracy, fast readings and great stability. It comes with dual channel measurement of temperature with Platinum Resistance Thermometers (PRTs). The temperature of each input and their temperature difference are displayed simultaneously. All of the readings can be stored in a USB flash disk or transferred to PC through a wireless module or an USB cable.

AM8060 Precision Thermometer allows users to choose ITS-90, IEC-751 (DIN), or Callendar-Van Dusen conversion methods to response to various PRTs. Users can also choose to key in calibration data of each PRT to ensure the best accuracy.

This dual-channel readout is a perfect choice for precision temperature measurement and calibration. It's also a top choice as temperature reference for Drywell Calibrators and Temperature Bath.

FEATURES

- High accuracy: up to ±0.008 °C at 0 °C
- High resolution: 0.001 °C over the full range
- Temperature range: -200 °C to 850 °C
- Two inputs for reading two different sensors simultaneously
- Differential temperature measurement
- ITS-90, CVD, IEC-751
- 2.7 inch OLED display
- Full-size Touchpad for function control
- User key-in coefficients to ensure the best accuracy
- Data storage into USB flash disk
- Data transfer to PC using an USB cable
- Wireless data transfer to PC with an optional wireless module

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AM8060 PRECISION THERMOMETER

SPECIFICATIONS

Temperature Range	-200°C to 850°C, depending on PRT used
Accuracy (meter only)	±0.01°C @ -200°C ±0.008°C @ 0°C ±0.009°C @ 232°C ±0.01°C @ 420°C ±0.015°C @ 660°C ±0.025°C @ 850°C
Resolution	0.001°C (0.0001 Ω) over full range
Probe	Nominal Rtpw: 25 Ω or 100 Ω RTD, PRT or SPRT
Characterizations	ITS-90 coefficients, Callender Van Dusen coefficients, IEC-751 (DIN 385)
Sample Interval	1 second
Display	2.7 inch OLED
Display Units	°C, °F, Ω
Excitation Current	1 mA, reversing
Operation Range	15 °C to 35 °C
Thermometer Input Connectors	Spade plug or bare wire
Power Requirements	100-220V
Dimension	180 mm (W) X 65 mm (H) X 200 mm (D)
Weight	0.3 kg (0.7 lbs)

OPTIONAL ACCESSORIES

Model	Description
8000-WLM	Wireless module for AM8040 and AM8060 precision thermometer
1610-12/9	Precision Industrial PRT, -60°C to 160°C
1620-12/9	Precision industrial PRT, -60°C to 300°C
1640-12	Precision industrial PRT, -200°C to420°C
1660-12	Precision industrial PRT, -200°C to 670°C
1730-12	Secondary Reference PRT, -200°C to 420°C
1750-12/20	Secondary Reference PRT, -200°C to 670°C
1850	Metal-sheath SPRT, -200°C to 500°C
1860	Metal-sheath SPRT, -200°C to 670°C
1950	Quartz-sheath SPRT, -200°C to 500 °C
1960	Quartz-sheath SPRT, -200°C to 670 °C

AM1660/1640/1620 PRECISION INDUSTRIAL PRT

HIGHLIGHTS

- ✓ **Accuracy ±0.035°C at 0°C**
- ✓ **Temperature range: -200°C to 670°C**
- ✓ **Durable and shock resistance**
- ✓ **Customized dimensions available**

OVERVIEW

AM1620/1640/1660 series precision industrial PRTs are top choices when price-to-performance is considered. They cover a wide range of temperature from -200 °C to 670 °C with amazing accuracy of ±0.035°C at 0 °C, short term stability of ±0.01°C and fast respond time of 5 seconds. These industrial PRTs come with standard length 12-inch but customized dimensions are available per request.

To reach the best performance in stability and repeatability, the wire-wound sensing elements are specially designed to protect the platinum sensing wire from contamination at high temperature. A unique support structure and filling material provide the best balance among the hysteresis effect, mechanical shock and thermal shock performance. All of these probes conform to the standard 385 curve so the resistance ratio of the PRT follow DIN/IEC-751 curve precisely.

FEATURES

- Temperature range: -200 °C to 670 °C
- Accuracy: ±0.035 °C at 0 °C
- Long term drift: ±0.04 °C
- Short term stability: 0.01 °C
- Durable and shock resistance
- Temperature Coefficient 0.00385
- Follow DIN/IEC-751 precisely
- Inconel[tm] sheath
- Quick response time
- Customized dimensions available

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AM1660/1640/1620 PRECISION INDUSTRIAL PRT

SPECIFICATIONS

Temperature Range	1660: -200°C to 670°C 1640: -200°C to 420°C 1620: -60°C to 300°C
Resistance at 0 °C	Nominal 100 Ω
Temperature Coefficient	0.00385 Ω/ Ω/°C
Accuracy	±0.04°C at -200°C ±0.035°C at 0°C ±0.05°C at 200°C ±0.09°C at 420°C ±0.15°C at 660°C
Drift	±0.04°C at 0 °C after 100 hours at 420 °C
Short Term Stability	±0.01°C
Thermal Shock	±0.007°C after 10 times thermal cycles from minimum to maximum temperatures
Hysteresis	<=0.01°C
Self-heating	50 mW/°C
Response Time	5 seconds for 63% response to step change in water moving at 3 feet per second
Measurement Current	0.5 mA or 1 mA
Sensor Length	32 mm
Sensor Location	5 mm from tip
Insulation Resistance	>1000 MΩ at room temperature
Sheath Material	1660/1640: Inconel[tm] 1620: 316 Stainless Steel
Dimension	0.25 inch X 12 inch (6.35 mm X 305 mm)
External Leads	Teflon[tm]–insulated copper wire, 4 leads, 2.5 meters
Handle Dimension	15mm (OD) X 65 mm (L)
Handle Temperature Range*	-50°C to 180°C
Calibration Options	1660-12-T, PRT with NIST traceable calibration and data 1640-12-T, PRT with NIST traceable calibration and data 1620-12-T, PRT with NIST traceable calibration and data NVLAP - Accredited Calibrations available per request

*Handle temperature outside this range will cause damage to the probe.

OPTIONAL ACCESSORIES

Model	Description
9001	Wooden Carrying Case

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AM1730 Secondary Reference PRT

HIGHLIGHTS

- ✓ **Affordable reference probe**
- ✓ **Accuracy ±0.015 °C at 0.01 °C**
- ✓ **Temperature range: -200 °C to 420 °C**
- ✓ **Customized dimensions available**

OVERVIEW

AM1730 series Secondary Reference PRT provides our customers an affordable reference probe for precision temperature measurement and calibration in labs and fields. The PRT features accuracy of ±0.015°C, short term stability of ±0.007°C. Two different lengths of PRTs are available at 9-inch and 12-inch.

To reach the best performance in stability and repeatability, the sensing element is specially designed to protect the platinum sensing wire from contamination at high temperature. A unique support structure and filling material provide the best balance among the hysteresis effect, mechanical shock and thermal shock performance. This high performance probe meets ITS-90 criteria of reference thermometer fully.

FEATURES

- Temperature range: -200 °C to 420 °C
- Accuracy: ±0.015 °C
- Long term drift: ±0.01 °C
- Short term stability: 0.007 °C
- Durable and shock resistance
- Temperature Coefficient 0.003925
- W(Ga)>=1.11807
- Inconel^{tm} sheath
- Customized dimensions available

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AM1730 Secondary Reference PRT

SPECIFICATIONS

Temperature Range	1730-12: -200°C to 420°C 1730-9: -60°C to 300°C
Resistance at 0 °C	Nominal 100 Ω
Temperature Coefficient	0.003925 Ω/ Ω/°C
Accuracy	±0.025°C at -196 °C ±0.015°C at 0.01 °C ±0.035°C at 420 °C
Drift	±0.01°C at 0 °C after 100 hours at 420 °C
Short Term Stability	±0.007°C
Thermal Shock	±0.005°C after 10 times thermal cycles from minimum to maximum temperatures
Hysteresis	<=0.005°C
Self-heating	50 mW/°C
Response Time	9 seconds for 63% response to step change in water moving at 3 feet per second
Measurement Current	0.5 mA or 1 mA
Sensor Length	32 mm
Sensor Location	5 mm from tip
Insulation Resistance	>1000 MΩ at room temperature
Sheath Material	Inconel[tm]
Dimension	1730-12: 0.25 inch X 12 inch (6.35 mm X 305 mm) 1730-9: 0.187 inch X 9 inch (4.75 mm X 229 mm)
External Leads	Teflon[tm]–insulated copper wire, 4 leads, 2.5 meters
Handle Dimension	1730-12: 15mm (OD) x 65mm (L) 1730-9: 10mm (OD) X 50 mm (L)
Handle Temperature Range*	-50°C to 180°C
Calibration Options	1730-12-T, PRT with NIST traceable calibration and data 1730-9-T, PRT with NIST traceable calibration and data NVLAP - Accredited Calibrations available per request

*Handle temperature outside this range will cause damage to the probe.

OPTIONAL ACCESSORIES

Model	Description
9001	Wooden Carrying Case

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AM1750 Secondary Reference PRT

HIGHLIGHTS

- ✓ **Affordable reference probe**
- ✓ **Accuracy ±0.015 °C at 0.01 °C**
- ✓ **Temperature range: -200 °C to 670 °C**
- ✓ **Customized dimensions available**

OVERVIEW

AM1750 series Secondary Reference PRT provides our customers an affordable reference probe for precision temperature measurement and calibration in labs and fields. The PRT features accuracy of ±0.015°C at 0.01°C ; short term stability of ±0.007°C. Two different lengths of PRTs are available at 12-inch and 20-inch.

The sensing element is designed to protect the platinum sensing wire from contamination at high temperatures, giving the device a high level of stability and repeatability in performance. A uniquely designed support structure and filling material provides excellent balance between the hysteresis effect, mechanical shock and thermal shock performance. This high performance probe fully meets ITS-90 criteria for reference thermometers.

FEATURES

- Temperature range: -200 °C to 670 °C
- Accuracy: ±0.015 °C at 0.01°C
- Long term drift: ±0.01 °C
- Short term stability: 0.007 °C
- Durable and shock resistance
- Temperature Coefficient 0.003925
- W(Ga)>=1.11807
- Inconel^{tm} sheath
- Customized dimensions available

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AM1750 Secondary Reference PRT

SPECIFICATIONS

Temperature Range	1750-12: -200°C to 670°C 1750-20: -200°C to 670°C
Resistance at 0 °C	Nominal 100 Ω
Temperature Coefficient	0.003925 Ω/ Ω/°C
Accuracy	±0.025°C at -196 °C ±0.015°C at 0.01 °C ±0.035°C at 420 °C ±0.05°C at 660 °C
Drift	±0.01°C at 0 °C after 100 hours at 660 °C
Short Term Stability	±0.007°C
Thermal Shock	±0.005°C after 10 times thermal cycles from minimum to maximum temperatures
Hysteresis	<=0.005°C
Self-heating	50 mW/°C
Response Time	9 seconds for 63% response to step change in water moving at 3 feet per second
Measurement Current	0.5 mA or 1 mA
Sensor Length	32 mm
Sensor Location	5 mm from tip
Insulation Resistance	>1000 MΩ at room temperature
Sheath Material	Inconel[tm]
Dimension	1750-12: 0.25 inch X 12 inch (6.35 mm X 305 mm) 1750-20: 0.25inch X 20 inch (6.35 mm X 500 mm)
External Leads	Teflon[tm]–insulated copper wire, 4 leads, 2.5 meters
Handle Dimension	15mm (OD) X 65 mm (L)
Handle Temperature Range*	-50°C to 180°C
Calibration Options	1750-12-T, PRT with NIST traceable calibration and data 1750-20-T, PRT with NIST traceable calibration and data NVLAP - Accredited Calibrations available per request

*Handle temperature outside this range will cause damage to the probe.

OPTIONAL ACCESSORIES

Model	Description
9001	Wooden Carrying Case for 1750-12
9002	Wooden Carrying Case for 1750-20

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AM1760/1762 Secondary Standard PRT

HIGHLIGHTS

- ✓ **Rtpw Drift < 19 mK after 500 hours**
- ✓ **Accuracy ±0.006 °C at 0.01 °C**
- ✓ **Temperature range: -200 °C to 670 °C**
- ✓ **Customized dimensions available**

OVERVIEW

AM1760 series Secondary Standard PRT provides our customers an affordable SPRT alternative for precision temperature measurement and calibration in labs and fields. This SPRT features accuracy of ±0.006°C at 0.01°C , short term stability of ±0.002°C and very low drift rate of less than 19 mK after 500 hours. Two different lengths of SPRTs are available at 12-inch and 20-inch.

The sensing element is designed to protect the platinum sensing wire from contamination at high temperatures, giving the device a high level of stability and repeatability in performance. A uniquely designed support structure and filling material provides excellent balance between the hysteresis effect, mechanical shock and thermal shock performance. This high performance probe fully meets ITS-90 criteria for reference thermometers.

FEATURES

- Temperature range: -200 °C to 670 °C
- Accuracy: ±0.006°C at 0.01°C
- Long term drift: ±0.019°C
- Short term stability: 0.002 °C
- Temperature Coefficient 0.003925
- W(Ga)>=1.11807
- Inconel^{tm} sheath
- Customized dimensions available

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AM1760/1762 Secondary Standard PRT

SPECIFICATIONS

Temperature Range	-200°C to 670°C
Resistance at 0 °C	1760 - Nominal 100 Ω 1762 – Nominal 25 Ω
Temperature Coefficient	0.003925 Ω/ Ω/°C
Accuracy	±0.007°C at -196 °C ±0.006°C at 0.01 °C ±0.015°C at 420 °C ±0.025°C at 660 °C
Drift*	±0.004°C at 0 °C after 100 hours at 660 °C
Short Term Stability	±0.002°C
Thermal Shock	±0.002°C after 10 times thermal cycles from minimum to maximum temperatures
Self-heating	0.0015 °C at 1 mA current
Response Time	9 seconds for 63% response to step change in water moving at 3 feet per second
Measurement Current	0.5 mA or 1 mA
Sensor Length	42 mm
Sensor Location	5 mm from tip
Insulation Resistance	>1000 MΩ at room temperature
Sheath Material	Inconel[tm]
Dimension	1760/1762-12: 0.25 inch X 12 inch (6.35 mm X 305 mm) 1760/1762-20: 0.25inch X 20 inch (6.35 mm X 500 mm)
External Leads	Teflon[tm]–insulated copper wire, 4 leads, 2.5 meters
Handle Dimension	15mm (OD) X 65 mm (L)
Handle Temperature Range**	-50°C to 180°C
Calibration Options	1760/1762-12-T, Secondary SPRT with NIST traceable calibration and data 1760/1762-20-T, Secondary SPRT with NIST traceable calibration and data

*Long-term drift rate is for reference only. It could be affected by such facts as handling, application, and maintenance, etc.
**Handle temperature outside this range will cause damage to the probe.

OPTIONAL ACCESSORIES

Model	Description
9001	Wooden Carrying Case for 1760/1762-12
9002	Wooden Carrying Case for 1760/1762-20

SPRT/PRT Selections

Model	Product	Temperature Range	Alpha	Rtp/R0	Sheath material	Probe Length	Probe Diameter
AM1950	SPRT	-200 °C to 500 °C	0.003925	25	quartz	480 mm	7 mm (0.276 inch)
AM1960	SPRT	-200 °C to 670 °C	0.003925	25	quartz	500 mm	7 mm (0.276 inch)
AM1850-25	SPRT	-200 °C to 500 °C	0.003925	25	inconel	480 mm	6.35 mm (0.25 inch)
AM1850-100	SPRT	-200 °C to 500 °C	0.003925	100	inconel	480 mm	6.35 mm (0.25 inch)
AM1860-25	SPRT	-200 °C to 670 °C	0.003925	25	inconel	500 mm	6.35 mm (0.25 inch)
AM1860-100	SPRT	-200 °C to 670 °C	0.003925	100	inconel	500 mm	6.35 mm (0.25 inch)
AM1760-12	Secondary SPRT	-200 °C to 670 °C	0.003925	100	inconel	12 inch	0.25 inch (6.35 mm)
AM1760-20	Secondary SPRT	-200 °C to 670 °C	0.003925	100	inconel	20 inch	0.25 inch (6.35 mm)
AM1762-12	Secondary SPRT	-200 °C to 670 °C	0.003925	25	inconel	12 inch	0.25 inch (6.35 mm)
AM1762-20	Secondary SPRT	-200 °C to 670 °C	0.003925	25	inconel	20 inch	0.25 inch (6.35 mm)
AM1750-12	Secondary Reference PRT	-200 °C to 670 °C	0.003925	100	inconel	12 inch	0.25 inch (6.35 mm)
AM1750-20	Secondary Reference PRT	-200 °C to 670 °C	0.003925	100	inconel	20 inch	0.25 inch (6.35 mm)
AM1730-12	Secondary Reference PRT	-200 °C to 420 °C	0.003925	100	inconel	12 inch	0.25 inch (6.35 mm)
AM1730-9	Secondary Reference PRT	-60 °C to 300 °C	0.003925	100	inconel	9 inch	0.187 inch (4.75 mm)
AM1660-12	Precision Industrial PRT	-200 °C to 670 °C	0.00385	100	inconel	12 inch	0.25 inch (6.35 mm)
AM1642	Full Immersion PRT	0 °C to 420 °C	0.00385	100	inconel	4 inch	0.125 inch (3 mm)
AM1640-12	Precision Industrial PRT	-200 °C to 420 °C	0.00385	100	inconel	12 inch	0.25 inch (6.35 mm)
AM1620-9	Precision Industrial PRT	-60 °C to 300 °C	0.00385	100	SST	9 inch	0.187 inch (4.75 mm)
AM1620-12	Precision Industrial PRT	-60 °C to 300 °C	0.00385	100	SST	12 inch	0.25 inch (6.35 mm)
AM1612	Full Immersion PRT	-196 °C to 180 °C	0.00385	100	SST	2 inch	0.125 inch (3 mm)
AM1610-12	Precision Industrial PRT	-60 °C to 160 °C	0.00385	100	SST	12 inch	0.25 inch (6.35 mm)
AM1610-9	Precision Industrial PRT	-60 °C to 160 °C	0.00385	100	SST	9 inch	0.187 inch (4.75 mm)

NIST Traceable Calibrations

Model	Temperature Range
5007	-200 °C to 670 °C
5012	0 °C to 420 °C
5013	0 °C to 300 °C
5014	-200 °C to 420 °C
5015	-60 °C to 300 °C
5017	-60 °C to 160 °C
5020	-196 °C to 660°C
5022	-196 °C to 420°C
	#5020 & 5022 are NVLAP accredited calibrations.

Thermocouple Selections

Model	Product	Temperature Range	Alpha	Rtp/R0	Sheath material	Probe Length	Probe Diameter
AM1210	Type S Reference Standard Thermocouple	0 °C to 1300 °C	N/A	N/A	Alumina	500 mm	6.35 mm (0.25 inch)
AM1110-12	Type S Precision Thermocouple	0 °C to 1450 °C	N/A	N/A	Alumina	12 inch	6.35 mm (0.25 inch)

Readout Selections

Model	Product
AM8060	Dual-Channel Precision Thermometer
AM8040	Single-Channel Precision Thermometer
AM8010	Handheld Precision Thermometer

Accessory Selections

Model	Product
9001	Wooden Carrying Case with Customized Foam Inserts (18'X4'X2.25')
9002	Wooden Carrying Case with Customized Foam Inserts (28'X5'X3')
9050	Low EMF Precision Switch

Note: 9002 Wooden Carrying Case is complementary for model # 1960, 1950, 1860, 1850

Accurate Thermal Systems
HEPA Air Filtration unit

Model DCS2500
Air Filtration System

APPLICATIONS

Filtering of exhaust air from Fluidized Bath tool cleaning and other extrusion operations

Remove smoke, fumes, VOC's and other fine particulate

BENEFITS

Common filter sizes that can be easily replaced by side access panels

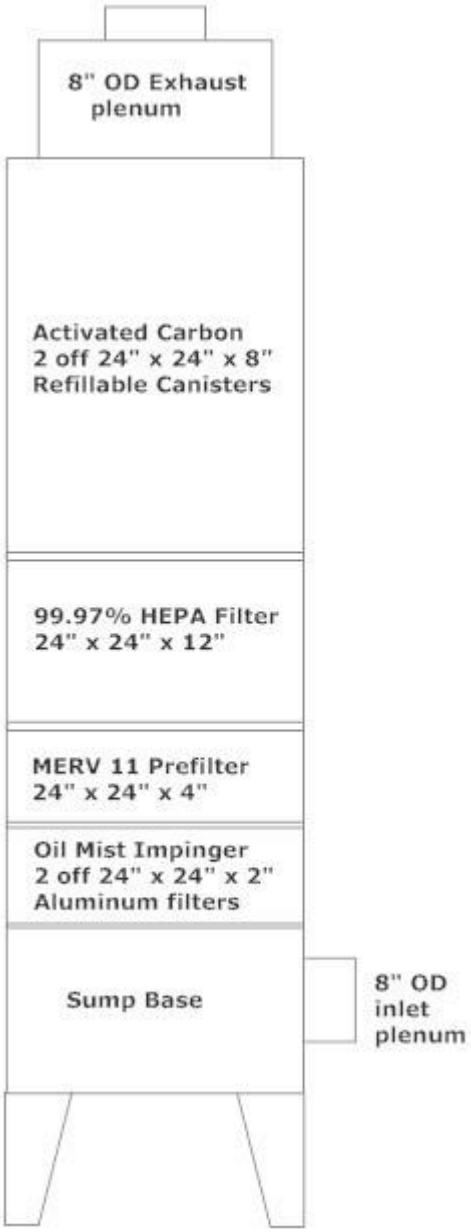
Oil mist impinger filters can be washed out for reuse

Sump base has a drain for collection of any oil

Available in vertical or horizontal configuration

Includes a mini-helic gauge to display filter back pressure

Designed and manufactured in USA



- Captures oil mist, smoke and fumes
- Easy access panels for filter replacement
- Powder coat painted for long life
- Common filter sizes that can be purchased from many sources
- Large 8" diameter inlet and outlet for best air flow
- Use an exhaust blower capable of 850 to 1000 cfm of flow for best results

The DCS2500 has been designed for use by Plastic Extrusion and Injection Molding companies to remove fine particulate, smoke and fumes from the exhaust stream of plant operations including tool cleaning in Fluidized Temperature Baths. The DCS2500 does not require any power, natural gas or continuous water supply to operate. Contact us for technical details and drawings on how to connect and plumb up the system.

ACCURATE THERMAL SYSTEMS
BETTER BY DEGREE

MODEL DCS2500

WHAT'S INCLUDED

-Powder coat painted cabinet and filters in each section.
-8" OD inlet and outlet plenums
-Mini helic gauge to show filter back pressure
-Instruction manual

WHAT DO I NEED TO RUN THE SYSTEM

-750 to 1000 CFM blower that is placed on the outlet side of the system drawing exhaust air into the filters.
-At least 9 feet of vertical or horizontal space to install the system

SERVICES AVAILABLE

-Technical support
-Application support
-Maintenance

V5 917

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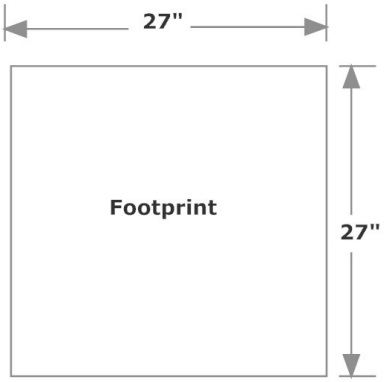
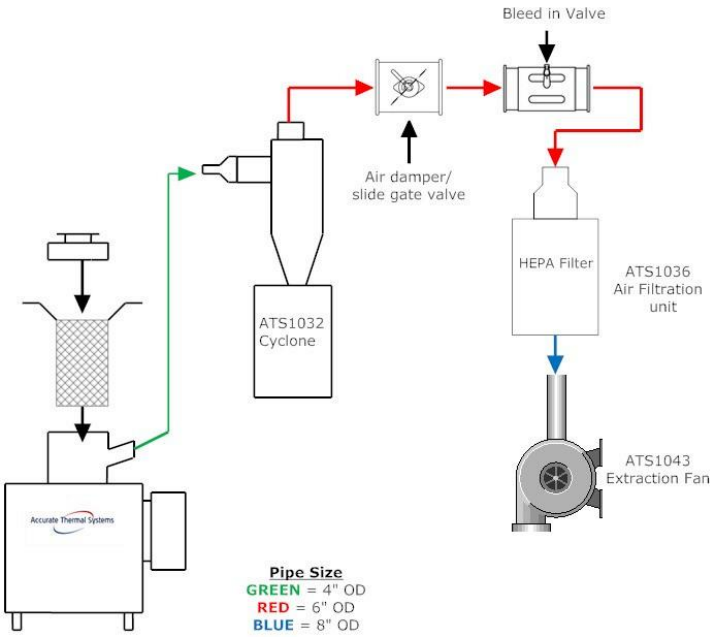
FEATURES AND SPECIFICATIONS



The DCS2500 has a relatively small footprint as shown but is 108" long. In the horizontal configuration it can be mounted to a wall and in the vertical configuration it can be free standing. It is ordered in either configuration that best suits your space and layout considerations. Three feet of clearance is needed on the inlet side of the system to open the filter access panels.

Shown here is a typical system layout and plumbing for a Fluidized Temperature Bath system. Other plant operations where it is desirable to have exhaust air filtered can also be tied into the system.



Specifications & Ordering info

	DCS2500
Overall System footprint	27"W x 27"D x 108"H
Extraction blower air flow required	750 to 1000 CFM
Maximum air inlet temperature	160°F / 70°C
Shipping weight	800 lbs
FILTER DETAILS	
Oil mist impinger (2 required)	Aluminum mesh, 24" x 24" x 2"
Prefilter (1 required)	Merv 11, 24" x 24" x 4"
HEPA filter (1 required)	99.97%, 24" x 24" x 12"
Activated carbon canister (2 off)	24" x 24" x 8" (each canister contains 45 lbs of granular carbon that can be refilled)
Order code – Horizontal Configuration	ATS1036-HOR
Order code – Vertical Configuration	ATS1036-VERT