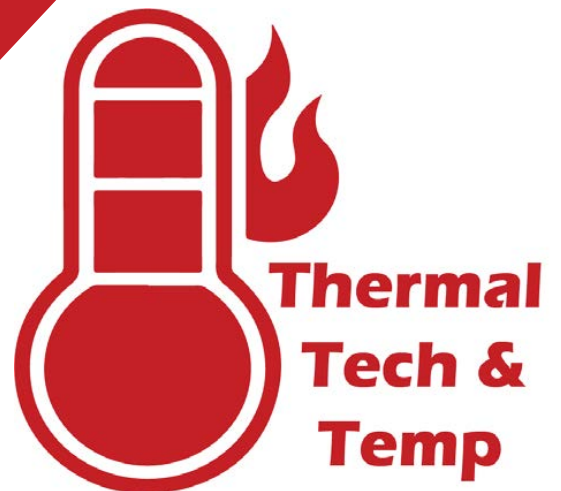


# INDUCTION HEATING EQUIPMENT CATALOG

[info@thermaltechttemp.com](mailto:info@thermaltechttemp.com)  
[www.thermaltechttemp.com](http://www.thermaltechttemp.com)  
1.800.674.9284



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## TABLE OF CONTENTS

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## THE TTT STORY

Thermal Tech & Temp Inc. has contributed to the heating industry for over 20 years. We specialize in custom-making induction heating equipment, insulation materials, and electrical resistance heating equipment. Some of our custom fabricated induction heating accessories include induction heat clamps, induction heat clam shells, and internal plugs. We take pride in the work we do by taking the time to meet our customers at job sites and by carefully overseeing all operations to make sure we are always fitting our customer's needs.



**Thermal Tech & Temp Inc. is committed to achieving total customer satisfaction by delivering high-quality, durable, and custom fabricated products 100% of the time!**

You can find Thermal Tech & Temp Inc. on many different social media platforms. Follow our accounts on Facebook, Twitter, Instagram, Linked In, and Youtube to stay up to date with our latest products and news.

## CONTACT US

We love connecting with our customers! Feel free to visit us during normal business hours, or reach out via phone or email, and make sure to stay up-to-date with Thermal Tech & Temp by following us on social media!

### **THERMAL TECH & TEMP INC.**

880 NORTH MADISON STREET  
CROWN POINT, IN 46307  
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INFO@THERMALTECHTEMP.COM  
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## OVENS/FURNACES

Our unique manufacturing method of induction ovens and furnaces allows for a uniform preheat and stress relief of materials that you don't see in other induction ovens. This is especially beneficial for some metals, such as aluminum or stainless steel parts, that cannot be heat treated through direct induction.

### KEY FEATURES:

- Quick heated up times
- Easily moved
- Convenient preheat
- Convenient stress relief
- Durable steel liner
- Controlled cool-down times
- No fumes or venting
- No open flames
- Cost-effective
- Increased staff safety
- Custom made for your application
- Powered by ProHeat 35





**SIDE LOAD OVEN**  
(with two racks  
that pull out)



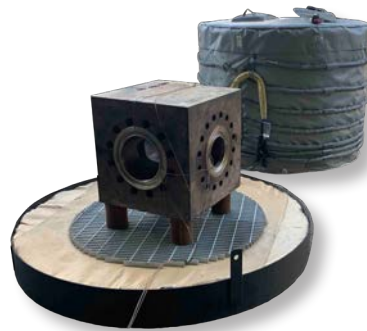
**INSIDE DISPLAY**  
(1350°F radiant  
uniform heat)



**TABLE OVEN**  
(with a bottom  
shelf for slow-cool)



**TOP LOAD OVEN  
WITH MILLER PROHEAT**  
(great for heating small  
parts up to 1200°F)



**BATCH STYLE**  
(48-inch tall x 48-  
inch diameter with  
a 60-inch base)



**LONG TOP LOAD OVEN**  
(has 3 lids for separate  
heating areas)



**SMALL HANDHELD OVEN**  
(12-inch tall x 12-inch  
diameter for heating  
small drill bits)



**LONG TOP LOAD OVEN**  
(preheat oven for 600°F  
industrial parts)



**60-INCH DIAMETER  
BATCH OVEN**  
(post-weld heat  
treat oven)

# INDUCTION BLANKETS

## INDUCTION BLANKETS

Thermal Tech & Temp's induction heating blankets are manufactured from durable high-temperature materials. Our flexible induction post-weld heat treatment (PWHT) blankets are designed to withstand tough conditions in both industrial and construction applications. With our induction blankets, we create a safer welding environment for our customers. All of our induction blankets are also designed to have high tensile strength and come with high temp magnets. Along with easy set-up and flexibility, and the ability to temperature control, our blankets can be custom made to fit a wide variety of pipe diameters and plate lengths.

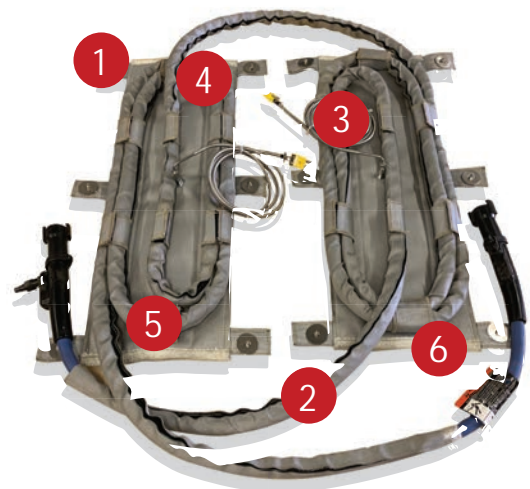


### KEY FEATURES:

- Custom made to fit your application
- Able to be reconfigured without a pegboard
- Made with durable/high temp materials
- Improved welding environment
- No exposure to open flame
- No need for explosive glasses
- Repetitive heating profiles
- Fits various pipe diameters lengths
- Quick and flexible set-up
- High-temperature magnet



- 1 MAGNET
- 2 INDUCTION COIL
- 3 THERMAL COUPLE
- 4 BAYONET
- 5 VELCRO TABS
- 6 32 OUNCE SILICONE COATED FABRIC





**HEAT SHRINK  
BLANKET**  
(rapid heat up to  
600°F to remove  
bearing)



**DAISY-CHAINED  
BLANKET**  
(equipped with  
switchable magnets)



**DAISY-CHAINED  
INTERNAL HEATING  
BLANKETS**  
(pre-heat of large  
castings)



**DAISY-CHAINED  
BLANKETS**  
(on a large base plate  
for windmill)



**PIPE HEATING  
BLANKET**  
(6-inch diameter to  
12-inch diameter)



**CIRCULAR BLANKET**  
(84-inch diameter  
bullseye will allow you  
to adjust coils where  
needed)



**PRE-HEAT BLANKET**  
(allows the blanket to  
contour to the vessel)



**MANWAY BLANKET**  
(36-inch diameter  
manway)



**HOTSIDE OF BLANKET**  
(illustrates the "hot"  
side of our induction  
blankets)

# INDUCTION HEAT CLAMPS

## CLAMPS

Ideally, induction heat clamps are suited for large diameter rotation when using submerged arc or manual metal arc but are also suited to small diameters. Our induction heat clamps are fitted with four thermocouples that are designed to contour the pipe to control the pre-heat temperature. As the pipe rotates around to the starting point, the thermocouples begin to pick up temperature readings to adjust the output of the 35 kilowatts to suit the target temperature that has been set. The spring that is positioned on the back of the heating clamp mounting is designed to allow the clamp to move in the vertical position which allows for any ovality in the pipe.



### KEY FEATURES:

- Quick set-up time
- Faster temp readings
- Fully controllable
- Uniform heating
- Can be digitally recorded
- No hydrogen created
- Low running costs



# INDUCTION HEAT CLAM SHELLS

## CLAM SHELLS

Our induction heat clams shells are custom-made to fit any application. We also utilize a new style of induction coils (the electric heater) set up for the ProHeat 35 Induction Heating System that focuses on pre-heating metal as it rotates. Also, our induction heat clam shells offer a pre-heat treatment of up to 1200°F. Internal thermocouples can also be added to monitor to produce the units of temperature during the rotation of the pipe or vessel. We also offer daisy-chained induction heat clam shells which allow you to preheat your application at 600°F for a sub-arc welding application.



**KEY FEATURES:**

- Uses ProHeat 35
- Preheats up to 1200°F
- Custom made



# INDUCTION INTERNAL PLUGS

## INTERNAL PLUGS

Our plugs allow for an even pre-heat and are powered by ProHeat 35. Our induction internal plugs can be inserted into bearings, vessels, and large piping for induction heating. The temperature rating of these internal plugs can be up to 1100°F.



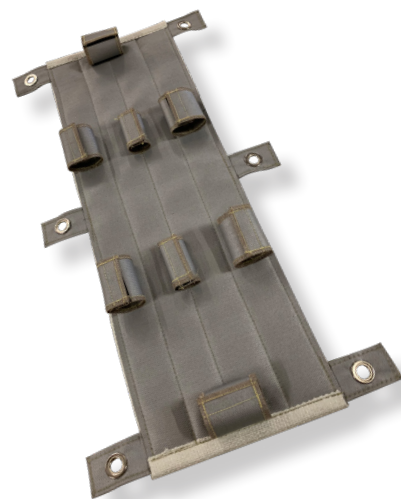
### KEY FEATURES:

- Custom made
- Allows even preheat
- Powered by Miller ProHeat 35

# TABS, GROMMETS, & MAGNETS

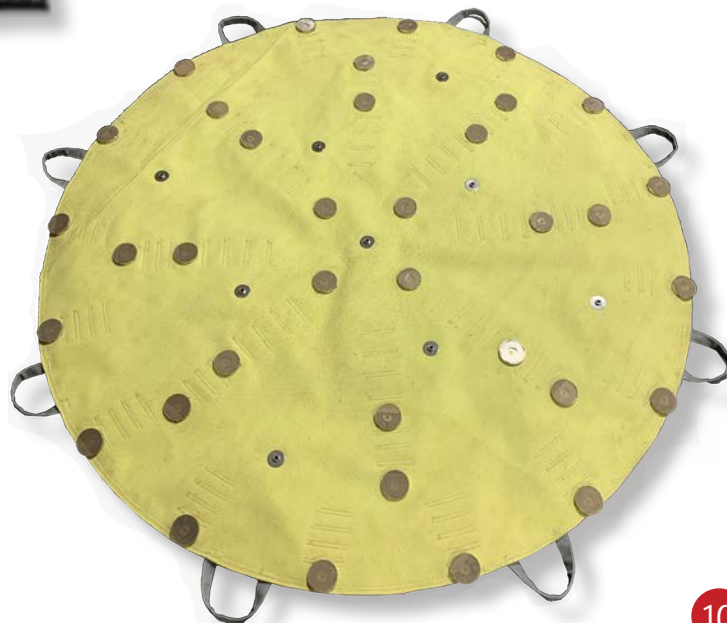
## TABS, GROMMETS, & MAGNETS

Coil tabs act as a harness to contain the induction coil on the blanket per the design of the heating arrangement. We utilize different size tabs for various blankets. Grommets are then added to the blanket to hold magnets, stud pins, or any other kind of hardware that can be added to the induction blanket. Thermal Tech & Temp's custom-fabricated tabs come in 2-inch by 7-inch, 3-inch by 6-inch, and 4-inch by 6-inch. Finally, our high-temperature magnets have different pull strengths based on the weight of the blanket. These magnets are installed through the grommet and will simplify attaching the blanket to the workpiece.



### KEY FEATURES:

- Easy installment
- Simple attachment
- High temp resistant
- Uniform heating
- Repetitive heating



# PROTECTIVE SLEEVES

## PROTECTIVE SLEEVES

Thermal Tech & Temp's protective sleeves provide flexibility, durability, and thermal protection against grinding sparks, welding splatter, and other industrial hazards that may be associated with the welding process. Resistant to hydraulic fluids, lubricating oils, and fuels, our protective sleeves insulate the induction coils from such hazards. Our industrial sleeves are coated with a proprietary silicone rubber compound for increased durability and enhanced heat and flame protection.

### KEY FEATURES:

- Lightweight
- Easily shapes to surfaces
- Abrasion resistant
- Resistant to flames & moisture
- Repels oil, sparks, and grease
- Freedom in shaping and cutting for induction coils (air or liquid-cooled)



# INSULATED COIL SLEEVES

## INSULATED COIL SLEEVES

Our high-temperature sleeves are completely customizable to your heat treating application. First, choose from either our 36-ounce silica fabric or 22-ounce kevlar fabric for the outer protection of the sleeve. Then, choose your insulation thickness from our choices of E-glass Needled Mat or Thermasil Needled Mat. Finally, we are able to sew on this high-temperature sleeve to either a coil that your company already has or a brand new liquid or air-cooled induction coil in any length that best suits your needs. In addition to induction coils, our high-temperature sleeves can also offer high-heat protection for hydraulic hoses and electrical cables for your industrial needs. With protective layers of both fabric and insulation, our high-temperature sleeves provide a high level of flexibility, durability, and thermal containment.



### KEY FEATURES:

- Easy to apply
- Forms to surface
- Cost-effective
- Weatherproof

## PROHEAT 35

The ProHeat 35 Induction Heat Systems solve ongoing pre-heat and stress-relieve problems. This user-friendly, cost-effective heating process delivers quick and consistent heat for a multitude of different applications such as welding fabrication and construction, pre-heating of welds, post-weld heat treatment, coating removal, shrink fit applications, and so much more.

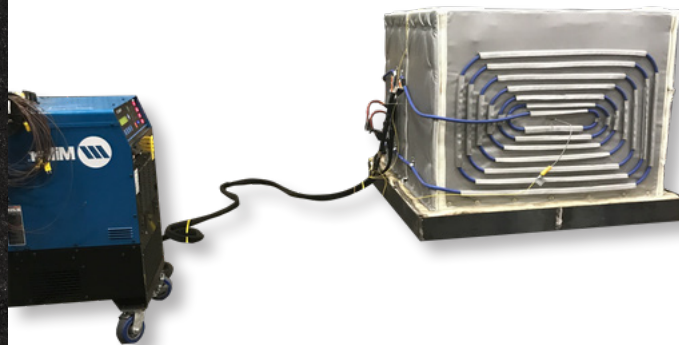
Applications that would typically take hours to heat can be done in minutes using the ProHeat 35. In addition to being simple and efficient, the ProHeat 35 solves many key issues in today's industry. Not only does it not produce exposure to burns and fumes typically associated with open flames and electrical resistant wires, but it also produces less particulate from overheated insulation that is caused by high-temperature electrical wires and ceramic pads.

### PROHEAT 35 APPLICATIONS



#### INDUCTION BLANKETS

Thermal Tech & Temp's induction blankets are custom-made to fit any application you made need. They are also able to be reconfigured without ever needing to use a pegboard, which therefore eliminates the safety hazard of needing to add wood products to your design.



#### INDUCTION OVENS

Our unique manufacturing method of induction ovens and furnaces allows for a uniform preheat and stress relief of materials that you don't see in other induction ovens.

This is especially beneficial for some metals, such as aluminum or stainless steel parts, that cannot be heat treated through direct induction.



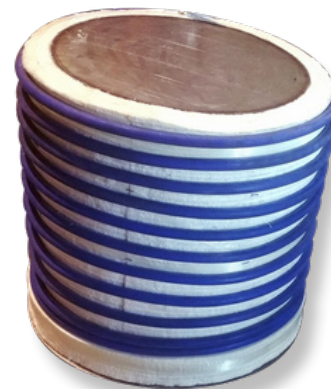
#### CLAMPS & CLAM SHELLS

All of our induction heat clamps and clam shells are custom built and can be fixed and adjusted to best suit your application. Ideally, induction heat clamps are suited for large diameter rotation when using submerged arc or manual metal arc but are also suited to small diameters.

## INDUCTION COILS

### LIQUID-COOLED INDUCTION COILS

Liquid-cooled coils provide a highly versatile tool for preheating, stress-relieving, hydrogen bake out, and post-weld heat treats in a variety of pipe diameters. Liquid-cooled coils are great for preheating applications on geometric that prevent the use of air-cooled blankets. With liquid-cooled coils, uniform heating is maintained along and through the heat zone by using induction to heat within the material.



### TWO WAYS TO HEAT



### AIR-COOLED INDUCTION COILS

Air-cooled coils may be the right choice when the maximum preheat temperature is 400°F. Air-cooled coils provide the same flexibility as liquid-cooled coils for preheating and can be utilized in applications where the part is an irregular, non-standard shape that needs the flexibility of wrapping the part.

# THERMOCOUPLES & MORE

## THERMOCOUPLES & MORE

From spring-loaded thermocouples to extension leads, Thermal Tech & Temp has something to fit all of your temperature recording needs. We offer all types of thermocouple accessories including QQ Thermocouple wire that can be spot-welded onto the piece to provide you with the most accurate temperature measurement of the part being heating, along with spring-loaded thermocouples that are mounted to our induction products.



### MALE & FEMALE THERMOCOUPLE PLUGS

Fixed to the induction blanket to provide precise temperatures while heating



### TYPE K SPRING-LOADED THERMOCOUPLES

Offer reliable, accurate measurements with a wide temperature range



### THERMOCOUPLE & MAGNET COMBO

Custom made combo that can be easily attached to the area you are working on and adjusted to fit your temperature needs



### PREMADE THERMOCOUPLES TYPE K

Can be made in custom lengths and can withstand temperatures of up to 2000 degrees F





### MAGNETIC THERMOCOUPLE

Provides precise high-temperature measurements and comes with fiberglass insulated cable made of stainless steel



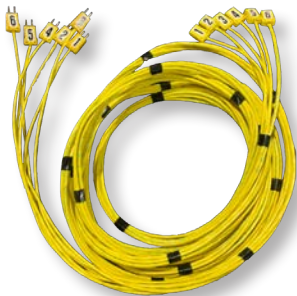
### INSULATED EXTENSION LEAD

Thermocouple extension lead insulated with 1/2 inch thick e-glass insulation covered with 22.0-ounce kevlar fabric



### ROLLING THERMOCOUPLE

Able to move with the rotation of the piece you are working with rather than being limited to a single position for temperature recording



### INDIVIDUAL THERMOCOUPLE EXTENSION LEAD

Custom made to offer more specific plug-in options than the standard extension lead



### BLOCK THERMOCOUPLE EXTENSION LEAD

Can either be produced in a standard 6 block setup or manufactured in custom lengths with (1) loom and (6) plugs



### BROWN THERMOCOUPLE WIRE

Can be easily tack welded to the workpiece for precise temperature control



### 12 & 24 POINT DIGITAL RECORDERS

Connect to the Proheat 35 for accurate measurements with a wide range of temperatures



### THERMOCOUPLE ATTACHMENT UNIT

Capacitor discharge unit with a battery that allows you to spot weld thermocouples to the workpiece



### EUROTHERM 12-POINT DIGITAL RECORDER

Connects directly to a Proheat 35 for accurate temperature measurement

# WELDING & KNEELING PADS

## WELDING & KNEELING PADS

When it comes to ergonomics in the welding industry, kneeling pads can be essential to industrial workers that put constant strain on their knees. Thermal Tech & Temp's high-temperature welding kneeling pads provide great protection from heat and more importantly sparks and slag from welding.

Our pads can be placed in tight, hard-to-reach spaces to offer maximum comfort while working. Manufactured from high-temperature resistant Kevlar and Thermal Tech & Temp Insulation up to 1200 degrees Fahrenheit. Our pads are offered in a variety of thicknesses and can be custom fabricated to any shape or size for your needed application.



### KEY FEATURES:

- Protects from heat, sparks, and welding slag
- Can be placed in tight/hard to reach spaces
- High-temperature resistant
- Protects up to 1200°F
- Offered in a variety of thicknesses
- Custom fabricated to any shape or size



# WELDING CURTAINS

## WELDING CURTAINS

Thermal Tech & Temp welding blankets and curtains aim to protect other applications and areas so weld splatter doesn't arc off and melt or heat something else. Our welding blankets and curtains are also made to order and can be cut to size right off the roll. Thermal Tech & Temp offers a variety of fabrics and styles for all types of welding applications. There are numerous fiberglass fabrics for light welding, grinding, and cutting as well as silica fabrics for heavy welding, slag, and spatter. Our blankets have the ability to withstand steady-state temperatures of 1200°F-1800°F and can be reused.



### KEY FEATURES:

- Highly re-usable
- Protects against sparks
- Shields against splatter
- Does not irritate skin
- Heavy duty



## ORDERING INFORMATION

For placing an order with Thermal Tech & Temp, please email us at [sales@thermaltechtemp.com](mailto:sales@thermaltechtemp.com). Feel free to call us at (1-800) 674-9284 with any questions you may have and we would be happy to assist you.

### INDUCTION OVEN & FURNACE

PART NUMBER	DESCRIPTION
TTT-INDO-24-24	Cylinder Induction Oven, 24" diameter x 24" tall with 50 ft liquid cooled coil
TTT-INDO-36-36	Cylinder Induction Oven, 36" diameter x 36" tall with 80 ft liquid cooled coil
TTT-INDO-48-48	Cylinder Induction Oven, 48" diameter x 48" tall with 140 ft liquid cooled coil
TTT-INDO-60-60	Cylinder Induction Oven, 60" diameter x 60" tall with 160 ft liquid cooled coil
TTT-INDO-60-60-60	Rectangle Induction Oven, 60" wide x 60" tall x 60" long with 140 ft liquid cooled coil
TTT-INDO-48-48-96	Rectangle Induction Oven, 48" wide x 48" tall x 96" long with 160 ft liquid cooled coil

### INDUCTION BLANKET

PART NUMBER	DESCRIPTION
TTT-INDB-6-240	Induction Blanket, 6" wide x 240" long with 80 ft coil, 4 TCs, handles, magnets & grommets
TTT-INDB-12-144	Induction Blanket, 12" wide x 144" long with 80 ft coil, 4 TCs, handles, magnets & grommets
TTT-INDB-16-120	Induction Blanket, 16" wide x 120" long with 80 ft coil, 4 TCs, handles, magnets & grommets
TTT-INDB-24-48	Induction Blanket, 24" wide x 48" long with 80 ft coil, 4 TCs, handles, magnets & grommets
TTT-INDB-24-96	Induction Blanket, 24" wide x 96" long with 140 ft coil, 4 TCs, handles, magnets & grommets
TTT-INDB-36-36	Induction Blanket, 36" wide x 36" long with 80 ft coil, 4 TCs, handles, magnets & grommets

### INDUCTION HEAT CLAMP

PART NUMBER	DESCRIPTION
TTT-IHCLAMP-12	Induction Heat Clamp, 12" diameter with 30 ft liquid cooled coil, lifting stand, & 4 TCs
TTT-IHCLAMP-20	Induction Heat Clamp, 20" diameter with 50 ft liquid cooled coil, lifting stand, & 4 TCs
TTT-IHCLAMP-36	Induction Heat Clamp, 36" diameter with 50 ft liquid cooled coil, lifting stand, & 4 TCs
TTT-IHCLAMP-48	Induction Heat Clamp, 48" diameter with 80 ft liquid cooled coil, lifting stand, & 4 TCs
TTT-IHCLAMP-60	Induction Heat Clamp, 60" diameter with 80 ft liquid cooled coil, lifting stand, & 4 TCs

### INDUCTION HEAT CLAM SHELL

PART NUMBER	DESCRIPTION
TTT-IHCS-12	Induction Heat Clam Shell, 12" diameter with 30 ft liquid cooled coil, lifting stand, & 4 TCs
TTT-IHCS-20	Induction Heat Clam Shell, 20" diameter with 50 ft liquid cooled coil, lifting stand, & 4 TCs
TTT-IHCS-36	Induction Heat Clam Shell, 36" diameter with 80 ft liquid cooled coil, lifting stand, & 4 TCs

### INDUCTION INTERNAL PLUGS

PART NUMBER	DESCRIPTION
TTT-PLUG-12	Induction Internal Plugs, 12" diameter x 24" long with lifting handles & protective sleeve
TTT-PLUG-24	Induction Internal Plugs, 24" diameter x 36" long with lifting handles & protective sleeve
TTT-PLUG-36	Induction Internal Plugs, 36" diameter x 36" long with lifting handles & protective sleeve
TTT-PLUG-48	Induction Internal Plugs, 48" diameter x 36" long with lifting handles & protective sleeve

## ORDERING INFORMATION

Thermal Tech & Temp ordering information is not limited to the specific sizes of the products listed. We are always happy to custom-make products to meet your specific induction needs!

### INDUCTION COIL

PART NUMBER	DESCRIPTION
TTT-LIQC-30	Liquid Cooled Induction Coil, 30 ft long
TTT-LIQC-50	Liquid Cooled Induction Coil, 50 ft long
TTT-LIQC-80	Liquid Cooled Induction Coil, 80 ft long
TTT-LIQC-140	Liquid Cooled Induction Coil, 140 ft long
TTT-LIQC-160	Liquid Cooled Induction Coil, 160 ft long
TTT-AIRC-30	Air Cooled Induction Coil, 30 ft long
TTT-AIRC-50	Air Cooled Induction Coil, 50 ft long
TTT-AIRC-80	Air Cooled Induction Coil, 80 ft long

### PROTECTIVE SLEEVE

PART NUMBER	DESCRIPTION
TTT-TUFSLV-30	Protective Sleeve made of TuffCoat material, 30 ft long
TTT-TUFSLV-50	Protective Sleeve made of TuffCoat material, 50 ft long
TTT-TUFSLV-80	Protective Sleeve made of TuffCoat material, 80 ft long
TTT-TUFSLV-140	Protective Sleeve made of TuffCoat material, 140 ft long
TTT-TUFSLV-160	Protective Sleeve made of TuffCoat material, 160 ft long

### HIGH TEMPERATURE SLEEVES

PART NUMBER	DESCRIPTION
TTT-HTS-SIL-2-80	High Temperature Sleeve, 2" diameter x 80 ft long made of silica fabric
TTT-HTS-SIL-4-80	High Temperature Sleeve, 4" diameter x 80 ft long made of silica fabric
TTT-HTS-SIL-6-80	High Temperature Sleeve, 6" diameter x 80 ft long made of silica fabric
TTT-HTS-TUFF-2-80	High Temperature Sleeve, 2" diameter x 80 ft long made of TuffCoat material
TTT-HTS-TUFF-4-80	High Temperature Sleeve, 4" diameter x 80 ft long made of TuffCoat material
TTT-HTS-TUFF-6-80	High Temperature Sleeve, 6" diameter x 80 ft long made of TuffCoat material
TTT-HTS-KEV-2-80	High Temperature Sleeve, 2" diameter x 80 ft long made of kevlar fabric
TTT-HTS-KEV-4-80	High Temperature Sleeve, 4" diameter x 80 ft long made of kevlar fabric
TTT-HTS-KEV-6-80	High Temperature Sleeve, 6" diameter x 80 ft long made of kevlar fabric

### GROMMETS & MAGNETS

PART NUMBER	DESCRIPTION
TTT-GROM-4	Nickel Plated #4 Grommet
TTT-MAG-40	40 Pound Pull Magnet, 400°F temperature rating
TTT-MAG-60	60 Pound Pull Magnet, 400°F temperature rating

## ORDERING INFORMATION

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### THERMOCOUPLES & MORE

PART NUMBER	DESCRIPTION
TTT-TCK-60	Type K Spring-Loaded Thermocouple, 60 inches long with male thermocouple plug
TTT-TCK-120	Type K Spring-Loaded Thermocouple, 120 inches long with male thermocouple plug
TTT-TCK-300	Type K Spring-Loaded Thermocouple, 300 inches long with male thermocouple plug
TTT-PRMD-TCK-25	Premade Type K Thermocouple, 25 feet long
TTT-MALE-TC	Male Thermocouple Plug
TTT-FEMALE-TC	Female Thermocouple Plug
TTT-INDV-EXT-25	Thermocouple Extension Lead, 1 loom with individual cables, 25 feet long
TTT-INDV-EXT-50	Thermocouple Extension Lead, 1 loom with individual cables, 50 feet long
TTT-INDV-EXT-100	Thermocouple Extension Lead, 1 loom with individual cables, 100 feet long
TTT-BLOCK-EXT-25	Thermocouple Extension Lead, 1 loom with standard block setup, 25 feet long
TTT-BLOCK-EXT-50	Thermocouple Extension Lead, 1 loom with standard block setup, 50 feet long
TTT-BLOCK-EXT-100	Thermocouple Extension Lead, 1 loom with standard block setup, 100 feet long
TTT-INS-EXT-25	Insulated Extension Lead, 1 cable, 25 feet long
TTT-INS-EXT-50	Insulated Extension Lead, 1 cable, 50 feet long
TTT-TC-60-MAG-40	Thermocouple & Magnet Combo, 60" long thermocouple with 40 lb pull magnet
TTT-MAGTC-RED	Magnetic Thermcouple, red with insulated stainless steel cable
TTT-ROLL-TC	Rolling Thermcouple
TTT-QQ-TCWIRE-500	Brown QQ Thermocouple Wire, 500 feet of thermocouple wire per spool
TTT-REC-12	12-Point Digital Recorder
TTT-REC-24	24-Point Digital Recorder
TTT-EUROREC-12	12-Point Eurotherm Digital Recorder for Miller Proheat 35
TTT-TAU-UNIT	Thermocouple Attachment Unit, with battery and 110 volt plug to re-charge

### WELDING & KNEELING PAD

PART NUMBER	DESCRIPTION
TTT-WKP-24-48	Welding & Kneeling Pad, 2" thick x 24" wide x 48" long made from 22.0 oz kevlar fabric
TTT-WKP-36-48	Welding & Kneeling Pad, 2" thick x 36" wide x 48" long made from 22.0 oz kevlar fabric
TTT-WKP-24-24	Welding & Kneeling Pad, 2" thick x 24" wide x 24" long made from 22.0 oz kevlar fabric
TTT-WKP-48-48	Welding & Kneeling Pad, 2" thick x 48" wide x 48" long made from 22.0 oz kevlar fabric

### WELDING CURTAIN

PART NUMBER	DESCRIPTION
TTT-WC-48-48	Welding Curtain, 48" wide x 48" long made of 36.0 oz silica fabric with grommets
TTT-WC-48-72	Welding Curtain, 48" wide x 72" long made of 36.0 oz silica fabric with grommets
TTT-WC-48-96	Welding Curtain, 48" wide x 96" long made of 36.0 oz silica fabric with grommets
TTT-WC-48-120	Welding Curtain, 48" wide x 120" long made of 36.0 oz silica fabric with grommets

## ORDERING INFORMATION

Thermal Tech & Temp ordering information is not limited to the specific sizes of the products listed. We are always happy to custom-make products to meet your specific induction needs!

### INSULATION MATERIAL

PART NUMBER	DESCRIPTION
TTT-ENM-12-60	E-Glass Needled Mat, 1/2" thick by 60 inches wide by 100 feet long (500 sf/roll)
TTT-ENM-25-60	E-Glass Needled Mat, 1" thick by 60 inches wide by 45 feet long (225 sf/roll)
TTT-TSM-12-36	Thermasil Needled Mat, 1/2" thick by 36 inches wide by 75 feet long (225 sf/roll)
TTT-TSM-25-36	Thermasil Needled Mat, 1" thick by 36 inches wide by 33 1/3 feet long (100 sf/roll)
TTT-SOLF-12-24	Soluble Fiber, 1/2" thick by 24 inches wide by 50 feet long (100 sf/roll)
TTT-SOLF-25-24	Soluble Fiber, 1" thick by 24 inches wide by 25 feet long (50 sf/roll)

### INDUSTRIAL TEXTILES

PART NUMBER	DESCRIPTION
TTT-SIL-1800	Silica Fabric, 18.0 oz/square yard
TTT-SIL-3600	Silica Fabric, 36.0 oz/square yard
TTT-HB-SRC	Herringbone Silica Fabric, 29.0 oz/square yard
TTT-TEX-2	Plain Weave Silica Fabric, 36.0 oz/square yard
TTT-TEX-4	Twill Weave Silica Fabric, 59.0 oz/square yard
TTT-SRC-1700	Fiberglass Fabric with Silicone Rubber, 17.5 oz/square yard
TTT-SRC-3400	Fiberglass Fabric with Silicone Rubber, 34.0 oz/square yard
TTT-WELD-3500	Fiberglass Fabric with Highly Texturized Yarn, 35.0 oz/square yard
TTT-KEV-2200	Kevlar Fabric, 22.0 oz/square yard



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## TTT-SIL-3600 DATA

1

### DESCRIPTION

TTT-SIL-3600 is a medium-weight silica fabric, tan in color, with superior physical and thermal characteristics compared to traditional silica fabrics. ANSI/FM 4950 approved for welding curtains. This material can meet MIL C24576A Type 1.

2

### APPLICATIONS

TTT-SIL-3600 is intended for use in any application where high heat resistance and thermal protection are required, such as furnace curtains, stress-relieving blankets, welding blankets, and other heat shielding applications.

3

### ADVANTAGES

The unique properties of TTT-SIL-3600 make it an extremely cost-effective alternative to regular silica fabrics with superior physical properties, such as abrasion resistance and breaking strength. The vermiculite coating that is on TTT-SIL-3600 performs a dual task. Initially, it reduces the ability of the fabric to fray making it more workable through the cutting and sewing processes. The even greater duty of the vermiculite coating is to dissipate the heat across the fabric rather than allow heat from molten slag to fester in a single point allowing greater protection from molten slag going through the fabric. These factors along with the higher melting point of the amorphous silica allow TTT-SIL-3600 to be the fabric of choice where high heat resistance is desired.

4

### PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Weight	ASTM-D-3776	34.0 oz/sy +/- 10%	1156 g/m +/- 10%
Thickness	ASTM-D-1777	.0050" +/- 10%	1.270 mm +/- 10%
Breaking Strength	ASTM-D-579	Warp: 200 lbs/in Fill: 100 lbs/in	Warp: 35.71 kg/cm Fill: 17.86 kg/cm
Temperature Resistance	N/A	Continuous Use: 1800°F Melting: 3000° F	Continuous Use: 982°C Melting: 1649°C
Linear Shrinkage		5% at 1800° F	5% at 982.22 °C
Base Fabric and Weave	N/A	Silica/8 Harness Satin	
Color:	N/A	Light Tan/Vermiculite	
Abrasion Resistance	MIL-C-24576A	20 Cycles/minute	
Width	N/A	35 inches	88.9 centimeters
Length	N/A	50 yards	45.72 meters

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## TTT-KEV-2200 DATA

1

### DESCRIPTION

TTT-KEV-2200 is a fairly modern fabric with an innumerable amount of applications across many industries. Known for its heat resistance and incredible strength, KEVLAR has found itself used as an essential component in protective equipment used by all industrial fields for abrasion protection, high strength fabric for covers, and blankets. TTT-KEV-2200 is an aramid fiber blend over a fiberglass core yarn. It can be used to produce high-temperature sleeves, heat shields, and curtains, tadpole seals, etc.

2

### APPLICATIONS

TTT-KEV-2200 is intended for preheat blankets, kneeling pads, protecting hoses, cables, welding neck protectors, low-temperature heating blankets, and welding gloves.

3

### ADVANTAGES

TTT-KEV-2200 is most notably recognized for its durability and ability to withstand impact, due to its high tensile strength-to-weight ratio. It is known to be five times stronger than steel. In terms of temperature, TTT-KEV-2200 can not only maintain its durability down to cryogenic temperatures but is even found to be stronger in such conditions. In intense heat, the tensile strength is found to reduce by 10% after exposure to 160°C (320 °F) for 500 hours.

4

### PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Weight	ASTM-D-3776	22.0 oz/sy +/- 10%	623.69 g/m <sup>2</sup> +/- 10%
Thickness	ASTM-D-1777	0.08" +/- 10%	2.032 mm +/- 10%
Tensile Strength	ASTM-D-5035	Warp: 225 lbs/in Fill: 150 lbs/in	40.1804 kg/cm 26.787 kg/cm
Temperature Resistance	N/A	600°F	315.556 °C
Color:	N/A	Yellow and Green	

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## TTT-TEX-2 DATA

1

### DESCRIPTION

TTT-TEX-2 is a high temperature resistant plain weave silica fabric with properties that include low thermal conductivity and ultra-low heat storage.

2

### APPLICATIONS

TTT-TEX-2 is intended for flange and equipment covers, removable insulation fabrics, expansion joints, and welding blankets.

3

### ADVANTAGES

The unique properties of TTT-TEX-2 make water, chemical, oil and it high temperature resistant, have low thermal conductivity, and ultra-low heat storage. TTT-TEX-2 is also skin-friendly and harmless to health.

4

### PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Thickness	DIN EN ISO 5084	0.789" +/- 0.01"	2.0 mm +/- 0.3 mm
Area Weight	DIN EN 12127	30.97 oz/yd <sup>2</sup> +/- 10%	1050 g/m <sup>2</sup> +/- 10%
Threadcount Warp	DIN EN 1049-2		55 Fd./10cm +/- 3 Fd./10 cm
Threadcount Weft	DIN EN 1049-2		31 Fd./10cm +/- 3 Fd./10 cm
Tensile Strength Warp	DIN EN ISO 13934-1		> 2500 N/5 cm
Tensile Strength Weft	DIN EN ISO 13934-1		> 850 N/5 cm
Linear Shrinkage	PV 01362	< 3%	< 3%
Loss on Ignition	ISO 1887	< 3%	< 3%
Weave	N/A	Plain	
Color:	N/A	White	
Application Limit			1050°C <sup>1</sup>
Brief Peaks up to			1100°C <sup>2</sup>

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## TTT-TEX-4 DATA

1

### DESCRIPTION

TTT-TEX-4 is a high-temperature resistant twill weave silica fabric with properties that include low thermal conductivity and ultra-low heat storage.

2

### APPLICATIONS

TTT-TEX-4 is intended for rugged terrain and conditions, abrasion-prone areas, expansion joints, pads, curtains, covers, and sleeves.

3

### ADVANTAGES

The unique properties of TTT-TEX-4 make it high-temperature resistant, have low thermal conductivity, and ultra-low heat storage. TTT-TEX-4 is also skin-friendly and harmless to health. TTT-TEX-4 handles high temperatures better than most plain style silica fabrics due to the texturization of the silica yarn. TTT-TEX-4 also handles metal to metal abrasion with ease.

4

### PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Weight	ASTM-D-3776	59.0 oz/sqyd +/- 10%	2000.44 g/m <sup>2</sup> +/- 10%
Weight with coating	N/A	None	None
Temperature Resistance	N/A	1022°F	550°C
Melting Temperature	N/A	1544°F	840°C
Thickness	ASTM-D-1777	0.05 inches +/- 10%	1.27 mm +/- 10%
Thread count	N/A	Warp: 82 Fd/10 cm Weft: 30 Fd/10 cm	
Yarn count	N/A	Warp: 500 tex Weft: 820 tex	
Tensile strength	N/A	Warp: > 4000 N/5 cm Weft: > 1000 N/5 cm	
Base Fabric and Weave	N/A	Twill weave	
Color:	N/A	White	

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## TTT-SRC-3400 DATA

1

### DESCRIPTION

TTT-SRC-3400 is a fiberglass fabric impregnated with a specially formulated silicone rubber designed to meet the rigid requirements for use in nuclear reactors. This product is designed specifically for high temperature (500 ° F) removable pads, flange, and valve covers. This product can be manufactured to meet the requirements of NRC 1.36 as well as MIL-I-24244. This (Heavy Duty) silicone impregnated fiberglass fabric is used where more wear resistance is needed.

2

### APPLICATIONS

TTT-SRC-3400 is intended for removable insulation pad covering, flange and valve covers, welding curtains and splash shields, safety clothing, equipment covers, and flexible connectors (expansion joints).

3

### ADVANTAGES

The unique properties of TTT-SRC-3400 make it water and oil resistant, acid and alkali resistant, flame retardant, low smoke, easily sewn, adhesively bonded or sealed. The special high temperature, flame retardant silicone rubber provides greater life and improved resistance to abrasion, flexing, tear, and puncture.

4

### PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Weight	ASTM-D-3776	34.0 oz/sy +/- 10%	1156g/m <sup>2</sup> +/- 10%
Thickness	ASTM-D-1777	.037" +/- 10%	0.940 mm +/- 10%
Breaking Strength	ASTM-D-5034	Warp: 400 lbs/in Fill: 350 lbs/in	Warp: 71.44 kg/cm Fill: 62.51 kg/cm
Tear Strength	ASTM-D-5587	Warp: 65 lbs/min. Fill: 55 lbs/min	Warp: 29.48 kg/min. Fill: 24.95 kg/min.
Burst Strength	ASTM-D-3786	750 psi/min	52.5 kg/sqcm
Flame Resistance	ASTM-D-6413	Char Length: 1" max Afterglow: 1 sec. max Flame Out: 1 sec. max	Char Length: 2.54 cm max
Temperature Resistance	N/A	-67°F to 500°F	-55°C to 260°C
Base Fabric and Weave	N/A	Fiberglass/Satin Weave	
Color:	N/A	Silver Silicone	
E-glass fabric	N/A	1200°F Melting Point	649°C Melting Point

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## TTT-WELD-3500 DATA

### 1 DESCRIPTION

TTT-WELD-3500 is extremely heavyweight fiberglass made with highly texturized yarn creating a very “bulky” fabric. It is available in three different finishes - GR (Greige or Loomstate), WS (Weave Set Finish), or VCF (Vermiculite Coating for high-temperature protection.)

### 2 APPLICATIONS

TTT-WELD-3500 is intended for uses where a heavyweight, thick (insulative) fabric is required with high heat resistance. The WS finish facilitates fabrication by reducing raveling and fraying of cut edges. The VCF (Vermiculite Coating) finish provides a combination of high heat resistance and weaves stability for use in fabrication items, such as mitts, gloves, aprons, removable blankets, expansion joints, and strip curtains. Available in 40" (101.6 cm) and 60" (152.4 cm) widths.

### 3 ADVANTAGES

Due to the fact that TTT-WELD-3500 is a texturized fiberglass plain weave fabric, it is extremely durable with high tensile strength and can handle temperatures up to 1200°F.

### 4 PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Weight	ASTM-D-3776	35.0 oz/sy +/- 10%	1190 g/m <sup>2</sup> +/- 10%
Thickness	ASTM-D-1777	0.080" +/- 10%	1.5424 mm +/- 10%
Tensile Strength	ASTM-D-5035	Warp: 470 lbs/in Fill: 250 lbs/in	Warp: 83.94 kg/cm Fill: 44.65kg/cm
Ends/Inch	ASTM-D-3775	Warp: 10 Fill: 8	
Temperature Resistance	N/A	GR and WS: 1000°F VCF: 1200°F continuous VCF: 1500°F intermittent	538°C : 649°C : 816°C VCF: 648.89 °C continuous VCF: 815 °C intermittent
Base Fabric and Weave	N/A	Fiberglass/Plain weave	
Color:	N/A	GR, WS: White; VCF: Tan	

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## TTT-ENM-25 DATA

1

### DESCRIPTION

TTT-ENM-25 is manufactured to conform with the requirements of Military Specification MIL-1-16411 Type II, ASTM-C-1086-96, and Coast Guard Specification for Incombustible Materials #164.009 and MIL-1-24244. TTT-ENM-25 is a fiberglass mat composed of 100% "E" type glass fibers 9-13 microns in diameter which is put into a web form and mechanically needled together without chemical binders.

2

### APPLICATIONS

TTT-ENM-25 is intended for use as thermal insulation and gasket material in home and industrial furnaces, package boiler, and for special piping applications where heat resistance, flexibility, and low special air and liquid chemical and thermal resistance are mandatory.

3

### ADVANTAGES

The unique properties of TTT-ENM-25 make it an effective low-cost replacement for asbestos mats, mill-board, ceramic or refractory paper, mat and sheets, and mineral boards.

4

### PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Weight		15 oz/sqft	4578 g/m <sup>2</sup>
Thickness	ASTM-D-1777	1" +/- 10%	25.4 mm +/- 10%
Density		11 lbs/ft <sup>3</sup>	176.2 kg/m <sup>3</sup>
Temperature Resistance	N/A	Max: 1200°F	Max: 649°C
Flame Resistance	ASTM-E-84	Flame Spread: 0 Smoke Developed: 0	
Tensile Strength	N/A	Machine: 125 lbs Cross machine: 90 lbs	Machine: 56.699 kg Cross machine: 90.8233 kg
Acoustical Ratings	N/A	250 frequency: .15 +/- .04 500 frequency: .8 +/- .03 1000 frequency: 1.02 +/- .02 2000 frequency: 1.08 +/- .02 4000 frequency: .92 +/- .02	
Color:	N/A	White	

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## TTT-TSM-25 DATA

1

### DESCRIPTION

TTT-TSM-25 is lightweight, high-temperature insulation composed of 100% amorphous silica fiber that has been specially treated during the manufacturing process to reduce residual shrinkage at elevated temperatures.

2

### APPLICATIONS

TTT-TSM-25 is intended for use in glass furnace crown insulation repair, nuclear insulation applications, acoustic insulation, insulating pads, and blankets, high temperature and acid resistant gaskets, exhaust manifold insulation, stress-relieving pads, high-temperature pipe and valve insulation, welding protection, thermal, and acoustic insulation for steam and gas turbines, expansion joints and more.

3

### ADVANTAGES

The unique properties of TTT-TSM-25 make it binder-free, highly resilient, non-respirable, fireproof and, cost-effective. TTT-TSM-25 also has outstanding chemical resistance, has excellent sound absorption, and low shrinkage.

4

### PROPERTY DATA

Characteristics:	Method:	English Values:	Metric Values:
Thickness	ASTM-D-1777	1" +/- 10%	25.4 mm +/- 10%
Density		10.5 to 12.0 lbs/ft <sup>3</sup>	168 to 192 kg/cc
Temperature Resistance	N/A	Intermittent: 2200°F Continuous: 2000°F Melting: 3100°F	Intermittent: 1200°C Continuous: 1100°C Melting: 1700°C
Linear Shrinkage	24 hrs at 1000°F (540°C) 24 hrs at 1200°F (990°C) 24 hrs at 1400°F (820°C) 24 hrs at 1600°F (1000°C) 24 hrs at 1800°F (1100°C) 24 hrs at 2000°F (1200°C)	0.05% 0.06% 0.06% 0.10% 0.30% 0.70%	
Thermal Conductivity	500°F (260°C) 1000°F (540°C) 1500°F (820°C) 1800°F (1000°C)	0.45 Btu-in/hr.ft 0.78 Btu-in/hr.ft 1.39 Btu-in/hr.ft 1.93 Btu-in/hr.ft	0.054 Kcal-m/hr.m <sup>20C</sup> 0.094 Kcal-m/hr.m <sup>20C</sup> 0.166 Kcal-m/hr.m <sup>20C</sup> 0.231 Kcal-m/hr.m <sup>20C</sup>
Color:	N/A	White	

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