

ProHeat™

Induction Blankets

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Induction Heating System 



Blankets easily conform to circular and flat parts.



Miller® ProHeat Induction Blankets are an innovation in preheat technology from a leader in the welding industry. The flexible, lightweight induction heating blankets come in a variety of sizes and are capable of preheat temperatures up to 400° Fahrenheit (204° C). The blankets easily conform to circular and flat parts and install in a matter of seconds. Manufactured from durable high-temperature materials, flexible induction blankets are designed to withstand the tough conditions in both industrial and construction applications. Each blanket is supplied with two spare blanket-securing straps and one replaceable Kevlar® sleeve which provides added protection against abrasion, cuts and tears, extending blanket life.

Features and Benefits

Replaceable Kevlar® sleeve. Each ProHeat Flexible Induction Blanket is supplied with a replaceable Kevlar sleeve for added protection against abrasion, cuts and tears. Straight-forward installation with hook-and-loop Velcro® allows for trouble-free field replacement.

Air-cooled — 100-percent duty cycle. Rated for continuous operation at 400° Fahrenheit (204° C), all Flexible Induction Blankets feature air-cooling. By eliminating the need for water-cooling as used in conventional induction coils, the ProHeat Flexible Induction Blanket provides greater flexibility and reduced installation costs.

Twistlock connectors. Electrical connection to output extension cables is made through the use of durable twistlock connectors. Molded to the ends of wires extending from the blanket, these connectors assure that connection is maintained during handling and operation of the induction system. A plastic shell seals the connection from dirt, debris and moisture.

High operating efficiency. With an operating efficiency greater than 90 percent, the ProHeat Flexible Induction Blankets provide efficient preheat performance for thin or heavy-wall part application.

True Blue® 90-day warranty. ProHeat Flexible Induction Blankets are built to the highest standards of quality and durability to ensure they withstand the rugged environment to which they're exposed.

Specifications

Maximum preheat temperature: 400° Fahrenheit (204° C).

See Lit. Index No. IN/11.0 ProHeat 35 for more information on induction heating systems.



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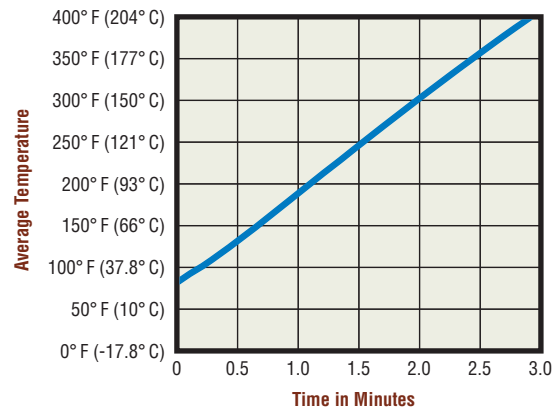


Performance Data

25 kW time to temperature with 24-inch (61 cm) diameter pipe blanket.

Fixed parameters

- Ambient temperature: 75° F (24° C)
- Material: carbon steel
- Material mass: 86 lb. (39 kg)
- Still air
- System efficiency: 95%

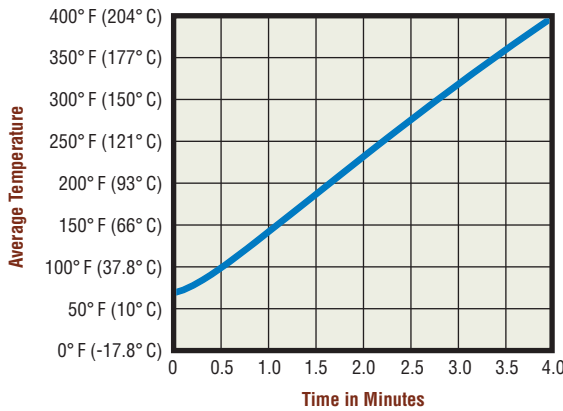


- 400° F (204° C) in 3.0 min.
- 350° F (177° C) in 2.4 min.
- 300° F (150° C) in 1.9 min.
- 250° F (121° C) in 1.5 min.
- 200° F (93° C) in 1.1 min.
- 150° F (66° C) in 0.7 min.

25 kW time to temperature with 36-inch (91 cm) diameter pipe blanket.

Fixed parameters

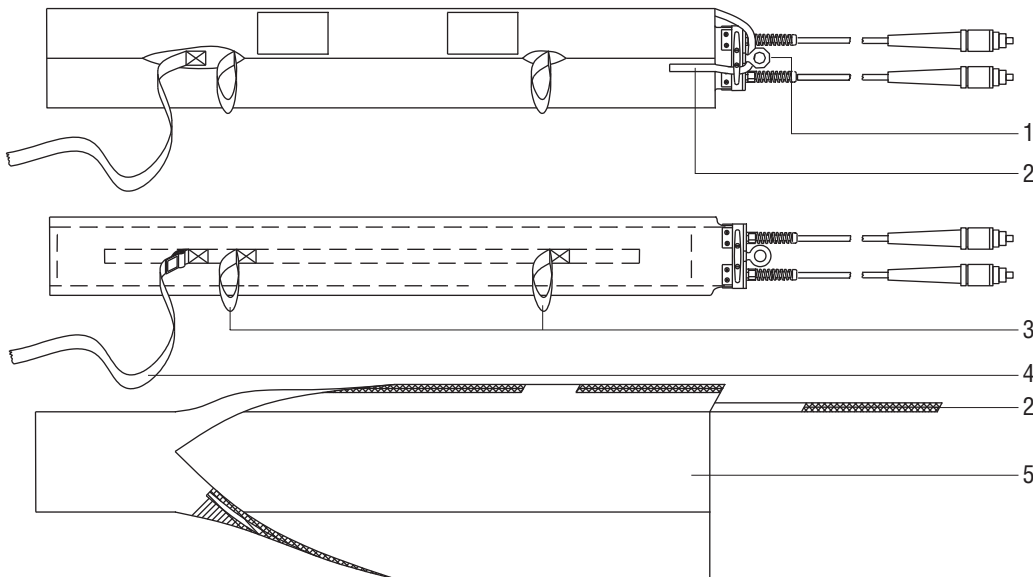
- Ambient temperature: 75° F (24° C)
- Material: carbon steel
- Material mass: 129 lb. (58.5 kg)
- Still air
- System efficiency: 95%



- 400° F (204° C) in 4.0 min.
- 350° F (177° C) in 3.4 min.
- 300° F (150° C) in 2.8 min.
- 250° F (121° C) in 2.2 min.
- 200° F (93° C) in 1.6 min.
- 150° F (66° C) in 1.1 min.

Blanket and Sleeve Assembly

Please refer to product manual for detailed assembly, installation and safety information.



1. Eyelet
2. Sleeve Securing Strap
3. Handles
4. Blanket Securing Strap
5. Protective Sleeve

Air-Cooled Blankets Applications

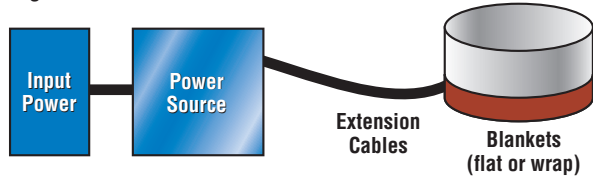
Use of the system with air-cooled blankets can be broken down into three different configurations. These include:

1. A single blanket attached to the power source. See Figure 1.
2. Two blankets in parallel on a single power source. See Figure 2.
3. Four blankets in a series/parallel arrangement on a single power source. See Figure 3.

Single Blanket Arrangement

A single blanket arrangement requires a single extension cable and blanket attached to the power source.

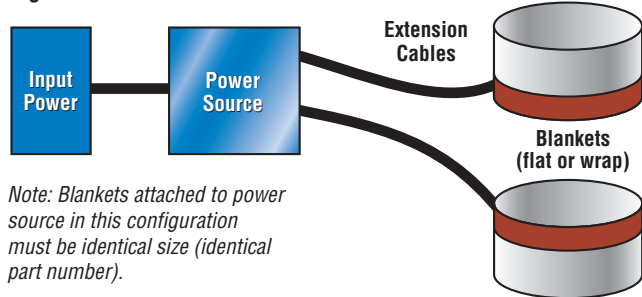
Figure 1



Parallel Blanket Adjustment

A two blanket parallel arrangement requires two equal size blankets and two extension cables attached to a single power source as shown in Figure 2. In this arrangement, the output power from the power source is divided equally between the blankets (assuming both blankets are in direct contact with the material being heated).

Figure 2

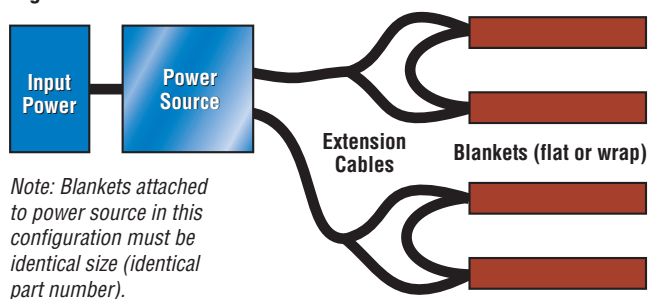


Note: Blankets attached to power source in this configuration must be identical size (identical part number).

Series/Parallel Blanket Arrangement

A series/blanket parallel arrangement requires four equal size blankets, two extension cables and two series adapter cables attached to a single power source as shown in Figure 3. In this arrangement, the output power from the power source is divided equally between the four blankets (assuming all blankets are in direct contact with the material being heated).

Figure 3



Note: Blankets attached to power source in this configuration must be identical size (identical part number).

Ordering Information

Induction Blanket

- #300 080 For 8.625-in. (22 cm) pipe, 13.1 x 40 in. (33 cm x 102 cm) with sleeve
- #300 079 For 10.75-in. (27 cm) pipe, 11.3 x 44 in. (29 cm x 112 cm) with sleeve
- #300 078 For 12-in. (31 cm) pipe, 47 x 10.1 in. (119 cm x 26 cm) with sleeve
- #300 077 For 14-in. (36 cm) pipe, 53 x 10.1 in. (135 cm x 26 cm) with sleeve
- #300 075 For 16-in. (41 cm) pipe, 60 x 10.1 in. (152 cm x 26 cm) with sleeve
- #300 074 For 18-in. (46 cm) pipe, 66 x 9.0 in. (168 cm x 23 cm) with sleeve
- #300 073 For 20-in. (51 cm) pipe, 72 x 9.0 in. (183 cm x 23 cm) with sleeve
- #300 072 For 22-in. (56 cm) pipe, 78 x 9.0 in. (198 cm x 23 cm) with sleeve
- #300 071 For 24-in. (61 cm) pipe, 85 x 9.0 in. (216 cm x 23 cm) with sleeve
- #300 070 For 26-in. (66 cm) pipe, 91 x 9.0 in. (231 cm x 23 cm) with sleeve
- #300 069 For 28-in. (71 cm) pipe, 97 x 9.0 in. (246 cm x 23 cm) with sleeve
- #300 068 For 30-in. (76 cm) pipe, 104 x 9.0 in. (264 cm x 23 cm) with sleeve
- #300 067 For 32-in. (81 cm) pipe, 110 x 9.0 in. (279 cm x 23 cm) with sleeve
- #300 066 For 34-in. (86 cm) pipe, 116 x 9.0 in. (295 cm x 23 cm) with sleeve
- #300 065 For 36-in. (91.5 cm) pipe, 122 x 7.5 in. (310 cm x 19 cm) with sleeve
- #300 064 For 38-in. (97 cm) pipe, 129 x 7.5 in. (328 cm x 19 cm) with sleeve
- #300 087 For 40-in. (101.6 cm) pipe, 135 x 7.5 in. (343 cm x 19 cm) with sleeve
- #300 063 For 42-in. (106.7 cm) pipe, 141 x 7.5 in. (358 cm x 19 cm) with sleeve
- #300 088 For 44-in. (111.8 cm) pipe, 147 x 7.5 in. (373 cm x 19 cm) with sleeve
- #300 062 For 46-in. (117 cm) pipe, 154 x 7.5 in. (391 cm x 19 cm) with sleeve
- #300 061 For 48-in. (122 cm) pipe, 160 x 7.5 in. (406 cm x 19 cm) with sleeve
- #300 060 For 52-in. (132 cm) pipe, 173 x 7.5 in. (439 cm x 19 cm) with sleeve
- #224 584 For 56-in. (142 cm) pipe, 185 x 7.5 in. (470 cm x 19 cm) with sleeve
- #300 336 For 60-in. (152 cm) pipe, 197 x 7.5 in. (500 cm x 19 cm) with sleeve
- #301 088 Narrow, for 48-in. (122 cm) pipe, 160 x 4.5 in. (406 cm x 11 cm) with sleeve
- #301 089 Narrow, for 56-in. (142 cm) pipe, 185 x 4.5 in. (470 cm x 11 cm) with sleeve
- #300 847 29.75-in. (75.6 cm) diameter circular with sleeve

Induction Blanket Sleeve — Replaceable Kevlar® sleeves for extended induction blanket life.

- #195 337 For 8.625-in. (22 cm) pipe, 41 x 13.1 in. (104 cm x 33 cm)
- #195 338 For 10.75-in. (27 cm) pipe, 45 x 11.3 in. (114 cm x 29 cm)
- #194 889 For 12-in. (31 cm) pipe, 49 x 10.1 in. (124 cm x 26 cm)
- #194 888 For 14-in. (36 cm) pipe, 55 x 10.1 in. (140 cm x 26 cm)
- #194 887 For 16-in. (41 cm) pipe, 62 x 10.1 in. (158 cm x 26 cm)
- #194 707 For 18-in. (46 cm) pipe, 68 x 9.0 in. (173 cm x 23 cm)
- #198 664 For 20-in. (51 cm) pipe, 74 x 9.0 in. (188 cm x 23 cm)
- #198 665 For 22-in. (56 cm) pipe, 81 x 9.0 in. (206 cm x 23 cm)
- #194 706 For 24-in. (61 cm) pipe, 87 x 9.0 in. (221 cm x 23 cm)
- #198 666 For 26-in. (66 cm) pipe, 94 x 9.0 in. (239 cm x 23 cm)
- #198 667 For 28-in. (71 cm) pipe, 100 x 9.0 in. (254 cm x 23 cm)
- #198 668 For 30-in. (76 cm) pipe, 107 x 9.0 in. (272 cm x 23 cm)
- #194 811 For 32-in. (81 cm) pipe, 114 x 9.0 in. (289 cm x 23 cm)
- #194 812 For 34-in. (86 cm) pipe, 120 x 9.0 in. (305 cm x 23 cm)
- #194 705 For 36-in. (91.5 cm) pipe, 127 x 7.5 in. (323 cm x 19 cm)
- #194 813 For 38-in. (97 cm) pipe, 133 x 7.5 in. (338 cm x 19 cm)
- #194 814 For 40-in. (101.6 cm) pipe, 140 x 7.5 in. (356 cm x 19 cm)
- #198 669 For 42-in. (106.7 cm) pipe, 146 x 7.5 in. (371 cm x 19 cm)
- #194 810 For 44-in. (111.8 cm) pipe, 153 x 7.5 in. (389 cm x 19 cm)
- #194 809 For 46-in. (117 cm) pipe, 159 x 7.5 in. (404 cm x 19 cm)
- #198 670 For 48-in. (122 cm) pipe, 166 x 7.5 in. (422 cm x 19 cm)
- #200 262 For 52-in. (132 cm) pipe, 179 x 7.5 in. (455 cm x 19 cm)
- #217 628 For 56-in. (142 cm) pipe, 193 x 7.5 in. (490 cm x 19 cm)
- #261 481 For 60-in. (152 cm) pipe, 205 x 7.5 in. (521 cm x 19 cm)
- #261 479 Narrow, for 48-in. (122 cm) pipe, 162 x 5.5 in. (412 cm x 14 cm)
- #261 480 Narrow, for 56-in. (142 cm) pipe, 187 x 5.5 in. (475 cm x 14 cm)

Blanket Securing Strap #197 866



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