ArcReach® Heater

Air-Cooled Induction System

Quick Specs

Applications
Refineries
Oil and gas
Petrochemical
Power plants
Shipyards
Structural

Process
Induction heating

Maximum Preheat Temperature
600°F (315°C)

Input Power
Operates on open-circuit voltage: 50-70 volts

Output Current 200 amps
Output Voltage 300 volts
Source Current 33 amps
Output Frequency 5–30 kHz
Rated Output 7.8 kW at 100% duty cycle

Dimensions
H: 18.6 in. (472 mm)
W: 11.2 in. (285 mm)
D: 26.7 in. (678 mm)

Weight
Net: 43 lb. (20 kg)

Take charge of your field preheat and bake-out applications up to 600 degrees Fahrenheit (315°C).

NEW! **As part of the ArcReach technology platform, the heater is an accessory for select ArcReach welding power sources.**

The induction heating tools (air-cooled cables or air-cooled quick wraps) connect to the ArcReach Heater, which is powered by select on-site welding power sources.

Air-cooled cable

Air-cooled quick wrap

ArcReach Heater systems allow economical, insourced weld preheating

With ArcReach Heater systems you can:

- Eliminate the costly overruns common with heating contractors
- Eliminate delays due to transitions between heating and welding crews
- Run your own schedule without depending on third-party contractors
- Use existing on-site welding equipment up to 200 feet away as the heating power source
- Lower preheating costs
- Automatically and accurately document joint temperatures
- Eliminate safety concerns caused by traditional open-flame heating

The ArcReach Heater air-cooled induction heating system is specifically designed for preheating and bake-out applications up to 600 degrees Fahrenheit (315°C), without the need for a cooler and coolant. Temperature control programs can be manually entered or loaded via USB drive. Heating data is automatically recorded and can be saved for use in quality control and documentation needs.

The air-cooled cables and quick wraps are manufactured from durable high-temperature materials, and designed to withstand the tough conditions in both industrial and construction applications.

ArcReach Heater is warranted for one year, parts and labor.
Accessories are warranted for 90 days, parts only.

Induction benefits

Improved working environment during welding. Welders are not exposed to open flames, explosive gases and hot elements associated with fuel gas heating and resistance heating.

Easy setup with flexibility to fit a variety of pipe diameters and plate lengths.

Uniform heating is maintained along and through the heat zone by using induction heat within the material. The surface of the part is not marred by localized conducted heat at higher than specified temperatures.

Time-to-temperature is faster than conventional processes due to the method of applying heat, reducing cycle time.

ArcReach® Heater System

Air-Cooled Cable Configuration

Shown with cable covers and preheat insulation.

Air-cooled cables are available in lengths of 30, 50 or 80 feet (9.1, 15.2 or 24.4 m). Designed with flexibility and efficiency in mind, the cables can be wrapped into coils of various shapes and sizes to fit almost any induction preheating application.

Compatible ArcReach power sources include:

- EX360 FieldPro
- XMT350 FieldPro
- XMT® 350 FieldPro™ with Polarity Reversing
- PipeWorx 350 FieldPro™
- Big Blue® 400 Pro
- Big Blue® 400 PipePro®
- Big Blue® 500 Pro
- Big Blue® 600 Pro
- Big Blue® 600 Air Pak™ Big
- Blue® 800 Duo Pro Big
- Blue® 800 Duo Air Pak™

Air-Cooled Quick Wrap Configuration

Air-cooled quick wraps provide a fast and easy way to wrap a pipe joint for preheating. Simply place around the pipe, connect the ends, and cinch the clip as close to the pipe as possible. Quick wraps fit pipe diameters from 10 to 1.5 inches (25.4 to 3.8 cm).

Up to six contact thermocouple sensors (probes) can be inserted into the extension cable for temperature feedback to the power source.

Up to two heating tools can be connected to the extension cable.

ArcReach® Heater System Components and Accessories

ArcReach Heater 301390
The ArcReach Heater is equipped with built-in temperature control allowing for either manual or computer-loaded programming using up to six thermocouples. The ArcReach Heater can run either one or two heating tools (air-cooled cable or air-cooled quick wrap) at the same time.
Note: Weld cables are not included.

ArcReach Heater Extension Cable
301451 10 ft. (3 m)
Air-cooled cables or quick wraps connect to the side of the box. Up to six thermocouple sensors connect to the yellow panel, and provide temperature feedback from the piece that is being heated.

Air-Cooled Quick Wrap 301452
The quick wrap works on pipe with outside diameter of 10 to 1.5 inches (25.4 to 3.8 cm), and can heat up to a maximum of 600 degrees Fahrenheit (315°C). Requires preheat insulation for temperatures over 392 degrees Fahrenheit (200°C) to protect the tool. Most joints will require two air-cooled quick wraps to be used simultaneously — one on each side of the joint.

Air-Cooled Cable
301453030 30 ft. (9.1 m)
301453050 50 ft. (15.2 m)
301453080 80 ft. (24.4 m)
Air-cooled cables are ideal for wrapping various pipe diameters, flat plate and irregular, non-standard shapes requiring a flexible and uniform heating solution. Use with preheat cable covers to help protect from abrasion and weld spatter. Requires preheat insulation for temperatures over 302 degrees Fahrenheit (150°C) to protect the tool.

Series Cable Adapter
195437 18 in. (46 cm)
Used to connect two air-cooled cables together in series to extend length and create extra heating area.

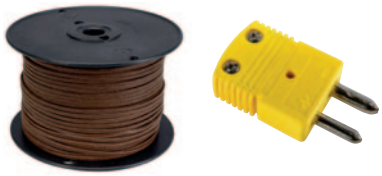
Preheat Cable Cover
204611 30 ft. (9.1 m)
204614 50 ft. (15.2 m)
204620 80 ft. (24.4 m)
Used in preheat applications to protect the heating cable from abrasion and weld spatter.
Note: Cable cover does not provide insulation benefits

Preheat Insulation
204669 1/2 x 6 x 120 in. (1.3 x 15 x 305 cm)
195376 1/2 x 6 x 240 in. (1.3 x 15 x 305 cm)
211474 1/2 x 12 x 120 in. (1.3 x 31 x 305 cm)
For preheat applications up to 600 degrees Fahrenheit (315°C). Designed to protect the air-cooled quick wraps and cables from high temperatures, and maintain the optimum coupling distance between the cables or wraps and the pipe. The preheat insulation is 1/2-inch thick and can be cut to length to fit your application.

Preheat Insulation with Cable Harness
301334 1/2 x 16 x 120 in. (1.3 x 41 x 305 cm)
Air-cooled heating cable coils of various sizes can be attached directly to this preheat insulation. Once a coil is set up it can easily be moved from part to part reducing setup times. The insulation is 10-foot (3 m) long and can be cut to length to fit your application.
Note: Heating cable not included.

High-Temperature Rope 194965
1-inch (2.5 cm) wide, 50-foot (15.2 m) roll.

Contact Thermocouple Sensor (Probe)
301517
Contact thermocouple sensor is placed on the part being heated and provides temperature feedback to the power source. For preheat only, 600 degrees Fahrenheit (315°C) maximum.



Temperature Measurement
194999 Thermocouple wire, 500 ft. (152 m)
195098 Thermocouple connectors (10 pack)
194959 Thermocouple attachment unit (not shown)
Thermocouples welded directly on the part being heated are the most accurate way of monitoring part temperature for recording and controlling the heating process.

Specifications

Input Power	Ambient Temperature Range Storage	Usage	Rated Output	Dimensions	Net Weight
Operates on open-circuit voltage: 50–70 V	-4–131°F (-20–55°C)	14–104°F (-10–40°C)	7.8 kW at 100% duty cycle	H: 18.6 in (472 mm) W: 11.2 in (285 mm) D: 26.7 in (678 mm)	43 lb. (20 kg)

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Equipment and Accessories	Stock No.	Description
ArcReach® Heater Packages	**951848** **951849**	Includes ArcReach Heater and extension cable Includes ArcReach Heater, extension cable and two air-cooled quick wraps
ArcReach® Heater Only	**301390**	
ArcReach® Heater Extension Cable Only	**301451**	10 ft. (3 m)
Air-Cooled Quick Wrap *Requires preheat insulation for temperatures over 392°F (200°C).*	**301452**	For 10–1.5 in. (25.4–3.8 cm) diameter pipes.
Air-Cooled Cable *Requires preheat insulation for temperatures over 302°F (150°C).*	**301453030** **301453050** **301453080**	30 ft. (9.1 m) 50 ft. (15.2 m) 80 ft. (24.4 m)
Series Cable Adapter	**195437**	18 in. (46 cm). For connecting two air-cooled cables in series
Preheat Cable Cover *Recommended for use on most preheat applications*	**204611** **204614** **204620**	30 ft. (9.1 m) 50 ft. (15.2 m) 80 ft. (24.4 m)
Preheat Insulation	**204669** **195376** **211474**	1/2 x 6 x 120 in. (1.3 x 15 x 305 cm) 1/2 x 6 x 240 in. (1.3 x 15 x 305 cm 1/2 x 12 x 120 in. (1.3 x 31 x 305 cm)
Preheat Insulation with Cable Harness	**301334**	1/2 x 16 x 120 in. (1.3 x 41 x 305 cm)
High-Temperature Rope	**194965**	1 in. (2.5 cm) wide, 50 ft. (15.2 m) roll
Contact Thermocouple Sensor (Probe)	**301517**	For use up to 600°F (315°C) maximum
Thermocouple Wire	**194999**	Type K thermocouple wire, 500 ft. (152 m)
Thermocouple Connectors	**195098**	Type K, 2-pin male (package of 10)
Thermocouple Attachment Unit	**194959**	Used for welding thermocouples to part being heated