Issued April 2022 • Index No. IN/16.1N UK

Induction Heating System

# **ArcReach<sup>®</sup> Heater** Air-Cooled Induction System

Quick Specs

CE

Applications Refineries

Petrochemical

Power plants

Shipyards

Structural

Oil and gas

### Process

Induction heating **Maximum Preheat and Bakeout Temperature** 315°C **Input Power** Operates on open-circuit voltage: 50-70 V Output Current 200 A Output Voltage 300 V Source Current 33 A Output Frequency 5-30 kHz Rated Output 7.8 kW at 100% duty cycle

#### ArcReach Heater Dimensions

H: 472 mm W: 285 mm D: 678 mm **Weight** Net: 23.4 kg

### Take charge of your field preheat and bakeout applications up to 315°C.

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.



## ArcReach Heater systems allow economical, insourced weld preheating and bakeout

#### 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 60 m away as the heating power source
- Lower preheating and bakeout costs
- Automatically and accurately document joint temperatures
- Eliminate safety concerns caused by traditional resistance and open-flame heating

The ArcReach Heater air-cooled induction heating system is specifically designed for preheating and bakeout applications up to 315°C, without the need for a cooler and coolant. Preheat and bakeout programs can be manually entered or loaded via USB drive. Heating data is automatically recorded and can be used 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.

### **Induction benefits**

**Easy setup** with flexibility to fit a variety of pipe diameters, plates or odd geometries.

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

**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.

**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.



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

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### ArcReach<sup>®</sup> Heater System

### **Air-Cooled Cable Configuration**

Shown with cable covers and preheat insulation. Air-cooled cables are available in lengths of 9, 15 or 24 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 or bakeout application (flat plate, pipe, odd geometries).

### Compatible ArcReach power sources include:

- XMT<sup>®</sup> 350 FieldPro<sup>™</sup>
- XMT<sup>®</sup> 350 FieldPro<sup>™</sup>
- with Polarity Reversing
- Big Blue<sup>®</sup> 400X Pro

### **Air-Cooled Quick Wrap Configuration**

Air-cooled quick wraps provide a fast and easy way to wrap a pipe joint up to 25.4 cm (10-inch) diameter for preheat or bakeout. Simply place around the pipe, connect the ends, and cinch the clip as close to the pipe as possible.



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<sup>®</sup> Heater System Components and Accessories



#### ArcReach® Heater 301591

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. Requires ArcReach Heater extension cable to operate.

Note: Weld cables are not included.



### ArcReach Heater Extension Cable 301451 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 up to 25.4 cm diameter, and can heat up to a maximum of 315°C. Requires preheat insulation for temperatures over 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
 9 m

 301453050
 15 m

 301453080
 24 m

Air-cooled cables are ideal for wrapping various pipe diameters, flat plate and irregular, nonstandard 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 150°C to protect the tool.



Series Cable Adapter 195437 46 cm

Used to connect two air-cooled cables together in series to extend length and create extra heating area.



Cable Cover2046119.1 m20461415.2 m20462024.4 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 with Cable Harness **301334** 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 3 m long and can be cut to length to fit your application. *Note: Heating cable not included.* 

High-Temperature Rope1949652.5 cm wide, 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, 315°C maximum.



#### **Temperature Measurement (welded on)**

194999 Thermocouple wire, 152 m
195098 Thermocouple connectors (10 pack)
194959 Thermocouple attachment unit (non-CE; 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.



#### **Preheat Insulation**

2046691.3 x 15 x 305 cm1953761.3 x 15 x 610 cm2114741.3 x 31 x 305 cm

For preheat applications up to 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 1.3 cm thick and can be cut to length to fit your application.



### **ArcReach® Heater**

Input Power	Ambient Temperature Range		Rated Output	Dimensions H/W/D	Net Weight	
	Storage	Usage	Kated Output		Not weight	
Operates on open-circuit voltage: 50–70 V	-20°C to +55°C	-10°C to +40°C	7.8 kW at 100% duty cycle	472/285/678 mm	23.4 kg	

( Manufactured and certified in accordance with IEC-60974-1, -10.

### **Ordering Information**

Equipment and Accessories	Stock No.	Description	Qty.	Price
ArcReach <sup>®</sup> Heater	301591	ArcReach® Heater Only		
ArcReach <sup>®</sup> Heater Extension Cable Only	301451	3 m		
Air-Cooled Quick Wrap <b>301452</b> Requires preheat insulation for temperatures over 200°C.•••••••••••••••••••••••••••••••••		For up to 25.4 cm (10 in.) diameter pipes		
Air-Cooled Cable Requires preheat insulation for temperatures over 150°C.	301453030 301453050 301453080	<b>453050</b> 15 m		
Series Cable Adapter 195437		46 cm. For connecting two air-cooled cables in series		
Cable Cover204611Recommended for use on most preheat204614applications204620		9 m 15 m 24 m		
Preheat Insulation 204669 195376 211474		1.3 x 15 x 305 cm 1.3 x 15 x 610 cm 1.3 x 31 x 305 cm		
Preheat Insulation with Cable Harness	301334	1.3 x 41 x 305 cm		
High-Temperature Rope 19496		2.5 cm wide, 15.2 m roll		
Contact Thermocouple Sensor (Probe)	301517	For use up to 315°C maximum		
Thermocouple Wire 194999		Type K thermocouple wire, 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 (non-CE)		

Date:

**Total Quoted Price:** 

Miller recommends Egge consumables



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