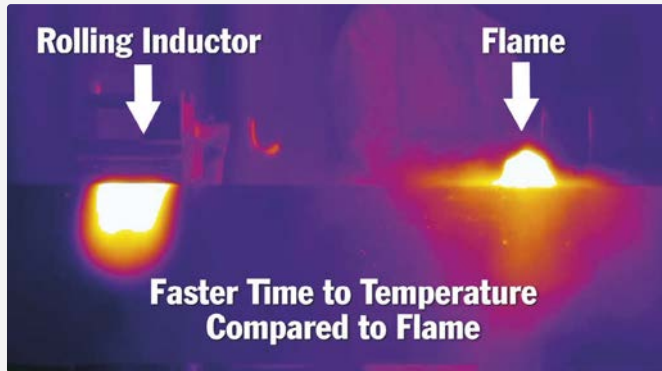




ProHeat™ Induction Heating

Induction heating is a simple and cost-effective heating process that can deliver fast and consistent heat. Applications that would typically require hours to heat can be done in minutes.

- Welding fabrication and construction
- Preheating of welds
- Post-weld heat treatment (PWHT)
- Hydrogen bakeout
- Shrink fit applications



Induction heating solves many key issues in today's environment.

- Does not produce the exposure to burns associated with open flames and electrical resistance wires (only the workpiece becomes hot)
- No significant expense of fuel gases
- Produces less particulate from overheated insulation caused by high-temperature electrical wires and ceramic pads

Induction heating applications:

- Process piping
- Refinery
- Petrochemical
- Power piping
- Pressure vessels
- Structural
- Shipbuilding
- Pipeline



For more information:
Call **1-844-IND-HEAT (1-844-463-4328)**
or email InductionSales@MillerWelds.com

ProHeat 35 Power Source

The ProHeat 35 induction power source is equipped with a built-in temperature controller allowing for manual or temperature-based programming using up to four control thermocouples. At more than 90 percent efficiency, the ProHeat 35 power source transfers more energy to the part, reducing operating costs over different heating methods.

Digital Recorder (optional)

The digital recorder is commonly used in stress relieving and critical preheat applications. The recorder stores temperature data based on time. It is not required to perform successful heating applications.

Heavy-Duty Induction Cooler (optional)

Optimized for induction heating applications, cooler features a 2.5-gallon rustproof polyethylene tank, high-pressure pump, and blower to yield a high cooling capacity.



ProHeat 35 power source shown with optional heavy-duty induction cooler, running gear and digital recorder.

Note: Primary input cable is not included with power source.

One ProHeat™ System – Four Basic Induction Heating Configurations

ProHeat 35 induction heating systems solve preheating, post weld heat treatment (PWHT) and stress relieving problems.

Liquid-Cooled Cables See literature IN/15.0

Preheat applications up to 1,450 degrees Fahrenheit (788°C).

- A highly versatile tool for preheating, stress relieving, hydrogen bakeout, post weld heat treatment and shrink fit in a variety of pipe diameters and flat plate
- Designed with flexibility in mind, the ProHeat liquid-cooled induction heating cables can be wrapped into coils of various shapes and sizes to fit almost any induction heating application



Liquid-Cooled Rolling See literature IN/13.0

Preheat of moving parts up to 600 degrees Fahrenheit (315°C).

- Ideal for preheating rolling pipe and moving parts, with easy and time-saving setup and movement for maintaining and adhering to preheat and interpass temperatures
- Enables the benefits of rolled pipe welding while also addressing some of the concerns associated with other popular heating methods, such as open flame and resistance heating
- *Optional* infrared temperature sensor can read the temperature on the moving part from 212–750 degrees Fahrenheit (100–400°C)
- *Optional* travel detect system can be used for setting different heating rates/ramps based on workpiece speed travel – when no movement is detected the system turns off the output preventing damage to workpiece and rolling inductor



Air-Cooled Blankets See literature IN/14.0

Preheating applications up to 400 degrees Fahrenheit (204°C).

- Air-cooled blankets are available for pipe diameters from 8–60 inches (20–152 cm) or in the case of plate, the lengths are 41–205 inches (1–5.2 m)
- 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



Air-Cooled Cables See literature IN/14.0

Preheating applications up to 392 degrees Fahrenheit (200°C).

- Air-cooled cables are available in lengths of 30 foot (9.1 m), 50 foot (15.2 m) or 80 foot (24.4 m) for flexible configurations
- Designed with flexibility and efficiency in mind, the air-cooled cables can be wrapped into coils of various shapes and sizes to fit almost any induction preheating application, without the need for cooler and coolant
- Air-cooled cables provide the same flexibility as liquid-cooled cables for preheating





ArcReach® Heater Air-Cooled Induction System

See literature IN/16.0

Field preheat and bakeout applications up to 600 degrees Fahrenheit (315°C).



ArcReach Heater

NEW!



Air-cooled cable

Air-cooled quick wrap

ArcReach Heater systems allow economical insured weld preheating and bakeout. 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. 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 and bakeout costs
- Automatically and accurately document joint temperatures
- Eliminate safety concerns caused by traditional resistance and open-flame heating

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 equipped with built-in temperature control allowing for either manual or computer-loaded programming using up to six thermocouples. It 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.

Air-cooled cables are designed with flexibility and efficiency in mind. Cables can be wrapped into coils of various shapes and sizes to fit any induction preheat or bakeout application (flat plate, pipe, odd geometries).

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

Durable high-temperature materials. Air-cooled cables and quick wraps are designed to withstand the tough conditions in both industrial and construction applications.

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.

Industrial ●

Process

- Induction heating

Suggested power sources

- XMT® 350 FieldPro (pg 44)
- Trailblazer® Series (ArcReach models only) (pg 78)
- Big Blue® Series (ArcReach models only) (pg 81-84)

Most popular accessories



- **ArcReach Heater Extension Cable** 301451 10 ft. (3 m)
- **Air-Cooled Quick Wrap** 301452
- **Air-Cooled Cable** 301453030 30 ft. (9.1 m) 301453050 50 ft. (15.2 m) 301453080 80 ft. (24.4 m)
- **Cable Cover** 204611 30 ft. (9.1 m) 204614 50 ft. (15.2 m) 204620 80 ft. (24.4 m)



- **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)



- **Preheat Insulation w/ Cable Harness** 301334 1/2 x 16 x 120 in. (1.3 x 41 x 305 cm)
- Series Cable Adapter 195437
- High-Temperature Rope 194965
- Temperature Measurement (two options available) Contact Thermocouple Sensor (Probe) 301517 **OR** welded on thermocouples which requires 500 ft. (152 m) Thermocouple Wire 194999, Thermocouple Connectors (10 pack) 195098, and Thermocouple Attachment Unit 194959

Visit MillerWelds.com for more information selecting Miller® induction heating options and accessories.

Stock Number	Input Power	Output Current	Output Voltage	Source Current	Output Frequency	Rated Output	Heater Dimensions	Heater Net Weight
(301390) Heater only (requires ArcReach Heater extension cable to operate) (951848) Heater w/extension cable (951849) Heater w/extension cable and two air-cooled quick wraps	Operates on open-circuit voltage: 50-70 V provided by an XMT 350 FieldPro or ArcReach-equipped engine drive	200 A	300 V	33 A	5-30 kHz	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)