

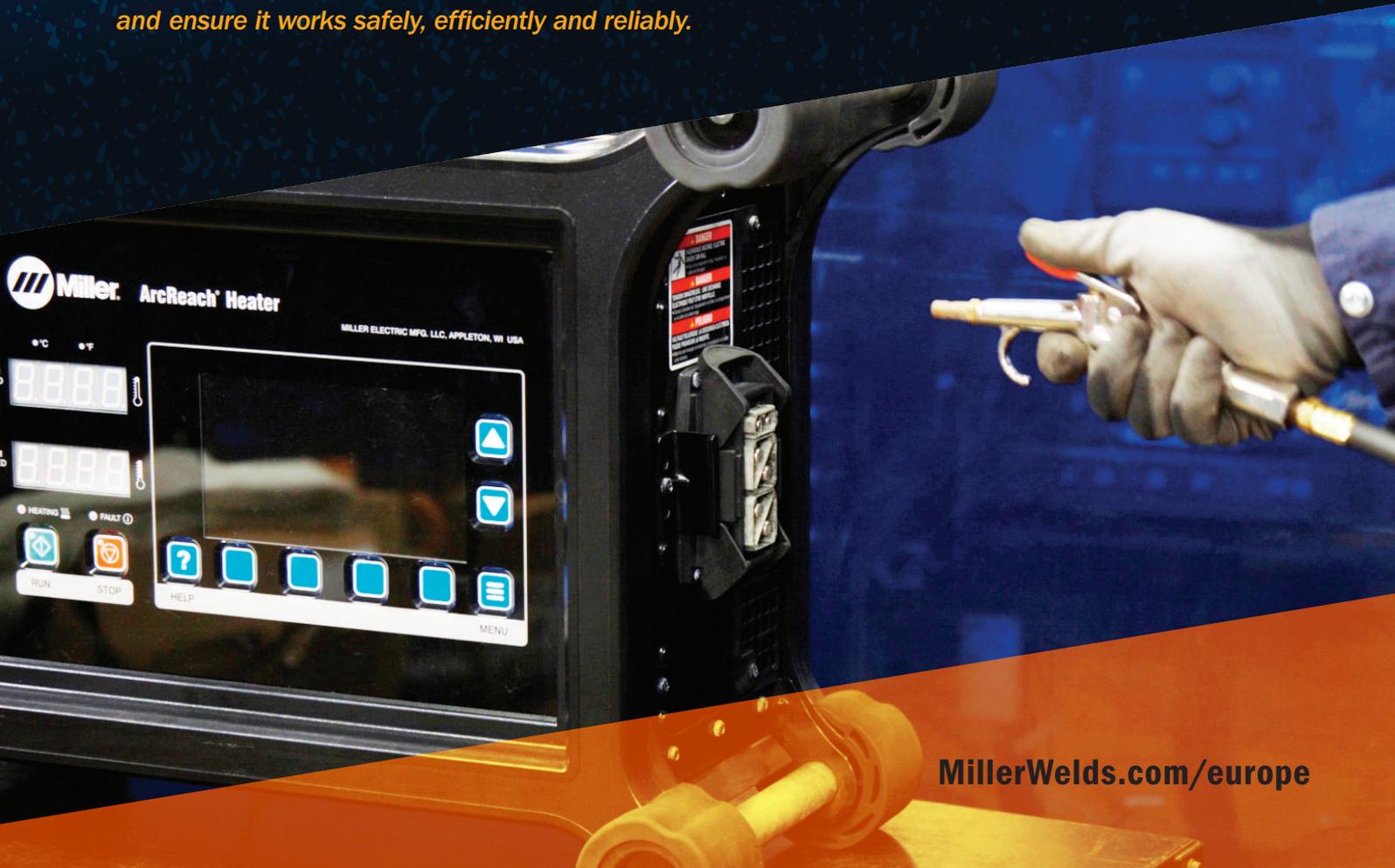


# HARNESS THE HEAT

**ArcReach**® HEATING SYSTEMS

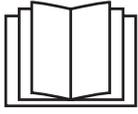
## DOs and DON'Ts

*By making sure to follow these simple **DOs AND DON'Ts**, you can get the best results from your ArcReach® Heater — and ensure it works safely, efficiently and reliably.*



[MillerWelds.com/europe](http://MillerWelds.com/europe)

## **WARNING**



### **READ INSTRUCTIONS.**

- Read and follow all labels and the Owner's Manual carefully before installing, operating, or servicing unit. Read the safety information at the beginning of the manual and in each section.

## **SET UP**

### **DO:**

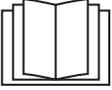
- ✓ **Connect weld cable ends** to the ArcReach Heater input studs using the correct polarity as noted on the side label of the heater: electrode cable to positive end and work cable to negative end. If cables are accidentally reversed, wait at least 10 seconds before connecting cables on heater to power up and display fault before correcting polarity.
- ✓ **Route weld cables** together to ensure proper communication between the ArcReach Heater and the power source.
- ✓ **Keep the ArcReach® Heater in an upright position** to maintain proper airflow through the unit.
- ✓ **Choose proper thermocouples** for your specific application. Use welded-on thermocouples for the best accuracy, secure placement and limited overshoot of temperatures. Use contact probes for faster set up.
- ✓ **Place the insulation fault detection magnet on the part prior to heating.** Make sure the magnet is in contact with bare metal by removing all rust, paint and grease.
- ✓ **Secure insulation** with non-conductive strap or tape, such as fiberglass-reinforced tape.
- ✓ **Use one layer of 1.3 cm preheat insulation** for part temperatures above 150°C for air-cooled cables and 200°C degrees Fahrenheit for air-cooled quick wraps. Use either one or two layers dependent on the target temperature — refer to owners manual for insulation requirements.

### **DON'T:**

- ✗ **Don't use a structure** as part of the cable path between the ArcReach Heater and the power source.
- ✗ **Don't use weld cables longer than 60 m** from the welding power source, or more than 120 m of total loop length.
- ✗ **Don't move or operate unit** where it could tip.
- ✗ **Don't use wire or metal straps to secure insulation or cable.** Instead, use plastic cable ties, tape or non-conductive straps to secure cable. Do not hang cable on metal brackets, hangers or other mechanisms. Stop using equipment if plug, receptacle or cable is damaged. Replace cable if braid, red jacket or bare wire is visible.
- ✗ **Don't use K wool as preheat insulation** for induction heating – instead, use Miller-approved 1.3 cm preheat insulation.

### **DANGER**

 Do Not Remove, Destroy, Or Cover This Label.

		
--	---	---

**HAZARDOUS VOLTAGE; ELECTRIC SHOCK can kill.**

- Do not use wire or metal straps to secure cable. Instead, use plastic cable ties, tape, or non-conductive straps to secure cable.
- Do not hang cable on metal brackets, hangers, or other mechanisms.
- Stop using equipment if plug, receptacle, or cable is damaged.
- Replace cable if braid, red jacket, or bare wire is visible.
- Read and follow all labels and the Owner's Manual carefully.

# EFFECTIVE HEATING PRACTICES

## DO:

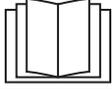
- ✓ **Secure induction cables** using non-conductive material such as plastic cable ties, tape or non-conductive strap.
- ✓ **Twist together air-cooled cables** exiting the workpiece to cancel magnetic fields.
- ✓ **Keep heating tool cables twisted** between the ArcReach Heater Extension Cable and the workpiece to increase heating performance and minimize unintentional heating of nearby objects.
- ✓ **Remember** that a typical air-cooled cable coil wrap will have two turns on each side of the pipe.
- ✓ **Use a preheat cable cover** to protect air-cooled cables from abrasion and spatter.
- ✓ **Keep the air-cooled cable coils close together** to achieve a faster temperature response.
- ✓ **Separate the air-cooled cables** to slow down the heating rate.
- ✓ **Remember** that air-cooled cables or quick wrap may be moved away from joint while maintaining target temperature, but the control thermocouples must be moved with them.
- ✓ **Check the parameters screen** on the heater menu to see if the setup is achieving an acceptable output close to the 8-kilowatt maximum. If not, check your coil setup and adjust as necessary.
- ✓ **Turn heater off** by making sure the heating cycle is off and not actively heating, then turning off the power source.
- ✓ **Turn off the welding power source and heater** before disconnecting any tools or cables.

## DON'T:

- ✗ **Don't use wire or metal straps to secure cable.**  
Instead, use plastic cable ties, tape or non-conductive straps to secure cable. Do not hang cable on metal brackets, hangers or other mechanisms. Stop using equipment if plug, receptacle or cable is damaged. Replace cable if braid, red jacket or bare wire is visible.
- ✗ **Don't expose air-cooled cables** to temperatures above 150°C or air-cooled quick wraps to temperatures above 200°C without preheat insulation, or their life will be shortened and damage will occur. Refer to owners manual for insulation requirements based on preheat and bake-out temperatures.
- ✗ **Don't start in Lift-Arc™ TIG Mode** on XMT® 350 FieldPro™ non-polarity reversing power sources.
- ✗ **Don't disconnect weld leads or heating tools** while unit is heating.

**⚠ DANGER**

 Do Not Remove, Destroy, Or Cover This Label.

**HAZARDOUS VOLTAGE; ELECTRIC SHOCK can kill.**

- Do not use wire or metal straps to secure cable. Instead, use plastic cable ties, tape, or non-conductive straps to secure cable.
- Do not hang cable on metal brackets, hangers, or other mechanisms.
- Stop using equipment if plug, receptacle, or cable is damaged.
- Replace cable if braid, red jacket, or bare wire is visible.
- Read and follow all labels and the Owner's Manual carefully.

## CARE OF MACHINES AND TOOLS

### DO:

- ✓ **Inspect your tools and machine** before use for any possible damage. Prior to each use, visually inspect wrap, sleeve and cables for wear or damage such as holes, rips, tears, broken or split insulation, exposed wires, cracked plastic, lack of tool flexibility, etc.
- ✓ **Remember** that if cleaning of heater or heating tools is required, gently wash with a solution of mild soap and lukewarm water, using a soft, grit-free cloth or sponge to loosen any dirt or grime.
- ✓ **Clean mud or dirt** from wrap, straps, wires and connectors daily to maintain efficient operation and consistent heating.
- ✓ **Keep the surface of heating tools** that contact metal pipes or metal parts free of debris.

### DON'T:

- ✗ **Don't use a pressure washer** to clean the heater or heating tools.
- ✗ **Don't clean ArcReach® Heaters or accessories with potentially damaging substances.** These include abrasive or highly alkaline cleaners; aromatic or halogenated solvents like toluene, benzene, gasoline, acetone and carbon tetrachloride; and harsh solvents like methyl ethyl ketone (MEK) and hydrochloric acid.
- ✗ **Don't disassemble the ArcReach® Heater case to clean.** Instead, use low-pressure air to clean the intake vent on the side and back of the heater.
- ✗ **Don't drag heating tools** on the ground or over rough terrain.