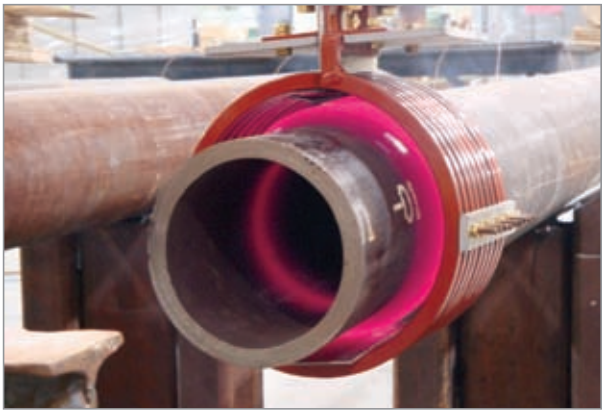
Pipe End Heating

Induction Heating

The precessing of pipe ends includes drilling, threading, welding and other types of mechanical deformation which may require heat treatment to harden the metal or to eliminate residual stresses. In addition, tube ends are often heated and then upset (formed) to increase or decrease the diameter or wall thickness to allow pipes to be joined end-to-end.

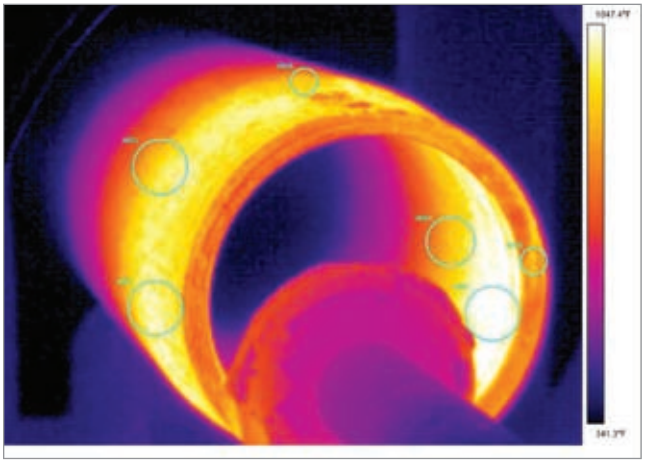
Pillar Induction pipe-end heating systems are designed for a variety of these applications including:

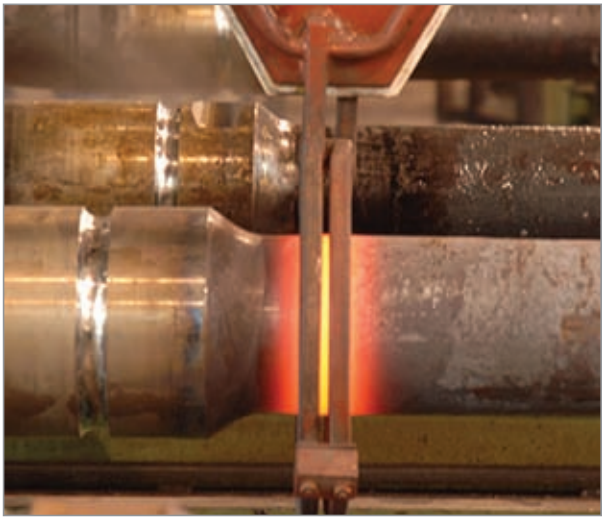
- Preheat for welding & swaging
- Friction weld and swage
- Stress Relieving
- Tempering
- Austentizing
- Annealing
- Normalizing
- Coating curing and removal
- Upsetting



Features Include:

- Single or multi-turn solenoid coils
- SCR or IGBT power supplies available from 200Hz to 3000Hz depending on the process and pipe size.
- Infrared temperature monitoring systems
- Advanced temperature process monitoring and chart recording
- Process analysis using 2D and 3D modeling
- Infrared camera analysis in the field or in our lab
- Pipe or coil positioning equipment as required
- Cooling systems





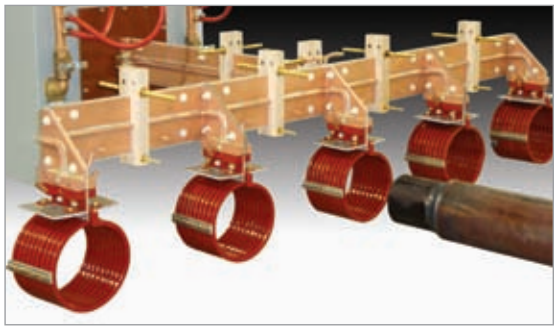
PILLAR INDUCTION

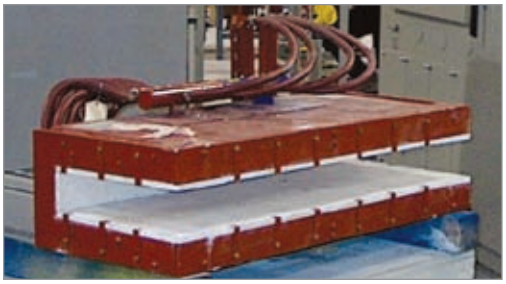
www.pillar.com

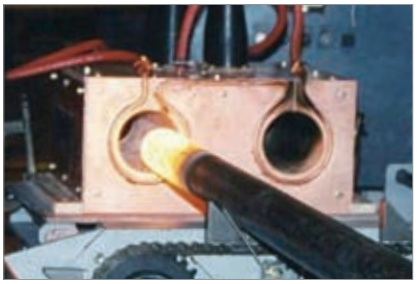
Pipe End Heating

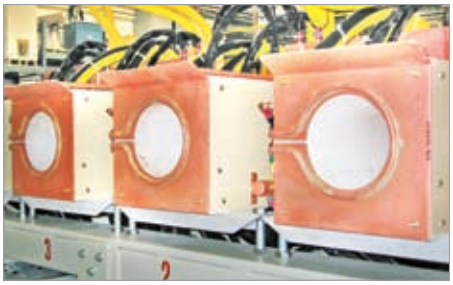
Coil Design

- Coil build—new and retrofit
- Single or multi-turn solenoid coils
- Channel coils
- Cast windings
- High temperature liners
- Open construction









MK8 – SCR Power Supply

Power Range: 50kW – 750kW **Frequency:** 200Hz – 3000Hz

The MK8 is a voltage source inverter with a parallel-tuned circuit. This range of power supply is designed as an economic and reliable solution for applications up to 750kW. The parallel-tuned circuit keeps the high currents away from the inverter thyristors (SCR). The lower currents flowing into the SCR's results in low power loss and high efficiency.

Control is by a combination of rectifier voltage control at lower power levels and inverter swept frequency control at higher power levels. This provides very controllable starting and excellent fault protection, along with constant output power over the entire heating cycle.

Accurate and reliable control is achieved in extreme ambient conditions without the need for additional cooling.

MK11 – IGBT Power Supply

Power Range: 100kW – 600kW **Frequency:** 1kHz – 50kHz

The MK11 is an energy efficient, voltage source inverter with a parallel-tuned technology. This IGBT power supply offers a wide tuning range and is available in both local and remote heat station configurations which simplifies integration into new installations or retrofitting existing systems with energy-efficient. Selectable output regulation modes are voltage, kW, or current, at any rated output.

MK8

MK11

USA Headquarters
21905 Gateway Road
Brookfield, WI 53045
Phone: +1 262-317-5300
Fax: 262-317-5353

CHINA
No. 533 Yuan Zhong Road
Nanhui Industrial Zone
Shanghai, China 201399
(86) 21-68009546
(86) 21-68009542 (FAX)

ENGLAND
2 Dorset Road,
Saltley Business Park
Saltley, Birmingham B8 1 BG
(44) 121 322 8000
(44) 121 322 8080 (FAX)

GERMANY
Ersheimer Str. 87
69434 Hirschhorn, Germany
49 62 72 92 17 500
49 62 72 92 17 587(FAX)

JAPAN
1-6-35 Shinsuna
N-Building, 7th Floor
Koto-Ku, Tokyo, 136-0075 Japan
(81) 33647 7661
(81) 33647 7662 (FAX)

KOREA, Seoul
Room #201, Dae-Ryuk Bldg,
103-9
Guro-Dong, Guro-Ku, Seoul Korea
(82) 2 837 2290
(82) 2 837 2292 (FAX)

MEXICO
Avenue Manantiales No. 11
Esq. Acueducto
Parque Industrial Bernardo
Quintana
El Marquez, Queretaro
C P 76246 Mexico
(011) 52 442 221 5415
(011) 52 442 221 5090 (FAX)

THAILAND
Suite 4, 36th Floor
All Season Place
87/2 Wireless Road
Lumpiui Phatumwan Bangkok
10330
Thailand
(66) 02 625 3111
(66) 02 625 3045

PILL_03/12_EN

Induction OEM for Westinghouse Cycle-Dyne

www.pillar.com

PILLAR INDUCTION