

INDUCTION HEATING APPLICATION NOTE

COMPONENT: Large Bearing Ring For Wind Mill

SPECIFICATIONS:

Part Name: Bearing ring from 1m - 3.5m OD

Material: 42CrMo4

Application: Harden gear tooth by tooth

Machine Type: Custom design

Production Rate: Scan rate approx.
7 mm/sec at 2.5 - 3.5 mm case depth

Power Supply Type: SP18

Power & Frequency: 150 kW / 10 kHz



MACHINE DESCRIPTION:

Inner Diameter: Minimum ID 1,200mm

Outer Diameter: Maximum OD 3,500mm

X-axis Traverse: Max 1,500mm

Z-axis Scan Height: 350mm

Rotating Index Table:

- Accept parts from 1,000mm - 3,000mm OD
- Component Weight: Max 5,000 Kg
- CNC type control

Manual loading and manually match the first gear tooth and coil location. After initial coil positioning, the process will run automatically based on application recipe.

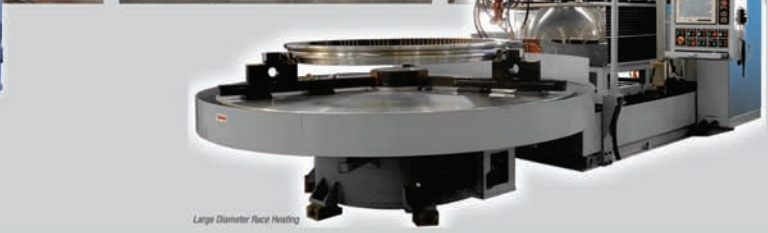
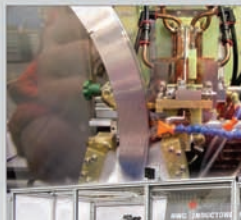


For more information, call 800/624-6297, email: sales@inductoheat.com or visit www.inductoheat.com

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Induction Heat Treating Technologies For Large Gears

Inductoheat has been manufacturing induction heating systems for large gears for over 30 years. Our accurately controlled, induction gear hardening systems can selectively harden specific areas of your gear teeth and bearing race with minimum shape distortion, producing a fine-grained martensitic layer. Additional benefits include required hardness and compressive surface stresses, improved contact fatigue strength and wear resistance, and elimination of premature gearbox failure.



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