OMEGA VANZETTI®
The Leader in Infrared Temperature Measurement and Control

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METAL INDUCTION HEATING MONITORING/CONTROLLING

Because of the strong RF inductive energy field needed to heat the metal parts to be treated, conventional temperature measuring devices are useless, since they will be heated directly by the induction field.

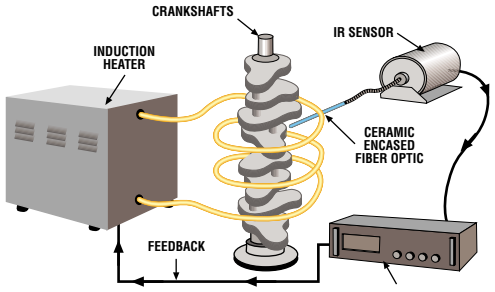

FIG. 1 – CONTROLLING INDUCTION TREATING OF AUTOMOTIVE CRANKSHAFTS.

$2,800.00
BASIC SYSTEM

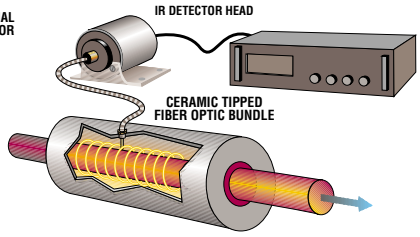

FIG. 2 – MONITORING STEEL ROD CONTINUES INDUCTION HEATING

Figures 1 and 2 show two typical applications of **OMEGA VANZETTI®** fiber optic systems used to monitor and control induction treatment of stationary or moving metal objects through induction furnaces.

Precise control of the temperature needed for perfect heat treatment of metal parts (bolts, camshafts, crankshafts, axles, etc.) is essential to produce the crystal structure that will ensure the mechanical characteristic specifications.

Advantages of the fiber optic infrared control equipment as illustrated in Fig. 1 & 2 are:

- Fast response time to 5 mSec
- Non-contact temperature measurement
- Wide temperature range of operation
- Fiber optics not affected by the induction field
- Replaceable optical tips
- Allows the viewing end of the fiber optic in close proximity of the target
- Saves energy by allowing only the precise amount of power used
- Speeds up production by controlling the process by temperature instead of time and by allowing faster heat injection notes
- Ability to control temperature with both hi-low logic and/or proportional control options
- Optional outputs include: 4-20 md, 0-10 vdc and thermocouple types “J” or “K”
- Emissivity adjustable control