



**Work Instruction For  
Calibration of Heating  
Furnaces for Forgings  
Manufacturing**

*Document No.*

*30-WI-PR-20*

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**Scope:** Calibration method of forging heating furnace by Thermocouple.

**Responsibility:** Production In-charge / Maintenance Head

**Procedure:**

- 1) Set the required forging temperature by referring Work instruction for Billet finishing temperature **30-WI-MQC-01** on temperature indicator.
- 2) Ensure the temperature indicator is calibrated as per calibration frequency
- 3) Light up the forging furnace by referring applicable Work instruction for Operating Forging Furnace.
- 4) Load the Thermocouples with billet into the furnace as per the respective location.
- 5) On achieving set temperature on temperature indicator, check the temperature of billet which inside the furnace with the help of calibrated Thermocouple.
- 6) Repeat the action of Point 4 for maximum billets into the furnace covering minimum and maximum billet cross section.
- 7) The temperature difference between achieved temperature on temperature indicator and thermocouple shall not be more than  $\pm 30^{\circ}\text{C}$ .
- 8) On removal of Billet forging furnace for forging on Hammer, once again ensure the required forging temperature with the help of optical temperature gun and do the forging.
- 9) After completion of forging, check the finish temperature of forged part randomly with the help of optical temperature gun and it shall be as **30-WI-MQC-01**

Prepared By Production Engineer	Approved By Production Head