

Master Specification: Electric Immersion Heaters

JOB NAME _____

ENGINEER _____

REPRESENTATIVE _____

CONTRACTOR _____

General

Provide a quantity of _____ electric immersion heater(s) Model No. _____ as manufactured by HUBBELL Electric Heater Co., Stratford, CT. The heater shall have a total rating of _____ KW composed of _____ circuit(s) of _____ KW each when supplied with _____ Volts _____ Phase _____ Hz electrical power. The heater shall be a _____ (**Specify: Flange or Screwplug**) type of _____ size. The heater shall be designed for full immersion in liquid and constructed of high quality grade materials to ensure a long service life.

Tubular

The heater shall consist of _____ individual tubular elements of _____ " diameter. The properly sized Nickel-Chromium resistor wire for the element shall be verified by computer calculations to ensure the longest service life possible. The resistor wire shall be factory inspected, tested, and verified as meeting rigid quality control specifications prior to being coiled. The resistor wire is to be centered in the sheath and insulated with high quality magnesium oxide. The magnesium oxide shall be compacted so that the terminal pin is firmly secured allowing for a maximum torque of 8 inch lbs. when tightening terminal hardware. The tubular sheathing shall be copper (**Optional Specifications:** *Incoloy, Type 304 or 316 or 321 stainless steel, Steel, Teflon coated, Titanium, Monel, Inconel, Copper-Nickel*) and have a maximum watt density of _____ watts/per square inch with a _____ " cold section and a total immersed length of _____ ". Non-Ferrous element spacers shall be supplied when required.

Terminal Housing

The heater (shall, shall not) include a terminal housing. The terminal housing shall be a general purpose NEMA 1 enclosure (**Optional Specification:** *Nema 4 watertight, explosion resistant*) and supplied with a quantity of _____ electrical conduit connections of _____ " NPT size each.

In addition, the heater may be supplied with the following optional features:

- Option** Built-in thermostat with a 60-250°F range
- Option** Built-in thermowell
- Option** Factory fitted thermocouple strapped to the element sheathing
- Option** Factory fitted element baffle system
- Option** Passivation of material
- Option** Electropolishing of material
- Option** Hermetic seals for superior moisture protection
- Option** Individually replaceable element hairpins
- Option** Liquid Die Penetrant Testing
- Option** ASME Certification
- Option** Construction to MIL-H-22577
- Option** _____
- Option** _____

Warranty

The heater manufacturer shall warranty the entire immersion heating element against defects in workmanship and material for a period of one (1) year from date of start-up, provided that the unit is started within three (3) months of date of shipment and installed and operated within the scope of the heater design and operating capability.

ISO 9001:2008 



Hubbell™

Committed to continuous improvement...

Continuing research results in product improvement; therefore specifications are subject to change without notice. For the most updated information, consult the factory directly.

