

Thermowells built-up from metal tubes are used when longer immersion lengths, special materials or not severe process conditions are required. Most thermocouples and thermometer sensing elements in industrial applications are protected against physical damage, corrosion and contamination by some types of thermometer protecting tubes. Metal tubes are generally used with base temperature sensing elements and selected to suit the temperature pressure and corrosion process conditions.

Technical Specifications

Design

We have the capability to design and manufacture thermowells to meet severe process conditions as pressure, temperature, vibrations, etc...

Materials

Thermowells are manufactured from tube material resulting in strict compliance to chemical and physical specifications (ANSI B36.10, ANSI B36.19, ISO R64 e ISO R65) . The tubes are shop-inspected to ensure freedom from internal defects and non metallic inclusions. In addition to the supplier's certificate, an internal test certificate is issued for every supply. Standard materials are AISI 316, AISI 30 and INCONEL 600.

Material tests

Every thermometer protecting tube is pressure - tested to ensure soundness of metal structure. If requested, and at extra cost, Gamma or X-Ray inspection may be made together with ultrasonic checks.

Heat and chemical treatment

Many types of thermometer protecting tubes require heat or chemical treatment to eliminate stress, carbide precipitation, etc.. Heat or chemical treatment is done on special order.

Identification

Every thermometer supplied is identified with tag, material, immersion length, etc...

Length

Immersion length "U" is without limitation (Limited only for transportation).

Standard connections

Process connection: screwed \varnothing 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", 2" (male) or flanged

Element connection: screwed \varnothing 1/4", 3/8", 1/2", 3/4", 1" (male or female).

Threading according to ANSI B2.1 or European standards.

Options

Upon request and at extra cost thermometers protecting tubes can be supplied: complete with plug and chain, with Teflon and stellite coating and any type of threading or flanged connection, etc...

To order specify: Pipe size and schedule, pipe material, "U" immersion and "E" extension length, type of connection and material of bushing, etc...



thermometer protection tubes, and bar stock thermowells