

OTW31 Welded Type Thermowells

DEFINITION

Thermowells are protective sheaths used to protect temperature sensors (T / C - R / T) and other temperature sensors (Bimetallic). They are processed from pipes and filled materials. All thermowells are an important component of the temperature measuring point. They prevent damage to the sensor from environmental conditions such as high pressure, excessive material speeds and viscosities, chemical and mechanical abrasions. In addition, they provide easy replacement of temperature sensors without interrupting the process in case of failure. They are an excellent solution to protect the process and extend the lifespan of the sensor.

Important criteria in the selection of thermowell:

- 1 Maximum operating temperature
- 2 Maximum working pressure
- 3 Flow rate of the working environment
- 4 The density of the working environment
- 5 Viscosity of the working environment
- 6- Predetermined Ordel or other brand thermowell code or details

Ordel Thermowells are classified according to the design of the body. Flat type thermowell is the same length along the whole body length. Conical thermowells have a diameter that gradually decreases along the body length. With this structure, they have a fast response time. Conical thermowells are also preferred in applications with very high output speed.

Stepped thermowells have two different diameter structures based on their body structure. With its low diameter structure close to the measurement point, it has a speed of transition and a fast temperature sensing structure.

Thermowells are usually drilled from solid bars and processed as a whole piece (Barstock). In addition, there are thermowell types produced by welding pipes of various structures to process fittings such as raccord and flange.

ORDEL WELDED THERMOVEL FEATURES and SELECTION CRITERIA

PICTURE NO;	OTW31
OTW31 -	Welded Type Thermowell

STANDARD THERMOVEL FILLED AND PIPE MATERIALS		
ASTM A304 (1.4301)	DIN 1.4749(AISI 446)	INCOLOY-825 (DIN 2.4858)
ASTM A316 Tİ (1.4571)	DIN 1.4828(AISI 309)	HASTELLOY-C4 (DIN 2.4610)
ASTM A316 L (1.4404)	DIN 1.4841(AISI 314)	BRASS MATERIAL
ASTM A310 (1.4845)	DIN 1.7335 (Molibden)	TEFLON
ASTM A321 (1.4541)	INCONEL-600 (DIN 2.4816)	
ASTM A105 (Carbon Steel)	INCONEL-800 (DIN 1.4876)	

DIAMETERS
3.0 mm
4.0 mm
5.0 mm
6.0 mm
7.0 mm
8.0 mm
9.0 mm

10.0 mm

STANDARD HOLE

Note: Ordel thermowells can be produced in desired diameters according to the application other than standard hole diameters. Filled material length is produced up to a maximum of 1100 mm.

Well

Type

OTW31

Body

Material Structure

Hole

Diameter

ORDEL OTW30 THERMOWELL CODING

End

Thickness

End

Diameter

Well

Head Length -

(T)

Immersion

Length

(U)

Length

(A)

Process

Connection

Option

Certificate

Plug and Chain Ordel Code

SF

TP

Sensor

Connection