

ALL SS THERMOWELLS

BAR STOCK (WELD IN / SOCKET WELD)



IPS-TW-07



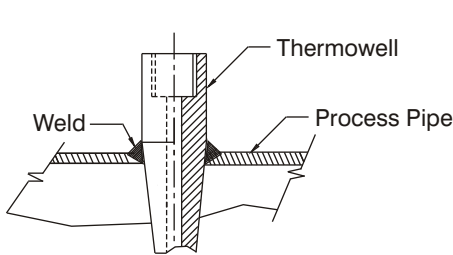
Special Features

- Design as per PTC 19.3.
- These Thermowells are machined from solid bar stock and inserted into the process through direct welded attachment.
- This design is suitable for all type of RTD's, Thermocouples, mechanical as well as digital thermometers.
- Available in various shapes like Straight, Straight with reduced tip, Partial taper & full taper and various exotic materials.

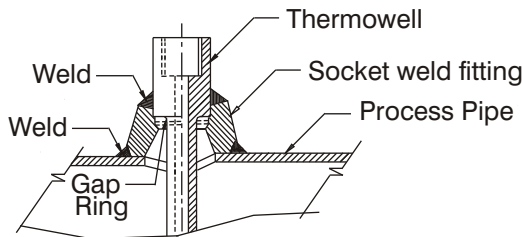
Applications

Chemical plants, Petrochemical Plants, Engineering Plants, On shore, Off shore & other similar process industries.

Typical Thermowell Installation

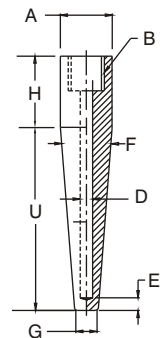
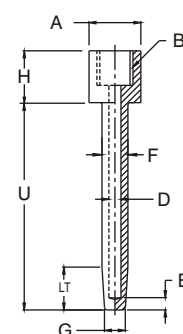
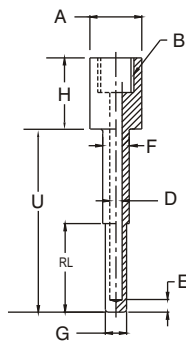
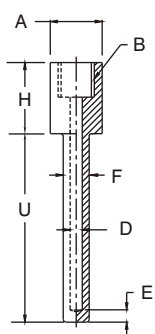


Weld in



Socket Weld

Thermowell Drawings



S - STRAIGHT

R - STRAIGHT REDUCED TIP

P - PARTIAL TAPER

F - FULL TAPER

A - Finished Head Size

E - Tip Thickness

RL - Reduced Tip Length

B - Instrument Connection

G - Minor Diameter

LT - Taper Length

F - Major Diameter

U - Insertion Length

D - Bore Diameter

H - Extension Length

HOW TO ORDER

BASIC MODEL

IPS-TW-07

TYPE

S - STRAIGHT R - STRAIGHT REDUCED TIP P - PARTIAL TAPER F - FULL TAPER

X

MATERIAL

LM AISI 316 SS	EP AISI 410 SS	LT Monel	LV Titanium
LN AISI 316L SS	EQ AISI 347 SS	LU Inconel 600	LX Nickel
LP AISI 304 SS	LO AISI 316Ti SS	ES Incolloy 625	LY HRS 446
ER AISI 304L SS	EO AISI 310 SS	ET Incolloy 800	LZ Alloy 20
EN AISI 321 SS	LQ Carbon Steel	EU Incolloy 825	LS Hastelloy C

Note : Other Materials are available on request.

XX

INSTRUMENT CONNECTION

4BF 1/2" BSP (F)	5TF 3/4" BSPT (F)	6NF 1" NPT (F)	3MF M18 x 1.5 (F)	6MF M24 x 1.5 (F)
4NF 1/2" NPT (F)	5NF 3/4" NPT (F)	6BF 1" BSP (F)	4MF M20 x 1.5 (F)	7MF M27 x 2 (F)
4TF 1/2" BSPT (F)	5BF 3/4" BSP (F)	6TF 1" BSPT (F)	5MF M22 x 1.5 (F)	9MF M33 x 2 (F)
4FF 1/2" PF (F)	5PF 3/4" G (F)	6PF 1" G (F)		
4PF 1/2" G (F)				

Note : Other Connections are available on request.

XXX

EXTENSION / LAGGING LENGTH "H"

50 mm (Standard)

Please specify in mm For e.g. : for length 50 mm, mention **H50**

XXX

FINISHED HEAD SIZE "A" (Refer Table 1.1 for selection of Head Size for Thermowell.)

Please Specify in mm

e.g. : For 28 mm Finished head Size, Specify **A28**

XXX

TYPE OF HEAD

K HEX HEADED* **L** ROUND HEADED

*Maximum "U" Length below thread will be 250 mm.

X

BORE DIAMETER "D"

A 6.6 mm	B 7 mm	C 8.5 mm	D 9 mm
E 10.5 mm	F 11 mm	G 13 mm	H 13.5 mm

Note : Referable 1.3 of Thermowell Design Procedure for dimensions as per PTC 19.3

X

MAJOR DIAMETER "F"



XXX
OR
XXX
OR
XXXX

<p>MAJOR DIAMETER "F" Please specify in mm e.g. : for 22 mm, mention F22</p>	<p>MAJOR DIAMETER OF STEP 'F' Please specify in mm e.g. : for 22 mm, mention F22</p> <p>MINOR DIAMETER OF STEP 'G' Please specify in mm e.g. : for 18 mm, mention G18</p> <p>LENGTH OF STEP 'RL' Please specify in mm e.g. : for 100 mm step length from tip, specify RL100</p>	<p>MAJOR DIAMETER OF TAPER 'F' Please specify in mm e.g. : for 22 mm, mention F22</p> <p>MINOR DIAMETER OF TAPER 'G' Please specify in mm e.g. : for 18 mm, mention G18</p> <p>LENGTH OF TAPER 'LT' Please specify in mm e.g. : For taper length from tip of 150 mm, specify LT150</p>	<p>MAJOR DIAMETER OF TAPER 'F' Please specify in mm e.g. : for 22 mm, mention F22</p> <p>MINOR DIAMETER OF TAPER 'G' Please specify in mm e.g. : for 18 mm, mention G18</p>
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Note : Refer Table 1.3 of Thermowell Design Procedure for dimensions as per PTC 19.3



TIP THICKNESS “E”

Standard Tip Thickness is 5 mm. e.g. : Specify **E5** for 5 mm Tip Thickness. For others, please specify in mm.

INSERTION LENGTH “U”

Please specify in mm e.g. : for 250 mm, mention **U250**

Note : Referable 1.4 of Thermowell Design Procedure for dimensions as per PTC 19.3

OPTIONS

GG	Plug and chain in SS	CX	Marking by Engraving	SX	SS Tag Plate
FW	Electro polishing	CW	Marking by Laser		

TESTS & CERTIFICATION

C1	Radiography for Bore Concentricity	C7	Wake Frequency Calculations as per PTC 19.3*
C2	IBR Certification	C8	Certification for Hydrogen Service
C3	Mechanical Test	C9	Certification for Oxygen Service
C4	Ultrasonic Test	T1	Chemical Composition Test
C5	PMI Test	T2	3.1B Material Conformity Certificate
C6	IGC Test	TF	Tested to NACE Standard

* Please Specify Fluid, Max. Pressure, Temperature & Flow velocity for wake frequency calculations as per PTC 19.3

Note : Specifications and dimensions given in this product catalogue represents the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

