

The following options are available on Pyromation thermowells. Please contact our sales department for information and current pricing.

Documentation/Testing	
Certificate of Compliance	C of C
Hydrostatic Test (Internal or External)	ASTM E1003 Compliant
Liquid Dye Penetrant Test	ASTM E165 Compliant
Material Test Reports	MTR
NACE	NACE Certification available for applicable materials. (Barstock thermowells meet this specification. Flanged thermowells can be heat treated to comply.)
Positive Material Identification (PMI)	X-Ray Fluorescence Spectrometry
Surface Roughness Test	ASME B46.1
Wake Frequency Calculation	ASME PTC 19.3 TW
Weld X-Ray Inspection	Call for Pricing
Services	
Expedited Delivery	Call for Pricing
Oxygen cleaning	ASTM G93 Compliant (when specified)
Stamping	10 Characters Maximum
Full-Penetration Weld	Performed by welders certified to ASME Section IX, Boiler and Pressure Vessel Code
Components/Coatings	
Abrasive Coatings	Call for Pricing
Plug and Chain - Brass	Call for Pricing
Plug and Chain - Stainless Steel	Call for Pricing
Ring-Joint Flange	Call for Pricing
Tantalum Jacket	Call for Pricing
FEP Coating	Call for Pricing
Industry Specifications	
Canadian Registration Numbers (CRN)	ASME B31.3 Process Piping
Flanged Thermowells	ASME B16.5 prior to fabrication
Heat Treating	Stress relief, annealing, and custom heat treating available upon request.
Material	ASTM Compliance and other applicable National Standards
Pipe Threads	ASME B1.20.1
Sanitary Thermowells	3-A Sanitary Council Standard. Authorization Number: 487 32 µin R <sub>a</sub> Food Grade Surface Finish
Manufacturing Tolerances and Maximums	
"S" Length Maximum	32" maximum for standard drilled thermowells. For over 32" or for multi-piece construction, consult factory.
Bore "Bottom" Shape	"W" (nominal)
Bore Concentricity	± 10% of minimum wall thickness
Bore Depth	±0.020" (through 32.00")
Bore Diameter	+0.005" / -0.003" (bore sizes 0.125" through 0.406" I.D.)
Insertion Length	Lengths up to 22.50" ± 0.0625". Lengths from 22.50" through 48" ±0.125". Lengths over 48" ±0.25".
Stem Outside Diameter	±0.010"
Tapered Allowance	Maximum tapered length is 16.00". "U" dimensions greater than 16.00" in length are manufactured with a straight O.D. beginning below the process connection radius and following throughout with only the last 16.00" of "U" dimension tapered to minor O.D.
Surface Finish	32 µin R <sub>a</sub> standard
Internal Threads	1/2"-14 - NPT per ANSI B1.20.1 (1 to 3 turns deep per UL 866 and CSA C22.2 No. 30-M1986)
Marking	Standard marking includes material grade, material traceability codes, and CRN when applicable on drilled barstock and flanged thermowells