



TW Series

Stainless steel Flanged Thermowell

- Flanged Thermowell
- Tapered, straight or stepped shank
- Flange standard as per ASME B16.5, DIN 2501 or JIS
- Solid bar stock stainless steel construction
- Full penetration flanged thermowell welding
- Testing and certifications as per ASME PTC19.3
- Widely used in oil&gas, chemical, food&beverages, etc

TW ^①<Flanged> ^②Material. ^③Lagging. ^④Insertion 'U'. ^⑤Bore Diameter. ^⑥Instrument Conn ^⑦*Option ^⑧



Ordering Code

①	Thermowell Type
10	Straight shank type
20	Tapered shank type
30	Stepped shank type

② Flanged as per ASME B16.5		
Size	Rating	Facing
1"	150	Raise Face (RF)
1½"	300	Flat Face (FF)
2"	600	Ring Type Joint (RTJ)
	900	
	1500	
	2500	

Other standard equivalent to DIN2501 or JIS

③	Thermowell Type
SS	304 Stainless steel
ST	316 Stainless steel
SL	316L Stainless steel

Other material available on request

④	Lagging
WL	Without lagging (Standard)
L1	With lagging 2", if 'U' length <3"
L2	With lagging 3", if 'U' length >3"
LX	With lagging specific length

⑤	'U' Insertion Length
02	2"
04	4"
07	7"
10	10"
13	13"
16	16"
22	22"
XX	Other to specify

⑥	Bore Diameter
2	0.260" (Standard for 0.250" sensor)
3	0.385" (For 0.375" sensor)

⑦	Instrument Connection
N2	½"NPT Female
G2	½"BSP Female

⑧	*OPTION
LM	Laser marking on well (Standard)
TW	ASME 19.3 TW Calculation
NT	Stainless steel name tag with chain
PM	Positive Material Identification (PMI)



THERMOWELL GENERAL MATERIAL SELECTION GUIDE

Chemical	Temp. °C	Conc. %	Recommended Material
Acetic Acid	100	ALL	Monel
Acetic Anhydride	150		Nickel
Acetone	100	ALL	304SS
Acetylene	205		304SS
Alcohols	100	ALL	304SS
Alum (Potassium/Sodium)	150	ALL	Hastelloy-C
Aluminum Chloride	100	ALL	Hastelloy-B
Aluminum Sulfate	100	ALL	316SS
Ammonia, Dry	100	ALL	304SS, 316SS
Ammonium Hydroxide	100	ALL	304SS, 316SS
Ammonium Chloride	150	50%	Monel
Ammonium Nitrate	150	ALL	304SS
Ammonium Sulfate	100	ALL	316SS
Amyl Acetate	150	ALL	304SS
Aniline	-4		Monel
Asphalt	122		304SS
Atmosphere (Industrial,Marine)			304SS
Barium Compounds		See Calcium	
Beer	22		304SS
Benzene (Benzol)	100		Steel
Benzoic Acid	100	ALL	316SS
Bleaching Powder	22	15%	Monel
Borax	100	ALL	Brass
Bordeaux Mixture	94		304SS
Boric Acid	204	ALL	316SS
Bromine	52	DRY	Monel
Butane	204	ALL	Steel
Butyl Alcohol		See Alcohols	
Butyric Acid	100		Hastelloy-C
Calcium Bisulphite	24	ALL	Hastelloy-C
Calcium Chloride	100	ALL	Hastelloy-C
Calcium Hydroxide	150	20%	Hastelloy-C
Calcium Hypochlorite		See Bleaching Powder	
Carbolic Acid		See Phenol	
Carbon Dioxide, Dry	426	ALL	Brass
Carbonated Water	100	ALL	304SS
Carbonated Beverages	100		304SS
Carbon Disulfide	93		304SS
Carbon Tetrachloride	52	ALL	Monel
Chlorine, Dry	38		Monel
Chlorine, Moist	38	ALL	Monel
Chloroacetic Acid	100	ALL	Monel
Chloroform, Dry	100		Monel
Chromic Acid	150	ALL	Hastelloy-C
Cider	150	ALL	304SS
Citric Acid	100	ALL	Hastelloy-C
Copper (10) Chloride	100	ALL	Hastelloy-C
Copper (10) Nitrate	150	ALL	316SS
Copper (10) Sulfate	150	ALL	316SS
Cu. Plating Solution (Cyanide)	54		304SS
Cu. Plating Solution (Acid)	24		304SS
Corn Oil	93		304SS
Creosote	93	ALL	304SS
Crude Oil	150		Monel
Ethyl Acetate		See Lacquer Thinner	
Ethyl Chloride, Dry	260		Steel
Ethanol		See Alcohols	
Ethylene Glycol (Uninhibited)	100	ALL	304SS
Ethylene Oxide	24		Steel
Fatty Acids	260	ALL	316SS
Ferric Chloride	24	ALL	Hastelloy-C
Ferric Sulfate	150	ALL	304SS
Formaldehyde	100	40%	316SS
Formic Acid	150	ALL	316SS
Freon	150		Steel
Fluorine, Anhydrous	38		304SS
Furfural	232		316SS
Gasoline	150		Steel
Glucose	150		304SS
Glue, ph 6-8	150	ALL	304SS
Glycerine	100	ALL	Brass
Hydrobromic Acid	100	ALL	Hastelloy-C
Hydrochloric Acid(37-38%)	107	ALL	Hastelloy-B
Hydrogen Chloride, Dry	260		304SS

Chemical	Temp. °C	Conc. %	Recommended Material
Hydrocyanic Acid	100	ALL	304SS
Hydrofluoric Acid	100	60%	Monel
Hydrogen Fluoride, Dry	80		Steel
Hydrofluosilicic Acid	100	40%	Monel
Hydrogen Peroxide	52	10-100%	304SS
Kerosene	150	ALL	Steel
Lacquers & Thinners	150	ALL	304SS
Lactic Acid	150	ALL	316SS
Lime	100	ALL	316SS
Linseed Oil	24		Steel
Magnesium Chloride	100	50%	Nickel
Magnesium Hydroxide	24	ALL	304SS
Magnesium Sulfate	100	40%	304SS
Mercuric Chloride	24	10%	Hastelloy-C
Mercury	371	100%	Steel
Methylene Chloride	100	ALL	304SS
Methyl Chloride, Dry	24		Steel
Milk, fresh or sour	82		304SS
Molasses		See Glucose	
Natural Gas	21		304SS
Nitric Acid	24	ALL	304SS
Nitric Acid	150	ALL	316SS
Oxygen	24	ALL	Steel
Oleic Acid		See Fatty Acids	
Oxalic Acid	100	ALL	Monel
Photographic Bleaching	38	ALL	304SS
Palmitic Acid		See Fatty Acids	
Phosphoric Acid	100	ALL	316SS
Phenol	100	ALL	316SS
Potassium Compounds		See Sodium Compound	
Propane	150		Steel
Rosin	371	100%	316SS
Sea Water	24		Monel
Soap & Detergents	100	ALL	304SS
Sodium Bicarbonate	100	20%	316SS
Sodium Bisulfite	100	20%	304SS
Sodium Bisulfate	100	20%	304SS
Sodium Carbonate	100	40%	316SS
Sodium Chloride	150	30%	Monel
Sodium Chromate	100	ALL	316SS
Salt or Brine		See Sodium Chloride	
Sodium Cyanide	100	ALL	304SS
Sodium Hydroxide	100	30%	316SS
Sodium Hypochlorite	24	10%	Hastelloy-C
Sodium Nitrate	100	40%	304SS
Sodium Nitrite	24	20%	316SS
Sodium Phosphate	100	10%	Steel
Sodium Silicate	100	10%	Steel
Sodium Sulfide	100	30%	316SS
Sodium Sulfite	100	10%	316SS
Sodium Sulfate	100	30%	304SS
Sodium Thiosulfate	100	ALL	304SS
Steam			304SS
Stearic Acid		See Fatty Acids	
Sugar Solution		See Glucose	
Sulfur	260		304SS
Sulfur Chloride	24	DRY	316SS
Sulfur Dioxide	260	DRY	316SS
Sulfur Trioxide	260	DRY	316SS
Sulfuric Acid	100	10%	316SS
Sulfuric Acid	100	10-90%	Hastelloy-B
Sulfuric Acid	100	90-100%	Hastelloy-B
Sulfuric Acid, Fuming	80		Hastelloy-C
Sulfurous Acid	24	20%	316SS
Titanium Tetrachloride	24	ALL	316SS
Tannic Acid	24	40%	Hastelloy-B
Toluene	24		Steel
Trichloroacetic Acid	24	ALL	Hastelloy-B
Trichloroethylene	150	DRY	Monel
Turpentine	24		316SS
Varnish	66		Steel
Zinc Chloride	100	ALL	Hastelloy-B
Zinc Sulfate	100	ALL	316SS