

TABLES FOR TAP DIMENSIONS

ECCENTRICITY TOLERANCES OF TAP ELEMENTS WHEN TESTED ON DEAD CENTERS (REF. USCTI TABLE 317)
 APPLICABLE TO TABLES 302, 303, 303A, AND 311

ELEMENT	RANGE			GROUND THREAD	
	INCH & MACH. SCREW	PIPE	METRIC	ECCENTRICITY	t.i.v.*
Square (at central point)	#0 - 1/2"	1/16 - 1/8"	M1.6 - M12	.0030	.0060
	Over 1/2" thru 4"	1/4 - 4"	Over M12 thru M100	.0040	.0080
Shank	#0 - 5/16"	1/16"	M1.6 - M8	.0005	.0010
	Over 5/16" thru 4"	1/8 - 4"	Over M8 thru M100	.0008	.0016
Major Diameter	#0 - 5/16"	1/16"	M1.6 - M8	.0005	.0010
	Over 5/16" thru 4"	1/8 - 4"	Over M8 thru M100	.0008	.0016
Pitch Diameter (at first full thread)	#0 - 1/2"	1/16"	M1.6 - M8	.0005	.0010
	Over 1/2" thru 4"	1/8 - 4"	Over M8 thru M100	.0008	.0016
Chamfer**	#0 - 1/2"	1/16 - 1/8"	M1.6 - M12	.0010	.0020
	Over 1/2" thru 4"	1/4 - 4"	Over M12 thru M100	.0015	.0030

* t.i.v. = Total indicator variation. Figures are given for both eccentricity and total indicator variation to avoid misunderstanding.

** Chamfer should preferably be inspected by light projection to avoid errors due to indicator contact points dropping into the thread grooves.

SURFACE TREATMENT ABBREVIATIONS

SEE SURFACE TREATMENT RECOMMENDATIONS ON CATALOG PAGE 117
 OR CONTACT CUSTOMER SERVICE

CrN: Chromium Nitride	TiAlN: Titanium Aluminum Nitride
N: Nitride	TiCN: Titanium Carbonitride
N + O: Nitride + Oxide	TiN: Titanium Nitride
O: Steam Oxide	DLC: Diamond-like Carbon
AlCrN: Aluminum Chromium Nitride	TiAlN + WC/C: Titanium Aluminum Nitride + Tungsten Carbide/Carbon



Surface treatments and coatings allow improved tooling performance. For more information on surface treatments, contact Customer Service.