

## 4 FLUTE - STUB LENGTH - DOUBLE END - SQUARE END - 30° HELIX



**SERIES 145**  
UNCOATED

DIA	SHANK	LOC	OAL	ITEM #	LIST PRICE
1/16	1/8	1/8	1-1/2	TC14504	22.90
3/32	1/8	3/16	1-1/2	TC14506	23.58
1/8	1/8	1/4	1-1/2	TC14508	19.04
5/32	3/16	5/16	2	TC14510	26.76
3/16	3/16	3/8	2	TC14512	26.76
7/32	1/4	1/2	2-1/2	TC14514	36.71
1/4	1/4	1/2	2-1/2	TC14516	36.71
5/16	5/16	1/2	2-1/2	TC14520	47.47
3/8	3/8	9/16	2-1/2	TC14524	52.40
7/16	7/16	9/16	2-3/4	TC14528	74.01
1/2	1/2	5/8	3	TC14532	90.60



**SERIES 149**  
ALTiN COATED

DIA	SHANK	LOC	OAL	ITEM #	LIST PRICE
1/16	1/8	1/8	1-1/2	TC14904	30.92
3/32	1/8	3/16	1-1/2	TC14906	31.86
1/8	1/8	1/4	1-1/2	TC14908	25.68
5/32	3/16	5/16	2	TC14910	34.56
3/16	3/16	3/8	2	TC14912	34.56
7/32	1/4	1/2	2-1/2	TC14914	47.42
1/4	1/4	1/2	2-1/2	TC14916	47.42
5/16	5/16	1/2	2-1/2	TC14920	58.27
3/8	3/8	9/16	2-1/2	TC14924	64.28
7/16	7/16	9/16	2-3/4	TC14928	90.86
1/2	1/2	5/8	3	TC14932	122.29

## 4 FLUTE - STUB LENGTH - DOUBLE END - BALL NOSE - 30° HELIX



**SERIES 146**  
UNCOATED

DIA	SHANK	LOC	OAL	ITEM #	LIST PRICE
1/16	1/8	1/8	1-1/2	TC14604	28.64
3/32	1/8	3/16	1-1/2	TC14606	29.46
1/8	1/8	1/4	1-1/2	TC14608	23.80
5/32	3/16	5/16	2	TC14610	33.44
3/16	3/16	3/8	2	TC14612	33.44
7/32	1/4	1/2	2-1/2	TC14614	43.91
1/4	1/4	1/2	2-1/2	TC14616	43.91
5/16	5/16	1/2	2-1/2	TC14620	59.35
3/8	3/8	9/16	2-1/2	TC14624	65.48
7/16	7/16	9/16	2-3/4	TC14628	92.53
1/2	1/2	5/8	3	TC14632	113.24



**SERIES 147**  
ALTiN COATED

DIA	SHANK	LOC	OAL	ITEM #	LIST PRICE
1/16	1/8	1/8	1-1/2	TC14704	38.68
3/32	1/8	3/16	1-1/2	TC14706	39.79
1/8	1/8	1/4	1-1/2	TC14708	32.12
5/32	3/16	5/16	2	TC14710	43.18
3/16	3/16	3/8	2	TC14712	43.18
7/32	1/4	1/2	2-1/2	TC14714	59.26
1/4	1/4	1/2	2-1/2	TC14716	59.26
5/16	5/16	1/2	2-1/2	TC14720	72.81
3/8	3/8	9/16	2-1/2	TC14724	80.36
7/16	7/16	9/16	2-3/4	TC14728	113.59
1/2	1/2	5/8	3	TC14732	152.91

For coating information see page 6. For technical information, please see pages 224, 228-229.

TOLERANCES	DIAMETER	SHANK	RADIUS
ALL SIZES	+0.00, -0.02	-0.001, -0.004 ISO H6	+0.01, -0.01