

# Cap Screw Counterbores

High Speed Steel — Straight Shank — 4-Flute

For producing counterbored clearance holes for the heads of socket head cap screws. Recommended for a wide range of material types.

Fraise à lamer

Broca para hacer cajas



## List No. 1766

STANDARD PACKAGE All sizes — 1 each

CUTTER DIA.	FOR CAP SCREW SIZE	PILOT TOLERANCE	PILOT DIA.	PILOT LENGTH	CUTTER DIA. FLUTE LENGTH	SHANK DIA.	OAL	EDP NUMBER
.183	4	Standard	.1120	1/8	9/16	.1562	37/8	25718
.215	4	+1/32 Over	.1430	1/8	9/16	.1562	37/8	25719
.205	5	Standard	.1250	5/32	5/8	.1875	4 1/8	25720
.237	5	+1/32 Over	.1560	5/32	5/8	.1875	4 1/8	25721
.227	6	Standard	.1380	3/16	3/4	.2188	4 9/8	25722
.259	6	+1/32 Over	.1690	3/16	3/4	.2188	4 9/8	25723
.270	8	Standard	.1640	7/32	3/4	.2500	5	25724
.302	8	+1/32 Over	.1950	7/32	3/4	.2500	5	25725
.312	10	Standard	.1900	1/4	7/8	.2812	5 1/4	25726
.344	10	+1/32 Over	.2210	1/4	7/8	.2812	5 1/4	25727
.380	1/4	Standard	.2500	9/32	1	.3125	5 5/8	25741
.412	1/4	+1/32 Over	.2810	9/32	1	.3125	5 5/8	25728
.474	5/16	Standard	.3125	5/16	1	.3750	6 1/8	25742
.504	5/16	+1/32 Over	.3430	5/16	1	.3750	6 1/8	25729
.569	3/8	Standard	.3750	3/8	1 1/4	.5000	6 1/2	25743
.601	3/8	+1/32 Over	.4060	3/8	1 1/4	.5000	6 1/2	25730
.661	7/16	Standard	.4370	7/16	1 1/4	.5000	7	25744
.691	7/16	+1/32 Over	.4680	7/16	1 1/4	.5000	7	25731
.755	1/2	Standard	.5000	1/2	1 1/2	.5000	7 1/2	25745
.787	1/2	+1/32 Over	.5310	1/2	1 1/2	.5000	7 1/2	25732
.969	5/8	Standard	.6250	5/8	1 1/2	.6250	7 7/8	25733
1.000	5/8	+1/32 Over	.6560	5/8	1 1/2	.6250	7 7/8	25734
1.156	3/4	Standard	.7500	3/4	1 5/8	.7500	7 3/4	25735
1.188	3/4	+1/32 Over	.7810	3/4	1 5/8	.7500	7 3/4	25736
1.344	7/8	Standard	.8750	7/8	1 7/8	.8750	8	25737
1.375	7/8	+1/32 Over	.9060	7/8	1 7/8	.8750	8	25738
1.531	1	Standard	1.0000	1	2	1.0000	8 1/2	25739
1.563	1	+1/32 Over	1.0310	1	2	1.0000	8 1/2	25740

## List No. 1766 — Metric



CUTTER DIA.	FOR CAP SCREW SIZE	PILOT DIA.	PILOT LENGTH	CUTTER DIA. FLUTE LENGTH	SHANK DIA.	OAL	EDP NUMBER
.2362	3mm	.1377	5/32	5/8	.1875	4 1/8	25746
.2953	4mm	.1772	7/32	3/4	.2500	5	25747
.3543	5mm	.2165	9/32	1	.3125	5 5/8	25748
.4134	6mm	.2559	5/16	1	.3750	6 1/8	25749
.5315	8mm	.3346	3/8	1 1/4	.5000	6 1/2	25750
.6496	10mm	.4134	7/16	1 1/4	.5000	7	25751
.7283	12mm	.4921	1/2	1 1/2	.5000	7 1/2	25752
.9645	16mm	.6500	5/8	1 1/2	.6250	7 5/8	25754
1.2010	20mm	.8070	7/8	1 7/8	.8750	8	25756
1.4370	24mm	.9650	1	2	1.0000	8 1/2	25758

# Interchangeable Pilot Counterbores

## Short Series — High Speed Steel

For use with interchangeable pilots (list no. 776). For general purpose counterboring and spot facing.

Fraise à lamer

Broca para hacer cajas



List No. 1772 Straight Shank



List No. 1771 Taper Shank

STANDARD PACKAGE All sizes — 1 each

CUTTER DIA.	NO. OF FLUTES	OAL	ACCEPTS PILOT SHANK DIA.	RANGE OF PILOTS DIA.	SHANK DIA.	LIST NO. 1772 EDP NO.	MORSE TAPER NO.	LIST NO. 1771 EDP NO.
3/16	3	3	3/32	1/8-3/16	15/64	25811	—	—
7/32	3	3	3/32	1/8-7/32	15/64	25812	—	—
1/4	3	3 13/16	3/32	1/8-3/16	15/64	25813	1	25761*
9/32	3	3 13/16	3/32	1/8-7/32	17/64	25814	1	25762*
5/16	3	3 13/16	3/32	1/8-1/4	19/64	25815	1	25763*
11/32	3	3 13/16	3/32	1/8-9/32	5/16	25816	—	—
3/8	3	4 1/16	5/32	3/16-5/16	5/16	25817	1	25765*
13/32	3	4 1/16	5/32	3/16-11/32	3/8	25818	1	25766*
7/16	3	4 1/16	5/32	3/16-3/8	3/8	25819	1	25767*
15/32	3	4 5/16	3/16	1/4-13/32	7/16	25820	1	25768*
1/2	3	4 5/16	3/16	1/4-7/16	7/16	25821	—	—
17/32	3	4 5/16	3/16	1/4-15/32	1/2	25822	—	—
9/16	3	4 5/16	3/16	1/4-1/2	1/2	25823	1	25771*
19/32	3	5 1/8	3/16	1/4-17/32	1/2	25824	2	25772*
5/8	3	5 1/8	3/16	1/4-9/16	1/2	25825	—	—
21/32	3	5 1/8	3/16	1/4-5/8	1/2	25826	2	25774*
11/16	3	5 1/8	3/16	1/4-5/8	1/2	25827	2	25775*
23/32	3	5 3/8	1/4	5/16-21/32	1/2	25828	2	25776*
3/4	3	5 3/8	1/4	5/16-11/16	1/2	25829	—	—
25/32	3	5 3/8	1/4	5/16-23/32	5/8	25830	2	25778*
13/16	3	5 3/8	1/4	5/16-3/4	5/8	25831	—	—
7/8	3	5 3/8	1/4	5/16-13/16	3/4	25833	—	—
15/16	3	6 1/8	1/4	5/16-7/8	3/4	25835	3	25781*
1	3	6 3/8	5/16	3/8-15/16	3/4	25837	3	25782*
1 1/16	3	6 3/8	5/16	3/8-1 1/16	3/4	25838	3	25783*
1 1/8	3	6 3/8	5/16	3/8-1 1/8	1	25839	—	—
1 3/16	3	6 3/8	5/16	3/8-1 1/8	1	25840	—	—
1 1/4	5	6 3/8	3/8	7/16-1 3/16	1	25841	—	—
1 3/8	5	6 3/8	3/8	7/16-1 5/16	1	25842	—	—
1 1/2	5	7 7/8	3/8	7/16-1 7/16	1 1/4	25843	—	—
1 5/8	5	8 1/8	7/16	1/2-1 9/16	1 1/4	25844	4	25790*
1 3/4	5	8 1/8	7/16	1/2-1 11/16	1 1/4	25845	4	25791*
1 7/8	5	8 1/8	7/16	1/2-1 13/16	1 1/2	25846	—	—
2	5	8 3/8	1/2	9/16-1 15/16	1 1/2	25847	4	25793*
2 1/8	5	9 7/8	1/2	9/16-2 1/16	—	—	5	25794*
2 1/2	5	9 7/8	1/2	9/16-2 7/16	—	—	5	25797*

\*Available While Supplies Last

# Carbide Tipped Interchangeable Pilot Counterbores

For use with interchangeable pilots (list no. 776).

**Carbide Tipped** offers excellent wear resistance. Recommended for counterboring and spot facing in cast iron, non-ferrous metals and other abrasive non-ferrous materials.

## NOT FOR USE IN STEEL

STANDARD TOLERANCE — plus .001" minus .0000".

Fraise à lamer à pointe au carbure

Broca para hacer cajas con punta de carburo



List No. 5779 Straight Shank



List No. 5780 Taper Shank

**STANDARD PACKAGE** All sizes — 1 each

CUTTER DIA.	FLUTE LENGTH	OAL	ACCEPTS PILOT SHANK DIA.	MINIMUM DIA. AT CENTER	SHANK DIA.	LIST NO. 5779 EDP NO.	MORSE TAPER NO.	LIST NO. 5780 EDP NO.
1/4	3/4	3 11/16	3/32	.114	15/64	56401	1	56451
5/16	3/4	3 11/16	3/32	.114	19/64	56402	1	56452
3/8	1	4 1/16	5/32	.187	5/16	56403	1	56453
7/16	1	4 1/16	5/32	.187	3/8	56404	1	56454
1/2	1 1/4	4 5/16	3/16	.245	7/16	56405	1	56455
9/16	1 1/4	4 5/16	3/16	.245	1/2	56406	1	56456
5/8	1 1/4	5 1/8	3/16	.245	1/2	56407	2	56457
11/16	1 1/4	5 1/8	3/16	.245	1/2	56408	2	56458
3/4	1 1/4	5 3/8	1/4	.245	1/2	56409	2	56459
13/16	1 1/4	5 3/8	1/4	.307	5/8	56410	2	56460
7/8	1 1/4	5 3/8	1/4	.307	3/4	56411	2	56461
15/16	1 1/4	6 1/8	1/4	.307	3/4	56412	3	56462
1	1 3/8	6 3/8	5/16	.370	3/4	56413	3	56463
1 1/16	1 3/8	6 3/8	5/16	.370	1	56414	3	56464
1 1/8	1 3/8	6 3/8	5/16	.370	1	56415	3	56465
1 3/16	1 3/8	6 3/8	5/16	.432	1	56416	3	56466
1 1/4	1 1/2	6 5/8	3/8	.432	1	56417	3	56467
1 5/16	1 1/2	6 5/8	3/8	.432	1	56418	3	56468
1 3/8	1 1/2	6 5/8	3/8	.432	1	56419	3	56469
1 7/16	1 1/2	7 7/8	3/8	.432	1 1/4	56420	4	56470
1 1/2	1 1/2	7 7/8	3/8	.432	1 1/4	56421	4	56471
1 9/16	1 3/4	8 1/8	7/16	.495	1 1/4	56422*	—	—

\* Available While Supplies Last

## TOOL COATING SERVICE

**Tool Coatings** enhance cutting tool performance for increased productivity and lower overall tooling cost. Benefits include increased surface hardness, lubricity & heat resistance and decreased chemical reactivity. Results include reduced friction & torque, higher speeds & feeds, increased tool life, decreased galling & chip welding and improved surface finish. **PLEASE INQUIRE.**

**TiN** — Titanium Nitride

**TiCN** — Titanium Carbonitride

**TiAlN** — Titanium Aluminum Nitride

**AlTiN** — Aluminum Titanium Nitride

**CrN** — Chromium Nitride

**CrC** — Chromium Carbide

**DLC** — Diamond Like Carbon

# Interchangeable Pilots For Counterbores

Carbon Steel

Fraise à lamer avec guide

Piloto de broca para hacer cajas



List No. 776

**STANDARD PACKAGE** All sizes — 1 each

PILOT DIA.	SHANK DIAMETER						
	3/32	5/32	3/16	1/4	5/16	3/8	7/16
	EDP NO.	EDP NO.	EDP NO.	EDP NO.	EDP NO.	EDP NO.	EDP NO.
1/8	26002						
5/32	26003						
3/16	26004	26009					
7/32	26005	26010					
1/4	26006	26011	26018				
9/32	26007	26012	26019				
5/16		26013	26020	26032			
11/32		26014	26021	26033			
3/8		26015	26022	26034	26050		
13/32			26023	26035			
7/16			26024	26036	26052		
15/32			26025	26037	26053		
1/2			26026	26038	26054	26072	
17/32			26027	26039	26055	26073*	
9/16			26028	26040	26056		
19/32			26029*	—			
5/8			26030	26042	26058		
21/32				26043	26059		
11/16				26044	26060	26078	
23/32					26061		
3/4				26046	26062	26080	
13/16				26047	26063	26081	26102
7/8				26048	26064	26082	26103
15/16					26065	26083	
1					26066		
1 1/16						26085	

\*Available While Supplies Last

## With MORSE® Modifications Why Start From Scratch?

When standard cutting tools aren't quite right for your application, let **Morse® Modifications** make them perfect for the task. Morse®-modified off-the-shelf standard cutting tools let you start with a standard tool at a standard price. Add a little for modifications, and save by not having to go with expensive custom-designed special cutting tools.

## With MORSE® Specials Fast Delivery on Custom Tools.

When your application requires special custom designed cutting tools, **Morse® Specials** offers complete tool design and manufacturing services. Fast quotes, quick delivery, specifically designed for your machining application. Engineered cutting tools optimized for lower overall machining costs.