

## Specialty Tools

## COUNTERSINKS

## Type 82-AG -Piloted , Type 82-AG -Pilotless , Type 90-AG -Deburring

Type 82-AG Chatterproof™ Countersinks Super Premium  
Type 90-AG Chatterproof™ Deburring Tools Super Premium



Type 82-AG - Piloted



Type 82-AG - Pilotless



Type 90-AG - Deburring

Special Hi-Molybdenum tool steel, gold surface treated for maximum lubricity.

## These high performance, flute-less tools are:

- Free cutting - for ease of use.
- Designed for fast stock removal.
- Chatterproof - for a micro smooth finish.
- Easily resharpened - for extra long life.
- Available in a wide selection of styles.
- Recommended for smooth finishes on metal, plastic and wood applications.
- Made in the U.S.A.

## TYPE 82-AG 82° PILOTED COUNTERSINK

Part No.	Size	Style	Screw Size		Shank Diameter		Overall Length		D	E	F	No. per/pack
			A	B	C	B	C					
67010	CS1/4	1	1/4	1/4	3/8	2	33/64	1	5/32		1	
67020	CS1/4A	1	1/4	17/64	3/8	2	33/64	1	5/32		1	
67030	CS5/16	1	5/16	5/16	3/8	2-3/16	41/64	1-3/16	5/32		1	
67040	CS5/16A	1	5/16	21/64	3/8	2-3/16	41/64	1-3/16	5/32		1	
67050	CS3/8	1	3/8	3/8	1/2	2-5/8	49/64	1-3/8	5/32		1	
67060	CS3/8A	1	3/8	25/64	1/2	2-5/8	49/64	1-3/8	5/32		1	
67070	CS7/16	1	7/16	7/16	1/2	2-3/4	53/64	1-1/2	7/32		1	
67080	CS7/16A	1	7/16	29/64	1/2	2-3/4	53/64	1-1/2	7/32		1	
67090	CS1/2	1	1/2	1/2	1/2	2-13/16	15/16	1-9/16	1/4		1	
67100	CS1/2A	1	1/2	33/64	1/2	2-13/16	15/16	1-9/16	1/4		1	

See next page for technical diagram

## TYPE 82-AG 82° PILOTLESS COUNTERSINK

Part No.	Size	Style	Diameter of Cut		Screw Size	Shank Diameter B	Overall Length		D	E	No. per/pack
			Min	Max			C	C			
67110	CS073	3	0.073	15/64		1/4	1-3/4				1
67120	CS3/16	2	3/16	17/32		1/4	1-15/16	9/16	1		1
67130	CS307	2	0.307	25/32		1/2	2-5/8	13/16	1-3/8		1
67140	CS307A	2	0.307	25/32		1/4	2-1/16	13/16	1-1/4		1
67150	CS431	2	0.431	7/8		1/2	2-13/16	1-1/8	1-9/16		1
67160	CS1/2B	2	1/2	1-15/32		1/2	3-1/2	1-1/2	2-1/8		1
67170	CS55	2			No. 4	1/4	1-1/2	17/64	5/8		1
67180	CS65	2			No. 6	1/4	1-1/2	19/64	5/8		1
67190	CS85	2			No. 8	1/4	1-5/8	11/32	3/4		1
67200	CS105	2			No. 10	1/4	1-5/8	25/64	3/4		1

See next page for technical diagram

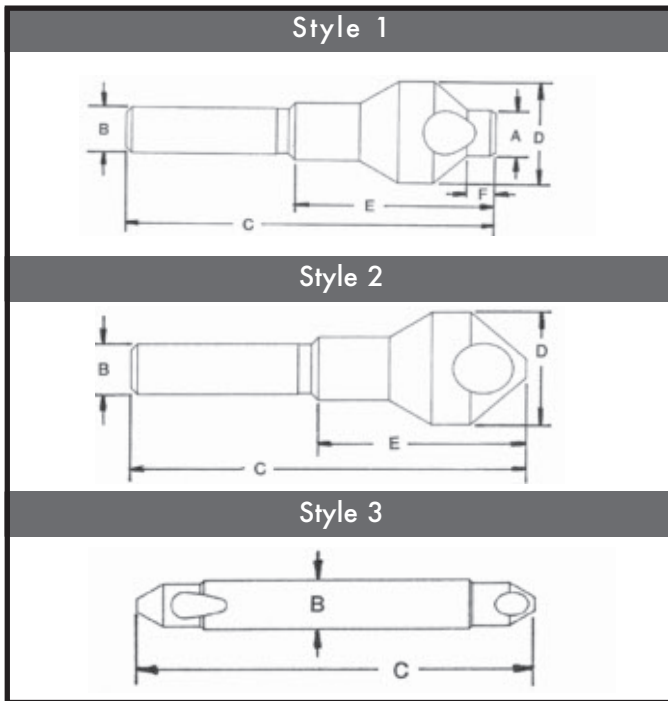
## TYPE 90-AG 90° DEBURRING TOOLS

Part No.	Size	Style	Diameter of Cut		Shank Diameter B	Overall Length		D	E	No. per/pack
			Min	Max		C	C			
67210	DB1/64	3	1/64	11/64	3/16	1-1/2				1
67220	DB1/16	3	1/16	11/64	3/16	1-1/2				1
67230	DB1/8	3	1/8	15/64	1/4	1-3/4				1
67240	DB5/32	2	5/32	13/32	1/4	1-11/16	7/16	13/16		1
67250	DB3/16	2	3/16	17/32	1/4	1-7/8	9/16	1		1
67260	DB5/16	2	5/16	25/32	1/2	2-19/32	13/16	1-3/8		1
67270	DB5/16C	2	5/16	25/32	1/4	2-1/32	13/16	1-5/32		1
67280	DB9/16	2	9/16	1-3/32	1/2	2-13/16	1-1/8	1-9/16		1
67290	DB1/2	2	1/2	1-15/32	1/2	3-1/2	1-1/2	2-1/8		1

See next page for technical diagram

# Specialty Tools

## COUNTERSINK TECHNICAL DIAGRAM



### TYPE 82-AG & TYPE 90-AG SETS

#### Part No. Description of Sizes

<b>SP-4CS</b> 10440	82-AG C/S sizes: CS5S, CS6S, CS5S, CS10S
<b>SP-4ACS</b> 10442	82-AG C/S sizes: CS6S, CS8S, CS10S, CS3/16S
<b>SP-6DB</b> 10450	90-AG D/B sizes: DB1/16, DB1/8, DB5/32, DB3/16, DB5/16 & DB9/16
<b>SP-9CS</b> 10443	82-AG C/S sizes: CS5S, CS6S, CS8S, CS10S, CS1/4, CS5/16, CS3/8, CS7/16, & CS1/2



## COMBINED DRILLS & COUNTERSINK

### Type 296 -Plain , Type 297 -Bell

#### Type 296

Drill ends are of equal diameter. The included angle is 60°.

#### Type 297

The included angles are 60° and 120°. The diameter at the intersection of these two angles is the bell diameter. The small 120° angular chamfer protects the edges of the center hole.



### TYPE 296 PLAIN COUNTERSINKS

Part No.	Size	Dia. of Body Inches	Dia. & Length of drills	Overall Length Inches	Std. Pack
26760	00	1/8	.025x.030	1-7/32	12
26770	0	1/8	1/32x.038	1-7/32	12
26780	1	1/8	3/64x3/64	1-1/4	12
26790	2	3/16	5/64x5/64	1-7/8	12
26800	3	1/4	7/64x7/64	2	12
26810	4	5/16	1/8x1/8	2-1/8	6
26820	5	7/16	3/16x3/16	2-3/4	6
26830	6	1/2	7/32x7/32	3	6
26840	7	5/8	1/4x1/4	3-1/4	1
26850	8	3/4	5/16x5/16	3-1/2	1

### TYPE 297 BELL COUNTERSINKS

Part No.	Size	Dia. of Body Inches	Dia. & Length of drills	Dia. of Bell Inches	Overall Length Inches	Std. Pack
26860	11	1/8	3/64x3/64	.100	1-1/4	12
26870	12	3/16	1/16x1/16	.150	1-7/8	12
26880	13	1/4	3/32x3/32	.200	2	12
26890	14	5/16	7/64x7/64	.250	2-1/8	12
26900	15	7/16	5/32x5/32	.350	2-3/4	6
26910	16	1/2	3/16x3/16	.400	3	6
26920	17	5/8	7/32x7/32	.500	3-1/4	1
26930	18	3/4	1/4x1/4	.600	3-1/2	1