

COUNTERSINKS & TECHNICAL DIAGRAMS & COMBINED DRILLS



Type 82-AG - Piloted



Type 82-AG - Pilotless



Type 90-AG - Deburring

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

Type 82-AG Chatter proof™ - Countersinks Type 90-AG Chatter proof™ - Deburring Tools

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.
- Chatter proof - for a micro smooth finish.
- 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					
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 left for technical diagram.

TYPE 82-AG 82° PILOT LESS COUNTERSINK

Part No.	Size	Style	Diameter of Cut		Screw Size	Shank Diameter	Overall Length	D	E	No. per/pack
			Min	Max						
67110	CS073	3	5/64"	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	5/16"	25/32"	---	1/2"	2-5/8"	13/16"	1-3/8"	1
67140	CS307A	2	5/16"	25/32"	---	1/4"	2-1/16"	13/16"	1-1/4"	1
67150	CS431	2	7/16"	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	1/8"	17/64"	No. 4	1/4"	1-1/2"	17/64"	5/8"	1
67180	CS65	2	1/8"	19/64"	No. 6	1/4"	1-1/2"	19/64"	5/8"	1
67190	CS85	2	1/8"	11/32"	No. 8	1/4"	1-5/8"	11/32"	3/4"	1
67200	CS105	2	9/64"	25/64"	No. 10	1/4"	1-5/8"	25/64"	3/4"	1

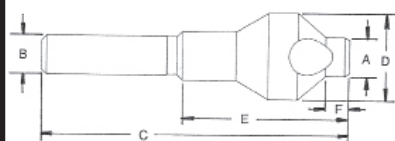
See left for technical diagram.

TYPE 90-AG 90° DEBURRING TOOLS

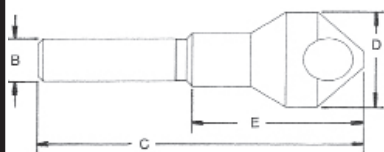
Part No.	Size	Style	Diameter of Cut		Shank Diameter	Overall Length	D	E	No. per/pack
			Min	Max					
67210	DB1/64	3	1/64"	11/64"	3/16"	1-1/2"	---	---	1
67220	DB1/16	3	1/16"	11/64"	3/16"	1-1/2"	---	---	1
67230	DB1/8	3	1/8"	15/64"	1/4"	1-3/4"	---	---	1
67240	DB5/32	2	5/32"	13/32"	1/4"	1-11/16"	7/16"	13/16"	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 left for technical diagram.

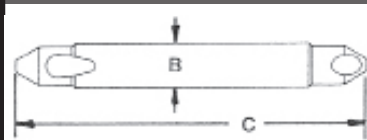
Style 1



Style 2



Style 3



Specialty Tools

Super Premium

Specialty Tools - Countersink, Combined Drills & 6-Flute Countersink

COMBINED DRILLS, COUNTERSINK SETS & 6-FLUTE COUNTERSINK TOOL

TYPE 82-AG & TYPE 90-AG SETS

Part#	Description of Sizes
SP-4CS 10440	82-AG C/S sizes: CS5S, CS6S, CS8S, CS10S
SP-4ACS 10442	82-AG C/S sizes: CS6S, CS8S, CS10S, CS3/16
SP-6DB 10450	90-AG D/B sizes: DB1/16, DB1/8, DB5/32, DB3/16, DB5/16 & DB9/16
SP-9CS 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

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



TYPE 296 PLAIN COUNTERSINKS

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

COMBINED DRILLS AND COUNTERSINK - SET

26861 5pc. Bright Finish Sizes: 1, 2, 3, 4 and 5



6-FLUTE 82° CHATTER-LESS HSS COUNTERSINK

Type 83-AG

- Chatter-less 6-flute design reduces vibration
- Multiple cutting edges extend tool life.
- 82° Countersink produce the ideal profile for the majority of flat head fasteners.
- 3-Flat on shank
- Made in the USA.



Type 83-AG

4pc. Type 83-AG



TYPE 83-AG HSS 82° COUNTERSINK

Part#	Size	Shank Size	# per/Pack
67700	1/4"	1/4"	1
67710	5/16"	1/4"	1
67720	3/8"	1/4"	1
67730	1/2"	3/8"	1
67740	5/8"	3/8"	1
67750	3/4"	1/2"	1
67760	7/8"	1/2"	1
67770	1"	1/2"	1
67780	1-1/4"	1/2"	1
67790	1-1/2"	3/4"	1

4PC. HSS 82° COUNTERSINK SET

Part#	Sizes	Shank Sizes	# per/Pack
67800	1/4", 5/16", 3/8", *1/2"	1/4", *3/8"	1

COMBINED DRILLS & COUNTERSINK

Type 296-XL - Long Length 60°

- 60° degree countersink angle fits all standard centers.
- Used for centering work ends, where the work piece is to be revolved on machine centers.
- Made in the USA.



TYPE 296-XL COMBINED DRILLS & COUNTERSINK

Part#	Size	Body Diameter	Drill Diameter	No. per/Pack
08603	1x3	1/8"	3/64"	1
08613	1x4	1/8"	3/64"	1
08623	1x5	1/8"	3/64"	1
08633	1x6	1/8"	3/64"	1
08643	2x3	3/16"	5/64"	1
08653	2x4	3/16"	5/64"	1
08663	2x5	3/16"	5/64"	1
08673	2x6	3/16"	5/64"	1
08683	3x3	1/4"	7/64"	1
08693	3x4	1/4"	7/64"	1
08703	3x5	1/4"	7/64"	1
08713	3x6	1/4"	7/64"	1
08723	4x4	5/16"	1/8"	1
08733	4x5	5/16"	1/8"	1
08743	4x6	5/16"	1/8"	1
08753	4-1/2x4	3/8"	9/64"	1
08763	4-1/2x5	3/8"	9/64"	1
08773	4-1/2x6	3/8"	9/64"	1
08783	5x4	7/16"	3/16"	1
08793	5x5	7/16"	3/16"	1
08803	5x6	7/16"	3/16"	1
08813	6x5	1/2"	7/32"	1
08823	6x6	1/2"	7/32"	1
08833	7x6	5/8"	1/4"	1
08843	8x6	3/4"	5/16"	1