

Multi-Flute Countersinks

Teeth as regularly furnished on these cutters are for quick light chamfering only. Stocked in 30° C/L and 45° C/L. The Inside Deburring Cutter is designed so that one tool can deburr many different hole diameters. The multi-flute design is self-piloting. For heavier countersinking, special arbors, or special angles, submit details to our Engineering Department.

High Speed Steel

30° C/L (60° Included) Solid

Head Dia.	Nose Point or Flat Dia.	Overall Length	Severance Tool Name	EDP Order Number
1/4"	P	2-1/4"	ID-1/4-30	20770
5/16"	1/32"	2-1/4"	ID-5/16-30	20771
3/8"	P	2-1/4"	ID-3/8-30	20772
1/2"	9/64"	2-1/4"	IDS-1/2-30	20773
1/2"	P	2-1/4"	IDL-1/2-30	20774
5/8"	13/64"	2-1/4"	IDS-5/8-30	20775

High Speed Steel

45° C/L (90° Included) Solid

Head Dia.	Nose Point or Flat Dia.	Overall Length	Severance Tool Name	EDP Order Number
1/4"	P	2-1/4"	ID-1/4-45	20805
5/16"	1/16"	2-1/4"	ID-5/16-45	20806
3/8"	P	2-1/4"	ID-3/8-45	20807
1/2"	1/8"	2-1/4"	IDS-1/2-45	20808
1/2"	P	2-1/4"	IDL-1/2-45	20809
5/8"	1/8"	2-1/4"	IDS-5/8-45	20810



Tools are furnished without shanks.
See pages 78-80 for available shank styles and sizes.

High Speed Steel

30° C/L (60° Included) Threaded

Head Dia.	Nose Point or Flat Dia.	Overall Length	Thread Size	Severance Tool Name	EDP Order Number
5/8"	3/64"	7/8"	1/4"-28	ID-5/8-30	20776
3/4"	1/32"	1"	5/16"-24	ID-3/4-30	20777
7/8"	5/32"	1"	3/8"-24	ID-7/8-30	20778
1"	9/32"	1-1/8"	3/8"-24	IDS-1-30	20779
1"	1/8"	1-1/8"	3/8"-24	IDL-1-30	20780
1-1/8"	1/8"	1-1/8"	3/8"-24	ID-1-1/8-30	20781
1-1/4"	17/32"	1"	3/8"-24	IDS-1-1/4-30	20782
1-1/4"	3/32"	1-1/4"	3/8"-24	IDL-1-1/4-30	20783
1-1/2"	31/64"	1-1/8"	1/2"-20	IDS-1-1/2-30	20784
1-1/2"	13/64"	1-1/2"	1/2"-20	IDL-1-1/2-30	20785
1-3/4"	3/4"	1-1/4"	1/2"-20	IDS-1-3/4-30	20786
1-3/4"	5/16"	1-1/2"	1/2"-20	IDL-1-3/4-30	20787
2"	63/64"	1-1/4"	5/8"-18	IDS-2-30	20788
2"	27/32"	1-1/4"	5/8"-18	IDL-2-30	20789
2-1/4"	1-3/32"	1-3/8"	3/4"-16	IDS-2-1/4-30	20790
2-1/4"	33/64"	1-7/8"	3/4"-16	IDL-2-1/4-30	20791
2-1/2"	1-31/64"	1-1/4"	3/4"-16	IDS-2-1/2-30	20792
2-1/2"	29/32"	1-3/4"	3/4"-16	IDL-2-1/2-30	20793
3"	1-63/64"	1-1/4"	1"-14	ID-3-30	20794

High Speed Steel

45° C/L (90° Included) Threaded

Head Dia.	Nose Point or Flat Dia.	Overall Length	Thread Size	Severance Tool Name	EDP Order Number
5/8"	1/8"	11/16"	1/4"-28	ID-5/8-45	20811
3/4"	P	13/16"	5/16"-24	ID-3/4-45	20812
7/8"	5/32"	1"	3/8"-24	ID-7/8-45	20813
1"	1/4"	7/8"	3/8"-24	IDS-1-45	20814
1"	P	7/8"	3/8"-24	IDL-1-45	20815
1-1/4"	3/8"	3/4"	3/8"-24	IDS-1-1/4-45	20816
1-1/4"	P	1"	3/8"-24	IDL-1-1/4-45	20817
1-1/2"	1/2"	7/8"	1/2"-20	IDS-1-1/2-45	20818
1-1/2"	1/4"	1-1/16"	1/2"-20	IDL-1-1/2-45	20819
1-3/4"	5/8"	7/8"	1/2"-20	ID-1-3/4-45	20820
2"	1"	1"	5/8"-18	IDS-2-45	20821
2"	1/4"	1-1/2"	5/8"-18	IDL-2-45	20822
2-1/4"	1"	1"	5/8"-18	IDS-2-1/4-45	20823
2-1/4"	1/4"	1-3/8"	5/8"-18	IDL-2-1/4-45	20824
2-1/2"	3/4"	1-3/8"	3/4"-16	IDS-2-12-45	20825
2-1/2"	1/4"	1-5/8"	3/4"-16	IDL-2-1/2-45	20826
3"	3/4"	1-3/4"	1"-14	IDS-3-45	20827
3"	1/4"	1-7/8"	1"-14	IDL-3-45	20828



Multi-Flute Countersinks

All carbide Inside Deburring Cutters are designed with a pointed nose. Tools with a head diameter measuring 3/32" thru 1/4" are made of solid carbide and are double ended. Inside Deburring Cutters with a head diameter measuring 5/16" thru 1" have solid carbide heads brazed to hardened alloy precision ground shanks.

Carbide

30° C/L (60° Included)

Carbide

45° C/L (90° Included)

Head Dia.	Shank Dia.	Overall Length
3/32"	3/32"	1-1/2"
1/8"	1/8"	1-1/2"
3/16"	3/16"	2"
1/4"	1/4"	2"
5/16"	1/4"	2-1/4"
3/8"	1/4"	2-1/4"
1/2"	1/4"	2-1/4"
1/2"	3/8"	2-1/8"
5/8"	1/4"	2-3/8"
5/8"	3/8"	2-3/8"
3/4"	1/2"	2-11/16"
7/8"	1/2"	2-13/16"
1"	1/2"	2-13/16"

Severance Tool Name	EDP Order Number
3Z-W-DE	20620
4Z-W-DE	22250
6Z-W-DE	20622
8Z-W-DE	22411
ID-5/16-30-W	20628
ID-3/8-30-W	20629
ID-1/2-30-W	20633
ID-1/2-30-W-3/8	20634
ID-5/8-30-W	20639
ID-5/8-30-W-3/8	20640
ID-3/4-30-W	20644
ID-7/8-30-W	20649
ID-1-30-W	20650

Severance Tool Name	EDP Order Number
3Y-W-DE	20680
4Y-W-DE	22249
6Y-W-DE	20682
8Y-W-DE	22412
ID-5/16-45-W	20688
ID-3/8-45-W	20689
ID-1/2-45-W	20693
ID-1/2-45-W-3/8	20694
ID-5/8-45-W	20699
ID-5/8-45-W-3/8	20700
ID-3/4-45-W	20704
ID-7/8-45-W	20709
ID-1-45-W	20710



Multi-Flute Countersinks

Severance Inside Chamfering Mills can be depended upon to produce smooth, burrless, chamfers on most machinable materials and are suitable for fairly heavy chamfering. For still heavier chamfering, consider Severance's Chatterless™ countersinks.

High Speed Steel

30° C/L (60° Included) Solid

Head Dia.	Nose Point or Flat Dia.	Overall Length	Severance Tool Name	EDP Order Number
1/4"	P	2-1/4"	IC-1/4-30	20470
5/16"	1/32"	2-1/4"	IC-5/16-30	20471
3/8"	P	2-1/4"	IC-3/8-30	20472
1/2"	9/64"	2-1/4"	ICS-1/2-30	20473
1/2"	P	2-1/4"	ICL-1/2-30	20474
5/8"	13/64"	2-1/4"	ICS-5/8-30	20475

High Speed Steel

45° C/L (90° Included) Solid

Head Dia.	Nose Point or Flat Dia.	Overall Length	Severance Tool Name	EDP Order Number
1/4"	P	2-1/4"	IC-1/4-45	20505
5/16"	1/16"	2-1/4"	IC-5/16-45	20506
3/8"	P	2-1/4"	IC-3/8-45	20507
1/2"	1/8"	2-1/4"	ICS-1/2-45	20508
1/2"	P	2-1/4"	ICL-1/2-45	20509
5/8"	1/8"	2-1/4"	ICS-5/8-45	20510

Miniature Multi-Flute Countersinks

3/32" Shank Diameter – 1-5/8"

Used on small hole and parts to chamfer or break the edge. May be resharpened many times. 3/32" shanks 25° C/L angle.



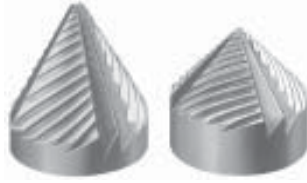
Head Dia.	Flute Length	Severance Tool Name	EDP Order Number
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Cone, Pointed Nose, 25° C/L Angle

1/16"	.081"	LM2-062	22626
3/32"	.122"	LM2-093	22627
1/8"	.162"	LM2-125	22628
3/16"	.244"	LM2-187	22629
1/4"	.325"	LM2-250	22630
5/16"	.407"	LM2-312	22631

Multi-Flute Countersinks Continued...

Tools are furnished without shanks.
See pages 78-80 for available shank styles and sizes.



High Speed Steel

30° C/L (60° Included) Threaded

Head Dia.	Nose Point or Flat Dia.	Overall Length	Thread Size	Severance Tool Name	EDP Order Number
5/8"	3/64"	7/8"	1/4"-28	IC-5/8-30	20476
3/4"	1/32"	1"	5/16"-24	IC-3/4-30	20477
7/8"	5/32"	1"	3/8"-24	IC-7/8-30	20478
1"	9/32"	1-1/8"	3/8"-24	ICS-1-30	20479
1"	1/8"	1-1/8"	3/8"-24	ICL-1-30	20480
1-1/8"	1/8"	1-1/8"	3/8"-24	IC-1-1/8-30	20481
1-1/4"	17/32"	1"	3/8"-24	ICS-1-1/4-30	20482
1-1/4"	3/32"	1-1/4"	3/8"-24	ICL-1-1/4-30	20483
1-1/2"	31/64"	1-1/8"	1/2"-20	ICS-1-1/2-30	20484
1-1/2"	13/64"	1-1/2"	1/2"-20	ICL-1-1/2-30	20485
1-3/4"	3/4"	1-1/4"	1/2"-20	ICS-1-3/4-30	20486
1-3/4"	5/16"	1-1/2"	1/2"-20	ICL-1-3/4-30	20487
2"	63/64"	1-1/4"	5/8"-18	ICS-2-30	20488
2"	27/32"	1-1/4"	5/8"-18	ICL-2-30	20489
2-1/4"	1-3/32"	1-3/8"	3/4"-16	ICS-2-1/4-30	20490
2-1/4"	33/64"	1-7/8"	3/4"-16	ICL-2-1/4-30	20491
2-1/2"	1-31/64"	1-1/4"	3/4"-16	ICS-2-1/2-30	20492
2-1/2"	29/32"	1-3/4"	3/4"-16	ICL-2-1/2-30	20493
3"	1-63/64"	1-1/4"	1"-14	IC-3-30	20494

High Speed Steel

45° C/L (90° Included) Threaded

Head Dia.	Nose Point or Flat Dia.	Overall Length	Thread Size	Severance Tool Name	EDP Order Number
5/8"	1/8"	11/16"	1/4"-28	IC-5/8-45	20511
3/4"	P	13/16"	5/16"-24	IC-3/4-45	20512
7/8"	5/32"	1"	3/8"-24	IC-7/8-45	20513
1"	1/4"	7/8"	3/8"-24	ICS-1-45	20514
1"	P	7/8"	3/8"-24	ICL-1-45	20515
1-1/4"	3/8"	3/4"	3/8"-24	ICS-1-1/4-45	20516
1-1/4"	P	1"	3/8"-24	ICL-1-1/4-45	20517
1-1/2"	1/2"	7/8"	1/2"-20	ICS-1-1/2-45	20518
1-1/2"	1/4"	1-1/16"	1/2"-20	ICL-1-1/2-45	20519
1-3/4"	5/8"	7/8"	1/2"-20	IC-1-3/4-45	20520
2"	1"	1"	5/8"-18	ICS-2-45	20521
2"	1/4"	1-1/2"	5/8"-18	ICL-2-45	20522
2-1/4"	1"	1"	5/8"-18	ICS-2-1/4-45	20523
2-1/4"	1/4"	1-3/8"	5/8"-18	ICL-2-1/4-45	20524
2-1/2"	3/4"	1-3/8"	3/4"-16	ICS-2-1/2-45	20525
2-1/2"	1/4"	1-5/8"	3/4"-16	ICL-2-1/2-45	20526
3"	3/4"	1-3/4"	1"-14	ICS-3-45	20527
3"	1/4"	1-7/8"	1"-14	ICL-3-45	20528



3N1® Drill Point Double Ended Countersinks

We have developed a unique tool, which combines the functions of a drill point, countersink, and edge chamfer. One double ended countersink is less costly than two single ended tools.

High Speed Steel

Head Dia.	Overall Length	Drill Point Dia.	Centerline Angle													
			30°		41°		45°		50°		55°		60°			
			Included Angle		Included Angle		Included Angle		Included Angle		Included Angle		Included Angle			
			60°	82°	90°	100°	110°	120°	Severance Name	Order Number	Order Number	Order Number	Order Number	Order Number	Order Number	
1/8"	1-1/2"	.047"								3N1-1/8-DE	01585	01595	01605	01615	01625	01635
3/16"	1-7/8"	.078"								3N1-3/16-DE	01586	01596	01606	01616	01626	01636
1/4"	2"	.109"								3N1-1/4-DE	01587	01597	01607	01617	01627	01637
5/16"	2-1/8"	.125"								3N1-5/16-DE	01588	01598	01608	01618	01628	01638
3/8"	2-1/2"	.141"								3N1-3/8-DE	01589	01599	01609	01619	01629	01639
1/2"	3"	.219"								3N1-1/2-DE	01590	01600	01610	01620	01630	01640
5/8"	3-1/4"	.25"								3N1-5/8-DE	01591	01601	01611	01621	01631	01641
3/4"	3-1/2"	.313"								3N1-3/4-DE	01592	01602	01612	01622	01632	01642

Carbide

Head Dia.	Overall Length	Drill Point Dia.	Centerline Angle													
			30°		41°		45°		50°		55°		60°			
			Included Angle		Included Angle		Included Angle		Included Angle		Included Angle		Included Angle			
			60°	82°	90°	100°	110°	120°	Severance Name	Order Number	Order Number	Order Number	Order Number	Order Number	Order Number	
1/8"	1-1/2"	.047"								3N1-1/8-W-DE	01650	01670	01680	01690	01700	01710
3/16"	2"	.078"								3N1-3/16-W-DE	01651	01671	01681	01691	01701	01711
1/4"	2"	.109"								3N1-1/4-W-DE	01652	01672	01682	01692	01702	01712
5/16"	2-1/8"	.125"								3N1-5/16-W-DE	01653	01673	01683	01693	01703	01713
3/8"	2-1/2"	.141"								3N1-3/8-W-DE	01654	01674	01684	01694	01704	01714
1/2"	3"	.219"								3N1-1/2-W-DE	01655	01675	01685	01695	01705	01715
5/8"	3-1/4"	.25"								3N1-5/8-W-DE	01656	01676	01686	01696	01706	01716
3/4"	3-1/2"	.313"								3N1-3/4-W-DE	01657	01677	01687	01697	01707	01717