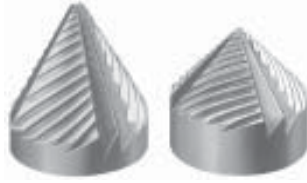


Multi-Flute Countersinks Continued...

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

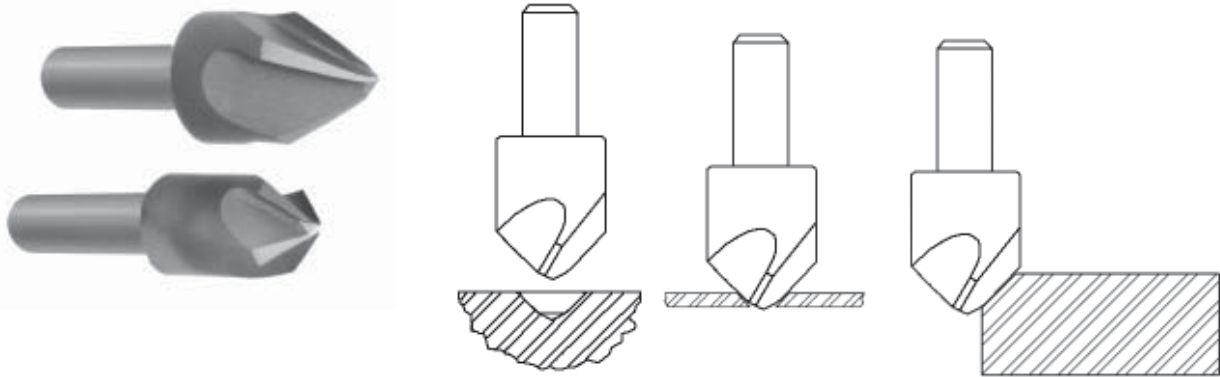
We have developed a unique tool, which combines the functions of a drill point, countersink, and edge chamfer. One double ended countersink is less costly than two single ended tools.

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



3N1® Drill Point Countersinks

We have developed a unique tool, which combines the functions of a **drill point** and **countersink** and **edge chamfer**. A conventional thin-web drill point is blended into two flutes of a four-flute chatter-free™ countersink ... to perform two or all three of the steps in a spot-drill-countersink and edge chamfer operations. Save steps, setup, production time, and lower scrap rates with a Severance 3N1® spotting tool. Specifically designed to give a true start spot and an accurate countersink chamfer on your part. See 3N1® Double Ended Countersinks on page 57.

High Speed Steel

Head Dia.	Shank Dia.	Overall Length	Shank Length	Centerline Angle						
				30°	41°	45°	50°	55°	60°	
				Included Angle 60°	82°	90°	100°	110°	120°	
Severance Name	Order Number	Order Number	Order Number	Order Number	Order Number	Order Number				
1/8"	1/8"	1-5/8"	1-5/8"	3N1-1/8	01473	01488	01503	01518	01533	01548
3/16"	3/16"	1-1/2"	1-1/2"	3N1-3/16	01474	01489	01504	01519	01534	01549
1/4"	3/16"	1-1/2"	3/4"	3N1-1/4	01470	01485	01500	01515	01530	01545
1/4"	1/4"	2"	1-3/4"	3N1-1/4-1/4	01464	01465	01466	01467	01468	01469
5/16"	1/4"	1-3/4"	7/8"	3N1-5/16	01475	01490	01505	01520	01535	01550
3/8"	1/4"	1-3/4"	7/8"	3N1-3/8	01471	01486	01501	01516	01531	01546
1/2"	3/8"	2-1/8"	1-1/8"	3N1-1/2	01472	01487	01502	01517	01532	01547
5/8"	3/8"	2-3/8"	1-1/8"	3N1-5/8	01476	01491	01506	01521	01536	01551
3/4"	1/2"	2-11/16"	1-5/16"	3N1-3/4	01477	01492	01507	01522	01537	01552
7/8"	1/2"	2-13/16"	1-5/16"	3N1-7/8	01478	01493	01508	01523	01538	01553
1"	1/2"	2-13/16"	1-5/16"	3N1-1	01479	01494	01509	01524	01539	01554

Carbide

Head Dia.	Shank Dia.	Overall Length	Shank Length	Centerline Angle						
				30°	41°	45°	50°	55°	60°	
				Severance Name	Order Number	Order Number	Order Number	Order Number	Order Number	
1/8"	1/8"	1-5/8"	1-5/8"	3N1-1/8-W	01903	01923	01943	01963	01983	02003
3/16"	3/16"	1-1/2"	1-1/2"	3N1-3/16-W	01904	01924	01944	01964	01984	02004
1/4"	3/16"	1-1/2"	3/4"	3N1-1/4 -W	01905	01925	01945	01965	01985	02005
1/4"	1/4"	2"	1-3/4"	3N1-1/4-W-1/4	01906	01926	01946	01966	01986	02006
5/16"	1/4"	1-3/4"	7/8"	3N1-5/16-W	01907	01927	01947	01967	01987	02007
3/8"	1/4"	1-3/4"	7/8"	3N1-3/8-W	01908	01928	01948	01968	01988	02008
1/2"	3/8"	2-1/8"	1-1/8"	3N1-1/2 -W	01909	01929	01949	01969	01989	02009
5/8"	3/8"	2-3/8"	1-1/8"	3N1-5/8-W	01910	01930	01950	01970	01990	02010
3/4"	1/2"	2-11/16"	1-5/16"	3N1-3/4-W	01911	01931	01951	01971	01991	02011
7/8"	1/2"	2-13/16"	1-5/16"	3N1-7/8-W	01912	01932	01952	01972	01992	02012
1"	1/2"	2-13/16"	1-5/16"	3N1-1 -W	01913	01933	01953	01973	01993	02013