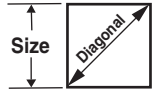
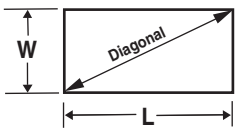


Table of Diagonals (Squares and Rectangles)



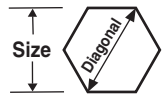
To determine the diagonal dimension of a **square punch**, multiply the size of the punch (see diagram) by 1.414.
EXAMPLE: A .500 square punch has a diagonal dimension of .707



To determine the diagonal dimension of a **rectangular punch**, determine the square root of the sum of "W²" and "L²" (see diagram).

$$\sqrt{W^2 + L^2}$$

EXAMPLE: A rectangular punch that measures .25 X 1, has a diagonal dimension of 1.03



To determine the diagonal dimension of a **hexagonal punch**, multiply the size of the punch (see diagram) by 1.155.
EXAMPLE: A .500 hexagonal punch has a diagonal dimension of .5775



CORRECT SPECIFICATION



INCORRECT SPECIFICATION

	1/8	5/32	3/16	7/32	1/4	9/32	5/16	11/32	3/8	13/32	7/16	15/32	1/2				
1/8	.1767	.2001	.2253	.2519	.2795	.3077	.3365	.3657	.3953	.4250	.4550	.4851	.5153				1/8
5/32	.2001	.2209	.2440	.2689	.2948	.3217	.3494	.3775	.4062	.4352	.4645	.4941	.5240				5/32
3/16	.2253	.2440	.2651	.2881	.3125	.3378	.3644	.3914	.4192	.4474	.4759	.5048	.5340				3/16
7/32	.2519	.2689	.2881	.3093	.3322	.3563	.3814	.4074	.4340	.4614	.4891	.5172	.5458				7/32
1/4	.2795	.2948	.3125	.3322	.3535	.3763	.4001	.4250	.4507	.4770	.5035	.5312	.5591				1/4
9/32	.3077	.3217	.3378	.3563	.3763	.3977	.4204	.4441	.4687	.4941	.5201	.5467	.5737				9/32
5/16	.3365	.3494	.3644	.3814	.4001	.4204	.4419	.4645	.4881	.5125	.5376	.5633	.5897				5/16
11/32	.3657	.3775	.3914	.4074	.4250	.4441	.4645	.4861	.5087	.5321	.5564	.5812	.6067				11/32
3/8	.3953	.4062	.4192	.4340	.4507	.4687	.4881	.5087	.5303	.5528	.5762	.6003	.6250				3/8
13/32	.4250	.4352	.4474	.4614	.4770	.4941	.5125	.5321	.5528	.5745	.5970	.6203	.6442				13/32
7/16	.4550	.4645	.4759	.4891	.5035	.5201	.5376	.5564	.5762	.5970	.6187	.6412	.6644				7/16
15/32	.4851	.4941	.5048	.5172	.5312	.5467	.5633	.5812	.6003	.6203	.6412	.6629	.6854				15/32
1/2	.5153	.5240	.5340	.5458	.5591	.5737	.5897	.6067	.6250	.6442	.6644	.6854	.7071				1/2

	17/32	9/16	19/32	5/8	21/32	11/16	23/32	3/4	25/32	13/16	27/32	7/8	29/32	15/16	31/32	1"	
1/8	.5457	.5762	.6067	.6373	.6680	.6987	.7295	.7603	.7911	.8220	.8529	.8839	.9148	.9458	.9768	1.0078	1/8
5/32	.5537	.5838	.6139	.6442	.6746	.7050	.7355	.7661	.7967	.8274	.8581	.8888	.9196	.9504	.9812	1.0121	5/32
3/16	.5633	.5929	.6226	.6525	.6825	.7126	.7428	.7731	.8034	.8339	.8643	.8948	.9254	.9560	.9867	1.0174	3/16
7/32	.5745	.6035	.6327	.6622	.6918	.7215	.7513	.7812	.8113	.8414	.8716	.9019	.9323	.9627	.9931	1.0236	7/32
1/4	.5871	.6155	.6442	.6731	.7022	.7315	.7610	.7906	.8203	.8501	.8800	.9100	.9401	.9703	1.0000	1.0307	1/4
9/32	.6011	.6289	.6570	.6853	.7140	.7428	.7718	.8010	.8303	.8598	.8894	.9191	.9488	.9788	1.0087	1.0387	9/32
5/16	.6163	.6434	.6709	.6987	.7268	.7552	.7837	.8125	.8414	.8705	.8997	.9291	.9586	.9882	1.0179	1.0477	5/16
11/32	.6327	.6592	.6861	.7133	.7408	.7686	.7967	.8250	.8535	.8822	.9111	.9401	.9692	.9985	1.0279	1.0574	11/32
3/8	.6503	.6760	.7022	.7288	.7558	.7831	.8107	.8385	.8666	.8948	.9233	.9519	.9808	1.0097	1.0387	1.0680	3/8
13/32	.6688	.6938	.7194	.7454	.7718	.7985	.8256	.8529	.8805	.9084	.9364	.9647	.9931	1.0217	1.0505	1.0794	13/32
7/16	.6882	.7126	.7375	.7629	.7887	.8149	.8414	.8682	.8954	.9228	.9504	.9783	1.0063	1.0345	1.0629	1.0915	7/16
15/32	.7085	.7322	.7565	.7812	.8064	.8321	.8581	.8844	.9111	.9380	.9652	.9926	1.0203	1.0481	1.0762	1.1044	15/32
1/2	.7295	.7526	.7763	.8004	.8250	.8501	.8756	.9014	.9275	.9540	.9808	1.0077	1.0350	1.0625	1.0902	1.1180	1/2

	17/32	9/16	19/32	5/8	21/32	11/16	23/32	3/4	25/32	13/16	27/32	7/8	29/32	15/16	31/32	1"	
17/32	.7513	.7737	.7967	.8203	.8443	.8688	.8938	.9191	.9447	.9707	.9971	1.0236	1.0505	1.0775	1.1048	1.1323	17/32
9/16	.7737	.7955	.8179	.8408	.8643	.8883	.9127	.9375	.9627	.9882	1.0141	1.0402	1.0666	1.0933	1.1202	1.1473	9/16
19/32	.7967	.8179	.8397	.8620	.8850	.9084	.9323	.9566	.9813	1.0063	1.0317	1.0574	1.0834	1.1097	1.1362	1.1630	19/32
5/8	.8203	.8408	.8620	.8839	.9062	.9291	.9525	.9763	1.0005	1.0251	1.0500	1.0753	1.1009	1.1267	1.1529	1.1792	5/8
21/32	.8443	.8643	.8850	.9062	.9281	.9504	.9733	.9965	1.0203	1.0444	1.0689	1.0937	1.1189	1.1443	1.1701	1.1961	21/32
11/16	.8688	.8883	.9084	.9291	.9504	.9723	.9946	1.0174	1.0407	1.0643	1.0884	1.1128	1.1375	1.1625	1.1879	1.2135	11/16
23/32	.8938	.9127	.9323	.9525	.9733	.9946	1.0164	1.0388	1.0616	1.0848	1.1084	1.1324	1.1566	1.1813	1.2062	1.2315	23/32
3/4	.9191	.9375	.9566	.9763	.9965	1.0174	1.0388	1.0606	1.0829	1.1057	1.1289	1.1524	1.1763	1.2006	1.2251	1.2500	3/4
25/32	.9447	.9627	.9813	1.0005	1.0203	1.0407	1.0616	1.0829	1.1048	1.1271	1.1499	1.1730	1.1965	1.2203	1.2445	1.2690	25/32
13/16	.9707	.9882	1.0063	1.0251	1.0444	1.0643	1.0848	1.1057	1.1271	1.1490	1.1713	1.1941	1.2171	1.2406	1.2644	1.2884	13/16
27/32	.9971	1.0141	1.0317	1.0500	1.0689	1.0884	1.1084	1.1289	1.1499	1.1713	1.1932	1.2155	1.2382	1.2613	1.2847	1.3084	27/32
7/8	1.0236	1.0402	1.0574	1.0753	1.0937	1.1128	1.1324	1.1524	1.1730	1.1941	1.2155	1.2374	1.2597	1.2824	1.3054	1.3287	7/8
29/32	1.0505	1.0666	1.0834	1.1009	1.1189	1.1375	1.1566	1.1763	1.1965	1.2171	1.2382	1.2597	1.2816	1.3039	1.3265	1.3495	29/32
15/16	1.0775	1.0933	1.1097	1.1267	1.1443	1.1625	1.1813	1.2006	1.2203	1.2406	1.2613	1.2824	1.3039	1.3258	1.3481	1.3707	15/16
31/32	1.1048	1.1202	1.1362	1.1529	1.1701	1.1879	1.2062	1.2251	1.2445	1.2644	1.2847	1.3054	1.3265	1.3481	1.3700	1.3923	31/32
1"	1.1323	1.1473	1.1630	1.1792	1.1961	1.2135	1.2315	1.2500	1.2690	1.2884	1.3084	1.3287	1.3495	1.3707	1.3923	1.4142	1"

Table of Diagonals (Hexagons)

SIZE	DIAGONAL	SIZE	DIAGONAL	SIZE	DIAGONAL
1/4	.2886	12/16	.9380	1-11/32	.9380
9/32	.3247	27/32	.9941	13/8	1.5877
5/16	.3608	7/8	1.0102	1-13/32	1.5877
11/32	.3968	29/32	1.0463	17/16	1.6598
3/8	.4329	15/16	1.0824	1-15/32	1.6959
13/32	.4690	31/32	1.1184	11/2	1.7320
7/16	.5051	1	1.1547	1-17/32	1.7681
15/32	.5412	1-1/32	1.1907	19/16	1.8042
1/2	.5773	1-1/16	1.2268	1-19/32	1.8403
17/32	.6133	1-3/32	1.2629	15/8	1.8764
9/16	.6494	1-1/8	1.2990	1-21/32	1.9124
19/32	.6855	1-5/32	1.3351	1-11/16	1.9485
5/8	.7216	1-3/16	1.3712	13/4	2.0207
21/32	.7576	1-7/32	1.4073	1-13/16	2.0929
11/16	.7937	1-1/4	1.4434	17/8	2.1650
23/32	.8298	1-9/32	1.4794	1-15/16	2.2372
3/4	.8659	1-5/16	1.5155	2	2.3094
25/32	.9020				

Cross Reference Table

Punch Cross Reference Table			
CST (Style No.)	CPD (Fig. No.)	AP (Style No.)	Piranha/ Whitney
28XX	28XX	100XX	28XX
51MM	SP51P		TU
60MM	SP60P		TV
80MM	SP80P		TW
90MM	SP90P		TX
100MM	SP100P		TY
61	C-232(C-710)		710
62	C-242(C-720)		720
63	C-252(C-740)	163	740
64	C-272(C-770)	164	770
64XX	C-790XX	164XX	790XX
65	C-282	165	PY
66	C-282(C-7501)	166	7501
67	C-400		UP
206	4	106	PU
207	6	107	PW
208	7	108	PX
209			
210	10	110	RP
212	9	112	
214			
215			
216	12	116	DE
218	15	118	
219	16	119	DH
220	17	120	
221	20	121	EA
222	19	122	RZ
223	21	123	SR
228	26	128	EF
234	C-48		UY
237	C-50	137	VP
239	C-53		VT
240	C-54		VU
241			VV
292C	C-292		PZ
DVP OR UHP	SR20	190	BF
DVP2	SR-150	190-A	
BNP	158		BJ
H-1	H-1	119M	DH
H-2	H-2	121M	EA
H-3	H-3	A3	VX
HUSPCH	5	105	
P36	9	3620	FF
P3T	3T-10220	3T10	FJ
P66	664	6640	FG
P90	903		
NKP	13	192	
UHP2	SR-200		VR

Die Cross Reference Table			
CST (Style No.)	CPD (Fig. No.)	AP (Style No.)	Piranha/ Whitney
28XX	28XX	100XX	28XX
291	C-291FS/291A3	391	UW
43	C-403	343	UR
44	C-400	344	UU
45	C-7602	345	7602
46	C-7502	346	7502
47	C-740	347	740
47B	C-740	347BC	740BS
47-F	C-281	347F	
47XX	C-790XX	347XX	790XX
47/45	C-273	347/45	
48	C-720	348	720
48B	C-720		720BS
49	C-710		710
402	41		HC
403	42		
405	43		
407	45		
408	46	308	HH
413	55	313	JB
417	59	317	JC
418	60	318	WP
419	62	319	JF
420	65	320	JG
421	C-89	321	JK
422	71		XR
490	C-91MM	390	ZR
C5921	C-291		
DVD OR UHD	59	351A	BG
DVD2			RS
D14	201	1400	
D85	200	85350	KJ
D66	202	665	BA
D90	203	9040	BB
H-1	H-1	313M	JB
H-2	H-2	317M	JC
H-3	H-3	320M	JG
HUSDIE	44	244	
NKD	51	352	166