



TABLE OF DIAGONALS FOR SQUARE AND RECTANGULAR PUNCHING

	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"

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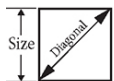
TABLE OF DIAGONALS FOR HEXAGONAL PUNCHING

Punch Size	Diagonal	Punch Size	Diagonal	Punch Size	Diagonal
1/4	.2887	13/16	.9384	1-3/8	1.5881
9/32	.3249	27/32	.9745	1-13/32	1.6243
5/16	.3610	7/8	1.0106	1-7/16	1.6603
11/32	.3971	29/32	1.0468	1-15/32	1.6965
3/8	.4331	15/16	1.0828	1-1/2	1.7325
13/32	.4693	31/32	1.1190	1-17/32	1.7687
7/16	.5053	1	1.1550	1-9/16	1.8047
15/32	.5414	1-1/32	1.1908	1-19/32	1.8408
1/2	.5775	1-1/16	1.2272	1-5/8	1.8768
17/32	.6136	1-3/32	1.2633	1-21/32	1.9130
9/16	.6501	1-1/8	1.2994	1-11/16	1.9491
19/32	.6858	1-5/32	1.3355	1-3/4	2.0213
5/8	.7219	1-3/16	1.3716	1-13/16	2.0934
21/32	.7580	1-7/32	1.4077	1-7/8	2.1656
11/16	.7941	1-1/4	1.4438	1-15/16	2.2378
23/32	.8302	1-9/32	1.4799	2	2.3100
3/4	.8662	1-5/16	1.5159	2-1/32	2.3458
25/32	.9024	1-11/32	1.5521	2-1/16	2.3822

Calculating Diagonals

Square

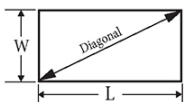
To calculate the diagonal dimension of a square punch, multiply the size of the punch by 1.414".



Example: a 1/2" (.500") square punch (.500" x 1.414" = .707") has a diagonal of .707".

Rectangle

To calculate the diagonal dimension of a rectangular punch, determine the square root of the sum of "W²" and "L²". $\sqrt{W^2+L^2}$



Example: A rectangular punch that measures 1/4" x 1" (.250" x 1.000") has a diagonal dimension of 1.031".

Hexagon

To calculate the diagonal dimension of a hexagonal punch, multiply the size of the punch by 1.155."



Example: a 1/2" (.500") hexagonal punch (.500" x 1.155" = .577") has a diagonal of .577".