

AMADA TOOLING LIST

STANDARDS

Oct 24, 2006

Type	Punch Size	Station Size	Punch Qty	Die Clearances			Notes	HTC
				.006	.012	Other		
Round	0.040	1/2"				.004		
Round	0.062	1/2"		X	X			
Round	0.070	1/2"		X	X			
Round	0.081	1/2"		X	X			
Round	0.086	1/2"		X	X			
Round	0.089	1/2"		X	X			
Round	0.093	1/2"		X	X			
Round	0.097	1/2"		X	X			
Round	0.101	1/2"		X	X			
Round	0.106	1/2"		X	X			
Round	0.109	1/2"		X	X			
Round	0.113	1/2"		X	X			
Round	0.116	1/2"		X	X			
Round	0.120	1/2"		X	X			
Round	0.123	1/2"		X	X			
Round	0.125	1/2"		X	X			
Round	0.128	1/2"		X	X			
Round	0.130	1/2"		X	X			
Round	0.133	1/2"						
Round	0.136	1/2"		X	X			
Round	0.140	1/2"		X	X			
Round	0.142	1/2"		X	X			
Round	0.149	1/2"		X	X			
Round	0.156	1/2"		X	X			
Round	0.159	1/2"		X	X			
Round	0.161	1/2"		X	X			
Round	0.166	1/2"		X	X	.004		
Round	0.168	1/2"		X	X			
Round	0.172	1/2"		X	X			
Round	0.176	1/2"		X	X			
Round	0.178	1/2"		X	X			
Round	0.187	1/2"		X	X			
Round	0.189	1/2"		X	X	.025		
Round	0.191	1/2"		X				
Round	0.195	1/2"		X	X			
Round	0.198	1/2"		X	X			
Round	0.201	1/2"		X	X			
Round	0.203	1/2"		X	X			
Round	0.208	1/2"		X	X			
Round	0.213	1/2"		X	X			
Round	0.218	1/2"		X	X			
Round	0.223	1/2"		X	X			
Round	0.228	1/2"		X	X			
Round	0.234	1/2"		X				
Round	0.237	1/2"		X	X			
Round	0.250	1/2"		X	X	.025		
Round	0.253	1/2"		X	X			
Round	0.257	1/2"			X			
Round	0.265	1/2"		X	X			
Round	0.271	1/2"		X	X			
Round	0.275	1/2"		X	X			
Round	0.281	1/2"		X	X			
Round	0.284	1/2"		X	X			
Round	0.290	1/2"		X	X			
Round	0.293	1/2"		X	X			
Round	0.296	1/2"		X	X			

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Type	Punch Size	Station Size	Punch Qty	Die Clearances			Notes	HTC
				.006	.012	Other		
Round	0.312	1/2"		X	X			
Round	0.323	1/2"		X	X			
Round	0.328	1/2"		X	X			
Round	0.343	1/2"		X	X			
Round	0.347	1/2"		X	X			
Round	0.360	1/2"		X	X			
Round	0.368	1/2"		X	X			
Round	0.375	1/2"		X	X			
Round	0.380	1/2"				.010		
Round	0.390	1/2"		X	X			
Round	0.394	1/2"		X	X			
Round	0.406	1/2"		X	X			
Round	0.414	1/2"		X	X			
Round	0.437	1/2"		X	X			
Round	0.445	1/2"		X	X			
Round	0.453	1/2"		X	X			
Round	0.468	1/2"		X	X			
Round	0.484	1/2"		X	X			
Round	0.500	1/2"		X	X	.018		
Round	0.505	1-1/4"		X	X	.003		
Round	0.515	1-1/4"		X	X	.025		
Round	0.531	1-1/4"		X	X			
Round	0.540	1-1/4"				.004		
Round	0.547	1-1/4"		X	X			
Round	0.576	1-1/4"				.010		
Round	0.562	1-1/4"		X	X			
Round	0.594	1-1/4"		X	X			
Round	0.602	1-1/4"		X	X			
Round	0.625	1-1/4"		X	X	.004		
Round	0.635	1-1/4"		X	X			
Round	0.650	1-1/4"		X	X			
Round	0.666	1-1/4"		X	X			
Round	0.680	1-1/4"		X	X			
Round	0.687	1-1/4"		X	X			
Round	0.703	1-1/4"		X	X			
Round	0.720	1-1/4"		X	X	.004		
Round	0.734	1-1/4"		X	X			
Round	0.750	1-1/4"		X	X	.004		
Round	0.760	1-1/4"		X	X	.009		
Round	0.770	1-1/4"		X	X			
Round	0.773	1-1/4"		X	X			
Round	0.812	1-1/4"		X	X			
Round	0.843	1-1/4"		X	X			
Round	0.852	1-1/4"		X	X			
Round	0.859	1-1/4"		X	X			
Round	0.870	1-1/4"				.004		
Round	0.875	1-1/4"		X	X			
Round	0.896	1-1/4"				.004	Blanking tool	
Round	0.906	1-1/4"		X	X			
Round	0.920	1-1/4"		X	X			
Round	0.937	1-1/4"		X	X			
Round	0.960	1-1/4"		X	X			
Round	0.972	1-1/4"		X	X			
Round	0.984	1-1/4"		X	X			
Round	1.000	1-1/4"		X	X			
Round	1.023	1-1/4"				.007		

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Type	Punch Size	Station Size	Punch Qty	Die Clearances			Notes	HTC
				.006	.012	Other		
Round	1.032	1-1/4"		X	X			
Round	1.043	1-1/4"		X	X			
Round	1.062	1-1/4"		X	X			
Round	1.068	1-1/4"		X				
Round	1.098	1-1/4"		X	X			
Round	1.125	1-1/4"		X	X			
Round	1.157	1-1/4"			X			
Round	1.187	1-1/4"		X	X			
Round	1.196	1-1/4"				.004	Blanking tool	
Round	1.250	1-1/4"		X	X	.025		
Round	1.260	2"				.004		
Round	1.312	2"		X	X			
Round	1.375	2"		X	X			
Round	1.406	2"		X	X			
Round	1.472	2"				.008		
Round	1.500	2"		X	X			
Round	1.584	2"				.008		
Round	1.650	2"		X	X		Blanking tool; use appropriate clearance	
Round	1.700	2"		X	X			
Round	1.720	2"		X	X			
Round	1.750	2"		X	X			
Round	1.800	2"		X				
Round	1.834	2"		X				
Round	1.875	2"		X	X			
Round	1.937	2"		X	X			
Round	2.000	2"		X	X			
Round	2.050	3-1/2"		X		.004		
Round	2.125	3-1/2"		X	X			
Round	2.250	3-1/2"		X	X			
Round	2.500	3-1/2"		X	X			
Round	2.813	3-1/2"			X			
Round	2.875	3-1/2"				.018		
Round	3.000	4-1/2"		X	X			
Round	3.143	3-1/2"			X			
Round	3.200	3-1/2"				.010		
Obround	0.040 x 0.156	1/2"		X	X	.008		
Obround	0.062 x 0.187	1/2"		X	X			
Obround	0.062 x 0.25	1/2"		X	X			
Obround	0.062 x 0.3	1/2"		X	X			
Obround	0.062 x 0.325	1/2"		X	X			
Obround	0.062 x 0.4	1/2"		X	X			
Obround	0.062 x 0.5	1/2"		X	X			
Obround	0.062 x 0.625	1-1/4"		X	X			
Obround	0.062 x 1.125	1-1/4"		X	X			
Obround	0.080 x 0.375	1/2"		X	X			
Obround	0.080 x 1	1-1/4"		X	X			
Obround	0.093 x 0.25	1/2"		X	X			
Obround	0.093 x 0.5	1/2"		X	X			
Obround	0.093 x 0.625	1-1/4"		X	X			
Obround	0.093 x 0.75	1-1/4"		X	X			
Obround	0.098 x 0.12	1/2"		X	X			
Obround	0.125 x 0.187	1/2"			X			
Obround	0.125 x 0.375	1/2"		X	X			
Obround	0.125 x 0.5	1/2"		X	X			
Obround	0.125 x 0.76	1-1/4"		X	X			
Obround	0.125 x 1	1-1/4"		X	X			

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STANDARDS

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Type	Punch Size	Station Size	Punch Qty	Die Clearances			Notes	HTC
				.006	.012	Other		
Obround	0.125 x 1.125	1-1/4"		X	X			
Obround	0.128 x 0.25	1/2"		X	X			
Obround	0.130 x 0.205	1/2"		X	X			
Obround	0.130 x 0.22	1/2"		X	X	.004		
Obround	0.140 x 0.197	1/2"		X	X			
Obround	0.140 x 0.23	1/2"		X	X			
Obround	0.140 x 0.25	1/2"		X	X			
Obround	0.141 x 0.218	1/2"		X	X			
Obround	0.141 x 0.44	1/2"		X	X			
Obround	0.145 x 1.25	1-1/4"		X	X			
Obround	0.150 x 0.19	1/2"		X	X			
Obround	0.156 x 0.23	1/2"		X	X			
Obround	0.156 x 0.25	1-1/4"		X	X			
Obround	0.156 x 0.312	1-1/4"		X	X			
Obround	0.156 x 0.375	1/2"		X	X			
Obround	0.156 x 0.5	1/2"		X	X			
Obround	0.156 x 1.25	1-1/4"		X	X			
Obround	0.157 x 1.024	1-1/4"		X				
Obround	0.160 x 0.22	1-1/4"		X	X			
Obround	0.160 x 0.5	1/2"		X	X			
Obround	0.171 x 0.236	1/2"		X	X			
Obround	0.172 x 0.25	1-1/4"		X	X			
Obround	0.178 x 0.225	1/2"		X	X			
Obround	0.187 x 0.218	1/2"		X	X			
Obround	0.187 x 0.25	1/2"		X	X			
Obround	0.187 x 0.375	1-1/4"		X	X			
Obround	0.187 x 0.5	1/2"		X	X			
Obround	0.187 x 0.75	1-1/4"		X	X	.018		
Obround	0.187 x 1	1-1/4"		X	X			
Obround	0.187 x 1.25	1-1/4"		X	X			
Obround	0.200 x 0.75	1-1/4"				.01		
Obround	0.209 x 0.394	1/2"				.008		
Obround	0.213 x 0.312	1/2"		X	X			
Obround	0.218 x 0.25	1/2"		X	X			
Obround	0.218 x 0.5	1-1/4"		X	X			
Obround	0.250 x 0.5	1/2"		X	X			
Obround	0.250 x 0.625	1-1/4"		X	X			
Obround	0.250 x 1.25	1-1/4"		X	X			
Obround	0.255 x 0.38	1/2"		X	X			
Obround	0.268 x 0.56	1-1/4"		X	X			
Obround	0.281 x 0.406	1/2"		X	X			
Obround	0.281 x 0.5	1/2"		X	X			
Obround	0.281 x 0.931	1-1/4"		X	X			
Obround	0.312 x 0.5	1/2"		X	X			
Obround	0.312 x 0.625	1-1/4"		X	X			
Obround	0.330 x 0.75	1-1/4"		X	X			
Obround	0.343 x 0.5	1/2"		X	X			
Obround	0.375 x 0.625	1-1/4"		X	X			
Obround	0.400 x 0.95	1-1/4"		X	X			
Obround	0.500 x 0.875	1-1/4"		X	X			
Obround	0.500 x 1.25	2"		X	X			
Obround	0.600 x 1.75	2"				.020		
Obround	0.720 x 1	1-1/4"		X	X			
Obround	0.780 x 1.5	2"		X	X			
Square	0.060	1/2"		X	X			Keyed @ 0° & 45°
Square	0.125	1/2"		X	X	.004		Keyed @ 0° & 45°

AMADA TOOLING LIST

STANDARDS

Oct 24, 2006

Type	Punch Size	Station Size	Punch Qty	Die Clearances			Notes
				.006	.012	Other	
Square	0.145	1/2"		X	X		Keyed @ 0° & 45°
Square	0.187	1/2"		X	X	.004	Keyed @ 0° & 45°
Square	0.250	1/2"		X	X	.004	Keyed @ 0° & 45°
Square	0.312	1/2"		X	X		Keyed @ 0° only
Square	0.360	1/2"		X	X		Keyed @ 0° only; blanking tool
Square	0.375	1-1/4"		X	X	.004	Keyed @ 0° & 45°
Square	0.390	1-1/4"		X	X	.018	Keyed @ 0° only
Square	0.437	1-1/4"		X	X		Keyed @ 0° only
Square	0.472	1-1/4"		X	X		Keyed @ 0° only
Square	0.500	1-1/4"		X	X	.004	Keyed @ 0° & 45°
Square	0.625	1-1/4"		X	X		Keyed @ 0° & 45°
Square	0.750	1-1/4"		X	X		Keyed @ 0° & 45°
Square	0.750	2"		X	X		Keyed @ 0° & 45°
Square	1.000	2"		X	X		Keyed @ 0° & 45°
Square	1.400	2"		X	X		Keyed @ 0° & 45°
Square	1.500	3-1/2"		X	X		Keyed @ 0° & 45°, .250 rad corners
Square	2.000	4-1/2"		X	X		Keyed @ 0° & 45°
Rectangle	0.040 x 0.312	1/2"		X			
Rectangle	0.040 x 0.5	1-1/4"		X		.004	
Rectangle	0.055 x 0.315	1/2"		X	X		
Rectangle	0.060 x 0.187	1/2"		X	X		
Rectangle	0.062 x 0.5	1-1/4"		X	X	.004	
Rectangle	0.062 x 0.75	1-1/4"		X	X		
Rectangle	0.070 x 0.7	1-1/4"		X	X		
Rectangle	0.080 x 0.375	1/2"		X	X		
Rectangle	0.080 x 0.74	1-1/4"		X	X		
Rectangle	0.093 x 0.5	1-1/4"		X	X		
Rectangle	0.093 x 1.083	1-1/4"		X	X	.004	
Rectangle	0.094 x 0.5	1-1/4"		X	X		
Rectangle	0.094 x 0.75	1-1/4"		X	X		
Rectangle	0.098 x 0.36	1/2"		X			
Rectangle	0.098 x 0.394	1/2"		X			
Rectangle	0.100 x 0.625	1-1/4"		X	X		
Rectangle	0.100 x 0.787	1-1/4"		X	X		
Rectangle	0.105 x 0.25	1/2"		X	X		
Rectangle	0.105 x 0.38	1/2"		X	X		
Rectangle	0.105 x 0.817	1-1/4"		X			
Rectangle	0.107 x 0.375	1/2"		X	X		
Rectangle	0.108 x 0.915	1-1/4"		X	X		
Rectangle	0.125 x 0.25	1/2"		X	X	.018	
Rectangle	0.125 x 0.28	1/2"		X	X		
Rectangle	0.125 x 0.375	1/2"		X	X		
Rectangle	0.125 x 0.45	1-1/4"		X	X		
Rectangle	0.125 x 0.5	1-1/4"		X	X	.010	
Rectangle	0.125 x 0.875	1-1/4"		X	X	.004, .018	
Rectangle	0.125 x 1	1-1/4"		X	X	.008, .010	
Rectangle	0.125 x 2	3-1/2"		X	X		
Rectangle	0.143 x 0.38	1/2"		X	X		
Rectangle	0.156 x 0.25	1/2"		X	X		
Rectangle	0.156 x 0.5	1-1/4"		X	X	.018	
Rectangle	0.158 x 0.847	1-1/4"		X	X		
Rectangle	0.170 x 1	1-1/4"		X	X		
Rectangle	0.170 x 1.23	1-1/4"		X	X		
Rectangle	0.172 x 0.55	1-1/4"		X	X		
Rectangle	0.175 x 0.5	1-1/4"		X	X		
Rectangle	0.175 x 3	3-1/2"		X	X		

HTC

AMADA TOOLING LIST

STANDARDS

Oct 24, 2006

Type	Punch Size	Station Size	Punch Qty	Die Clearances			Notes	HTC
				.006	.012	Other		
Rectangle	0.181 x 0.187	1/2"		X	X		.054 rad corners	
Rectangle	0.187 x 0.5	1-1/4"		X	X			
Rectangle	0.187 x 1	1-1/4"		X	X	.018		
Rectangle	0.200 x 0.35	1-1/4"		X	X	.018		
Rectangle	0.200 x 0.5	1-1/4"		X	X			
Rectangle	0.200 x 1	1-1/4"		X	X			
Rectangle	0.210 x 0.75	1-1/4"		X		.004		
Rectangle	0.218 x 1	1-1/4"		X	X	.018		
Rectangle	0.237 x 0.75	1-1/4"		X	X			
Rectangle	0.242 x 0.532	1-1/4"				.008	.030 rad corners	
Rectangle	0.250 x 0.375	1/2"		X	X	.018		
Rectangle	0.250 x 0.5	1-1/4"		X	X			
Rectangle	0.250 x 1	1-1/4"		X	X	.018		
Rectangle	0.250 x 2.5	3-1/2"		X	X	.004, .010, .018		
Rectangle	0.250 x 3	3-1/2"		X	X	.004, .010, .018		
Rectangle	0.250 x 4	4-1/2"		X	X	.010	Relieved stripper plate available	
Rectangle	0.258 x 0.28	1/2"		X	X			
Rectangle	0.281 x 0.562	1-1/4"		X	X			
Rectangle	0.300 x 1.55	2"				.004	.031 rad corners	
Rectangle	0.300 x 3.5	4-1/2"		X	X			
Rectangle	0.312 x 0.5	1-1/4"		X	X			
Rectangle	0.330 x 0.835	1-1/4"		X	X		.030 rad corners	
Rectangle	0.350 x 0.45	1-1/4"		X	X		.031 rad corners	
Rectangle	0.375 x 1	1-1/4"		X	X			
Rectangle	0.400 x 0.517	1-1/4"		X	X		.062 rad corners	
Rectangle	0.400 x 1.58	2"		X	X		.060 rad corners	
Rectangle	0.400 x 2.5	3-1/2"		X	X			
Rectangle	0.420 x 0.8	1-1/4"		X	X		.060 rad corners	
Rectangle	0.450 x 0.6	1-1/4"		X	X			
Rectangle	0.488 x 0.65	1-1/4"		X	X			
Rectangle	0.490 x 0.645	1-1/4"		X	X			
Rectangle	0.492 x 0.692	1-1/4"				.008	Blanking tool	
Rectangle	0.500 x 1	1-1/4"		X	X	.024		
Rectangle	0.500 x 1.25	2"				.024		
Rectangle	0.500 x 1.625	2"		X	X			
Rectangle	0.500 x 2	3-1/2"			X	.004		
Rectangle	0.520 x 0.611	1-1/4"		X	X			
Rectangle	0.525 x 0.645	1-1/4"		X	X			
Rectangle	0.528 x 0.625	1-1/4"		X	X			
Rectangle	0.540 x 0.576	1-1/4"		X	X			
Rectangle	0.550 x 0.61	1-1/4"		X	X			
Rectangle	0.590 x 2	3-1/2"		X	X			
Rectangle	0.595 x 2.287	3-1/2"				.005	Blanking tool; .043 copper	
Rectangle	0.597 x 1.697	3-1/2"				.003	Blanking tool; .219 rad corners	
Rectangle	0.609 x 0.734	1-1/4"				.009	.089 rad corners, blanking tool	
Rectangle	0.625 x 1.25	2"		X	X			
Rectangle	0.625 x 1.931	2"			X		.125 x 45° chamfered corners	
Rectangle	0.750 x 1	1-1/4"		X	X	.004		
Rectangle	0.796 x 3.402	3-1/2"				.004	.004 rad corners, Blanking tool	
Rectangle	0.921 x 1.621	2"				.004	Blanking tool	
Rectangle	0.968 x 1.696	2"				.004	Blanking tool	
Rectangle	1.030 x 1.08	2"		X	X			
Rectangle	1.100 x 1.125	2"				.024		
Rectangle	1.250 x 2.5	3-1/2"			X	.014	.250 rad corners	
Rectangle	1.575 x 2.237	3-1/2"		X	X		.125 x 45° chamfered corners	

Diameter	Angle	Pilot Size	Type	Material	Approximate Pre-Punch	Notes	HTC
0.161 x 82°		0.098	Form Down	0.036			
0.165 x 82°		0.117	Form Up	0.048	0.125		
0.170 x 82°		0.089	Form Down	0.080			
0.172 x 82°		0.094	Form Down	0.050			
0.178 x 82°			Form Up		0.136	No pilot	
0.185 x 82°		0.099	Form Down	0.090			
0.185 x 120°		0.098	Form Down	0.080	0.128		
0.190 x 90°		0.097	Form Down	0.040	0.128		
0.190 x 90°		0.097	Form Down	0.063	0.128		
0.190 x 90°		0.097	Form Up	0.080	0.125		
0.190 x 90°		0.097	Form Down	0.080	0.128		
0.190 x 90°			Form Down		0.128	No pilot	
0.197 x 82°		0.145	Form Down	0.030			
0.201 x 82°		0.125	Form Down	0.048	0.156		
0.210 x 100°		0.134	Form Down	0.032			
0.218 x 82°		0.125	Form Down	0.063			
0.225 x 82°		0.125	Form Down	0.063			
0.225 x 82°		0.156	Form Down	0.040	0.176		
0.230 x 90°		0.128	Form Down	0.090	0.156		
0.230 x 82°		0.144	Form Down	0.050	0.166		
0.230 x 100°		0.128	Form Down	0.080	0.156		
0.231 x 100°		0.133	Form Down	0.045			
0.238 x 100°		0.133	Form Up	0.048			
0.240 x 82°		0.140	Form Down	0.080	0.165		
0.240 x 82°		0.140	Form Down	0.063	0.172		
0.240 x 90°		0.128	Form Down	0.075	0.156		
0.240 x 90°		0.128	Form Down	0.125	0.156		
0.245 x 100°		0.141	Form Down	0.050	0.167		
0.246 x 100°		0.156	Form Down	0.062	0.187		
0.250 x 82°		0.144	Form Down	0.063			
0.250 x 90°		0.185	Form Up	0.048			
0.250 x 90°		0.185	Form Down	0.048			
0.250 x 120°		0.136	Form Up	0.048			
0.250 x 120°		0.136	Form Down	0.048			
0.252 x 100°		0.134	Form Down	0.075	0.161		
0.252 x 100°		0.132	Form Up	0.080			
0.255 x 82°		0.128	Form Down	0.090			
0.260 x 82°		0.141	Form Down	0.080			
0.270 x 120°		0.220	Form Down	0.048	0.250		
0.270 x 82°			Form Down			No pilot	
0.280 x 82°		0.175	Form Down	0.062	0.195		
0.285 x 100°		0.175	Form Up	0.100	0.203		
0.286 x 100°		0.156	Form Down	0.062	0.172		
0.289 x 82°		0.156	Form Down	0.125	0.189		
0.290 x 82°		0.156	Form Down	0.100	0.195		
0.290 x 100°		0.162	Form Down	0.080			
0.300 x 82°		0.175	Form Down	0.125	0.195		
0.307 x 82°			Form Down			No pilot	
0.307 x 82°		0.156	Form Down	0.105	0.195		
0.308 x 82°		0.205	Form Down	0.063	0.223		
0.315 x 90°		0.173	Form Down	0.125			
0.320 x 82°		0.181	Form Down	0.080			
0.320 x 82°		0.212	Form Down	0.063			
0.329 x 82°		0.164	Form Down	0.125			
0.330 x 100°			Form Up	0.032		Embossed	
0.330 x 100°		0.172	Form Down	0.080			

Diameter	Angle	Pilot Size	Type	Material	Approximate Pre-Punch	Notes	HTC
0.337	x 82°	0.181	Form Down	0.090			
0.342	x 82°	0.219	Form Down	0.075			
0.342	x 82°	0.189	Form Down	0.104			
0.342	x 90°	0.182	Form Down	0.090			
0.344	x 82°	0.187	Form Down	0.090			
0.350	x 100°	0.177	Form Down	0.100			
0.355	x 82°	0.192	Form Down	0.125			
0.360	x 82°	0.257	Form Down	0.063			
0.375	x 100°	0.188	Form Up	0.100			
0.386	x 120°	0.260	Form Up	0.063			
0.388	x 100°	0.219	Form Down	0.075			
0.390	x 82°	0.234	Form Down	0.090			
0.395	x 100°	0.210	Form Down	0.117			
0.455	x 100°	no pilot	Form Down	any			
0.470	x 120°	0.195	Form Down	0.090	0.228		

Type	Punch Size	Station Size	Punch Qty	Die Clearances			Notes	HTC
				.006	.012	Other		
Star Radius	.062 rad, .250 web	1-1/4"		X	X		.500 x .500 w/.125 offset	
Star Radius	.079 rad, .250 web	1-1/4"			X		.534 x .534 w/.125 offset	
Star Radius	.094 rad, .250 web	1-1/4"		X	X		.625 x .625 w/.125 offset	
Star Radius	.125 rad, .250 web	1-1/4"		X	X		.625 x .625 w/.125 offset	
Star Radius	.140 rad, .250 web	1-1/4"		X	X		.530 x .530 w/.125 offset	
Star Radius	.187 rad, .250 web	1-1/4"		X	X		.750 x .750 w/.125 offset	
Star Radius	.250 rad, .250 web	1-1/4"		X	X		.875 x .875 w/.125 offset	
Star Radius	.375 rad, .250 web	1-1/4"		X	X		1.125 x 1.125 w/.125 offset	
Star Radius	.500 rad, .250 web	1-1/4"		X	X		1.250 x 1.250 w/.125 offset	
Curved Rect	.062 in-rad x .125 thk	1-1/4"		X	X		90° arc, .187 x .187	
Curved Rect	.180 in-rad x .080 thk	1-1/4"		X			90° arc, .133 x .367	
Curved Rect	.187 in-rad x .125 thk	1-1/4"				.010	90° arc, .312 x .312	
Curved Rect	.250 in-rad x .125 thk	1-1/4"			X		45° arc, .287 x .144	
Curved Rect	.250 in-rad x .125 thk	1-1/4"		X	X		90° arc, .375 x .375	
Curved Rect	.312 in-rad x .125 thk	1-1/4"				.005	46° arc, .150 x .341	
Curved Rect	.325 in-rad x .125 thk	1-1/4"				.008	46° arc, .151 x .352	
Curved Rect	.375 in-rad x .125 thk	1-1/4"				.010	90° arc, .500 x .500	
Curved Rect	.438 in-rad x .125 thk	1-1/4"				.005	46° arc, .158 x .436	
Curved Rect	1.563 in-rad x .250 thk	1-1/4"				.010	31° arc	
Curved Rect	1.625 in-rad x .250 thk	1-1/4"				.008	31° arc	
Single-D	.237 flat x .252 dia	1/2"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.292 flat x .316 dia	1/2"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.289 flat x .328 dia	1/2"				.008	Keyed: Flat to operator, Flat to Left	
Single-D	.350 flat x .378 dia	1-1/4"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.350 flat x .385 dia	1/2"				.008	Keyed: Flat to operator, Flat to Left	
Single-D	.412 flat x .437 dia	1-1/4"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.426 flat x .446 dia	1-1/4"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.471 flat x .506 dia	1-1/4"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.473 flat x .505 dia	1-1/4"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.480 flat x .510 dia	1-1/4"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.555 flat x .625 dia	1-1/4"		X			Keyed: Flat to operator, Flat to Left	
Single-D	.575 flat x .630 dia	1-1/4"		X	X		Keyed: Flat to operator, Flat to Left	
Single-D	.656 flat x .713 dia	1-1/4"		X			Keyed: Flat to operator, Flat to Left	
Double-D	.130 flat x .232 dia	1/2"		X	X		Keyed @ 0° & 90°	
Double-D	.203 flat x .265 dia	1/2"		X	X		Keyed @ 0° & 90°	
Double-D	.211 flat x .257 dia	1/2"		X	X	.008	Keyed @ 0° & 90°	
Double-D	.245 flat x .325 dia	1/2"		X			Keyed @ 0° & 90°	
Double-D	.290 flat x .405 dia	1/2"		X	X		Keyed @ 0° & 90°	
Double-D	.312 flat x .375 dia	1/2"		X	X		Keyed @ 0° & 90°	
Double-D	.415 flat x .475 dia	1/2"		X	X		Keyed @ 0° & 90°	
Double-D	.440 flat x .500 dia	1-1/4"		X	X		Keyed @ 0° & 90°	
Double-D	.461 flat x .562 dia	1-1/4"				.010	Keyed @ 0° & 90°	
Double-D	.465 flat x .500 dia	1/2"		X	X		Keyed @ 0° & 90°	
Double-D	.570 flat x .625 dia	1-1/4"		X	X		Keyed @ 0° & 90°	
Double-D	.625 flat x .740 dia	1-1/4"		X	X		Keyed @ 0° & 90° (Mailbox lock)	
Double-D	.645 flat x .755 dia	1-1/4"		X	X		Keyed @ 0° & 90°	
Double-D	.615 flat x .755 dia	1-1/4"				.010	Keyed @ 0° & 90°	
Double-D	.660 flat x .780 dia	1-1/4"		X			Keyed @ 0° & 90°	
Double-D	1.125 flat x 1.340 dia	2"		X	X		Keyed @ 0° & 90°	
Trapezoid	.250 x 1.220, 30° ang	1-1/4"		X	X		Keyed @ 0° & 90°	
Trapezoid	.390 x .768, .100 rad	1-1/4"		X	X		Keyed @ 0° & 90°	
Trapezoid	.450 x .810, .132 rad	1-1/4"		X	X		Keyed @ 0° & 270° (Std DB-9)	
Trapezoid	.450 x 1.67, .132 rad	2"		X	X		Note: 0° = Short side of trap to operator Keyed @ 0°, 90°, 180°, 270° (Std DB-25)	

Type	Punch Size	Station Size	Specs & Notes	HTC
Blanking	.450 x 1.176	2"	Die clear.: .011, tool no.: 928644	
Blanking	.450 x 1.740	2"	Die clear.: .009, tool no.: 849479	
Blanking	.470 x 1.988		Die clear.: .012, tool no.: 911577	
Blanking	.500 x .625	1-1/4"	Die clear.: .006 [DTI Rack hole]	
Blanking	.605 x 2.210		Die clear.: .015, tool no.: 912850	
Emboss	.300 flat x .469 oml x .110 high	1-1/4"	WT2408389, form UP, mat'l: .017, pre-punch=.114, ANGLED	
Emboss	.300 flat x .510 oml x .090 high	1-1/4"	WT2159765, form UP, mat'l: .017, pre-punch=.130, ANGLED	
Emboss	.347 flat x .250 hi	1-1/4"	WT2071645, form UP, mat'l=.080	
Emboss	.350 flat x .670 oml x .150 high	1-1/4"	WT837622, form down	
Emboss	.400 flat x .580 oml x .125 high	1-1/4"	WT2071639, form UP, mat'l=.063	
Emboss	.410 flat x .750 oml x .130 high	1-1/4"	WT2128607, form UP, mat'l=.063	
Emboss	.750 flat x .063 hi	1-1/4"	WT2071643, form UP, mat'l=.090	
Extrusion	.089 dia		WT893654, aprox. pre-punch: .062	
Extrusion	.159 dia		WT937322, adjust pre-punch for desired height	
Lance & Form	.060 x .500 x .080 high	1-1/4"	WT2013479, designed for .048 crs	
Lance & Form	.150 x .495 x .108 high	1-1/4"	WT2127477, designed for .100 alum	
Lance & Form	.175 x .495 x .108 high	1-1/4"	WT2120124, designed for .030 alum	
Louver	.243 x 1.860 x .188 high w/.243 rad corners (2x)	3-1/2"	Form UP; .197 offset from flat TL#S300801-0083	
Louver	.259 x 1.175 x .121 high w/.259 rad corners (2x)	2"	Form UP; .130 offset from flat TL#S300606-0116	
Louver	.550 x .610 x .180 high w/.100 rad corners (2x)	1-1/4"	Form UP, .325 offset from flat WT2071654	
Louver	.590 x 3.150 x .256 high w/.590 rad corners (2x)	3-1/2"	Form UP, .185 offset from flat; Loads 4 ways. TL#0300-772, punch is relieved on flat side.	
Louver	.600 x .650 x .110 high	1-1/4"	WT2120124, form UP, .275 offset from flat	
Perforator	.078 dia rounds .250 x .216 centers	2"	16-hole rectangular. Die clear.: .010	
Perforator	.094 dia rounds .216 centers	1-1/4"	3-hole in-line. Die clear.: .006	
Perforator	.094 dia rounds .216 centers	1-1/4"	4-hole in-line Die clear.: .006	
Perforator	.094 dia rounds .250 x .216 centers	2"	12-hole rectangular Die clear.: .006	
Perforator	.094 dia rounds .250 x .216 centers	2"	16-hole rectangular Die clear.: .006	
Perforator	.135 dia rounds .320 x .187 centers	2"	12-hole staggered Die clear.: .006	
Perforator	.149 dia rounds .374 x .324 centers	1-1/4"	6-hole rectangular Die clear.: .006, .012	
Perforator	.156 dia rounds .216 x .187 centers	1-1/4"	12-hole staggered Die clear.: .006, .012	
Perforator	.187 dia rounds .500 x .433 centers	2"	12-hole rectangular Die clear.: .006, .010	
Perforator	.145 squares .450 centers	1-1/4"	3-hole in-line Die clear.: .005	
Perforator	.125 x .375 obrounds .500 x .450 centers	2"	9-hole rectangular Die clear.: .010	
1/2-Shear	.104 x .125	1-1/4"	Rectangle w/ full rad one end only.	
1/2-Shear	.125 dia	1-1/4"	Form UP; nominal mat'l = .060	
Rack Tab	.463 x .495 x .193 high	1-1/4"	Form UP. DTI tool.	
Ground Symbol		1-1/4"		
Wilson Wheel	.125rad rib wheel	1-1/4"	Form UP; max.mat'l=.080 alum; min.dist.from X0=4"	
Wilson Wheel	.080 offset tool	1-1/4"	Mat'l: .080 alum.	
Hinge Tool Set (2 tools)	.125 dia pin opening .500 knuckles	1-1/4"	For .063 alum ONLY	

Type	Punch Size	Station Size	Specs & Notes	HTC
NCT3-Tap	tapping tool with various inserts	2"	Current taps: 4-40, 6-32, 8-32, 10-32	