



Hard Plastic Cutting Data

SHEET - 1/2" DIAMETER

APPLICATION	GOOD	BETTER	BEST
Single Pass	63-750	63-700	56-000P
Roughing	60-900	81-700	60-000
Finishing	81-700	60-200	75-000

DEPTH OF CUT: 1 x D Use recommended chip load
 2 x D Reduce chip load by 25%
 3 x D Reduce chip load by 50%

SHEET - 1/2" DIAMETER

APPLICATION	GOOD	BETTER	BEST
Single Pass	52-700	52-600	56-000P
Roughing	82-100	81-700	60-000
Finishing	81-700	60-200	75-000

CHIP LOAD PER TOOTH

		Cutting Edge Diameter																					
Series	Cut	1/16	3/32	1/8	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8	1 1/4	1 1/2	1 3/4	2	
38-50/ 38-60	1 x D			.002 - .005		.002 - .005		.003 - .005		.004 - .006		.005 - .007		.006 - .008	.007 - .009								
39-00	1 x D																.003 - .005						
48-600DE	1 x D					.003 - .005		.004 - .006		.005 - .007		.006 - .008											
48-600SE	1 x D					.009 - .011		.010 - .012		.011 - .013		.012 - .014											
52-200B/BL	1 x D	.002 - .004		.002 - .004		.004 - .006		.004 - .006		.004 - .006		.006 - .008		.008 - .010	.010 - .012								
52-600	1 x D							.006 - .008		.008 - .010		.010 - .012		.012 - .014	.014 - .016								
56-000P	1 x D			.002 - .004		.004 - .006		.004 - .006		.006 - .008		.008 - .010											
56-430	1 x D			.005 - .007		.005 - .007		.006 - .008		.007 - .009		.008 - .010											
56-450	1 x D					.005 - .007		.006 - .008		.007 - .009		.008 - .010											
56-600	1 x D			.003 - .005		.005 - .007		.007 - .009		.009 - .011		.011 - .013											
57-600	1 x D							.006 - .008		.008 - .010		.010 - .012		.012 - .014	.014 - .016								
60-000	1 x D									.004 - .006		.006 - .008		.008 - .010	.012 - .016								
60-200	1 x D							.004 - .006		.004 - .006		.006 - .010			.012 - .016								
60-470	1 x D							.004 - .006		.004 - .006		.006 - .010			.012 - .016								
60-900	1 x D									.004 - .006		.006 - .008											
61-000P	1 x D			.003 - .005		.005 - .007		.007 - .011		.013 - .017		.017 - .021											
61-400	1 x D			.014 - .016		.014 - .016		.015 - .017		.016 - .018		.017 - .019											
62-700	1 x D			.006 - .008		.008 - .010		.010 - .012		.010 - .012		.012 - .016											
62-750	1 x D			.004 - .006		.006 - .008		.008 - .012		.008 - .012		.010 - .014											
62-800	1 x D			.006 - .008		.008 - .010		.010 - .012		.010 - .012		.012 - .016											
62-850	1 x D			.004 - .006		.006 - .008		.008 - .012		.008 - .012		.010 - .014											
63-700	1 x D	.002 - .004		.006 - .008		.008 - .010		.010 - .012		.010 - .012		.012 - .016											
63-750	1 x D	.002 - .004		.004 - .006		.006 - .008		.008 - .012		.008 - .012		.010 - .014											
63-800	1 x D	.002 - .004		.006 - .008		.008 - .010		.010 - .012		.010 - .012		.012 - .016											
63-850	1 x D	.002 - .004		.004 - .006		.006 - .008		.008 - .012		.008 - .012													
64-000/ 65-000	1 x D	.002 - .004		.006 - .008		.008 - .010		.010 - .012		.010 - .012													
81-700	1 x D							.002 - .004		.003 - .006		.003 - .006		.006 - .010	.010 - .012		.012 - .014						
82-100	1 x D																.002 - .003		.007 - .015	.003 - .012			

NOTE: When chip rewelding occurs while cutting soft plastic, increase feedrate or go to a single edge tool. Incorrect chiploads can result in cratering

FORMULAS: Chip Load = Feed Rate / (RPM x # of cutting edges)
 Feed Rate = RPM x # of cutting edges x chip load
 Speed (RPM) = Feed Rate / (# of cutting edges x chip load)

Chipload Instructions and Example

Instructions

1. Find the cutting data for the material being cut
2. Find the series number of the selected tool under the series column
3. Move across until you find the cutting edge diameter of the tool
4. Note the chipload range.

Example

56-122 selected to cut Hard Plastic

56-000P series
3/8" diameter tool
.006" - .008" chipload range

Feedrate = RPM x # of cutting edges x chipload.

$18,000 \times 2 \times .006 = 216 \text{ IPM}$

$18,000 \times 2 \times .008 = 288 \text{ IPM}$

(RPM = tools are recommended to cut at 18,000 RPM but the customer can vary it based on their machine)