



# Composite Cutting Data

APPLICATION	GOOD	BETTER	BEST
Finishing			55-000/58-000
Honeycomb	67-300	32-000	30-300
G10/G11 Fiberglass	56-000P	67-000	54-300/55-300
Fiberglass	67-000	67-400	67-200
Phenolic	53-000	56-000P	67-200
Single Pass	56-000P	67-250	68-000

**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%

## 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	
48-000	1 x D			.006 - .008		.006 - .008		.007 - .009	.007 - .009	.008 - .010		.009 - .011		.010 - .012	.011 - .013		.012 - .014		.013 - .015	.014 - .016	.015 - .017	.016 - .018	
48-000DE	1 x D			.002 - .004		.002 - .004		.003 - .005	.003 - .005	.004 - .006		.005 - .007		.006 - .008	.007 - .009		.008 - .010		.009 - .011	.010 - .012	.011 - .013	.012 - .014	
48-600	1 x D					.006 - .008		.007 - .009		.008 - .010		.009 - .011											
48-600DE	1 x D					.002 - .005		.003 - .005		.004 - .006		.005 - .007											
52-000	1 x D			.003 - .005		.003 - .005		.004 - .006		.006 - .008		.010 - .012											
53-000	1 x D			.002 - .004				.003 - .006															
54-000/ 59-000	1 x D			.002 - .004		.002 - .004		.002 - .004		.003 - .006		.005 - .010											
54-300	1 x D									.007 - .009		.008 - .010											
55-000/ 58-000	1 x D			.002 - .004		.002 - .004		.002 - .004		.003 - .006		.005 - .010											
55-300	1 x D									.007 - .009		.008 - .010											
56-000P	1 x D			.002 - .004		.002 - .004		.004 - .006		.004 - .006		.004 - .006											
56-450	1 x D					.002 - .005		.003 - .005	.003 - .006	.004 - .006		.005 - .007											
57-000	1 x D			.003 - .005		.003 - .005		.004 - .006		.006 - .008		.010 - .012											
60-470	1 x D							.003 - .005	.003 - .005	.004 - .008		.005 - .007		.006 - .008	.007 - .009								
62-000	1 x D			.003 - .005				.004 - .006	.004 - .006	.005 - .007													
62-400	1 x D			.003 - .005		.003 - .005		.004 - .006	.004 - .006														
63-000	1 x D			.003 - .006		.003 - .005		.004 - .006	.004 - .006														
63-400	1 x D			.003 - .005		.003 - .005		.004 - .006	.004 - .006														
67-000	1 x D							.004 - .006		.004 - .006		.004 - .006											
67-200	1 x D									.002 - .010		.002 - .010											
67-250	1 x D			.002 - .004				.004 - .006		.004 - .006													
67-300	1 x D							.004 - .006		.006 - .008		.010 - .012											
67-400	1 x D			.002 - .004				.004 - .006		.004 - .006		.004 - .006											
67-500	1 x D			.001 - .003		.001 - .003		.002 - .004	.002 - .004	.003 - .005		.004 - .006											
67-600	1 x D			.002 - .004		.002 - .004		.003 - .005	.003 - .005	.004 - .006		.005 - .007											
68-000	1 x D							.004 - .006		.004 - .006		.004 - .006			.008 - .010								

**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

67-021 selected to cut Composite

67-000 series

3/8" diameter tool

.004" - .006" chipload range

Feedrate = RPM x # of cutting edges x chipload.

$18,000 \times 1 \times .004 = 72 \text{ IPM}$

$18,000 \times 1 \times .006 = 108 \text{ IPM}$

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