Hard Wood Cutting Data Recommendations

HP

Application	Good	Better	Best
Single Pass	52-200/57-200	60-300/60-350	60-100C
Roughing	52-200/57-200	60-800/60-900	60-000
Finishing		60-300/60-350	60-200

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%

Recommended Chip Load per Tooth by Cutting Diameter (in)

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
37-00/37-20	Varies							.004-.006														
37-50	1/2 CED					.003-.006				.003-.006												
37-60	1/2 CED									.004-.006		.004-.006		.006-.008	.008-.010							
37-80	Varies																.004-.006		.004-.006*			.004-.006**
40-50	1 1/2											.003-.005										
40-000	1 x D			.006-.008	.006-.008	.007-.009		.008-.010	.008-.010	.009-.007												
40-100	1 x D			.004-.006		.005-.007	.005-.007	.005-.007	.006-.008	.006-.008		.007-.009			.009-.011							
48-000	1 x D					.004-.006		.005-.007	.005-.007	.005-.007		.006-.008		.007-.009	.008-.010	.009-.011	.010-.012					
52-200/57-200	1 x D			.003-.005	.003-.005	.004-.006	.004-.006	.005-.007	.005-.007	.006-.008	.006-.008	.007-.009	.007-.008	.008-.010	.009-.011							
52-700	1 x D			.002-.004		.003-.005		.004-.006		.005-.007		.006-.008		.007-.009	.008-.010		.009-.011					
57-200MD	1 x D							.009-.011		.010-.012		.011-.013										
52-400/57-400	1 x D				.004-.006	.004-.006		.005-.007	.005-.007	.006-.008		.007-.009										
52-900	1 x D							.006-.008		.007-.009		.007-.009										
56-200	1 x D			.003-.005	.003-.005	.004-.006	.004-.006	.005-.007	.005-.007	.006-.008		.007-.009			.009-.011							
57-900	1 x D							.005-.007		.006-.008		.007-.009										
60-000 (LH)	1 x D									.013-.015		.014-.016		.016-.018	.017-.019							
60-000 (HH)	1 x D									.015-.017		.017-.019		.019-.021	.021-.023							
60-090	1 x D													.005-.007								
60-100MW	1 x D			.010-.012		.012-.014		.014-.016		.016-.018		.018-.020		.020-.022	.022-.024							
60-100C	1 x D									.019-.021		.021-.023		.023-.025	.025-.027							
60-100MC	1 x D									.019-.021		.021-.023										
60-100PLR	1 x D									.021-.023		.023-.025										
60-200	1 x D							.005-.007		.006-.008		.007-.009			.008-.010							
60-300	1 x D									.024-.026		.026-.028		.028-.030	.030-.032							
60-350	1 x D									.018-.020		.020-.022		.022-.025	.024-.026							
60-600	1 x D											.018-.020			.022-.024							
60-700	1 x D											.018-.020		.020-.022	.022-.024							
60-800	1 x D									.017-.019		.019-.021		.021-.023	.023-.025							
60-900	1 x D									.015-.017		.017-.019			.019-.021							
60-950	1 x D									.019-.021		.021-.023										
61-200	1 x D			.007-.009				.009-.011	.009-.011	.010-.012												
63-200	1 x D			.003-.005				.005-.007														
64-000/65-000	1 x D	.001-.003		.002-.004		.003-.005		.004-.006		.005-.007												
68-100	1 x D									.010-.012		.011-.013		.012-.014	.013-.015							
77-100	1 x D			.003-.005				.005-.007														

* = 16,000 RPM
** = 15,000 RPM

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

DEFINITIONS: IPM = Inches Per Minute