

HP

# Hard Wood Cutting Data Recommendations

| 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 |           | .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