## CNMP 120412 NN

| | Material Group | Lamina Gr. N° | Material Examples | Hardness | DOC [mm] | | Feed [mm/rev] | | Amax [mm²] | Suggested Starting Parameters | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | min | max | min | max | | DOC | Feed |
| P | Non Alloyed | 1 | C35, Ck45, 1020, 1045, 1060, 28Mn6 | 125 HB | 0.70 | 6.00 | 0.26 | 0.68 | 3.06 | 4.00 | 0.50 |
| | | | | 190 HB | | | | | | | 0.46 |
| | | | | 250 HB | | | | 0.61 | 2.55 | | 0.44 |
| | Low Alloyed | 2 | 42CrMo4, St50, Ck60, 4140, 4340, 100Cr6 | 180 HB | 0.70 | 6.00 | 0.26 | 0.61 | 2.04 | 4.00 | 0.42 |
| | | | | 230 HB | | 4.80 | | | | | |
| | | | | 280 HB | | | 0.22 | 0.54 | | | 0.40 |
| | | | | 350 HB | | 4.20 | | | 1.70 | 3.60 | |
| | High Alloyed | 3 | X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19 | 220 HB | 0.70 | 4.80 | 0.22 | 0.54 | 2.04 | 3.40 | 0.40 |
| | | | | 280 HB | | | | | | | |
| | | | | 320 HB | | 3.60 | | 0.47 | 1.36 | | 0.37 |
| | | | | 350 HB | | | | | | | |
| M | Austenitic | 4 | 304, 316, X5CrNi18-9 | 180 HB | 0.70 | 6.00 | 0.25 | 0.54 | 2.04 | 4.00 | 0.33 |
| | | | | 240 HB | | | | | 1.70 | | 0.29 |
| | Duplex | 5 | X2CrNiN23-4, S31500 | 290 HB | 0.70 | 4.80 | 0.22 | 0.47 | 1.36 | 3.40 | 0.32 |
| | | | | 310 HB | | | | | | | |
| | Ferritic & Martensitic | 6 | 410, X6Cr17, 17-4PH, 430 | 200 HB | 0.70 | 6.00 | 0.22 | 0.54 | 1.19 | 3.40 | 0.26 |
| | | | | 42 HRc | | 4.80 | | | | 2.90 | |
| K | Grey | 7 | GG20, GG40, EN-GJL-250, N030B | 150 HB | 0.70 | 6.00 | 0.19 | 0.81 | 3.40 | 4.00 | 0.46 |
| | | | | 200 HB | | | | | 3.06 | | |
| | | | | 250 HB | | | | 0.74 | | | |
| | Malleable & Nodular | 8 | GGG40, GGG70, 50005 | 150 HB | 0.70 | 6.00 | 0.19 | 0.68 | 2.55 | 4.00 | 0.40 |
| | | | | 200 HB | | | | | 2.21 | | |
| | | | | 250 HB | | | | | 2.04 | | |
| S | Fe, Ni & Co based | 9 | Incoloy 800 | 240 HB | 0.70 | 3.60 | 0.25 | 0.47 | 1.19 | 2.70 | 0.37 |
| | | | Inconel 700 | 250 HB | | | | | | | |
| | | | Stellite 21 | 350 HB | | | | | | | |
| | Ti based | 10 | T40 | - | 0.70 | 4.20 | 0.25 | 0.54 | 1.36 | 2.70 | 0.44 |
| | | | TiAl6V4 | - | | 3.60 | | 0.47 | 1.19 | | 0.40 |
| H | Steel | 11 | X100 CrMo13, 440C, G-X260NiCr42 | 45 HRc | 0.70 | 3.00 | 0.14 | 0.41 | 1.02 | 2.70 | 0.33 |
| | | | | 50 HRc | | 2.40 | | 0.34 | 0.68 | 2.00 | 0.26 |
| | | | | 55 HRc | | 1.80 | | 0.27 | 0.51 | 1.30 | 0.24 |
| | Chilled Cast Iron | | Ni-Hard 2 | 400 HB | | 2.40 | | 0.34 | 0.68 | 2.00 | |
| | White Cast Iron | | G-X300CrMo15 | 55 HRc | | 1.80 | | 0.27 | 0.51 | 1.30 | 0.20 |
| NF | Aluminium | 12 | AlSi12 | 130 HB | 0.70 | 7.20 | 0.25 | 0.81 | 3.06 | 4.00 | 0.53 |

The depth of cut and feed rate tables are for the geometry and corner radius specified above the table. Refer to cutting speed tables on pages 186 and 187 for recommended materials per grade.