

## SEKT 1204 AFTN LT 3130

M0004486

| Material Group         | SAPPHIRE<br>CUTTING TOOLS<br>Group | Material Example | Hardness                                | D.O.C                |         | Feed      |           | Vc         |             | Advised D.O.C | Advised Feed | Advised Vc |      |
|------------------------|------------------------------------|------------------|---|----------------------|---------|-----------|-----------|------------|-------------|---------------|--------------|------------|------|
|                        |                                    |                  |   | min[mm]              | max[mm] | min[mm/t] | max[mm/t] | min[m/min] | max [m/min] | [mm]          | [mm/t]       | [m/min]    |      |
| Steel                  | Non Alloyed                        | 1                | C35, Ck45, 1020, 1045, 1060, 28Mn6      | 125 HB               | 0.5     | 6         | 0.18      | 0.46       | 190         | 350           | 3            | 0.34       | 265  |
|                        |                                    |                  |   | 190 HB               | 0.5     | 6         | 0.18      | 0.46       | 190         | 320           | 3            | 0.34       | 240  |
|                        |                                    |                  |   | 250 HB               | 0.5     | 6         | 0.18      | 0.46       | 190         | 280           | 3            | 0.34       | 215  |
|                        | Low Alloyed                        | 2                | 42CrMo4, St50, Ck60, 4140, 4340, 100Cr6 | 230 HB               | 0.5     | 6         | 0.15      | 0.36       | 150         | 230           | 3            | 0.3        | 200  |
|                        |                                    |                  |   | 280 HB               | 0.5     | 6         | 0.15      | 0.32       | 130         | 210           | 3            | 0.27       | 165  |
|                        |                                    |                  |   | 180 HB               | 0.5     | 6         | 0.15      | 0.36       | 150         | 270           | 3            | 0.3        | 215  |
|                        |                                    |                  |   | 350 HB               | 0.5     | 6         | 0.15      | 0.32       | 130         | 190           | 3            | 0.27       | 155  |
|                        | High Alloyed                       | 3                | X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19 | 220 HB               | 0.5     | 5         | 0.12      | 0.32       | 90          | 170           | 2.3          | 0.27       | 140  |
|                        |                                    |                  |   | 280 HB               | 0.5     | 5         | 0.12      | 0.32       | 90          | 150           | 2.3          | 0.27       | 130  |
|                        |                                    |                  |   | 320 HB               | 0.5     | 5         | 0.12      | 0.26       | 60          | 120           | 2.3          | 0.24       | 110  |
|                        |                                    |                  |   | 350 HB               | 0.5     | 5         | 0.12      | 0.26       | 60          | 100           | 2.3          | 0.24       | 90   |
|                        | Stainless Steel                    | Austenitic       | 4                                       | 304, 316, X5CrNi18-9 | 180 HB  | 0.5       | 6         | 0.15       | 0.32        | 190           | 260          | 3          | 0.27 |
| 240 HB                 |                                    |                  |   |                      | 0.5     | 6         | 0.12      | 0.29       | 160         | 220           | 3            | 0.27       | 200  |
| Duplex                 |                                    | 5                | X2CrNiN23-4, S31500                     | 290 HB               | 0.5     | 5         | 0.12      | 0.26       | 70          | 140           | 2.3          | 0.24       | 110  |
|                        |                                    |                  |   | 310 HB               | 0.5     | 5         | 0.12      | 0.26       | 70          | 130           | 2.3          | 0.24       | 100  |
| Ferritic & Martensitic |                                    | 6                | 410, X6Cr17, 17-4 PH, 430               | 200 HB               | 0.5     | 6         | 0.15      | 0.32       | 150         | 220           | 3            | 0.27       | 200  |
|                        |                                    |                  |   | 42 HRc               | 0.5     | 5         | 0.15      | 0.26       | 90          | 160           | 2.3          | 0.24       | 140  |