

# SNKX 1607-45° LT 30

## Speeds & Feeds

| Material Group         |                     | Gr. N°     | VDI Group    | Material Examples*                      | Hardness             | D.O.C. [inch] |       | Feed [inch/tooth] |       | V <sub>c</sub> [sfm] |       | Optimal cutting conditions |       |                |
|------------------------|---------------------|------------|--------------|-----------------------------------------|----------------------|---------------|-------|-------------------|-------|----------------------|-------|----------------------------|-------|----------------|
|                        |                     |            |              |                                         |                      | min           | max   | min               | max   | min                  | max   | D.O.C.                     | Feed  | V <sub>c</sub> |
| Steel                  | Non-alloyed         | 1          | 1            | C35, Ck45, 1020, 1045, 1060, 28Mn6      | 125 HB               | 0.020         | 0.256 | 0.006             | 0.023 | 620                  | 1080  | 0.157                      | 0.018 | 820            |
|                        |                     |            | 2            |                                         | 190 HB               |               | 0.256 |                   | 0.023 |                      | 980   |                            |       | 720            |
|                        |                     |            | 3            |                                         | 250 HB               |               | 0.256 |                   | 0.023 |                      | 820   |                            |       | 650            |
|                        | Low alloyed         | 2          | 6            | 42CrMo4, St50, Ck60, 4140, 4340, 100Cr6 | 180 HB               | 0.020         | 0.256 | 0.006             | 0.020 | 490                  | 780   | 0.157                      | 0.016 | 650            |
|                        |                     |            | 4,6          |                                         | 230 HB               |               | 0.256 |                   | 0.020 | 490                  | 680   |                            | 0.016 | 590            |
|                        |                     |            | 5,7          |                                         | 280 HB               |               | 0.256 |                   | 0.017 | 420                  | 620   |                            | 0.014 | 490            |
|                        |                     |            | 8            |                                         | 350 HB               |               | 0.256 |                   | 0.017 | 420                  | 550   |                            | 0.014 | 450            |
|                        | High alloyed        | 3          | 10           | X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19 | 220 HB               | 0.020         | 0.256 | 0.004             | 0.017 | 290                  | 490   | 0.118                      | 0.014 | 420            |
|                        |                     |            | 10           |                                         | 280 HB               |               | 0.256 |                   | 0.017 | 290                  | 420   |                            | 0.014 | 390            |
|                        |                     |            | 11           |                                         | 320 HB               |               | 0.256 |                   | 0.014 | 190                  | 360   |                            | 0.013 | 320            |
|                        |                     |            | 11           |                                         | 350 HB               |               | 0.256 |                   | 0.014 | 190                  | 290   |                            | 0.013 | 260            |
|                        | Stainless Steel     | Austenitic | 4            | 14                                      | 304, 316, X5CrNi18-9 | 180 HB        | 0.020 | 0.256             | 0.006 | 0.017                | 620   | 820                        | 0.157 | 0.013          |
| 14                     |                     |            |              | 240 HB                                  |                      | 0.256         |       | 0.004             | 0.016 | 520                  | 680   | 620                        |       |                |
| Duplex                 |                     | 5          | 14           | X2CrNiN23-4, S31500                     | 290 HB               | 0.020         | 0.197 | 0.004             | 0.014 | 220                  | 420   | 0.118                      | 0.012 | 320            |
|                        |                     |            | 14           |                                         | 310 HB               |               | 0.197 |                   | 0.014 | 390                  | 290   |                            |       | 290            |
| Ferritic & Martensitic |                     | 6          | 12           | 410, X6Cr17, 17-4 PH, 430               | 200 HB               | 0.020         | 0.256 | 0.006             | 0.017 | 490                  | 680   | 0.157                      | 0.013 | 620            |
|                        |                     |            | 13           |                                         | 42 HRc               |               | 0.198 |                   | 0.016 | 290                  | 490   | 0.118                      | 0.012 | 420            |
| Cast Iron              | Grey                | 7          | 15           | GG20, GG40, EN-GJL-250, No30B           | 150 HB               | 0.020         | 0.256 | 0.007             | 0.023 | 490                  | 780   | 0.157                      | 0.018 | 650            |
|                        |                     |            | 15           |                                         | 200 HB               |               | 0.256 |                   | 0.023 |                      | 720   |                            |       | 590            |
|                        |                     |            | 16           |                                         | 250 HB               |               | 0.256 |                   | 0.023 |                      | 620   |                            |       | 520            |
|                        | Malleable & Nodular | 8          | 17,19        | GGG40, GGG70, 50005                     | 150 HB               | 0.020         | 0.256 | 0.006             | 0.020 | 320                  | 650   | 0.157                      | 0.016 | 590            |
|                        |                     |            | 17,19        |                                         | 200 HB               |               | 0.256 |                   | 0.020 |                      | 590   |                            |       | 490            |
|                        |                     |            | 18,20        |                                         | 250 HB               |               | 0.256 |                   | 0.020 |                      | 490   |                            |       | 420            |
| High Temp.Alloys       | Fe, Ni & Co based   | 9          | 31,32        | Incoloy 800                             | 240 HB               | 0.020         | 0.197 | 0.004             | 0.014 | 80                   | 140   | 0.118                      | 0.012 | 100            |
|                        |                     |            | 33           | Inconel 700                             | 250 HB               |               | 0.197 |                   | 0.014 |                      | 140   |                            |       | 90             |
|                        |                     |            | 34           | Stellite 21                             | 350 HB               |               | 0.197 |                   | 0.014 |                      | 140   |                            |       | 90             |
|                        | Ti based            | 10         | 36           | TiAl6V4                                 | -                    | 0.020         | 0.197 | 0.004             | 0.016 | 130                  | 210   | 0.118                      | 0.013 | 180            |
| 37                     |                     |            | T40          | -                                       | 0.197                |               | 0.014 |                   | 90    | 180                  | 0.012 |                            | 130   |                |
| Hardened Mat.          | Steel               | 11         | 38           | X100CrMo13, 440C, G-X260NiCr42          | 45 HRc               | 0.016         | 0.119 | 0.004             | 0.014 | 130                  | 260   | 0.079                      | 0.011 | 190            |
|                        |                     |            | 38           | 50 HRc                                  | 0.119                |               | 0.013 |                   | 220   |                      | 0.059 | 0.010                      | 180   |                |
|                        |                     |            | 38           | 55 HRc                                  | 0.059                |               | 0.011 |                   | 190   |                      | 0.039 | 0.009                      | 160   |                |
|                        | Chilled Cast Iron   | 40         | Ni-Hard 2    | 400 HB                                  | 0.016                | 0.119         | 0.004 | 0.014             | 130   | 260                  | 0.059 | 0.011                      | 160   |                |
|                        | White Cast Iron     | 41         | G-X300CrMo15 | 55 HRc                                  | 0.016                | 0.059         | 0.004 | 0.011             | 90    | 190                  | 0.039 | 0.009                      | 130   |                |
| NF                     | Al (>8%Si)          | 12         | 25           | AlSi12                                  | 130 HB               | 0.020         | 0.256 | 0.007             | 0.024 | 650                  | 1310  | 0.157                      | 0.020 | 910            |



(800) 597-3921 or (317) 803-8000 for Application Support.  
For additional suggested Speeds & Feeds: <http://delivr.com/1kmpm>

