

Suitable for material group:



# NiTiCo 30 DH (Without Oil Feed)

## 1 5 Flute Design

- Significantly increased feedrate (25% over 4 flute)

## 2 Differential Helix (DH)

Reduces the cutting force:

- Allows high speed machining
- Improves surface finishing

## 3 Optimized Geometry with Chipbreakers

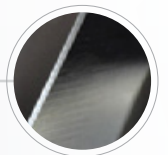
- Efficiently shears work materials and shortens chips for improved chips removal

## 4 Small Corner Radius

- For less chipping of the cutting edges and longer tool life

## 5 Ideal Cutting Edge

- Provide edge protection to prolong tool life



**Oil & Gas**



**Energy**



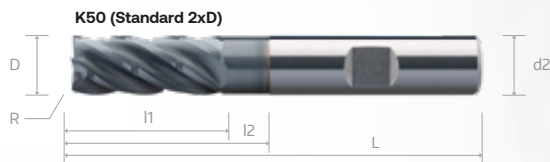
**Mould & Die**

# K50 / K51

## NiTiCo 30 DH WELDON, RECESS, 5 FLUTES



Z5



| Order Number   | D (mm) | l1 (mm) | l2 (mm) | L (mm) | d2 h6 (mm) | R    | EUR    |
|----------------|--------|---------|---------|--------|------------|------|--------|
| K50 0600 057 * | 6      | 15      | 20      | 57     | 6          | 0.1  | 19,91  |
| K50 0800 064   | 8      | 20      | 25      | 64     | 8          | 0.15 | 28,15  |
| K50 1000 072 * | 10     | 25      | 30      | 72     | 10         | 0.2  | 38,16  |
| K50 1200 083 * | 12     | 30      | 38      | 83     | 12         | 0.2  | 54,25  |
| K50 1600 092 * | 16     | 39      | 44      | 92     | 16         | 0.3  | 78,84  |
| K50 2000 104 * | 20     | 48      | 54      | 104    | 20         | 0.3  | 120,88 |

\* - DIN 6535



| Order Number   | D (mm) | l1 (mm) | l2 (mm) | L (mm) | d2 h6 (mm) | R   | EUR    |
|----------------|--------|---------|---------|--------|------------|-----|--------|
| K51 0600 075   | 6      | 26      | 32      | 75     | 6          | 0.1 | 29,69  |
| K51 0800 075 * | 8      | 32      | 38      | 75     | 8          | 0.2 | 39,00  |
| K51 1000 100   | 10     | 42      | 52      | 100    | 10         | 0.2 | 54,68  |
| K51 1200 100 * | 12     | 42      | 54      | 100    | 12         | 0.2 | 68,89  |
| K51 1600 125   | 16     | 60      | 68      | 125    | 16         | 0.3 | 112,99 |
| K51 2000 125 * | 20     | 67      | 75      | 125    | 20         | 0.3 | 146,67 |

\* - DIN 6535

### NiTiCo 30 DH Standard, 2xD Weldon, Recess, 5 Flutes - K50



| Side Milling      | K              |  | P            |  | M               |  | S                  |  |                |  |              |  |              |  |
|-------------------|----------------|--|--------------|--|-----------------|--|--------------------|--|----------------|--|--------------|--|--------------|--|
| Working Material  | Grey Cast Iron |  | Carbon Steel |  | Alloy Steel     |  | Stainless Steel    |  | Titanium Alloy |  | Nickel Alloy |  | Cobalt Alloy |  |
| Properties        | -              |  | -            |  | 520 < Rm < 1200 |  | High Machinability |  | -              |  | -            |  | -            |  |
| Cutting depth, ap | 1.00 × D       |  | 1.00 × D     |  | 1.00 × D        |  | 1.00 × D           |  | 1.00 × D       |  | 1.00 × D     |  | 1.00 × D     |  |
| Cutting Width, ae | 0.25 × D       |  | 0.25 × D     |  | 0.20 × D        |  | 0.18 × D           |  | 0.15 × D       |  | 0.15 × D     |  | 0.15 × D     |  |
| D                 | Vc             |  | Fz           |  | Vc              |  | Fz                 |  | Vc             |  | Fz           |  | Vc           |  |
| 6                 | 0.026          |  | 0.027        |  | 0.029           |  | 0.027              |  | 0.034          |  | 0.034        |  | 0.032        |  |
| 8                 | 0.036          |  | 0.037        |  | 0.040           |  | 0.037              |  | 0.047          |  | 0.047        |  | 0.045        |  |
| 10                | 0.047          |  | 0.047        |  | 0.052           |  | 0.047              |  | 0.060          |  | 0.060        |  | 0.057        |  |
| 12                | 0.057          |  | 0.057        |  | 0.065           |  | 0.057              |  | 0.074          |  | 0.074        |  | 0.070        |  |
| 16                | 0.074          |  | 0.073        |  | 0.082           |  | 0.072              |  | 0.093          |  | 0.093        |  | 0.088        |  |
| 20                | 0.085          |  | 0.089        |  | 0.097           |  | 0.082              |  | 0.104          |  | 0.104        |  | 0.100        |  |

### NiTiCo 30 DH Standard, 2xD Weldon, Recess, 5 Flutes - K50



| Trochoidal Milling | K              |       | P            |       | M               |       | S                  |       |                |       |              |       |              |       |
|--------------------|----------------|-------|--------------|-------|-----------------|-------|--------------------|-------|----------------|-------|--------------|-------|--------------|-------|
| Working Material   | Grey Cast Iron |       | Carbon Steel |       | Alloy Steel     |       | Stainless Steel    |       | Titanium Alloy |       | Nickel Alloy |       | Cobalt Alloy |       |
| Properties         |                |       |              |       | 520 < Rm < 1200 |       | High Machinability |       |                |       |              |       |              |       |
| Maximum Slot Width | 1.25 x D       |       | 1.25 x D     |       | 1.25 x D        |       | 1.25 x D           |       | 1.25 x D       |       | 1.25 x D     |       | 1.25 x D     |       |
| Cutting depth, ap  | 1.50 x D       |       | 1.50 x D     |       | 1.50 x D        |       | 1.50 x D           |       | 1.50 x D       |       | 1.50 x D     |       | 1.50 x D     |       |
| Cutting Width, ae  | 0.15 x D       |       | 0.15 x D     |       | 0.12 x D        |       | 0.10 x D           |       | 0.10 x D       |       | 0.10 x D     |       | 0.10 x D     |       |
| D                  | Vc             | Fz    | Vc           | Fz    | Vc              | Fz    | Vc                 | Fz    | Vc             | Fz    | Vc           | Fz    | Vc           | Fz    |
| 6                  |                | 0.031 |              | 0.032 |                 | 0.037 |                    | 0.035 |                | 0.045 |              | 0.045 |              | 0.043 |
| 8                  |                | 0.044 |              | 0.044 |                 | 0.052 |                    | 0.048 |                | 0.063 |              | 0.063 |              | 0.060 |
| 10                 |                | 0.059 |              | 0.059 |                 | 0.071 |                    | 0.064 |                | 0.082 |              | 0.082 |              | 0.078 |
| 12                 |                | 0.076 |              | 0.075 |                 | 0.094 |                    | 0.084 | 120            | 0.108 |              | 0.108 |              | 0.103 |
| 16                 | 315            | 0.094 | 345          | 0.094 | 290             | 0.116 | 170                | 0.104 | 160            | 0.133 | 60           | 0.133 | 47           | 0.136 |
| 20                 |                | 0.109 |              | 0.107 |                 | 0.131 |                    | 0.117 |                | 0.157 |              | 0.157 |              | 0.149 |

### NiTiCo 30 DH Long, 4xD Weldon, Recess, 5 Flutes - K51



| Side Milling      | K              |              | P               |                    | M              |              | S            |          |
|-------------------|----------------|--------------|-----------------|--------------------|----------------|--------------|--------------|----------|
| Working Material  | Grey Cast Iron | Carbon Steel | Alloy Steel     | Stainless Steel    | Titanium Alloy | Nickel Alloy | Cobalt Alloy |          |
| Properties        | -              | -            | 520 < Rm < 1200 | High Machinability | -              | -            | -            | -        |
| Cutting depth, ap | 1.50 · D       | 1.50 · D     | 1.50 · D        | 1.50 · D           | 1.50 · D       | 1.50 · D     | 1.50 · D     | 1.50 · D |
| Cutting Width, ae | 0.15 · D       | 0.15 · D     | 0.12 · D        | 0.10 · D           | 0.10 · D       | 0.10 · D     | 0.10 · D     | 0.10 · D |
| D                 | Vc             | Fz           | Vc              | Fz                 | Vc             | Fz           | Vc           | Fz       |
| 6                 | 0.023          | 0.024        | 0.027           | 0.025              | 0.030          | 0.030        | 0.030        | 0.029    |
| 8                 | 0.031          | 0.032        | 0.037           | 0.034              | 0.043          | 0.043        | 0.043        | 0.041    |
| 10                | 0.041          | 0.041        | 0.048           | 0.043              | 0.055          | 0.055        | 0.055        | 0.052    |
| 12                | 240            | 0.053        | 270             | 0.052              | 220            | 0.060        | 0.070        | 0.060    |
| 16                |                | 0.067        |                 | 0.077              |                | 0.069        | 0.089        | 0.085    |
| 20                |                | 0.079        |                 | 0.089              |                | 0.089        | 0.099        | 0.096    |

### NiTiCo 30 DH Long, 4xD Weldon, Recess, 5 Flutes - K51



| Trochoidal Milling | K              |       | P            |       | M               |       | S                  |       |                |       |              |       |              |       |
|--------------------|----------------|-------|--------------|-------|-----------------|-------|--------------------|-------|----------------|-------|--------------|-------|--------------|-------|
| Working Material   | Grey Cast Iron |       | Carbon Steel |       | Alloy Steel     |       | Stainless Steel    |       | Titanium Alloy |       | Nickel Alloy |       | Cobalt Alloy |       |
| Properties         |                |       |              |       | 520 - Rm < 1200 |       | High Machinability |       |                |       |              |       |              |       |
| Maximum Slot Width | 1.25 × D       |       | 1.25 × D     |       | 1.25 × D        |       | 1.25 × D           |       | 1.25 × D       |       | 1.25 × D     |       | 1.25 × D     |       |
| Cutting depth, ap  | 2.00 × D       |       | 2.00 × D     |       | 2.00 × D        |       | 2.00 × D           |       | 2.00 × D       |       | 2.00 × D     |       | 2.00 × D     |       |
| Cutting Width, ae  | 0.12 × D       |       | 0.12 × D     |       | 0.10 × D        |       | 0.08 × D           |       | 0.08 × D       |       | 0.08 × D     |       | 0.08 × D     |       |
| D                  | Vc             | Fz    | Vc           | Fz    | Vc              | Fz    | Vc                 | Fz    | Vc             | Fz    | Vc           | Fz    | Vc           | Fz    |
| 6                  |                | 0.024 |              | 0.025 |                 | 0.028 |                    | 0.026 |                | 0.030 |              | 0.032 |              | 0.029 |
| 8                  |                | 0.034 |              | 0.035 |                 | 0.040 |                    | 0.036 |                | 0.042 |              | 0.044 |              | 0.040 |
| 10                 |                | 0.046 |              | 0.046 |                 | 0.055 |                    | 0.049 |                | 0.056 |              | 0.056 |              | 0.053 |
| 12                 |                | 0.060 |              | 0.060 |                 | 0.071 |                    | 0.063 |                | 0.074 |              | 0.074 |              | 0.070 |
| 16                 | 285            | 0.070 | 315          | 0.071 | 270             | 0.089 | 150                | 0.097 | 105            | 0.091 | 53           | 0.091 | 39           | 0.096 |
| 20                 |                | 0.080 |              | 0.080 |                 | 0.100 |                    | 0.088 |                | 0.101 |              | 0.107 |              | 0.102 |



Scan for the  
K50 & K51  
Cutting Parameter

OPOMBA: Cene so brez DDV. Ponudba velja do 30.06.2025 !!