

YD-P620

PROMOTION



*SONDERAKTION  
gültig bis 31.12.2020*

**iWS**   
Industrie-Werkzeuge Stephan

**V7 Plus**

**K-2 CARBIDE END MILLS**

**DREAM DRILLS**



Angebot ist begrenzt und ist speziell für Gewerbe, Handwerk, Handel und Industrie.  
Preise in EURO, zzgl. MwSt. - Änderungen, Zwischenverkauf und Irrtümer vorbehalten.  
Der Verkauf ist ausschließlich für den deutschen Markt bestimmt. Ein Verkauf ins Ausland ist untersagt.



# INHALTSVERZEICHNIS



SEITE 3

*K-2 VHM FRÄSER* SEITE 15  
*K-2 CARBIDE END MILLS*

**DREAMDRILLS**

SEITE 37



Angebot ist begrenzt und ist speziell für Gewerbe, Handwerk, Handel und Industrie.  
Preise in EURO, zzgl. MwSt. - Änderungen, Zwischenverkauf und Irrtümer vorbehalten.  
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YD-VP20

PROMOTION

SONDERAKTION

330 V-7 PLUS ARTIKEL

*gültig bis 31.12. 2020*

The logo for JIG, featuring the letters 'JIG' in a stylized, bold, red font. The 'J' and 'I' are connected, and the 'G' is a simple block letter.The logo for V7 Plus, featuring a large red 'V' with a white '7' inside it, followed by the word 'Plus' in a white sans-serif font.

HOCHLEISTUNGS-  
VHM-SCHAFTFRÄSER

Für Stähle, Gusseisen und rostfreie Stähle

Angebot ist begrenzt und ist speziell für Gewerbe, Handwerk, Handel und Industrie.  
Preise in EURO, zzgl. MwSt. - Änderungen, Zwischenverkauf und Irrtümer vorbehalten.  
Der Verkauf ist ausschließlich für den deutschen Markt bestimmt. Ein Verkauf ins Ausland ist untersagt.



# SELECTION GUIDE



| SERIES             | GMF54<br>GMF55 | GMF58<br>GMF59 | GMF62<br>GMF63 |
|--------------------|----------------|----------------|----------------|
| FLUTE              | 4              | 4              | 4              |
| HELIX ANGLE        | 35°/37°        | 35°/37°        | 35°/37°        |
| CUTTING EDGE SHAPE | CORNER RADIUS  | CORNER RADIUS  | CORNER RADIUS  |
| SIZE MIN           | D3.0           | D3.0           | D3.0           |
| SIZE MAX           | D20.0          | D25.0          | D20.0          |
| PAGE               | 9              | 10             | 11             |



HIGH PERFORMANCE  
SOLID CARBIDE END MILLS  
For Steels, Cast Iron and Stainless Steels



◎ : Excellent ○ : Good

| ISO | VDI 3323  | Material Description                      | Composition / Structure / Heat Treatment       | HB       | HRc |    |   |   |
|-----|-----------|---|--|----------|-----|----|---|---|
| P   | 1         | Non-alloy steel                           | About 0.15% C Annealed                         | 125      |     | ◎  | ◎ | ◎ |
|     | 2         |   | About 0.45% C Annealed                         | 190      | 13  | ◎  | ◎ | ◎ |
|     | 3         |   | About 0.45% C Quenched & tempered              | 250      | 25  | ◎  | ◎ | ◎ |
|     | 4         |   | About 0.75% C Annealed                         | 270      | 28  | ◎  | ◎ | ◎ |
|     | 5         |   | About 0.75% C Quenched & tempered              | 300      | 32  | ◎  | ◎ | ◎ |
|     | 6         | Low alloy steel                           | Annealed                                       | 180      | 10  | ◎  | ◎ | ◎ |
|     | 7         |   | Quenched & tempered                            | 275      | 29  | ◎  | ◎ | ◎ |
|     | 8         |   | Quenched & tempered                            | 300      | 32  | ◎  | ◎ | ◎ |
|     | 9         |   | Quenched & tempered                            | 350      | 38  | ◎  | ◎ | ◎ |
|     | 10        |   | High alloyed steel, and tool steel             | Annealed | 200 | 15 | ◎ | ◎ |
|     | 11        | Quenched & Tempered                       |  | 325      | 35  | ◎  | ◎ | ◎ |
| M   | 12        | Stainless steel                           | Ferritic / Martensitic Annealed                | 200      | 15  | ◎  | ◎ | ◎ |
|     | 13        |   | Martensitic Quenched & Tempered                | 240      | 23  | ◎  | ◎ | ◎ |
|     | 14        |   | Austenitic                                     | 180      | 10  | ◎  | ◎ | ◎ |
| K   | 15        | Grey cast iron                            | Pearlitic / ferritic                           | 180      | 10  | ◎  | ◎ | ◎ |
|     | 16        |   | Pearlitic (Martensitic)                        | 260      | 26  | ◎  | ◎ | ◎ |
|     | 17        | Nodular cast iron                         | Ferritic                                       | 160      | 3   | ◎  | ◎ | ◎ |
|     | 18        |   | Pearlitic                                      | 250      | 25  | ◎  | ◎ | ◎ |
|     | 19        | Malleable cast iron                       | Ferritic                                       | 130      |     | ◎  | ◎ | ◎ |
| 20  | Pearlitic |   | 230  | 21       | ◎   | ◎  | ◎ |   |
| N   | 21        | Aluminum-wrought alloy                    | Not Curable                                    | 60       |     |    |   |   |
|     | 22        |   | Curable Hardened                               | 100      |     |    |   |   |
|     | 23        | Aluminum-cast, alloyed                    | ≤ 12% Si, Not Curable                          | 75       |     |    |   |   |
|     | 24        |   | ≤ 12% Si, Curable Hardened                     | 90       |     |    |   |   |
|     | 25        |   | > 12% Si, Not Curable                          | 130      |     |    |   |   |
|     | 26        | Copper and Copper Alloys (Bronze / Brass) | Cutting Alloys, PB>1%                          | 110      |     |    |   |   |
|     | 27        |   | CuZn, CuSnZn (Brass)                           | 90       |     |    |   |   |
|     | 28        |   | CuSn, lead-free copper and electrolytic copper | 100      |     |    |   |   |
|     | 29        | Non Metallic Materials                    | Duroplastic, Fiber Reinforced Plastic          |          |     |    |   |   |
|     | 30        |   | Rubber, Wood, etc.                             |          |     |    |   |   |
| S   | 31        | Heat Resistant Super Alloys               | Fe Based Annealed                              | 200      | 15  | ○  | ○ | ○ |
|     | 32        |   | Cured  | 280      | 30  | ○  | ○ | ○ |
|     | 33        |   | Annealed                                       | 250      | 25  | ○  | ○ | ○ |
|     | 34        |   | Ni or Co Based Cured                           | 350      | 38  | ○  | ○ | ○ |
|     | 35        |   | Cast   | 320      | 34  | ○  | ○ | ○ |
|     | 36        | Titanium Alloys                           | Pure Titanium                                  | 400 Rm   |     | ○  | ○ | ○ |
|     | 37        |   | Alpha + Beta Alloys Hardened                   | 1050 Rm  |     | ○  | ○ | ○ |
| H   | 38        | Hardened steel                            | Hardened                                       | 550      | 55  |    |   |   |
|     | 39        |   | Hardened                                       | 630      | 60  |    |   |   |
|     | 40        | Chilled Cast Iron                         | Cast   | 400      | 42  |    |   |   |
|     | 41        | Hardened Cast Iron                        | Hardened                                       | 550      | 55  |    |   |   |

TOP SELLER

| GMF52<br>GMF53 | GMF56<br>GMF57 | GMF60<br>GMF61           |
|----------------|----------------|--------------------------|
| 4              | 4              | 4                        |
| 35°/37°        | 35°/37°        | 35°/37°                  |
| SQUARE         | SQUARE         | SQUARE                   |
| D3.0           | D3.0           | D3.0                     |
| D20.0          | D25.0          | D20.0                    |
| 14             | 15             | 16                       |
| SHORT LENGTH   | LONG LENGTH    | LONG LENGTH<br>with NECK |
| Y-Coating      | Y-Coating      | Y-Coating                |



|   |   |   |    |
|---|---|---|----|
| ⊙ | ⊙ | ⊙ | 1  |
| ⊙ | ⊙ | ⊙ | 2  |
| ⊙ | ⊙ | ⊙ | 3  |
| ⊙ | ⊙ | ⊙ | 4  |
| ⊙ | ⊙ | ⊙ | 5  |
| ⊙ | ⊙ | ⊙ | 6  |
| ⊙ | ⊙ | ⊙ | 7  |
| ⊙ | ⊙ | ⊙ | 8  |
| ⊙ | ⊙ | ⊙ | 9  |
| ⊙ | ⊙ | ⊙ | 10 |
| ⊙ | ⊙ | ⊙ | 11 |
| ⊙ | ⊙ | ⊙ | 12 |
| ⊙ | ⊙ | ⊙ | 13 |
| ⊙ | ⊙ | ⊙ | 14 |
| ⊙ | ⊙ | ⊙ | 15 |
| ⊙ | ⊙ | ⊙ | 16 |
| ⊙ | ⊙ | ⊙ | 17 |
| ⊙ | ⊙ | ⊙ | 18 |
| ⊙ | ⊙ | ⊙ | 19 |
| ⊙ | ⊙ | ⊙ | 20 |
|   |   |   | 21 |
|   |   |   | 22 |
|   |   |   | 23 |
|   |   |   | 24 |
|   |   |   | 25 |
|   |   |   | 26 |
|   |   |   | 27 |
|   |   |   | 28 |
|   |   |   | 29 |
|   |   |   | 30 |
| ○ | ○ | ○ | 31 |
| ○ | ○ | ○ | 32 |
| ○ | ○ | ○ | 33 |
| ○ | ○ | ○ | 34 |
| ○ | ○ | ○ | 35 |
| ○ | ○ | ○ | 36 |
| ○ | ○ | ○ | 37 |
|   |   |   | 38 |
|   |   |   | 39 |
|   |   |   | 40 |
|   |   |   | 41 |

# V7 Plus

**Corner Geometries**  
YG-1's High Performance Corner Geometries Including Corner Radius, applied for Longer Tool Life with Higher Cutting Speed and Heavy Cutting

**Unequal Index**  
Exclusively Designed Unique Geometry applied to Reduce Vibration and also to achieve Excellent Chip Evacuation with Better Surface Finish

**Multiple Helix**  
Multiple Helix Designed for Optimal Chip Formation and Chip Evacuation Concluding Faster and Heavier Cutting making Higher Productivity

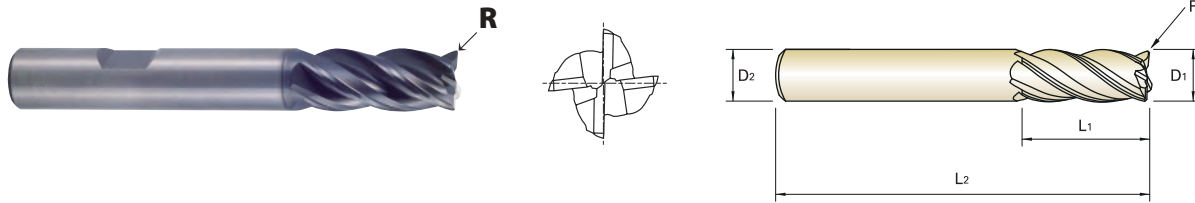
**Ultra Micro grain Carbide**  
Premium Carbide Substrate Achieving Exceptional Wear Resistance

- Chatter and Harmonics Reduced for Improved Stability and Better Finishing
- Special Design of Flute Geometry for Optimal Chip Formation and Chip Evacuation
- Engineered Coating Technology to Reduced Wear and Increase Heat Resistance
- Enhanced Corner Geometry for Longer Tool Life

# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE CORNER RADIUS SHORT LENGTH

**GMF54** PLAIN SHANK  
**GMF55** FLAT SHANK

- ▶ Special flute geometry and multiple helix eliminate vibrations
- ▶ Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRC40



Unit : mm

| EDP No.   |           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Promotion Price/Pcs |
|-----------|-----------|---------------|---------------|----------------|---------------|----------------|---------------------|
| PLAIN     | FLAT      | R             | D1            | D2             | L1            | L2             |                     |
| GMF54030  | GMF55030  | R0.3          | 3.0           | 6              | 7             | 54             | 12,21 €             |
| GMF54901  | GMF55901  | R0.5          | 3.0           | 6              | 7             | 54             | 12,21 €             |
| GMF54040  | GMF55040  | R0.3          | 4.0           | 6              | 8             | 54             | 12,21 €             |
| GMF54902* | GMF55902* | R0.5          | 4.0           | 6              | 8             | 54             | 12,21 €             |
| GMF54050  | GMF55050  | R0.3          | 5.0           | 6              | 10            | 54             | 12,21 €             |
| GMF54903* | GMF55903* | R0.5          | 5.0           | 6              | 10            | 54             | 12,21 €             |
| GMF54060  | GMF55060  | R0.3          | 6.0           | 6              | 10            | 54             | 12,21 €             |
| GMF54904  | GMF55904  | R0.5          | 6.0           | 6              | 10            | 54             | 12,21 €             |
| GMF54905* | GMF55905* | R1.0          | 6.0           | 6              | 10            | 54             | 12,21 €             |
| GMF54080  | GMF55080  | R0.5          | 8.0           | 8              | 12            | 58             | 17,00 €             |
| GMF54906* | GMF55906* | R1.0          | 8.0           | 8              | 12            | 58             | 17,00 €             |
| GMF54100  | GMF55100  | R0.5          | 10.0          | 10             | 14            | 66             | 22,80 €             |
| GMF54907* | GMF55907* | R1.0          | 10.0          | 10             | 14            | 66             | 22,80 €             |
| GMF54120  | GMF55120  | R0.5          | 12.0          | 12             | 16            | 73             | 32,18 €             |
| GMF54908* | GMF55908* | R1.0          | 12.0          | 12             | 16            | 73             | 32,18 €             |
| GMF54909* | GMF55909* | R2.0          | 12.0          | 12             | 16            | 73             | 32,18 €             |
| GMF54140  | GMF55140  | R0.5          | 14.0          | 14             | 18            | 75             | 45,04 €             |
| GMF54160  | GMF55160  | R1.0          | 16.0          | 16             | 22            | 82             | 57,46 €             |
| GMF54912* | GMF55912* | R2.0          | 16.0          | 16             | 22            | 82             | 57,46 €             |
| GMF54913  | GMF55913  | R3.0          | 16.0          | 16             | 22            | 82             | 57,46 €             |
| GMF54180  | GMF55180  | R1.0          | 18.0          | 18             | 24            | 84             | 84,84 €             |
| GMF54200  | GMF55200  | R1.0          | 20.0          | 20             | 26            | 92             | 85,83 €             |
| GMF54916* | GMF55916* | R2.0          | 20.0          | 20             | 26            | 92             | 85,83 €             |
| GMF54917* | GMF55917* | R3.0          | 20.0          | 20             | 26            | 92             | 85,83 €             |

\* Kein Lagerartikel, Lieferung auf Anfrage.

| Mill Dia. Tolerance (mm) |           | Shank Dia. Tolerance         |
|--------------------------|-----------|------------------------------|
| Up to Ø12                | 0 ~ -0.02 | h5<br>* Shank Dia. ≥ Ø12: h6 |
| Over Ø12                 | 0 ~ -0.03 |                              |

◎ : Excellent ○ : Good

| ISO Material Description | P               |     |     |     |     |                 |     |     |     |     | M                                  |     |                 |     | K              |     |                   |     |                     |     |
|--------------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-----|-------------------|-----|---------------------|-----|
|                          | Non-alloy steel |     |     |     |     | Low alloy steel |     |     |     |     | High alloyed steel, and tool steel |     | Stainless steel |     | Grey cast iron |     | Nodular cast iron |     | Malleable cast iron |     |
| VDI 3323                 | 1               | 2   | 3   | 4   | 5   | 6               | 7   | 8   | 9   | 10  | 11                                 | 12  | 13              | 14  | 15             | 16  | 17                | 18  | 19                  | 20  |
| HRC                      | 13              | 25  | 28  | 32  | 10  | 29              | 32  | 38  | 15  | 35  | 15                                 | 23  | 10              | 10  | 26             | 3   | 25                |     | 21                  |     |
| HB                       | 125             | 190 | 250 | 270 | 300 | 180             | 275 | 300 | 350 | 200 | 325                                | 200 | 240             | 180 | 180            | 260 | 160               | 250 | 130                 | 230 |
| Recommended              | ◎               | ◎   | ◎   | ◎   | ◎   | ◎               | ◎   | ◎   | ◎   | ◎   | ◎                                  | ◎   | ◎               | ◎   | ◎              | ◎   | ◎                 | ◎   | ◎                   | ◎   |

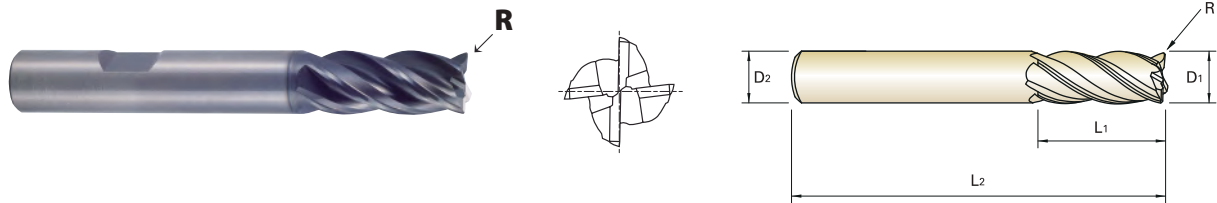
| ISO Material Description | N                      |     |                        |    |     | S   |    |                        |    |    | H                           |     |     |     |     |                 |         |                |                   |                    |     |
|--------------------------|------------------------|-----|------------------------|----|-----|---|----|------------------------|----|----|-----------------------------|-----|-----|-----|-----|-----------------|---------|----------------|-------------------|--------------------|-----|
|                          | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |    |     | Copper and Copper Alloys (Bronze / Brass) |    | Non Metallic Materials |    |    | Heat Resistant Super Alloys |     |     |     |     | Titanium Alloys |         | Hardened steel | Chilled Cast Iron | Hardened Cast Iron |     |
| VDI 3323                 | 21                     | 22  | 23                     | 24 | 25  | 26  | 27 | 28                     | 29 | 30 | 31                          | 32  | 33  | 34  | 35  | 36              | 37      | 38             | 39                | 40                 | 41  |
| HRC                      |                        |     |                        |    |     |   |    |                        |    |    | 15                          | 30  | 25  | 38  | 34  |                 |         | 55             | 60                | 42                 | 55  |
| HB                       | 60                     | 100 | 75                     | 90 | 130 | 110                                       | 90 | 100                    |    |    | 200                         | 280 | 250 | 350 | 320 | 400 Rm          | 1050 Rm | 550            | 630               | 400                | 550 |
| Recommended              |                        |     |                        |    |     |   |    |                        |    |    | ○                           | ○   | ○   | ○   | ○   | ○               | ○       |                |                   |                    |     |



# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE CORNER RADIUS LONG LENGTH

**GMF58** PLAIN SHANK  
**GMF59** FLAT SHANK

- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRC40



Unit : mm

| EDP No.   |           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Promotion Price/Pcs |
|-----------|-----------|---------------|---------------|----------------|---------------|----------------|---------------------|
| PLAIN     | FLAT      | R             | D1            | D2             | L1            | L2             |                     |
| GMF58030  | GMF59030  | R0.3          | 3.0           | 6              | 8             | 57             | 12,76 €             |
| GMF58901* | GMF59901* | R0.5          | 3.0           | 6              | 8             | 57             | 12,76 €             |
| GMF58040  | GMF59040  | R0.3          | 4.0           | 6              | 11            | 57             | 12,76 €             |
| GMF58902* | GMF59902* | R0.5          | 4.0           | 6              | 11            | 57             | 12,76 €             |
| GMF58050  | GMF59050  | R0.3          | 5.0           | 6              | 13            | 57             | 12,76 €             |
| GMF58903* | GMF59903* | R0.5          | 5.0           | 6              | 13            | 57             | 12,76 €             |
| GMF58060  | GMF59060  | R0.3          | 6.0           | 6              | 13            | 57             | 12,76 €             |
| GMF58904  | GMF59904  | R0.5          | 6.0           | 6              | 13            | 57             | 12,76 €             |
| GMF58905  | GMF59905  | R1.0          | 6.0           | 6              | 13            | 57             | 12,76 €             |
| GMF58080  | GMF59080  | R0.5          | 8.0           | 8              | 19            | 63             | 17,75 €             |
| GMF58906  | GMF59906  | R1.0          | 8.0           | 8              | 19            | 63             | 17,75 €             |
| GMF58100  | GMF59100  | R0.5          | 10.0          | 10             | 22            | 72             | 25,59 €             |
| GMF58907* | GMF59907* | R1.0          | 10.0          | 10             | 22            | 72             | 25,59 €             |
| GMF58120  | GMF59120  | R0.5          | 12.0          | 12             | 26            | 83             | 33,66 €             |
| GMF58908* | GMF59908* | R1.0          | 12.0          | 12             | 26            | 83             | 33,66 €             |
| GMF58909* | GMF59909* | R2.0          | 12.0          | 12             | 26            | 83             | 33,66 €             |
| GMF58140  | GMF59140  | R0.5          | 14.0          | 14             | 26            | 83             | 49,01 €             |
| GMF58160  | GMF59160  | R1.0          | 16.0          | 16             | 32            | 92             | 59,13 €             |
| GMF58912* | GMF59912* | R2.0          | 16.0          | 16             | 32            | 92             | 59,13 €             |
| GMF58913  | GMF59913  | R3.0          | 16.0          | 16             | 32            | 92             | 59,13 €             |
| GMF58180  | GMF59180  | R1.0          | 18.0          | 18             | 32            | 92             | 85,98 €             |
| GMF58200  | GMF59200  | R1.0          | 20.0          | 20             | 38            | 104            | 106,15 €            |
| GMF58916* | GMF59916* | R2.0          | 20.0          | 20             | 38            | 104            | 106,15 €            |
| GMF58917* | GMF59917* | R3.0          | 20.0          | 20             | 38            | 104            | 106,15 €            |
| GMF58250  | GMF59250  | R1.0          | 25.0          | 25             | 38            | 104            | 149,34 €            |

\* Kein Lagerartikel, Lieferung auf Anfrage.

| Mill Dia. Tolerance (mm) |            | Shank Dia. Tolerance         |
|--------------------------|------------|------------------------------|
| Up to Ø12                | 0 ~ - 0.02 | h5<br>* Shank Dia. ≥ Ø12: h6 |
| Over Ø12                 | 0 ~ - 0.03 |                              |

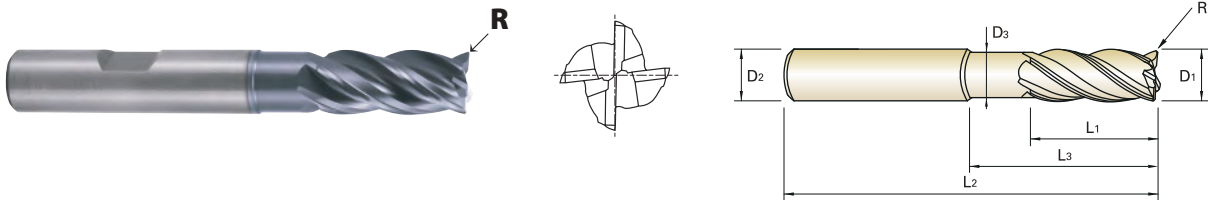
◎ : Excellent ○ : Good

| ISO<br>Material Description | P                      |     |                        |     |     |   |     |     |     |     | M                                  |     |                             |     | K              |        |                   |     |                     |                   |                    |
|-----------------------------|------------------------|-----|------------------------|-----|-----|---|-----|-----|-----|-----|------------------------------------|-----|-----------------------------|-----|----------------|--------|-------------------|-----|---------------------|-------------------|--------------------|
|                             | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |     |     |     | High alloyed steel, and tool steel |     | Stainless steel             |     | Grey cast iron |        | Nodular cast iron |     | Malleable cast iron |                   |                    |
| VDI 3323                    | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11                                 | 12  | 13                          | 14  | 15             | 16     | 17                | 18  | 19                  | 20                |                    |
| HRC                         | 13                     | 25  | 28                     | 32  | 32  | 10  | 29  | 32  | 38  | 15  | 35                                 | 15  | 23                          | 10  | 10             | 26     | 3                 | 25  |                     | 21                |                    |
| HB                          | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300 | 350 | 200 | 325                                | 200 | 240                         | 180 | 180            | 260    | 160               | 250 | 130                 | 230               |                    |
| Recommended                 | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎   | ◎   | ◎   | ◎                                  | ◎   | ◎                           | ◎   | ◎              | ◎      | ◎                 | ◎   | ◎                   | ◎                 |                    |
| ISO<br>Material Description | N                      |     |                        |     |     |   |     |     |     |     | S                                  |     |                             |     |                |        | H                 |     |                     |                   |                    |
|                             | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     |     |     |     | Non Metallic Materials             |     | Heat Resistant Super Alloys |     |                |        | Titanium Alloys   |     | Hardened steel      | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323                    | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31                                 | 32  | 33                          | 34  | 35             | 36     | 37                | 38  | 39                  | 40                | 41                 |
| HRC                         |                        |     |                        |     |     |   |     |     |     |     | 15                                 | 30  | 25                          | 38  | 34             |        |                   | 55  | 60                  | 42                | 55                 |
| HB                          | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100 |     |     | 200                                | 280 | 250                         | 350 | 320            | 400 Rm | 1050 Rm           | 550 | 630                 | 400               | 550                |
| Recommended                 |                        |     |                        |     |     |   |     |     |     |     | ○                                  | ○   | ○                           | ○   | ○              | ○      | ○                 |     |                     |                   |                    |

# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE CORNER RADIUS WITH NECK

**GMF62** PLAIN SHANK  
**GMF63** FLAT SHANK

- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRc40



Unit : mm

| EDP No.   |           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Promotion Price/Pcs |
|-----------|-----------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|---------------------|
| PLAIN     | FLAT      | R             | D1            | D2             | L1            | L3                 | L2             | D3            |                     |
| GMF62030  | GMF63030  | R0.3          | 3.0           | 6              | 7             | 12                 | 54             | 2.7           | 12,76 €             |
| GMF62901* | GMF63901* | R0.5          | 3.0           | 6              | 7             | 12                 | 54             | 2.7           | 12,76 €             |
| GMF62902  | GMF63902  | R0.3          | 3.0           | 6              | 7             | 17                 | 57             | 2.7           | 12,76 €             |
| GMF62903* | GMF63903* | R0.5          | 3.0           | 6              | 7             | 17                 | 57             | 2.7           | 12,76 €             |
| GMF62040  | GMF63040  | R0.3          | 4.0           | 6              | 8             | 15                 | 57             | 3.7           | 12,76 €             |
| GMF62904* | GMF63904* | R0.5          | 4.0           | 6              | 8             | 15                 | 57             | 3.7           | 12,76 €             |
| GMF62905  | GMF63905  | R0.3          | 4.0           | 6              | 8             | 22                 | 63             | 3.7           | 12,76 €             |
| GMF62906* | GMF63906* | R0.5          | 4.0           | 6              | 8             | 22                 | 63             | 3.7           | 12,76 €             |
| GMF62050  | GMF63050  | R0.3          | 5.0           | 6              | 10            | 17                 | 57             | 4.7           | 12,76 €             |
| GMF62907* | GMF63907* | R0.5          | 5.0           | 6              | 10            | 17                 | 57             | 4.7           | 12,76 €             |
| GMF62908  | GMF63908  | R0.3          | 5.0           | 6              | 10            | 27                 | 67             | 4.7           | 12,76 €             |
| GMF62909* | GMF63909* | R0.5          | 5.0           | 6              | 10            | 27                 | 67             | 4.7           | 12,76 €             |
| GMF62060  | GMF63060  | R0.3          | 6.0           | 6              | 10            | 15                 | 57             | 5.5           | 12,76 €             |
| GMF62910  | GMF63910  | R0.5          | 6.0           | 6              | 10            | 15                 | 57             | 5.5           | 12,76 €             |
| GMF62911* | GMF63911* | R1.0          | 6.0           | 6              | 10            | 15                 | 57             | 5.5           | 12,76 €             |
| GMF62912* | GMF63912* | R0.3          | 6.0           | 6              | 10            | 20                 | 62             | 5.5           | 12,76 €             |
| GMF62913  | GMF63913  | R0.5          | 6.0           | 6              | 10            | 20                 | 62             | 5.5           | 12,76 €             |
| GMF62914* | GMF63914  | R1.0          | 6.0           | 6              | 10            | 20                 | 62             | 5.5           | 12,76 €             |
| GMF62915* | GMF63915  | R0.3          | 6.0           | 6              | 10            | 32                 | 74             | 5.5           | 12,76 €             |
| GMF62916  | GMF63916  | R0.5          | 6.0           | 6              | 10            | 32                 | 74             | 5.5           | 12,76 €             |
| GMF62917* | GMF63917  | R1.0          | 6.0           | 6              | 10            | 32                 | 74             | 5.5           | 12,76 €             |
| GMF62080  | GMF63080  | R0.5          | 8.0           | 8              | 12            | 20                 | 63             | 7.5           | 17,75 €             |
| GMF62918* | GMF63918  | R1.0          | 8.0           | 8              | 12            | 20                 | 63             | 7.5           | 17,75 €             |
| GMF62919  | GMF63919  | R0.5          | 8.0           | 8              | 12            | 30                 | 73             | 7.5           | 19,57 €             |

| Mill Dia. Tolerance (mm) |           | Shank Dia. Tolerance         |
|--------------------------|-----------|------------------------------|
| Up to Ø12                | 0 ~ -0.02 | h5<br>* Shank Dia. ≥ Ø12: h6 |
| Over Ø12                 | 0 ~ -0.03 |                              |

\* Kein Lagerartikel, Lieferung auf Anfrage.

◎ : Excellent ○ : Good

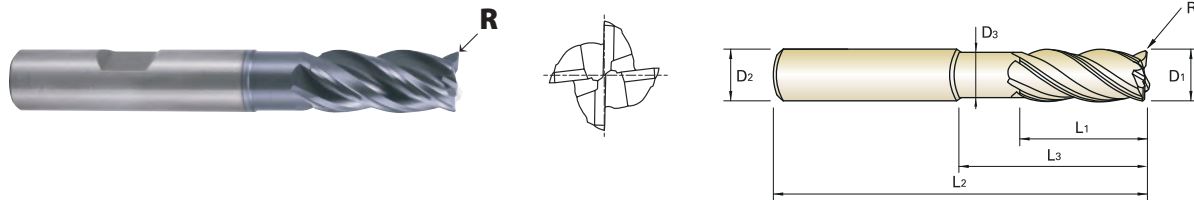
| ISO<br>Material Description | P                      |     |                        |     |     |   |     |                        |     |     | M                                  |     |                 |     | K              |                 |                   |                |                     |                   |                    |
|-----------------------------|------------------------|-----|------------------------|-----|-----|---|-----|------------------------|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-----------------|-------------------|----------------|---------------------|-------------------|--------------------|
|                             | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |                        |     |     | High alloyed steel, and tool steel |     | Stainless steel |     | Grey cast iron |                 | Nodular cast iron |                | Malleable cast iron |                   |                    |
| VDI 3323                    | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8                      | 9   | 10  | 11                                 | 12  | 13              | 14  | 15             | 16              | 17                | 18             | 19                  | 20                |                    |
| HRc                         |                        | 13  | 25                     | 28  | 32  | 10  | 29  | 32                     | 38  | 15  | 35                                 | 15  | 23              | 10  | 10             | 26              | 3                 | 25             |                     | 21                |                    |
| HB                          | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300                    | 350 | 200 | 325                                | 200 | 240             | 180 | 180            | 260             | 160               | 250            | 130                 | 230               |                    |
| Recommended                 | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎                      | ◎   | ◎   | ◎                                  | ◎   | ◎               | ◎   | ◎              | ◎               | ◎                 | ◎              | ◎                   | ◎                 |                    |
| ISO<br>Material Description | N                      |     |                        |     |     | S   |     |                        |     |     | H                                  |     |                 |     |                |                 |                   |                |                     |                   |                    |
|                             | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     | Non Metallic Materials |     |     | Heat Resistant Super Alloys        |     |                 |     |                | Titanium Alloys |                   | Hardened steel |                     | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323                    | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28                     | 29  | 30  | 31                                 | 32  | 33              | 34  | 35             | 36              | 37                | 38             | 39                  | 40                | 41                 |
| HRc                         |                        |     |                        |     |     |   |     |                        |     |     | 15                                 | 30  | 25              | 38  | 34             |                 |                   | 55             | 60                  | 42                | 55                 |
| HB                          | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100                    |     |     | 200                                | 280 | 250             | 350 | 320            | 400 Rm          | 1050 Rm           | 550            | 630                 | 400               | 550                |
| Recommended                 |                        |     |                        |     |     |   |     |                        |     |     | ○                                  | ○   | ○               | ○   | ○              | ○               | ○                 |                |                     |                   |                    |



# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE CORNER RADIUS WITH NECK

**GMF62** PLAIN SHANK  
**GMF63** FLAT SHANK

- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRC40



Unit : mm

| EDP No.   |           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Promotion Price/Pcs |
|-----------|-----------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|---------------------|
| PLAIN     | FLAT      | R             | D1            | D2             | L1            | L3                 | L2             | D3            |                     |
| GMF62920* | GMF63920* | R1.0          | 8.0           | 8              | 12            | 30                 | 73             | 7.5           | 19,57 €             |
| GMF62921  | GMF63921  | R0.5          | 8.0           | 8              | 12            | 46                 | 90             | 7.5           | 21,09 €             |
| GMF62922* | GMF63922* | R1.0          | 8.0           | 8              | 12            | 46                 | 90             | 7.5           | 21,09 €             |
| GMF62100  | GMF63100  | R0.5          | 10.0          | 10             | 14            | 25                 | 72             | 9.2           | 25,59 €             |
| GMF62923* | GMF63923* | R1.0          | 10.0          | 10             | 14            | 25                 | 72             | 9.2           | 25,59 €             |
| GMF62924  | GMF63924  | R0.5          | 10.0          | 10             | 14            | 35                 | 82             | 9.2           | 29,18 €             |
| GMF62925* | GMF63925* | R1.0          | 10.0          | 10             | 14            | 35                 | 82             | 9.2           | 29,18 €             |
| GMF62926  | GMF63926  | R0.5          | 10.0          | 10             | 14            | 55                 | 102            | 9.2           | 30,69 €             |
| GMF62927* | GMF63927* | R1.0          | 10.0          | 10             | 14            | 55                 | 102            | 9.2           | 30,69 €             |
| GMF62120  | GMF63120  | R0.5          | 12.0          | 12             | 16            | 30                 | 83             | 11.0          | 33,66 €             |
| GMF62928* | GMF63928* | R1.0          | 12.0          | 12             | 16            | 30                 | 83             | 11.0          | 33,66 €             |
| GMF62929* | GMF63929* | R2.0          | 12.0          | 12             | 16            | 30                 | 83             | 11.0          | 33,66 €             |
| GMF62930  | GMF63930  | R0.5          | 12.0          | 12             | 16            | 40                 | 93             | 11.0          | 35,31 €             |
| GMF62931* | GMF63931  | R1.0          | 12.0          | 12             | 16            | 40                 | 93             | 11.0          | 35,31 €             |
| GMF62932* | GMF63932* | R2.0          | 12.0          | 12             | 16            | 40                 | 93             | 11.0          | 35,31 €             |
| GMF62933  | GMF63933  | R0.5          | 12.0          | 12             | 16            | 64                 | 117            | 11.0          | 45,13 €             |
| GMF62934* | GMF63934* | R1.0          | 12.0          | 12             | 16            | 64                 | 117            | 11.0          | 45,13 €             |
| GMF62935* | GMF63935* | R2.0          | 12.0          | 12             | 16            | 64                 | 117            | 11.0          | 45,13 €             |
| GMF62160  | GMF63160  | R1.0          | 16.0          | 16             | 22            | 38                 | 92             | 15.0          | 59,13 €             |
| GMF62936* | GMF63936* | R2.0          | 16.0          | 16             | 22            | 38                 | 92             | 15.0          | 59,13 €             |
| GMF62937* | GMF63937  | R3.0          | 16.0          | 16             | 22            | 38                 | 92             | 15.0          | 59,13 €             |
| GMF62938  | GMF63938  | R1.0          | 16.0          | 16             | 22            | 55                 | 109            | 15.0          | 75,03 €             |
| GMF62939* | GMF63939* | R2.0          | 16.0          | 16             | 22            | 55                 | 109            | 15.0          | 75,03 €             |
| GMF62940* | GMF63940* | R3.0          | 16.0          | 16             | 22            | 55                 | 109            | 15.0          | 75,03 €             |

| Mill Dia. Tolerance (mm) |            | Shank Dia. Tolerance         |
|--------------------------|------------|------------------------------|
| Up to Ø12                | 0 ~ - 0.02 | h5<br>* Shank Dia. ≥ Ø12: h6 |
| Over Ø12                 | 0 ~ - 0.03 |                              |

\* Kein Lagerartikel, Lieferung auf Anfrage.

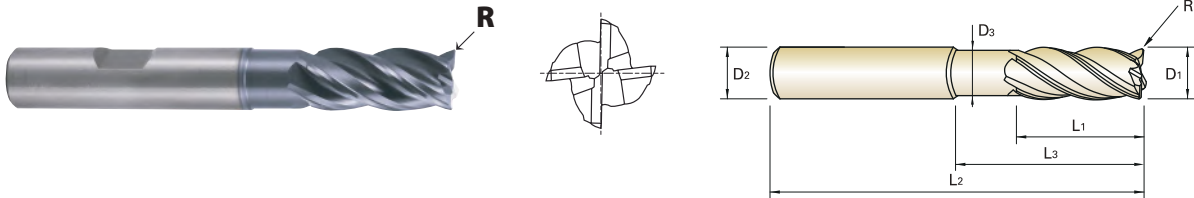
◎ : Excellent ○ : Good

| ISO Material Description | P                      |     |                        |     |     |   |     |     |     |                        |                                    | M               |     |     |                 | K      |                   |                |                     |                    |     |
|--------------------------|------------------------|-----|------------------------|-----|-----|---|-----|-----|-----|------------------------|------------------------------------|-----------------|-----|-----|-----------------|--------|-------------------|----------------|---------------------|--------------------|-----|
|                          | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |     |     |                        | High alloyed steel, and tool steel | Stainless steel |     |     | Grey cast iron  |        | Nodular cast iron |                | Malleable cast iron |                    |     |
| VDI 3323                 | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8   | 9   | 10                     | 11                                 | 12              | 13  | 14  | 15              | 16     | 17                | 18             | 19                  | 20                 |     |
| HRC                      | 13                     | 25  | 28                     | 32  | 10  | 29  | 32  | 38  | 15  | 35                     | 15                                 | 23              | 10  | 10  | 26              | 3      | 25                |                | 21                  |                    |     |
| HB                       | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300 | 350 | 200                    | 325                                | 200             | 240 | 180 | 180             | 260    | 160               | 250            | 130                 | 230                |     |
| Recommended              | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎   | ◎   | ◎                      | ◎                                  | ◎               | ◎   | ◎   | ◎               | ◎      | ◎                 | ◎              | ◎                   | ◎                  |     |
| ISO Material Description | N                      |     |                        |     |     |   |     |     |     | S                      |                                    |                 |     |     |                 |        | H                 |                |                     |                    |     |
|                          | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     |     |     | Non Metallic Materials | Heat Resistant Super Alloys        |                 |     |     | Titanium Alloys |        |                   | Hardened steel | Chilled Cast Iron   | Hardened Cast Iron |     |
| VDI 3323                 | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28  | 29  | 30                     | 31                                 | 32              | 33  | 34  | 35              | 36     | 37                | 38             | 39                  | 40                 | 41  |
| HRC                      |                        |     |                        |     |     |   |     |     |     |                        | 15                                 | 30              | 25  | 38  | 34              |        |                   | 55             | 60                  | 42                 | 55  |
| HB                       | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100 |     |                        | 200                                | 280             | 250 | 350 | 320             | 400 Rm | 1050 Rm           | 550            | 630                 | 400                | 550 |
| Recommended              |                        |     |                        |     |     |   |     |     |     |                        | ○                                  | ○               | ○   | ○   | ○               | ○      | ○                 |                |                     |                    |     |

# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE CORNER RADIUS WITH NECK

**GMF62** PLAIN SHANK  
**GMF63** FLAT SHANK

- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRc40



Unit : mm

| EDP No.          |                  | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Promotion Price/Pcs |
|------------------|------------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|---------------------|
| PLAIN            | FLAT             | R             | D1            | D2             | L1            | L3                 | L2             | D3            |                     |
| <b>GMF62941</b>  | <b>GMF63941</b>  | R1.0          | <b>16.0</b>   | 16             | 22            | 87                 | 141            | 15.0          | <b>80,98 €</b>      |
| <b>GMF62942*</b> | <b>GMF63942*</b> | R2.0          | <b>16.0</b>   | 16             | 22            | 87                 | 141            | 15.0          | <b>80,98 €</b>      |
| <b>GMF62943*</b> | <b>GMF63943*</b> | R3.0          | <b>16.0</b>   | 16             | 22            | 87                 | 141            | 15.0          | <b>80,98 €</b>      |
| <b>GMF62200</b>  | <b>GMF63200</b>  | R1.0          | <b>20.0</b>   | 20             | 26            | 50                 | 104            | 19.0          | <b>106,15 €</b>     |
| <b>GMF62944*</b> | <b>GMF63944*</b> | R2.0          | <b>20.0</b>   | 20             | 26            | 50                 | 104            | 19.0          | <b>106,15 €</b>     |
| <b>GMF62945</b>  | <b>GMF63945</b>  | R3.0          | <b>20.0</b>   | 20             | 26            | 50                 | 104            | 19.0          | <b>106,15 €</b>     |
| <b>GMF62946</b>  | <b>GMF63946</b>  | R1.0          | <b>20.0</b>   | 20             | 26            | 70                 | 124            | 19.0          | <b>135,21 €</b>     |
| <b>GMF62947*</b> | <b>GMF63947*</b> | R2.0          | <b>20.0</b>   | 20             | 26            | 70                 | 124            | 19.0          | <b>135,21 €</b>     |
| <b>GMF62948*</b> | <b>GMF63948*</b> | R3.0          | <b>20.0</b>   | 20             | 26            | 70                 | 124            | 19.0          | <b>135,21 €</b>     |
| <b>GMF62949</b>  | <b>GMF63949</b>  | R1.0          | <b>20.0</b>   | 20             | 26            | 110                | 164            | 19.0          | <b>156,94 €</b>     |
| <b>GMF62950*</b> | <b>GMF63950*</b> | R2.0          | <b>20.0</b>   | 20             | 26            | 110                | 164            | 19.0          | <b>156,94 €</b>     |
| <b>GMF62951</b>  | <b>GMF63951</b>  | R3.0          | <b>20.0</b>   | 20             | 26            | 110                | 164            | 19.0          | <b>156,94 €</b>     |

\* Kein Lagerartikel, Lieferung auf Anfrage.

| Mill Dia. Tolerance (mm) |            | Shank Dia. Tolerance   |
|--------------------------|------------|------------------------|
| Up to Ø12                | 0 ~ - 0.02 | h5                     |
| Over Ø12                 | 0 ~ - 0.03 | * Shank Dia. ≥ Ø12: h6 |

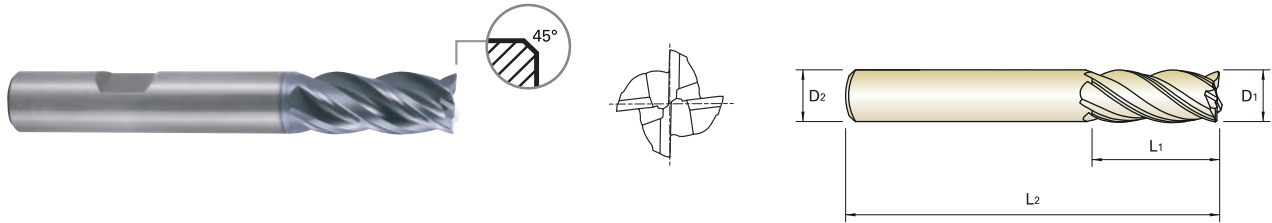
◎ : Excellent ○ : Good

| ISO Material Description | P                      |     |                        |     |     |   |     |                        |     |     | M                                  |     |                 |     | K              |                 |                   |                |                     |                    |     |
|--------------------------|------------------------|-----|------------------------|-----|-----|---|-----|------------------------|-----|-----|------------------------------------|-----|-----------------|-----|----------------|-----------------|-------------------|----------------|---------------------|--------------------|-----|
|                          | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |                        |     |     | High alloyed steel, and tool steel |     | Stainless steel |     | Grey cast iron |                 | Nodular cast iron |                | Malleable cast iron |                    |     |
| VDI 3323                 | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8                      | 9   | 10  | 11                                 | 12  | 13              | 14  | 15             | 16              | 17                | 18             | 19                  | 20                 |     |
| HRc                      |                        | 13  | 25                     | 28  | 32  | 10  | 29  | 32                     | 38  | 15  | 35                                 | 15  | 23              | 10  | 10             | 26              | 3                 | 25             |                     | 21                 |     |
| HB                       | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300                    | 350 | 200 | 325                                | 200 | 240             | 180 | 180            | 260             | 160               | 250            | 130                 | 230                |     |
| Recommended              | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎                      | ◎   | ◎   | ◎                                  | ◎   | ◎               | ◎   | ◎              | ◎               | ◎                 | ◎              | ◎                   | ◎                  |     |
| ISO Material Description | N                      |     |                        |     |     | S   |     |                        |     |     | H                                  |     |                 |     |                |                 |                   |                |                     |                    |     |
|                          | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     | Non Metallic Materials |     |     | Heat Resistant Super Alloys        |     |                 |     |                | Titanium Alloys |                   | Hardened steel | Chilled Cast Iron   | Hardened Cast Iron |     |
| VDI 3323                 | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28                     | 29  | 30  | 31                                 | 32  | 33              | 34  | 35             | 36              | 37                | 38             | 39                  | 40                 | 41  |
| HRc                      |                        |     |                        |     |     |   |     |                        |     |     | 15                                 | 30  | 25              | 38  | 34             |                 |                   | 55             | 60                  | 42                 | 55  |
| HB                       | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100                    |     |     | 200                                | 280 | 250             | 350 | 320            | 400 Rm          | 1050 Rm           | 550            | 630                 | 400                | 550 |
| Recommended              |                        |     |                        |     |     |   |     |                        |     |     | ○                                  | ○   | ○               | ○   | ○              | ○               | ○                 |                |                     |                    |     |

# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE SHORT LENGTH

**GMF52** PLAIN SHANK  
**GMF53** FLAT SHANK

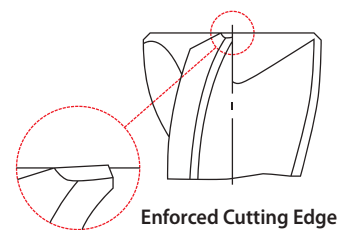
- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRC40



Unit : mm

| EDP No.         |                 | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Chamfer | Promotion Price/Pcs |
|-----------------|-----------------|---------------|----------------|---------------|----------------|---------|---------------------|
| PLAIN           | FLAT            | D1            | D2             | L1            | L2             |         |                     |
| <b>GMF52030</b> | <b>GMF53030</b> | <b>3.0</b>    | 6              | 7             | 54             | 0.10    | <b>10,16 €</b>      |
| <b>GMF52040</b> | <b>GMF53040</b> | <b>4.0</b>    | 6              | 8             | 54             | 0.15    | <b>10,16 €</b>      |
| <b>GMF52050</b> | <b>GMF53050</b> | <b>5.0</b>    | 6              | 10            | 54             | 0.15    | <b>10,16 €</b>      |
| <b>GMF52060</b> | <b>GMF53060</b> | <b>6.0</b>    | 6              | 10            | 54             | 0.20    | <b>10,16 €</b>      |
| <b>GMF52080</b> | <b>GMF53080</b> | <b>8.0</b>    | 8              | 12            | 58             | 0.20    | <b>14,33 €</b>      |
| <b>GMF52100</b> | <b>GMF53100</b> | <b>10.0</b>   | 10             | 14            | 66             | 0.30    | <b>19,51 €</b>      |
| <b>GMF52120</b> | <b>GMF53120</b> | <b>12.0</b>   | 12             | 16            | 73             | 0.35    | <b>27,56 €</b>      |
| <b>GMF52140</b> | <b>GMF53140</b> | <b>14.0</b>   | 14             | 18            | 75             | 0.40    | <b>38,54 €</b>      |
| <b>GMF52160</b> | <b>GMF53160</b> | <b>16.0</b>   | 16             | 22            | 82             | 0.40    | <b>50,52 €</b>      |
| <b>GMF52180</b> | <b>GMF53180</b> | <b>18.0</b>   | 18             | 24            | 84             | 0.50    | <b>73,02 €</b>      |
| <b>GMF52200</b> | <b>GMF53200</b> | <b>20.0</b>   | 20             | 26            | 92             | 0.50    | <b>74,53 €</b>      |

| Mill Dia. Tolerance (mm) |            | Shank Dia. Tolerance   |
|--------------------------|------------|------------------------|
| Up to Ø12                | 0 ~ - 0.02 | h5                     |
| Over Ø12                 | 0 ~ - 0.03 | * Shank Dia. ≥ Ø12: h6 |



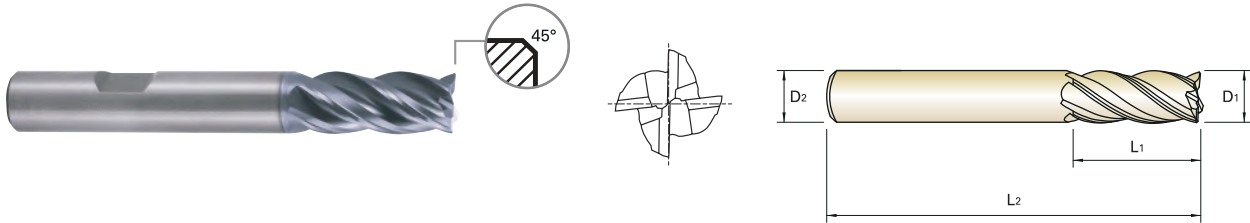
◎ : Excellent ○ : Good

| ISO<br>Material Description | P                      |     |                        |     |     |   |     |     |     |                        | M                                  |                 |     |     | K               |                   |         |                     |                   |                    |     |
|-----------------------------|------------------------|-----|------------------------|-----|-----|---|-----|-----|-----|------------------------|------------------------------------|-----------------|-----|-----|-----------------|-------------------|---------|---------------------|-------------------|--------------------|-----|
|                             | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |     |     |                        | High alloyed steel, and tool steel | Stainless steel |     |     | Grey cast iron  | Nodular cast iron |         | Malleable cast iron |                   |                    |     |
| VDI 3323                    | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8   | 9   | 10                     | 11                                 | 12              | 13  | 14  | 15              | 16                | 17      | 18                  | 19                | 20                 |     |
| HRc                         |                        | 13  | 25                     | 28  | 32  | 10  | 29  | 32  | 38  | 15                     | 35                                 | 15              | 23  | 10  | 10              | 26                | 3       | 25                  |                   | 21                 |     |
| HB                          | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300 | 350 | 200                    | 325                                | 200             | 240 | 180 | 180             | 260               | 160     | 250                 | 130               | 230                |     |
| Recommended                 | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎   | ◎   | ◎                      | ◎                                  | ◎               | ◎   | ◎   | ◎               | ◎                 | ◎       | ◎                   | ◎                 | ◎                  |     |
| ISO<br>Material Description | N                      |     |                        |     |     |   |     |     |     | S                      |                                    |                 |     |     |                 |                   | H       |                     |                   |                    |     |
|                             | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     |     |     | Non Metallic Materials | Heat Resistant Super Alloys        |                 |     |     | Titanium Alloys |                   |         | Hardened steel      | Chilled Cast Iron | Hardened Cast Iron |     |
| VDI 3323                    | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28  | 29  | 30                     | 31                                 | 32              | 33  | 34  | 35              | 36                | 37      | 38                  | 39                | 40                 | 41  |
| HRc                         |                        |     |                        |     |     |   |     |     |     |                        | 15                                 | 30              | 25  | 38  | 34              |                   |         | 55                  | 60                | 42                 | 55  |
| HB                          | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100 |     |                        | 200                                | 280             | 250 | 350 | 320             | 400 Rm            | 1050 Rm | 550                 | 630               | 400                | 550 |
| Recommended                 |                        |     |                        |     |     |   |     |     |     |                        | ○                                  | ○               | ○   | ○   | ○               | ○                 | ○       |                     |                   |                    |     |

# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE LONG LENGTH

**GMF56** PLAIN SHANK  
**GMF57** FLAT SHANK

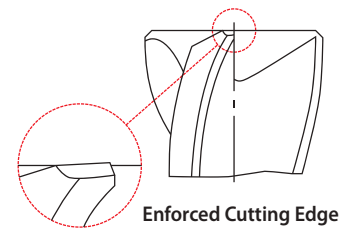
- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRc40



Unit : mm

| EDP No.         |                 | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Chamfer | Promotion Price/Pcs |
|-----------------|-----------------|---------------|----------------|---------------|----------------|---------|---------------------|
| PLAIN           | FLAT            | D1            | D2             | L1            | L2             |         |                     |
| <b>GMF56030</b> | <b>GMF57030</b> | <b>3.0</b>    | 6              | 8             | 57             | 0.10    | <b>10,58 €</b>      |
| <b>GMF56040</b> | <b>GMF57040</b> | <b>4.0</b>    | 6              | 11            | 57             | 0.15    | <b>10,58 €</b>      |
| <b>GMF56050</b> | <b>GMF57050</b> | <b>5.0</b>    | 6              | 13            | 57             | 0.15    | <b>10,58 €</b>      |
| <b>GMF56060</b> | <b>GMF57060</b> | <b>6.0</b>    | 6              | 13            | 57             | 0.20    | <b>10,58 €</b>      |
| <b>GMF56080</b> | <b>GMF57080</b> | <b>8.0</b>    | 8              | 19            | 63             | 0.20    | <b>14,97 €</b>      |
| <b>GMF56100</b> | <b>GMF57100</b> | <b>10.0</b>   | 10             | 22            | 72             | 0.30    | <b>21,93 €</b>      |
| <b>GMF56120</b> | <b>GMF57120</b> | <b>12.0</b>   | 12             | 26            | 83             | 0.35    | <b>28,84 €</b>      |
| <b>GMF56140</b> | <b>GMF57140</b> | <b>14.0</b>   | 14             | 26            | 83             | 0.40    | <b>41,96 €</b>      |
| <b>GMF56160</b> | <b>GMF57160</b> | <b>16.0</b>   | 16             | 32            | 92             | 0.40    | <b>51,99 €</b>      |
| <b>GMF56180</b> | <b>GMF57180</b> | <b>18.0</b>   | 18             | 32            | 92             | 0.50    | <b>73,98 €</b>      |
| <b>GMF56200</b> | <b>GMF57200</b> | <b>20.0</b>   | 20             | 38            | 104            | 0.50    | <b>92,15 €</b>      |
| <b>GMF56250</b> | <b>GMF57250</b> | <b>25.0</b>   | 25             | 38            | 104            | 0.50    | <b>129,68 €</b>     |

| Mill Dia. Tolerance (mm) |            | Shank Dia. Tolerance         |
|--------------------------|------------|------------------------------|
| Up to Ø12                | 0 ~ - 0.02 | h5<br>* Shank Dia. ≥ Ø12: h6 |
| Over Ø12                 | 0 ~ - 0.03 |                              |



Enforced Cutting Edge

◎ : Excellent ○ : Good

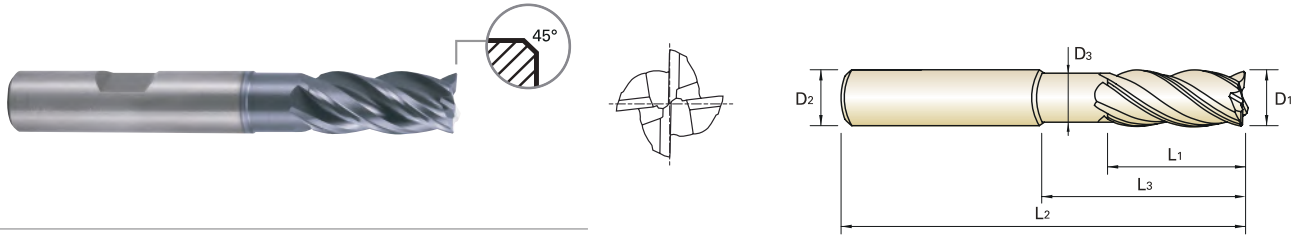
| ISO<br>Material Description | P                      |     |                        |     |     |   |     |     |                        |     | M                                  |     |                 |     | K              |                 |                   |                |                     |                    |     |
|-----------------------------|------------------------|-----|------------------------|-----|-----|---|-----|-----|------------------------|-----|------------------------------------|-----|-----------------|-----|----------------|-----------------|-------------------|----------------|---------------------|--------------------|-----|
|                             | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |     |                        |     | High alloyed steel, and tool steel |     | Stainless steel |     | Grey cast iron |                 | Nodular cast iron |                | Malleable cast iron |                    |     |
| VDI 3323                    | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8   | 9                      | 10  | 11                                 | 12  | 13              | 14  | 15             | 16              | 17                | 18             | 19                  | 20                 |     |
| HRc                         | 13                     | 25  | 28                     | 32  | 10  | 29  | 32  | 38  | 15                     | 35  | 15                                 | 23  | 10              | 10  | 26             | 3               | 25                |                | 21                  |                    |     |
| HB                          | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300 | 350                    | 200 | 325                                | 200 | 240             | 180 | 180            | 260             | 160               | 250            | 130                 | 230                |     |
| Recommended                 | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎   | ◎                      | ◎   | ◎                                  | ◎   | ◎               | ◎   | ◎              | ◎               | ◎                 | ◎              | ◎                   | ◎                  |     |
| ISO<br>Material Description | N                      |     |                        |     |     | S   |     |     |                        |     | H                                  |     |                 |     |                |                 |                   |                |                     |                    |     |
|                             | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     |     | Non Metallic Materials |     | Heat Resistant Super Alloys        |     |                 |     |                | Titanium Alloys |                   | Hardened steel | Chilled Cast Iron   | Hardened Cast Iron |     |
| VDI 3323                    | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28  | 29                     | 30  | 31                                 | 32  | 33              | 34  | 35             | 36              | 37                | 38             | 39                  | 40                 | 41  |
| HRc                         |                        |     |                        |     |     |   |     |     |                        |     | 15                                 | 30  | 25              | 38  | 34             |                 |                   | 55             | 60                  | 42                 | 55  |
| HB                          | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100 |                        |     | 200                                | 280 | 250             | 350 | 320            | 400 Rm          | 1050 Rm           | 550            | 630                 | 400                | 550 |
| Recommended                 |                        |     |                        |     |     |   |     |     |                        |     | ○                                  | ○   | ○               | ○   | ○              | ○               | ○                 |                |                     |                    |     |



# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE with EXTENDED NECK

**GMF60** PLAIN SHANK  
**GMF61** FLAT SHANK

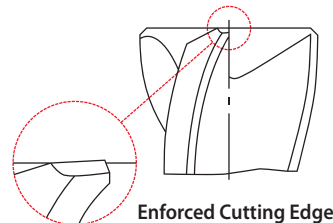
- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRC40



Unit : mm

| EDP No.      |          | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Chamfer | Promotion Price/Pcs |
|--------------|----------|---------------|----------------|---------------|--------------------|----------------|---------------|---------|---------------------|
| PLAIN        | FLAT     | D1            | D2             | L1            | L3                 | L2             | D3            |         |                     |
| GMF60030     | GMF61030 | 3.0           | 6              | 7             | 12                 | 54             | 2.7           | 0.10    | 10,58 €             |
| GMF60901     | GMF61901 | 3.0           | 6              | 7             | 17                 | 57             | 2.7           | 0.10    | 10,58 €             |
| GMF60902     | GMF61902 | 3.0           | 6              | 8             | 14                 | 57             | 2.7           | 0.10    | 10,58 €             |
| GMF60040     | GMF61040 | 4.0           | 6              | 8             | 15                 | 57             | 3.7           | 0.15    | 10,58 €             |
| GMF60903     | GMF61903 | 4.0           | 6              | 8             | 22                 | 63             | 3.7           | 0.15    | 10,58 €             |
| GMF60904     | GMF61904 | 4.0           | 6              | 11            | 16                 | 57             | 3.7           | 0.15    | 10,58 €             |
| GMF60050     | GMF61050 | 5.0           | 6              | 10            | 17                 | 57             | 4.7           | 0.15    | 10,58 €             |
| GMF60905     | GMF61905 | 5.0           | 6              | 10            | 27                 | 67             | 4.7           | 0.15    | 10,58 €             |
| GMF60906     | GMF61906 | 5.0           | 6              | 13            | 18                 | 57             | 4.7           | 0.15    | 10,58 €             |
| GMF60060     | GMF61060 | 6.0           | 6              | 10            | 15                 | 57             | 5.5           | 0.20    | 10,58 €             |
| GMF60907     | GMF61907 | 6.0           | 6              | 10            | 20                 | 62             | 5.5           | 0.20    | 10,58 €             |
| GMF60908     | GMF61908 | 6.0           | 6              | 10            | 32                 | 74             | 5.5           | 0.20    | 10,58 €             |
| TOP GMF60909 | GMF61909 | 6.0           | 6              | 13            | 21                 | 57             | 5.5           | 0.20    | 10,58 €             |
| GMF60080     | GMF61080 | 8.0           | 8              | 12            | 20                 | 63             | 7.5           | 0.20    | 14,97 €             |
| GMF60910     | GMF61910 | 8.0           | 8              | 12            | 30                 | 73             | 7.5           | 0.20    | 14,97 €             |
| GMF60911     | GMF61911 | 8.0           | 8              | 12            | 46                 | 90             | 7.5           | 0.20    | 16,26 €             |
| TOP GMF60912 | GMF61912 | 8.0           | 8              | 19            | 27                 | 63             | 7.5           | 0.20    | 14,97 €             |
| GMF60100     | GMF61100 | 10.0          | 10             | 14            | 25                 | 72             | 9.2           | 0.30    | 21,93 €             |
| GMF60913     | GMF61913 | 10.0          | 10             | 14            | 35                 | 82             | 9.2           | 0.30    | 21,93 €             |
| GMF60914     | GMF61914 | 10.0          | 10             | 14            | 55                 | 102            | 9.2           | 0.30    | 23,01 €             |

| Mill Dia. Tolerance (mm) |           | Shank Dia. Tolerance         |
|--------------------------|-----------|------------------------------|
| Up to Ø12                | 0 ~ -0.02 | h5<br>* Shank Dia. ≥ Ø12: h6 |
| Over Ø12                 | 0 ~ -0.03 |                              |



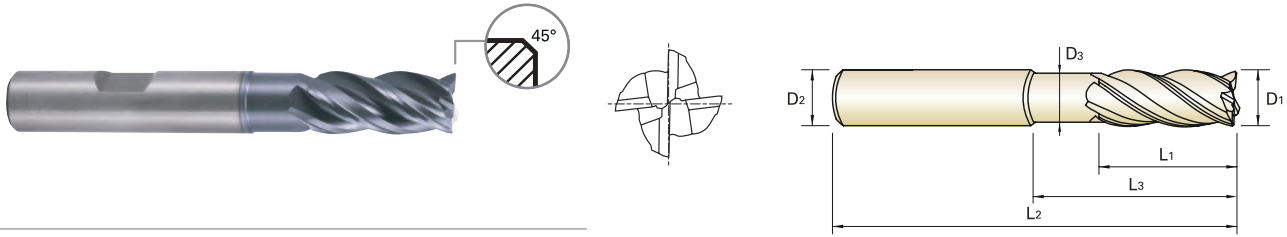
◎ : Excellent ○ : Good

| ISO Material Description | P                      |     |                        |     |     |   |     |     |     |                                    |                             | M   |     |                |                 | K                 |         |                     |                   |                    |     |
|--------------------------|------------------------|-----|------------------------|-----|-----|---|-----|-----|-----|------------------------------------|-----------------------------|-----|-----|----------------|-----------------|-------------------|---------|---------------------|-------------------|--------------------|-----|
|                          | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |     |     | High alloyed steel, and tool steel | Stainless steel             |     |     | Grey cast iron |                 | Nodular cast iron |         | Malleable cast iron |                   |                    |     |
| VDI 3323                 | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8   | 9   | 10                                 | 11                          | 12  | 13  | 14             | 15              | 16                | 17      | 18                  | 19                | 20                 |     |
| HRc                      | 13                     | 25  | 28                     | 32  | 32  | 10  | 29  | 32  | 38  | 15                                 | 35                          | 15  | 23  | 10             | 10              | 26                | 3       | 25                  |                   | 21                 |     |
| HB                       | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300 | 350 | 200                                | 325                         | 200 | 240 | 180            | 180             | 260               | 160     | 250                 | 130               | 230                |     |
| Recommended              | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎   | ◎   | ◎                                  | ◎                           | ◎   | ◎   | ◎              | ◎               | ◎                 | ◎       | ◎                   | ◎                 | ◎                  |     |
| ISO Material Description | N                      |     |                        |     |     |   |     |     |     | S                                  |                             |     |     |                |                 |                   | H       |                     |                   |                    |     |
|                          | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     |     |     | Non Metallic Materials             | Heat Resistant Super Alloys |     |     |                | Titanium Alloys |                   |         | Hardened steel      | Chilled Cast Iron | Hardened Cast Iron |     |
| VDI 3323                 | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28  | 29  | 30                                 | 31                          | 32  | 33  | 34             | 35              | 36                | 37      | 38                  | 39                | 40                 | 41  |
| HRc                      |                        |     |                        |     |     |   |     |     |     |                                    | 15                          | 30  | 25  | 38             | 34              |                   |         | 55                  | 60                | 42                 | 55  |
| HB                       | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100 |     |                                    | 200                         | 280 | 250 | 350            | 320             | 400 Rm            | 1050 Rm | 550                 | 630               | 400                | 550 |
| Recommended              |                        |     |                        |     |     |   |     |     |     |                                    | ○                           | ○   | ○   | ○              | ○               | ○                 | ○       |                     |                   |                    |     |

# HIGH PERFORMANCE SOLID CARBIDE END MILLS 4 FLUTE with EXTENDED NECK

**GMF60** PLAIN SHANK  
**GMF61** FLAT SHANK

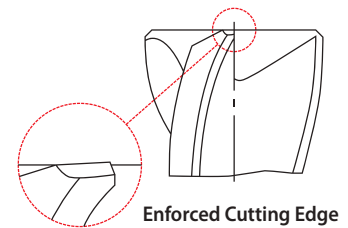
- Special flute geometry and multiple helix eliminate vibrations
- Excellent performance for Stainless Steels, Mild Steels, Cast Iron, Low/Medium hardness materials under HRc40



Unit : mm

| EDP No.             |          | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Chamfer | Promotion Price/Pcs |
|---------------------|----------|---------------|----------------|---------------|--------------------|----------------|---------------|---------|---------------------|
| PLAIN               | FLAT     | D1            | D2             | L1            | L3                 | L2             | D3            |         |                     |
| <b>TOP</b> GMF60915 | GMF61915 | 10.0          | 10             | 22            | 32                 | 72             | 9.2           | 0.30    | 21,93 €             |
| GMF60120            | GMF61120 | 12.0          | 12             | 16            | 30                 | 83             | 11.0          | 0.35    | 28,84 €             |
| GMF60916            | GMF61916 | 12.0          | 12             | 16            | 40                 | 93             | 11.0          | 0.35    | 28,84 €             |
| GMF60917            | GMF61917 | 12.0          | 12             | 16            | 64                 | 117            | 11.0          | 0.35    | 37,24 €             |
| <b>TOP</b> GMF60918 | GMF61918 | 12.0          | 12             | 26            | 38                 | 83             | 11.0          | 0.35    | 28,84 €             |
| GMF60160            | GMF61160 | 16.0          | 16             | 22            | 38                 | 92             | 15.0          | 0.40    | 60,80 €             |
| GMF60919            | GMF61919 | 16.0          | 16             | 22            | 55                 | 109            | 15.0          | 0.40    | 60,80 €             |
| GMF60920            | GMF61920 | 16.0          | 16             | 22            | 87                 | 141            | 15.0          | 0.40    | 65,25 €             |
| <b>TOP</b> GMF60921 | GMF61921 | 16.0          | 16             | 32            | 44                 | 92             | 15.0          | 0.40    | 51,99 €             |
| GMF60200            | GMF61200 | 20.0          | 20             | 26            | 50                 | 104            | 19.0          | 0.50    | 80,00 €             |
| GMF60922            | GMF61922 | 20.0          | 20             | 26            | 70                 | 124            | 19.0          | 0.50    | 103,29 €            |
| GMF60923            | GMF61923 | 20.0          | 20             | 26            | 110                | 164            | 19.0          | 0.50    | 121,08 €            |
| <b>TOP</b> GMF60924 | GMF61924 | 20.0          | 20             | 38            | 54                 | 104            | 19.0          | 0.50    | 83,71 €             |

| Mill Dia. Tolerance (mm) |            | Shank Dia. Tolerance         |
|--------------------------|------------|------------------------------|
| Up to Ø12                | 0 ~ - 0.02 | h5<br>* Shank Dia. ≥ Ø12: h6 |
| Over Ø12                 | 0 ~ - 0.03 |                              |



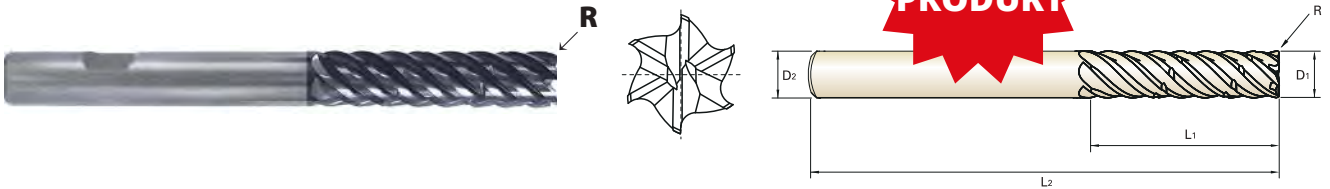
◎ : Excellent ○ : Good

| ISO Material Description | P                      |     |                        |     |   |                 |     |                        |     |                             | M                                  |     |                 |                 | K              |                |                   |                   |                     |                    |     |
|--------------------------|------------------------|-----|------------------------|-----|---|-----------------|-----|------------------------|-----|-----------------------------|------------------------------------|-----|-----------------|-----------------|----------------|----------------|-------------------|-------------------|---------------------|--------------------|-----|
|                          | Non-alloy steel        |     |                        |     |   | Low alloy steel |     |                        |     |                             | High alloyed steel, and tool steel |     | Stainless steel |                 | Grey cast iron |                | Nodular cast iron |                   | Malleable cast iron |                    |     |
| VDI 3323                 | 1                      | 2   | 3                      | 4   | 5   | 6               | 7   | 8                      | 9   | 10                          | 11                                 | 12  | 13              | 14              | 15             | 16             | 17                | 18                | 19                  | 20                 |     |
| HRc                      | 13                     | 25  | 28                     | 32  | 10  | 29              | 32  | 38                     | 15  | 35                          | 15                                 | 23  | 10              | 10              | 26             | 3              | 25                |                   |                     |                    |     |
| HB                       | 125                    | 190 | 250                    | 270 | 300                                       | 180             | 275 | 300                    | 350 | 200                         | 325                                | 200 | 240             | 180             | 180            | 260            | 160               | 250               | 130                 | 230                |     |
| Recommended              | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎               | ◎   | ◎                      | ◎   | ◎                           | ◎                                  | ◎   | ◎               | ◎               | ◎              | ◎              | ◎                 | ◎                 | ◎                   | ◎                  |     |
| ISO Material Description | N                      |     |                        |     | S   |                 |     |                        |     | H                           |                                    |     |                 |                 |                |                |                   |                   |                     |                    |     |
|                          | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     | Copper and Copper Alloys (Bronze / Brass) |                 |     | Non Metallic Materials |     | Heat Resistant Super Alloys |                                    |     |                 | Titanium Alloys |                | Hardened steel |                   | Chilled Cast Iron |                     | Hardened Cast Iron |     |
| VDI 3323                 | 21                     | 22  | 23                     | 24  | 25  | 26              | 27  | 28                     | 29  | 30                          | 31                                 | 32  | 33              | 34              | 35             | 36             | 37                | 38                | 39                  | 40                 | 41  |
| HRc                      |                        |     |                        |     |   |                 |     |                        |     |                             | 15                                 | 30  | 25              | 38              | 34             |                |                   | 55                | 60                  | 42                 | 55  |
| HB                       | 60                     | 100 | 75                     | 90  | 130                                       | 110             | 90  | 100                    |     |                             | 200                                | 280 | 250             | 350             | 320            | 400 Rm         | 1050 Rm           | 550               | 630                 | 400                | 550 |
| Recommended              |                        |     |                        |     |   |                 |     |                        |     |                             | ○                                  | ○   | ○               | ○               | ○              | ○              | ○                 |                   |                     |                    |     |

**HIGH PERFORMANCE SOLID CARBIDE END MILLS  
6 FLUTE CORNER RADIUS EXTRA LONG LENGTH CHIP SPLITTER**

**NEW** **GMH58** PLAIN SHANK  
**GMH59** FLAT SHANK

- ▶ Special chip splitter design for better chip removal shortened chip length at high axial machining
- ▶ High Performance for Steels, Stainless Steels and Cast Iron



Unit : mm

| EDP No.         |                 | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length |
|-----------------|-----------------|---------------|---------------|----------------|---------------|----------------|
| PLAIN           | FLAT            | R             | D1            | D2             | L1            | L2             |
| <b>GMH58060</b> | <b>GMH59060</b> | R0.5          | <b>6.0</b>    | 6              | 24            | 75             |
| <b>GMH58901</b> | <b>GMH59901</b> | R1.0          | <b>6.0</b>    | 6              | 24            | 75             |
| <b>GMH58080</b> | <b>GMH59080</b> | R0.5          | <b>8.0</b>    | 8              | 32            | 75             |
| <b>GMH58902</b> | <b>GMH59902</b> | R1.0          | <b>8.0</b>    | 8              | 32            | 75             |
| <b>GMH58903</b> | <b>GMH59903</b> | R2.0          | <b>8.0</b>    | 8              | 32            | 75             |
| <b>GMH58100</b> | <b>GMH59100</b> | R0.5          | <b>10.0</b>   | 10             | 40            | 100            |
| <b>GMH58904</b> | <b>GMH59904</b> | R1.0          | <b>10.0</b>   | 10             | 40            | 100            |
| <b>GMH58905</b> | <b>GMH59905</b> | R1.5          | <b>10.0</b>   | 10             | 40            | 100            |
| <b>GMH58906</b> | <b>GMH59906</b> | R2.0          | <b>10.0</b>   | 10             | 40            | 100            |
| <b>GMH58120</b> | <b>GMH59120</b> | R0.5          | <b>12.0</b>   | 12             | 48            | 120            |
| <b>GMH58907</b> | <b>GMH59907</b> | R1.0          | <b>12.0</b>   | 12             | 48            | 120            |
| <b>GMH58908</b> | <b>GMH59908</b> | R1.5          | <b>12.0</b>   | 12             | 48            | 120            |
| <b>GMH58909</b> | <b>GMH59909</b> | R2.0          | <b>12.0</b>   | 12             | 48            | 120            |
| <b>GMH58910</b> | <b>GMH59910</b> | R3.0          | <b>12.0</b>   | 12             | 48            | 120            |
| <b>GMH58160</b> | <b>GMH59160</b> | R1.0          | <b>16.0</b>   | 16             | 64            | 140            |
| <b>GMH58911</b> | <b>GMH59911</b> | R1.5          | <b>16.0</b>   | 16             | 64            | 140            |
| <b>GMH58912</b> | <b>GMH59912</b> | R2.0          | <b>16.0</b>   | 16             | 64            | 140            |
| <b>GMH58913</b> | <b>GMH59913</b> | R3.0          | <b>16.0</b>   | 16             | 64            | 140            |
| <b>GMH58200</b> | <b>GMH59200</b> | R1.0          | <b>20.0</b>   | 20             | 80            | 150            |
| <b>GMH58914</b> | <b>GMH59914</b> | R1.5          | <b>20.0</b>   | 20             | 80            | 150            |
| <b>GMH58915</b> | <b>GMH59915</b> | R2.0          | <b>20.0</b>   | 20             | 80            | 150            |

▶ NEXT PAGE

|                          |                              |
|--------------------------|------------------------------|
| Mill Dia. Tolerance (mm) | Shank Dia. Tolerance         |
| 0 ~ - 0.03               | h5<br>* Shank Dia. ≥ Ø12: h6 |

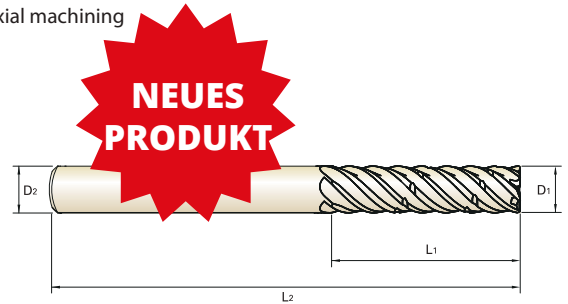
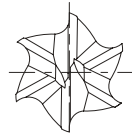
◎ : Excellent ○ : Good

| ISO<br>Material Description | P                      |     |                        |     |     |   |     |     |                        |                             | M                                  |                 |     |                 | K              |                   |                   |                     |     |     |     |
|-----------------------------|------------------------|-----|------------------------|-----|-----|---|-----|-----|------------------------|-----------------------------|------------------------------------|-----------------|-----|-----------------|----------------|-------------------|-------------------|---------------------|-----|-----|-----|
|                             | Non-alloy steel        |     |                        |     |     | Low alloy steel                           |     |     |                        |                             | High alloyed steel, and tool steel | Stainless steel |     |                 | Grey cast iron | Nodular cast iron |                   | Malleable cast iron |     |     |     |
| VDI 3323                    | 1                      | 2   | 3                      | 4   | 5   | 6   | 7   | 8   | 9                      | 10                          | 11                                 | 12              | 13  | 14              | 15             | 16                | 17                | 18                  | 19  | 20  |     |
| HRc                         | 13                     | 25  | 28                     | 32  | 32  | 10  | 29  | 32  | 38                     | 15                          | 35                                 | 15              | 23  | 10              | 10             | 26                | 3                 | 25                  |     | 21  |     |
| HB                          | 125                    | 190 | 250                    | 270 | 300 | 180                                       | 275 | 300 | 350                    | 200                         | 325                                | 200             | 240 | 180             | 180            | 260               | 160               | 250                 | 130 | 230 |     |
| Recommended                 | ◎                      | ◎   | ◎                      | ◎   | ◎   | ◎   | ◎   | ◎   | ◎                      | ◎                           | ◎                                  | ◎               | ◎   | ◎               | ◎              | ◎                 | ◎                 | ◎                   | ◎   | ◎   |     |
| ISO<br>Material Description | N                      |     |                        |     |     | S   |     |     |                        |                             | H                                  |                 |     |                 |                |                   |                   |                     |     |     |     |
|                             | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |     |     | Copper and Copper Alloys (Bronze / Brass) |     |     | Non Metallic Materials | Heat Resistant Super Alloys |                                    |                 |     | Titanium Alloys |                | Hardened steel    | Chilled Cast Iron | Hardened Cast Iron  |     |     |     |
| VDI 3323                    | 21                     | 22  | 23                     | 24  | 25  | 26  | 27  | 28  | 29                     | 30                          | 31                                 | 32              | 33  | 34              | 35             | 36                | 37                | 38                  | 39  | 40  | 41  |
| HRc                         |                        |     |                        |     |     |   |     |     |                        |                             | 15                                 | 30              | 25  | 38              | 34             |                   |                   | 55                  | 60  | 42  | 55  |
| HB                          | 60                     | 100 | 75                     | 90  | 130 | 110                                       | 90  | 100 |                        |                             | 200                                | 280             | 250 | 350             | 320            | 400 Rm            | 1050 Rm           | 550                 | 630 | 400 | 550 |
| Recommended                 |                        |     |                        |     |     |   |     |     |                        |                             | ○                                  | ○               | ○   | ○               | ○              | ○                 | ○                 |                     |     |     |     |

# HIGH PERFORMANCE SOLID CARBIDE END MILLS 6 FLUTE EXTRA LONG LENGTH CHIP SPLITTER

**NEW** **GMH56** PLAIN SHANK  
**GMH57** FLAT SHANK

- Special chip splitter design for better chip removal shortened chip length at high axial machining
- High Performance for Steels, Stainless Steels and Cast Iron

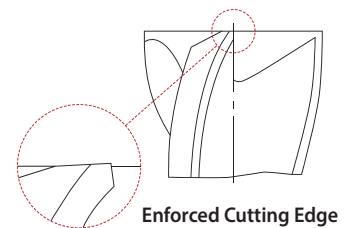


CARBIDE
6
45°
PLAIN
FLAT
P.30

Unit : mm

| EDP No.         |                 | Mill Diameter | Shank Diameter | Length of Cut | Overall Length |
|-----------------|-----------------|---------------|----------------|---------------|----------------|
| PLAIN           | FLAT            | D1            | D2             | L1            | L2             |
| <b>GMH56060</b> | <b>GMH57060</b> | <b>6.0</b>    | 6              | 24            | 75             |
| <b>GMH56080</b> | <b>GMH57080</b> | <b>8.0</b>    | 8              | 32            | 75             |
| <b>GMH56100</b> | <b>GMH57100</b> | <b>10.0</b>   | 10             | 40            | 100            |
| <b>GMH56120</b> | <b>GMH57120</b> | <b>12.0</b>   | 12             | 48            | 120            |
| <b>GMH56160</b> | <b>GMH57160</b> | <b>16.0</b>   | 16             | 64            | 140            |
| <b>GMH56200</b> | <b>GMH57200</b> | <b>20.0</b>   | 20             | 80            | 150            |
| <b>GMH56250</b> | <b>GMH57250</b> | <b>25.0</b>   | 25             | 100           | 170            |

| Mill Dia. Tolerance (mm) | Shank Dia. Tolerance         |
|--------------------------|------------------------------|
| 0 ~ - 0.03               | h5<br>* Shank Dia. ≥ Ø12: h6 |



◎ : Excellent ○ : Good

| ISO<br>Material Description | P               |     |     |     |     |                 |     |     |     |     | M                                  |                 |     |     | K              |                   |     |                     |     |     |
|-----------------------------|-----------------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|------------------------------------|-----------------|-----|-----|----------------|-------------------|-----|---------------------|-----|-----|
|                             | Non-alloy steel |     |     |     |     | Low alloy steel |     |     |     |     | High alloyed steel, and tool steel | Stainless steel |     |     | Grey cast iron | Nodular cast iron |     | Malleable cast iron |     |     |
| VDI 3323                    | 1               | 2   | 3   | 4   | 5   | 6               | 7   | 8   | 9   | 10  | 11                                 | 12              | 13  | 14  | 15             | 16                | 17  | 18                  | 19  | 20  |
| HRc                         |                 | 13  | 25  | 28  | 32  | 10              | 29  | 32  | 38  | 15  | 35                                 | 15              | 23  | 10  | 10             | 26                | 3   | 25                  |     | 21  |
| HB                          | 125             | 190 | 250 | 270 | 300 | 180             | 275 | 300 | 350 | 200 | 325                                | 200             | 240 | 180 | 180            | 260               | 160 | 250                 | 130 | 230 |
| Recommended                 | ◎               | ◎   | ◎   | ◎   | ◎   | ◎               | ◎   | ◎   | ◎   | ◎   | ◎                                  | ◎               | ◎   | ◎   | ◎              | ◎                 | ◎   | ◎                   | ◎   | ◎   |

| ISO<br>Material Description | N                      |     |                        |    |     | S   |    |                        |    |    |                             |     |     |     |     | H               |         |                |                   |                    |     |
|-----------------------------|------------------------|-----|------------------------|----|-----|---|----|------------------------|----|----|-----------------------------|-----|-----|-----|-----|-----------------|---------|----------------|-------------------|--------------------|-----|
|                             | Aluminum-wrought alloy |     | Aluminum-cast, alloyed |    |     | Copper and Copper Alloys (Bronze / Brass) |    | Non Metallic Materials |    |    | Heat Resistant Super Alloys |     |     |     |     | Titanium Alloys |         | Hardened steel | Chilled Cast Iron | Hardened Cast Iron |     |
| VDI 3323                    | 21                     | 22  | 23                     | 24 | 25  | 26  | 27 | 28                     | 29 | 30 | 31                          | 32  | 33  | 34  | 35  | 36              | 37      | 38             | 39                | 40                 | 41  |
| HRc                         |                        |     |                        |    |     |   |    |                        |    |    | 15                          | 30  | 25  | 38  | 34  |                 |         | 55             | 60                | 42                 | 55  |
| HB                          | 60                     | 100 | 75                     | 90 | 130 | 110                                       | 90 | 100                    |    |    | 200                         | 280 | 250 | 350 | 320 | 400 Rm          | 1050 Rm | 550            | 630               | 400                | 550 |
| Recommended                 |                        |     |                        |    |     |   |    |                        |    |    | ○                           | ○   | ○   | ○   | ○   | ○               | ○       |                |                   |                    |     |



**YD-K2 20**

**PROMOTION**

**SONDERAKTION**  
**728 K-2 ARTIKEL**  
*gültig bis 31.12. 2020*



**WZG**

**K-2 CARBIDE END MILLS**

**K2- HARTMETALL-SCHAFTFRÄSER**

**TiAIN-BESCHICHTETE VHM SCHAFTFRÄSER**

Allgemeine Bearbeitung  
Konventionelles u. hochgeschwindigkeitsfräsen  
Trocken- und Nassbearbeitung

Angebot ist begrenzt und ist speziell für Gewerbe, Handwerk, Handel und Industrie.  
Preise in EURO, zzgl. MwSt. - Änderungen, Zwischenverkauf und Irrtümer vorbehalten.  
Der Verkauf ist ausschließlich für den deutschen Markt bestimmt. Ein Verkauf ins Ausland ist untersagt.



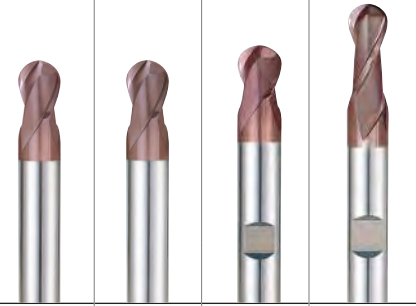


| SERIES             | G9624     | G9A70     | G9437     | G9438     |
|--------------------|-----------|-----------|-----------|-----------|
| FLUTE              | 2         | 2         | 2         | 2         |
| HELIX ANGLE        | 30°       | 30°       | ≈ 30°     | ≈ 30°     |
| CUTTING EDGE SHAPE | BALL NOSE | BALL NOSE | BALL NOSE | BALL NOSE |
| SIZE MIN           | R1.0      | R0.5      | R1.0      | R1.0      |
| SIZE MAX           | R10.0     | R10.0     | R10.0     | R10.0     |
| CATALOGUE PAGE     | 548       | 549       | 550       | 551       |

# SOLID CARBIDE K-2 END MILLS

General Purpose  
Conventional or High Speed Milling  
Wet & Dry Cutting

| SHORT LENGTH | SHORT LENGTH | SHORT LENGTH | LONG LENGTH |
|--------------|--------------|--------------|-------------|
| TiAlN based  | TiAlN based  | TiAlN based  | TiAlN based |



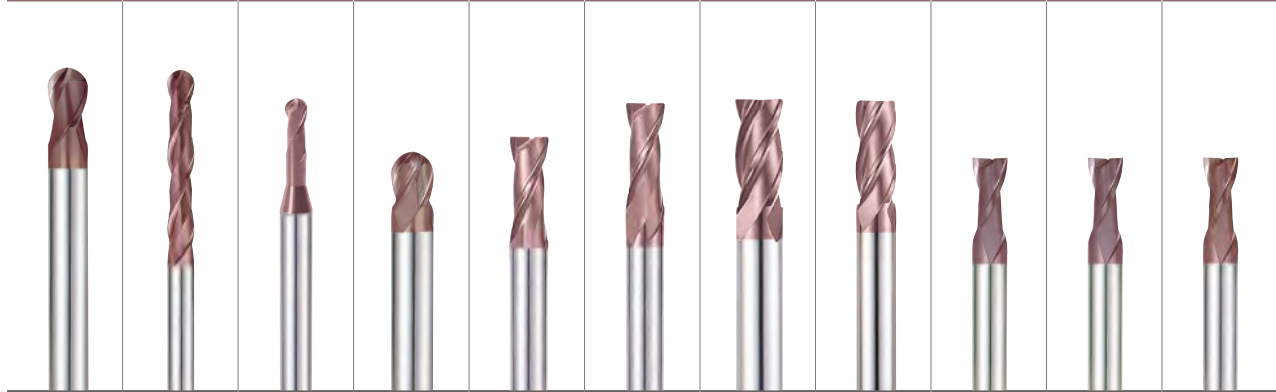
Please visit  
[globalyg1.com/mat](http://globalyg1.com/mat)  
for material search

⊙ : Excellent ○ : Good

Recommended cutting conditions : P 597

| ISO | VDI 3323           | Material Description                      | Composition / Structure / Heat Treatment       | HB       | HRC |    |   |   |   |   |
|-----|--------------------|---|--|----------|-----|----|---|---|---|---|
| P   | 1                  | Non-alloy steel                           | About 0.15% C Annealed                         | 125      |     | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 2                  |   | About 0.45% C Annealed                         | 190      | 13  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 3                  |   | About 0.45% C Quenched & Tempered              | 250      | 25  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 4                  |   | About 0.75% C Annealed                         | 270      | 28  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 5                  |   | About 0.75% C Quenched & Tempered              | 300      | 32  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 6                  | Low alloy steel                           | Annealed                                       | 180      | 10  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 7                  |   | Quenched & Tempered                            | 275      | 29  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 8                  |   | Quenched & Tempered                            | 300      | 32  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 9                  |   | Quenched & Tempered                            | 350      | 38  | ⊙  | ⊙ | ⊙ | ⊙ |   |
|     | 10                 |   | High alloyed steel, and tool steel             | Annealed | 200 | 15 | ⊙ | ⊙ | ⊙ | ⊙ |
|     | 11                 | Quenched & Tempered                       |  | 325      | 35  | ⊙  | ⊙ | ⊙ | ⊙ |   |
| M   | 12                 | Stainless steel                           | Ferritic / Martensitic Annealed                | 200      | 15  | ○  | ○ | ○ | ○ |   |
|     | 13                 |   | Martensitic Quenched & Tempered                | 240      | 23  | ○  | ○ | ○ | ○ |   |
|     | 14                 |   | Austenitic                                     | 180      | 10  | ○  | ○ | ○ | ○ |   |
| K   | 15                 | Grey cast iron                            | Pearlitic / ferritic                           | 180      | 10  | ○  | ○ | ○ | ○ |   |
|     | 16                 |   | Pearlitic (Martensitic)                        | 260      | 26  | ○  | ○ | ○ | ○ |   |
|     | 17                 | Nodular cast iron                         | Ferritic                                       | 160      | 3   | ○  | ○ | ○ | ○ |   |
|     | 18                 |   | Pearlitic                                      | 250      | 25  | ○  | ○ | ○ | ○ |   |
|     | 19                 | Malleable cast iron                       | Ferritic                                       | 130      |     | ○  | ○ | ○ | ○ |   |
| 20  | Pearlitic          |   | 230  | 21       | ○   | ○  | ○ | ○ |   |   |
| N   | 21                 | Aluminum-wrought alloy                    | Not Curable                                    | 60       |     | ○  | ○ | ○ | ○ |   |
|     | 22                 |   | Curable Hardened                               | 100      |     | ○  | ○ | ○ | ○ |   |
|     | 23                 | Aluminum-cast, alloyed                    | ≤ 12% Si, Not Curable                          | 75       |     | ○  | ○ | ○ | ○ |   |
|     | 24                 |   | ≤ 12% Si, Curable Hardened                     | 90       |     | ○  | ○ | ○ | ○ |   |
|     | 25                 |   | > 12% Si, Not Curable                          | 130      |     | ○  | ○ | ○ | ○ |   |
|     | 26                 | Copper and Copper Alloys (Bronze / Brass) | Cutting Alloys, PB>1%                          | 110      |     | ○  | ○ | ○ | ○ |   |
|     | 27                 |   | CuZn, CuSnZn (Brass)                           | 90       |     | ○  | ○ | ○ | ○ |   |
|     | 28                 | Non Metallic Materials                    | CuSn, lead-free copper and electrolytic copper | 100      |     | ○  | ○ | ○ | ○ |   |
|     | 29                 |   | Duroplastic, Fiber Reinforced Plastic          |          |     |    |   |   |   |   |
| 30  | Rubber, Wood, etc. |   |  |          |     |    |   |   |   |   |
| S   | 31                 | Heat Resistant Super Alloys               | Fe Based                                       | Annealed | 200 | 15 | ○ | ○ | ○ | ○ |
|     | 32                 |   |  | Cured    | 280 | 30 | ○ | ○ | ○ | ○ |
|     | 33                 |   | Ni or Co Based                                 | Annealed | 250 | 25 | ○ | ○ | ○ | ○ |
|     | 34                 |   |  | Cured    | 350 | 38 | ○ | ○ | ○ | ○ |
|     | 35                 |   |  | Cast     | 320 | 34 | ○ | ○ | ○ | ○ |
|     | 36                 | Titanium Alloys                           | Pure Titanium                                  | 400 Rm   |     | ○  | ○ | ○ | ○ |   |
|     | 37                 |   | Alpha + Beta Alloys Hardened                   | 1050 Rm  |     | ○  | ○ | ○ | ○ |   |
| H   | 38                 | Hardened steel                            | Hardened                                       | 550      | 55  |    |   |   |   |   |
|     | 39                 |   | Hardened                                       | 630      | 60  |    |   |   |   |   |
|     | 40                 | Chilled Cast Iron                         | Cast   | 400      | 42  | ○  | ○ | ○ | ○ |   |
|     | 41                 | Hardened Cast Iron                        | Hardened                                       | 550      | 55  |    |   |   |   |   |

| G9454       | G9455             | G9B81          | G9634        | G9B82         | G9B83         | G9B84         | G9B85         | G9424        | G9G44                     | G9A68        |
|-------------|-------------------|----------------|--------------|---------------|---------------|---------------|---------------|--------------|---------------------------|--------------|
| 2           | 2                 | 2              | 4            | 2             | 2             | 4             | 4             | 2            | 2                         | 2            |
| 30°         | 30°               | 30°            | 30°          | 30°           | 30°           | 30°           | 30°           | 30°          | 30°                       | 30°          |
| BALL NOSE   | BALL NOSE         | BALL NOSE      | BALL NOSE    | CORNER RADIUS | CORNER RADIUS | CORNER RADIUS | CORNER RADIUS | SQUARE       | SQUARE                    | SQUARE       |
| R1.5        | R1.5              | R0.2           | R1.0         | D2.0          | D3.0          | D2.0          | D3.0          | D1.0         | D3.0                      | D1.0         |
| R10.0       | R10.0             | R2.0           | R10.0        | D12.0         | D12.0         | D12.0         | D12.0         | D20.0        | D20.0                     | D20.0        |
| 552         | 553               | 554            | 556          | 557           | 559           | 560           | 562           | 563          | 564                       | 565          |
| LONG REACH  | EXTRA LONG LENGTH | RIB PROCESSING | SHORT LENGTH | SHORT LENGTH  | LONG REACH    | SHORT LENGTH  | LONG REACH    | SHORT LENGTH | SHORT LENGTH WITH CHAMFER | SHORT LENGTH |
| TiAlN based | TiAlN based       | TiAlN based    | TiAlN based  | TiAlN based   | TiAlN based   | TiAlN based   | TiAlN based   | TiAlN based  | TiAlN based               | TiAlN based  |



|   |   |   |   |   |   |   |   |   |   |   |      |
|---|---|---|---|---|---|---|---|---|---|---|------|
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 5    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 6 P  |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 7    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 8    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 9    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 10   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 11   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 12   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 13 M |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 14   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 15   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 16   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 17   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 18 K |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 19   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 20   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 21   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 22   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 23   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 24   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 25   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 26 N |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 27   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 28   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 29   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 30   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 31   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 32   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 33   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 34 S |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 35   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 36   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 37   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 38   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 39   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 40 H |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 41   |



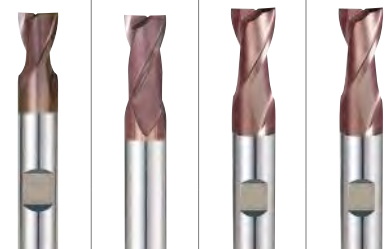


| SERIES             | G9444  | G9527  | G9445  | G9G45  |
|--------------------|--------|--------|--------|--------|
| FLUTE              | 2      | 2      | 2      | 2      |
| HELIX ANGLE        | ≈ 30°  | ≈ 30°  | ≈ 30°  | ≈ 30°  |
| CUTTING EDGE SHAPE | SQUARE | SQUARE | SQUARE | SQUARE |
| SIZE MIN           | D2.0   | D3.5   | D2.0   | D3.0   |
| SIZE MAX           | D20.0  | D20.0  | D20.0  | D20.0  |
| CATALOGUE PAGE     | 566    | 567    | 568    | 570    |

# SOLID CARBIDE K-2 END MILLS

General Purpose with Coating  
Conventional or High Speed Milling, Wet or Dry Cutting

| SHORT LENGTH | LONG LENGTH | LONG LENGTH | LONG LENGTH with CHAMFER |
|--------------|-------------|-------------|--------------------------|
| TiAlN based  | TiAlN based | TiAlN based | TiAlN based              |



Please visit  
[globalyg1.com/mat](http://globalyg1.com/mat)  
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P 597

| ISO | VDI 3323           | Material Description                      | Composition / Structure / Heat Treatment       | HB       | HRC |    |   |   |   |
|-----|--------------------|---|--|----------|-----|----|---|---|---|
| P   | 1                  | Non-alloy steel                           | About 0.15% C Annealed                         | 125      |     | ◎  | ◎ | ◎ | ◎ |
|     | 2                  |   | About 0.45% C Annealed                         | 190      | 13  | ◎  | ◎ | ◎ | ◎ |
|     | 3                  |   | About 0.45% C Quenched & Tempered              | 250      | 25  | ◎  | ◎ | ◎ | ◎ |
|     | 4                  |   | About 0.75% C Annealed                         | 270      | 28  | ◎  | ◎ | ◎ | ◎ |
|     | 5                  |   | About 0.75% C Quenched & Tempered              | 300      | 32  | ◎  | ◎ | ◎ | ◎ |
|     | 6                  | Low alloy steel                           | Annealed                                       | 180      | 10  | ◎  | ◎ | ◎ | ◎ |
|     | 7                  |   | Quenched & Tempered                            | 275      | 29  | ◎  | ◎ | ◎ | ◎ |
|     | 8                  |   | Quenched & Tempered                            | 300      | 32  | ◎  | ◎ | ◎ | ◎ |
|     | 9                  |   | Quenched & Tempered                            | 350      | 38  | ◎  | ◎ | ◎ | ◎ |
|     | 10                 |   | High alloyed steel, and tool steel             | Annealed | 200 | 15 | ◎ | ◎ | ◎ |
|     | 11                 | Quenched & Tempered                       |  | 325      | 35  | ◎  | ◎ | ◎ | ◎ |
| M   | 12                 | Stainless steel                           | Ferritic / Martensitic Annealed                | 200      | 15  | ○  | ○ | ○ | ○ |
|     | 13                 |   | Martensitic Quenched & Tempered                | 240      | 23  | ○  | ○ | ○ | ○ |
|     | 14                 |   | Austenitic                                     | 180      | 10  | ○  | ○ | ○ | ○ |
| K   | 15                 | Grey cast iron                            | Pearlitic / ferritic                           | 180      | 10  | ○  | ○ | ○ | ○ |
|     | 16                 |   | Pearlitic (Martensitic)                        | 260      | 26  | ○  | ○ | ○ | ○ |
|     | 17                 | Nodular cast iron                         | Ferritic                                       | 160      | 3   | ○  | ○ | ○ | ○ |
|     | 18                 |   | Pearlitic                                      | 250      | 25  | ○  | ○ | ○ | ○ |
|     | 19                 | Malleable cast iron                       | Ferritic                                       | 130      |     | ○  | ○ | ○ | ○ |
| 20  | Pearlitic          |   | 230  | 21       | ○   | ○  | ○ | ○ |   |
| N   | 21                 | Aluminum-wrought alloy                    | Not Curable                                    | 60       |     | ○  | ○ | ○ | ○ |
|     | 22                 |   | Curable Hardened                               | 100      |     | ○  | ○ | ○ | ○ |
|     | 23                 | Aluminum-cast, alloyed                    | ≤ 12% Si, Not Curable                          | 75       |     | ○  | ○ | ○ | ○ |
|     | 24                 |   | ≤ 12% Si, Curable Hardened                     | 90       |     | ○  | ○ | ○ | ○ |
|     | 25                 |   | > 12% Si, Not Curable                          | 130      |     | ○  | ○ | ○ | ○ |
|     | 26                 | Copper and Copper Alloys (Bronze / Brass) | Cutting Alloys, PB>1%                          | 110      |     | ○  | ○ | ○ | ○ |
|     | 27                 |   | CuZn, CuSnZn (Brass)                           | 90       |     | ○  | ○ | ○ | ○ |
|     | 28                 | Non Metallic Materials                    | CuSn, lead-free copper and electrolytic copper | 100      |     | ○  | ○ | ○ | ○ |
|     | 29                 |   | Duroplastic, Fiber Reinforced Plastic          |          |     | ○  | ○ | ○ | ○ |
| 30  | Rubber, Wood, etc. |   |  |          |     |    |   |   |   |
| S   | 31                 | Heat Resistant Super Alloys               | Fe Based Annealed                              | 200      | 15  | ○  | ○ | ○ | ○ |
|     | 32                 |   | Cured  | 280      | 30  | ○  | ○ | ○ | ○ |
|     | 33                 |   | Annealed                                       | 250      | 25  | ○  | ○ | ○ | ○ |
|     | 34                 |   | Ni or Co Based Cured                           | 350      | 38  | ○  | ○ | ○ | ○ |
|     | 35                 |   | Cast   | 320      | 34  | ○  | ○ | ○ | ○ |
|     | 36                 | Titanium Alloys                           | Pure Titanium                                  | 400 Rm   |     | ○  | ○ | ○ | ○ |
|     | 37                 |   | Alpha + Beta Alloys Hardened                   | 1050 Rm  |     | ○  | ○ | ○ | ○ |
| H   | 38                 | Hardened steel                            | Hardened                                       | 550      | 55  |    |   |   |   |
|     | 39                 |   | Hardened                                       | 630      | 60  |    |   |   |   |
|     | 40                 | Chilled Cast Iron                         | Cast   | 400      | 42  | ○  | ○ | ○ | ○ |
|     | 41                 | Hardened Cast Iron                        | Hardened                                       | 550      | 55  |    |   |   |   |



| G9452             | G9B80          | G9410<br>G9553 | G9G46                   | G9425        | G9G47                     | G9439        | G9528       | G9433       | G9G48                    | G9447       |
|-------------------|----------------|----------------|-------------------------|--------------|---------------------------|--------------|-------------|-------------|--------------------------|-------------|
| 2                 | 2              | 3              | 3                       | 3            | 3                         | 3            | 3           | 3           | 3                        | 3           |
| 30°               | 30°            | 30°            | 30°                     | 30°          | 30°                       | ≈ 30°        | ≈ 30°       | ≈ 30°       | ≈ 30°                    | 45°         |
| SQUARE            | SQUARE         | SQUARE         | SQUARE                  | SQUARE       | SQUARE                    | SQUARE       | SQUARE      | SQUARE      | SQUARE                   | SQUARE      |
| D3.0              | D0.4           | D0.5           | D3.0                    | D1.0         | D3.0                      | D2.0         | D3.5        | D3.0        | D3.0                     | D3.0        |
| D20.0             | D4.0           | D20.0          | D20.0                   | D20.0        | D20.0                     | D20.0        | D20.0       | D20.0       | D20.0                    | D20.0       |
| 571               | 572            | 575            | 577                     | 578          | 579                       | 580          | 581         | 582         | 583                      | 584         |
| EXTRA LONG LENGTH | RIB PROCESSING | THROW AWAY     | THROW AWAY with CHAMFER | SHORT LENGTH | SHORT LENGTH with CHAMFER | SHORT LENGTH | LONG LENGTH | LONG LENGTH | LONG LENGTH with CHAMFER | LONG LENGTH |
| TiAlN based       | TiAlN based    | TiAlN based    | TiAlN based             | TiAlN based  | TiAlN based               | TiAlN based  | TiAlN based | TiAlN based | TiAlN based              | TiAlN based |

|   |   |   |   |   |   |   |   |   |   |   |      |
|---|---|---|---|---|---|---|---|---|---|---|------|
|   |   |   |   |   |   |   |   |   |   |   |      |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 1    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 2    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 3    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 4    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 5    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 6 P  |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 7    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 8    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 9    |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 10   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 11   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 12   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 13 M |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 14   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 15   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 16   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 17   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 18 K |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 19   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 20   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 21   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 22   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 23   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 24   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 25   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 26 N |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 27   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 28   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 29   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 30   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 31   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 32   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 33   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 34 S |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 35   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 36   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 37   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 38   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 39   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 40 H |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 41   |

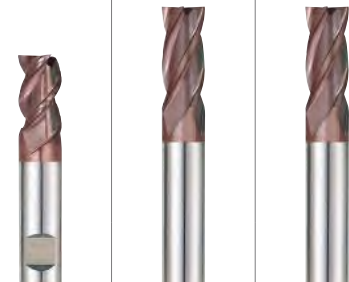


| SERIES             | G9G49  | G9432  | G9G50  |
|--------------------|--------|--------|--------|
| FLUTE              | 3      | 4      | 4      |
| HELIX ANGLE        | 45°    | 30°    | 30°    |
| CUTTING EDGE SHAPE | SQUARE | SQUARE | SQUARE |
| SIZE MIN           | D3.0   | D1.0   | D3.0   |
| SIZE MAX           | D20.0  | D20.0  | D20.0  |
| CATALOGUE PAGE     | 585    | 586    | 587    |

# SOLID CARBIDE K-2 END MILLS

General Purpose with Coating  
Conventional or High Speed Milling, Wet or Dry Cutting

| LONG LENGTH with CHAMFER | SHORT LENGTH | SHORT LENGTH with CHAMFER |
|--------------------------|--------------|---------------------------|
| TiAlN based              | TiAlN based  | TiAlN based               |



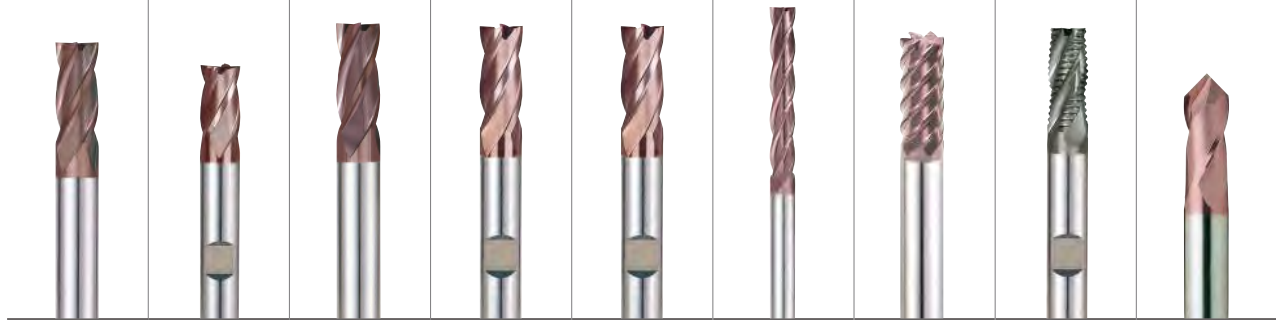
Please visit  
[globalyg1.com/mat](http://globalyg1.com/mat)  
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P 597

| ISO | VDI 3323           | Material Description                      | Composition / Structure / Heat Treatment       | HB                  | HRc      |     |    |   |   |
|-----|--------------------|---|--|---------------------|----------|-----|----|---|---|
| P   | 1                  | Non-alloy steel                           | About 0.15% C                                  | Annealed            | 125      |     | ◎  | ◎ | ◎ |
|     | 2                  |   | About 0.45% C                                  | Annealed            | 190      | 13  | ◎  | ◎ | ◎ |
|     | 3                  |   | About 0.45% C                                  | Quenched & Tempered | 250      | 25  | ◎  | ◎ | ◎ |
|     | 4                  |   | About 0.75% C                                  | Annealed            | 270      | 28  | ◎  | ◎ | ◎ |
|     | 5                  |   | About 0.75% C                                  | Quenched & Tempered | 300      | 32  | ◎  | ◎ | ◎ |
|     | 6                  | Low alloy steel                           |  | Annealed            | 180      | 10  | ◎  | ◎ | ◎ |
|     | 7                  |   |  | Quenched & Tempered | 275      | 29  | ◎  | ◎ | ◎ |
|     | 8                  |   |  | Quenched & Tempered | 300      | 32  | ◎  | ◎ | ◎ |
|     | 9                  |   |  | Quenched & Tempered | 350      | 38  | ◎  | ◎ | ◎ |
|     | 10                 |   | High alloyed steel, and tool steel             |                     | Annealed | 200 | 15 | ◎ | ◎ |
|     | 11                 |   |  | Quenched & Tempered | 325      | 35  | ◎  | ◎ | ◎ |
| M   | 12                 | Stainless steel                           | Ferritic / Martensitic                         | Annealed            | 200      | 15  | ○  | ○ | ○ |
|     | 13                 |   | Martensitic                                    | Quenched & Tempered | 240      | 23  | ○  | ○ | ○ |
|     | 14                 |   | Austenitic                                     |                     | 180      | 10  | ○  | ○ | ○ |
| K   | 15                 | Grey cast iron                            | Pearlitic / ferritic                           |                     | 180      | 10  | ○  | ○ | ○ |
|     | 16                 |   | Pearlitic (Martensitic)                        |                     | 260      | 26  | ○  | ○ | ○ |
|     | 17                 | Nodular cast iron                         | Ferritic                                       |                     | 160      | 3   | ○  | ○ | ○ |
|     | 18                 |   | Pearlitic                                      |                     | 250      | 25  | ○  | ○ | ○ |
|     | 19                 | Malleable cast iron                       | Ferritic                                       |                     | 130      |     | ○  | ○ | ○ |
| 20  | Pearlitic          |   |  | 230                 | 21       | ○   | ○  | ○ |   |
| N   | 21                 | Aluminum-wrought alloy                    | Not Curable                                    |                     | 60       |     | ○  | ○ | ○ |
|     | 22                 |   | Curable  | Hardened            | 100      |     | ○  | ○ | ○ |
|     | 23                 | Aluminum-cast, alloyed                    | ≤ 12% Si, Not Curable                          |                     | 75       |     | ○  | ○ | ○ |
|     | 24                 |   | ≤ 12% Si, Curable                              | Hardened            | 90       |     | ○  | ○ | ○ |
|     | 25                 |   | > 12% Si, Not Curable                          |                     | 130      |     | ○  | ○ | ○ |
|     | 26                 | Copper and Copper Alloys (Bronze / Brass) | Cutting Alloys, PB>1%                          |                     | 110      |     | ○  | ○ | ○ |
|     | 27                 |   | CuZn, CuSnZn (Brass)                           |                     | 90       |     | ○  | ○ | ○ |
|     | 28                 | Non Metallic Materials                    | CuSn, lead-free copper and electrolytic copper |                     | 100      |     | ○  | ○ | ○ |
|     | 29                 |   | Duroplastic, Fiber Reinforced Plastic          |                     |          |     | ○  | ○ | ○ |
| 30  | Rubber, Wood, etc. |   |  |                     |          | ○   | ○  | ○ |   |
| S   | 31                 | Heat Resistant Super Alloys               | Fe Based                                       | Annealed            | 200      | 15  | ○  | ○ | ○ |
|     | 32                 |   |  | Cured               | 280      | 30  | ○  | ○ | ○ |
|     | 33                 |   | Ni or Co Based                                 | Annealed            | 250      | 25  | ○  | ○ | ○ |
|     | 34                 |   |  | Cured               | 350      | 38  | ○  | ○ | ○ |
|     | 35                 |   |  | Cast                | 320      | 34  | ○  | ○ | ○ |
|     | 36                 | Titanium Alloys                           | Pure Titanium                                  |                     | 400 Rm   |     | ○  | ○ | ○ |
|     | 37                 |   | Alpha + Beta Alloys                            | Hardened            | 1050 Rm  |     | ○  | ○ | ○ |
| H   | 38                 | Hardened steel                            |  | Hardened            | 550      | 55  |    |   |   |
|     | 39                 |   |  | Hardened            | 630      | 60  |    |   |   |
|     | 40                 | Chilled Cast Iron                         |  | Cast                | 400      | 42  | ○  | ○ | ○ |
|     | 41                 | Hardened Cast Iron                        |  | Hardened            | 550      | 55  |    |   |   |

| G9A69        | G9448        | G9540       | G9449       | G9G51                       | G9453             | G9F45<br>G9F46              | G9A42       | G9400       |
|--------------|--------------|-------------|-------------|-----------------------------|-------------------|-----------------------------|-------------|-------------|
| 4            | 4            | 4           | 4           | 4                           | 4                 | 4&6                         | Multi Flute | 2           |
| 30°          | ≈ 30°        | ≈ 30°       | ≈ 30°       | ≈ 30°                       | 30°               | 45°                         | 30°         | 30°         |
| SQUARE       | SQUARE       | SQUARE      | SQUARE      | SQUARE                      | SQUARE            | SQUARE                      | ROUGHING    | DRILL MILL  |
| D1.0         | D2.0         | D3.5        | D2.0        | D3.0                        | D3.0              | D3.0                        | D6.0        | D3.0        |
| D20.0        | D20.0        | D20.0       | D20.0       | D20.0                       | D20.0             | D20.0                       | D25.0       | D20.0       |
| 588          | 589          | 590         | 591         | 592                         | 593               | 594                         | 595         | 596         |
| SHORT LENGTH | SHORT LENGTH | LONG LENGTH | LONG LENGTH | LONG LENGTH<br>with CHAMFER | EXTRA LONG LENGTH | SHORT LENGTH<br>LONG LENGTH | LONG LENGTH | -           |
| TiAlN based  | TiAlN based  | TiAlN based | TiAlN based | TiAlN based                 | TiAlN based       | TiAlN based                 | X-Coating   | TiAlN based |



|   |   |   |   |   |   |   |   |   |      |
|---|---|---|---|---|---|---|---|---|------|
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 1    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 2    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 3    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 4    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 5    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 6 P  |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 7    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 8    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 9    |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 10   |
| ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ⊙ | ○ | ⊙ | ⊙ | 11   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 12   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 13 M |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 14   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 15   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 16   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 17 K |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 18   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 19   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 20   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 21   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 22   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 23   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 24   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 25 N |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 26   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 27   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 28   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 29   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 30   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 31   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 32   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 33   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 34 S |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 35   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 36   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 37   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 38   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 39 H |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 40   |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | 41   |

| EDP Nr.  | Beschreibung                                  | Abmessungen   | Promotion Preis [€] |
|----------|---|---------------|---------------------|
| G9410020 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 2X6X4X35      | <b>6,34</b>         |
| G9410025 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 2 5X6X5X36    | <b>6,64</b>         |
| G9410030 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 3X6X5X36      | <b>6,34</b>         |
| G9410035 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 3 5X6X6X37    | <b>6,93</b>         |
| G9410040 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 4X6X7X38      | <b>6,34</b>         |
| G9410045 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 4 5X6X8X38    | <b>6,93</b>         |
| G9410050 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 5X6X8X39      | <b>6,34</b>         |
| G9410055 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 5 5X6X8X39    | <b>6,93</b>         |
| G9410060 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 6X6X8X39      | <b>6,34</b>         |
| G9410070 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 7X8X10X42     | <b>8,62</b>         |
| G9410080 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 8X8X11X43     | <b>9,30</b>         |
| G9410087 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 8.7X10X11X48  | <b>14,45</b>        |
| G9410090 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 9X10X11X48    | <b>13,26</b>        |
| G9410097 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 9.7X10X11X48  | <b>14,45</b>        |
| G9410100 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 10X10X13X50   | <b>13,86</b>        |
| G9410120 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 12X12X15X55   | <b>16,44</b>        |
| G9410140 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 14X14X15X58   | <b>24,39</b>        |
| G9410160 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 16X16X18X62   | <b>28,81</b>        |
| G9410180 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 18X18X20X70   | <b>35,53</b>        |
| G9410200 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 20X20X22X75   | <b>46,79</b>        |
| G9410957 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 5.75X6X8X39   | <b>6,93</b>         |
| G9410967 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 6.75X8X10X42  | <b>9,36</b>         |
| G9410977 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 7.75X8X10X42  | <b>9,36</b>         |
| G9424010 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 1X4X3X40      | <b>6,93</b>         |
| G9424015 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 1.5X4X4.5X40  | <b>6,64</b>         |
| G9424020 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 2X2X8X32      | <b>5,75</b>         |
| G9424025 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 2.5X2 5X8X32  | <b>5,75</b>         |
| G9424030 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 3X3X12X32     | <b>5,75</b>         |
| G9424035 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 3.5X3.5X12X32 | <b>6,41</b>         |
| G9424040 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 4X4X12X40     | <b>6,41</b>         |
| G9424045 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 4.5X4.5X14X50 | <b>6,70</b>         |
| G9424050 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 5X5X14X50     | <b>6,70</b>         |
| G9424055 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 5.5X5.5X16X50 | <b>7,44</b>         |
| G9424060 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 6X6X16X50     | <b>7,44</b>         |
| G9424070 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 7X7X20X60     | <b>9,95</b>         |
| G9424080 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 8X8X20X60     | <b>12,01</b>        |
| G9424090 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 9X9X20X60     | <b>16,28</b>        |
| G9424100 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 10X10X22X70   | <b>18,12</b>        |
| G9424120 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 12X12X22X70   | <b>24,76</b>        |
| G9424140 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 14X14X25X75   | <b>33,09</b>        |
| G9424160 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 16X16X25X75   | <b>43,41</b>        |
| G9424200 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ EINWEGFRÄSER | 20X20X32X100  | <b>73,55</b>        |
| G9425010 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 1X4X3X40      | <b>6,93</b>         |
| G9425015 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 1.5X4X4.5X40  | <b>6,64</b>         |
| G9425020 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 2X2X8X32      | <b>5,75</b>         |
| G9425025 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 2.5X2.5X8X32  | <b>5,75</b>         |
| G9425030 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 3X3X12X32     | <b>5,75</b>         |
| G9425035 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 3.5X3.5X12X32 | <b>6,41</b>         |
| G9425040 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 4X4X12X40     | <b>6,41</b>         |
| G9425045 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 4.5X4.5X14X50 | <b>6,70</b>         |



| EDP Nr.  | Beschreibung                                 | Abmessungen   | Promotion Preis [€] |
|----------|--|---------------|---------------------|
| G9425050 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 5X5X14X50     | 6,70 €              |
| G9425055 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 5.5X5.5X16X50 | 7,44 €              |
| G9425060 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 6X6X16X50     | 7,44 €              |
| G9425070 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 7X7X20X60     | 9,95 €              |
| G9425080 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 8X8X20X60     | 12,01 €             |
| G9425090 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 9X9X20X60     | 16,28 €             |
| G9425100 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 10X10X22X70   | 18,12 €             |
| G9425120 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 12X12X22X70   | 24,76 €             |
| G9425140 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 14X14X25X75   | 33,09 €             |
| G9425160 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 16X16X25X75   | 43,41 €             |
| G9425200 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 20X20X32X100  | 73,55 €             |
| G9432010 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 1X4X3X40      | 6,93 €              |
| G9432015 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 1.5X4X4.5X40  | 6,64 €              |
| G9432020 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 2X2X8X32      | 5,75 €              |
| G9432025 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 2.5X2.5X8X32  | 5,75 €              |
| G9432030 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 3X3X12X32     | 5,75 €              |
| G9432035 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 3.5X3.5X12X32 | 6,41 €              |
| G9432040 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 4X4X12X40     | 6,41 €              |
| G9432045 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 4.5X4.5X14X50 | 6,70 €              |
| G9432050 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 5X5X14X50     | 6,70 €              |
| G9432055 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 5.5X5.5X16X50 | 7,44 €              |
| G9432060 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 6X6X16X50     | 7,44 €              |
| G9432070 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 7X7X20X60     | 9,95 €              |
| G9432080 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 8X8X20X60     | 12,01 €             |
| G9432090 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 9X9X20X60     | 16,28 €             |
| G9432100 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 10X10X22X70   | 18,12 €             |
| G9432120 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 12X12X22X70   | 24,76 €             |
| G9432140 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 14X14X25X75   | 33,09 €             |
| G9432160 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 16X16X25X75   | 43,41 €             |
| G9432200 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 20X20X32X100  | 73,55 €             |
| G9433030 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 3X6X7X57      | 9,50 €              |
| G9433040 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 4X6X8X57      | 9,50 €              |
| G9433050 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 5X6X10X57     | 9,50 €              |
| G9433060 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 6X6X10X57     | 9,50 €              |
| G9433080 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 8X8X16X63     | 11,94 €             |
| G9433090 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 9X10X16X72    | 18,28 €             |
| G9433100 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 10X10X19X72   | 18,28 €             |
| G9433120 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 12X12X22X83   | 26,75 €             |
| G9433140 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 14X14X22X83   | 34,12 €             |
| G9433160 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 16X16X26X92   | 45,10 €             |
| G9433180 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 18X18X26X92   | 59,03 €             |
| G9433200 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG             | 20X20X32X104  | 74,15 €             |
| G9437020 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 2X6X3X50      | 9,80 €              |
| G9437030 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 3X6X4X50      | 9,80 €              |
| G9437040 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 4X6X5X54      | 9,80 €              |
| G9437050 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 5X6X6X54      | 9,80 €              |
| G9437060 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 6X6X7X54      | 9,80 €              |
| G9437080 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 8X8X9X58      | 15,26 €             |
| G9437100 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 10X10X11X66   | 24,54 €             |
| G9437120 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 12X12X12X73   | 31,41 €             |

| EDP Nr.  | Beschreibung                                 | Abmessungen  | Promotion Preis [€] |
|----------|--|--------------|---------------------|
| G9437140 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 14X14X14X75  | 37,00 €             |
| G9437180 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 18X18X18X84  | 53,87 €             |
| G9437200 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 20X20X20X92  | 76,87 €             |
| G9438020 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 2X3X6X38     | 7,22 €              |
| G9438030 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 3X6X7X57     | 9,58 €              |
| G9438040 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 4X6X8X57     | 9,58 €              |
| G9438050 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 5X6X10X57    | 10,02 €             |
| G9438060 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 6X6X10X57    | 10,84 €             |
| G9438080 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 8X8X16X63    | 18,28 €             |
| G9438100 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 10X10X19X72  | 29,63 €             |
| G9438120 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 12X12X22X83  | 38,17 €             |
| G9438140 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 14X14X22X83  | 45,19 €             |
| G9438160 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 16X16X26X92  | 60,95 €             |
| G9438180 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 18X18X26X92  | 65,53 €             |
| G9438200 | K-2 VHM FRÄSER, 2 SCHNEIDEN LANG             | 20X20X32X104 | 93,37 €             |
| G9439020 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 2X6X3X50     | 8,03 €              |
| G9439030 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 3X6X4X50     | 7,44 €              |
| G9439035 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 3.5X6X4X50   | 7,44 €              |
| G9439040 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 4X6X5X54     | 7,44 €              |
| G9439045 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 4.5X6X5X54   | 7,44 €              |
| G9439050 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 5X6X6X54     | 7,44 €              |
| G9439060 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 6X6X7X54     | 7,44 €              |
| G9439070 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 7X8X8X58     | 10,39 €             |
| G9439080 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 8X8X9X58     | 10,39 €             |
| G9439090 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 9X10X10X66   | 15,85 €             |
| G9439100 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 10X10X11X66  | 15,85 €             |
| G9439120 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 12X12X12X73  | 21,96 €             |
| G9439140 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 14X14X14X75  | 29,11 €             |
| G9439160 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 16X16X16X82  | 39,94 €             |
| G9439180 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 18X18X18X84  | 52,27 €             |
| G9439200 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ             | 20X20X20X92  | 67,07 €             |
| G9444020 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 2X6X3X50     | 8,03 €              |
| G9444030 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 3X6X4X50     | 7,44 €              |
| G9444035 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 3.5X6X4X50   | 7,44 €              |
| G9444040 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 4X6X5X54     | 7,44 €              |
| G9444045 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 4.5X6X5X54   | 7,44 €              |
| G9444050 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 5X6X6X54     | 7,44 €              |
| G9444060 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 6X6X7X54     | 7,44 €              |
| G9444070 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 7X8X8X58     | 10,39 €             |
| G9444080 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 8X8X9X58     | 10,39 €             |
| G9444090 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 9X10X10X66   | 15,85 €             |
| G9444100 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 10X10X11X66  | 15,85 €             |
| G9444120 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 12X12X12X73  | 21,96 €             |
| G9444140 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 14X14X14X75  | 29,11 €             |
| G9444160 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 16X16X16X82  | 39,94 €             |
| G9444180 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 18X18X18X84  | 52,27 €             |
| G9444200 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ              | 20X20X20X92  | 67,07 €             |
| G9445028 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG              | 2.8X6X7X57   | 10,54 €             |
| G9445030 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG              | 3X6X7X57     | 9,50 €              |
| G9445035 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG              | 3.5X6X7X57   | 9,50 €              |

| EDP Nr.  | Beschreibung                                       | Abmessungen    | Promotion Preis [€] |
|----------|--|----------------|---------------------|
| G9445038 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 3.8X6X8X57     | 10,54 €             |
| G9445040 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 4X6X8X57       | 9,50 €              |
| G9445045 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 4 5X6X8X57     | 9,50 €              |
| G9445048 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 4.8X6X10X57    | 10,54 €             |
| G9445050 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 5X6X10X57      | 9,50 €              |
| G9445060 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 6X6X10X57      | 9,50 €              |
| G9445070 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 7X8X13X63      | 11,94 €             |
| G9445080 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 8X8X16X63      | 11,94 €             |
| G9445087 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 8.7X10X16X72   | 19,97 €             |
| G9445090 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 9X10X16X72     | 18,28 €             |
| G9445097 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 9.7X10X19X72   | 19,97 €             |
| G9445100 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 10X10X19X72    | 18,28 €             |
| G9445117 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 11.7X12X22X83  | 29,26 €             |
| G9445120 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 12X12X22X83    | 26,83 €             |
| G9445137 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 13.7X14X22X83  | 37,14 €             |
| G9445140 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 14X14X22X83    | 34,20 €             |
| G9445157 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 15.7X16X26X92  | 49,46 €             |
| G9445160 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 16X16X26X92    | 45,19 €             |
| G9445177 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 17.7X18X26X92  | 64,56 €             |
| G9445180 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 18X18X26X92    | 59,18 €             |
| G9445197 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 19.7X20X32X104 | 80,63 €             |
| G9445200 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 20X20X32X104   | 74,29 €             |
| G9445901 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 2X3X6X38       | 5,75 €              |
| G9445957 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 5.75X6X10X57   | 10,54 €             |
| G9445967 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 6.75X8X13X63   | 12,97 €             |
| G9445977 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 7.75X8X16X63   | 12,97 €             |
| G9447030 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 3X6X7X57       | 11,42 €             |
| G9447035 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 3 5X6X7X57     | 11,42 €             |
| G9447040 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 4X6X8X57       | 11,42 €             |
| G9447045 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 4 5X6X8X57     | 11,42 €             |
| G9447050 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 5X6X10X57      | 11,42 €             |
| G9447060 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 6X6X10X57      | 11,42 €             |
| G9447070 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 7X8X13X63      | 14,00 €             |
| G9447080 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 8X8X16X63      | 14,00 €             |
| G9447090 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 9X10X16X72     | 21,96 €             |
| G9447100 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 10X10X19X72    | 21,96 €             |
| G9447120 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 12X12X22X83    | 31,69 €             |
| G9447140 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 14X14X22X83    | 40,46 €             |
| G9447160 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 16X16X26X92    | 53,59 €             |
| G9447180 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 18X18X26X92    | 70,17 €             |
| G9447200 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 20X20X32X104   | 84,55 €             |
| G9448020 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 2X6X4X50       | 8,03 €              |
| G9448025 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 2 5X6X4X50     | 8,03 €              |
| G9448030 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 3X6X5X50       | 7,44 €              |
| G9448035 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 3 5X6X6X50     | 7,44 €              |
| G9448040 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 4X6X8X54       | 7,44 €              |
| G9448045 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 4 5X6X8X54     | 7,44 €              |
| G9448050 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 5X6X9X54       | 7,44 €              |
| G9448060 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 6X6X10X54      | 7,44 €              |
| G9448070 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 7X8X11X58      | 10,69 €             |

| EDP Nr.  | Beschreibung                                  | Abmessungen  | Promotion Preis [€] |
|----------|---|--------------|---------------------|
| G9448080 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 8X8X12X58    | 10,69 €             |
| G9448090 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 9X10X13X66   | 16,52 €             |
| G9448100 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 10X10X14X66  | 16,52 €             |
| G9448120 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 12X12X16X73  | 22,70 €             |
| G9448140 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 14X14X18X75  | 30,15 €             |
| G9448160 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 16X16X22X82  | 43,48 €             |
| G9448180 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 18X18X24X84  | 55,94 €             |
| G9448200 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 20X20X26X92  | 69,87 €             |
| G9449030 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 3X6X8X57     | 9,88 €              |
| G9449035 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 3.5X6X10X57  | 9,88 €              |
| G9449040 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 4X6X11X57    | 10,24 €             |
| G9449045 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 4.5X6X11X57  | 10,24 €             |
| G9449050 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 5X6X13X57    | 10,24 €             |
| G9449060 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 6X6X13X57    | 10,24 €             |
| G9449070 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 7X8X16X63    | 12,46 €             |
| G9449080 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 8X8X19X63    | 12,46 €             |
| G9449090 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 9X10X19X72   | 19,02 €             |
| G9449100 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 10X10X22X72  | 19,02 €             |
| G9449120 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 12X12X26X83  | 27,50 €             |
| G9449140 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 14X14X26X83  | 35,96 €             |
| G9449160 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 16X16X32X92  | 48,80 €             |
| G9449180 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 18X18X32X92  | 62,73 €             |
| G9449200 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 20X20X38X104 | 77,91 €             |
| G9449901 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 2X3X7X38     | 5,75 €              |
| G9452903 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 3X3X20X60    | 10,39 €             |
| G9452904 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 4X4X20X60    | 10,98 €             |
| G9452905 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 5X5X25X75    | 12,75 €             |
| G9452906 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 6X6X30X75    | 13,86 €             |
| G9452908 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 8X8X30X75    | 20,56 €             |
| G9452910 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 10X10X40X100 | 26,46 €             |
| G9452912 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 12X12X45X100 | 39,94 €             |
| G9452914 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 14X14X45X100 | 50,78 €             |
| G9452916 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 16X16X45X100 | 69,43 €             |
| G9452918 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 18X18X45X100 | 76,87 €             |
| G9452920 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ, EXTRA LANG  | 20X20X45X100 | 92,87 €             |
| G9453903 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 3X3X20X60    | 10,39 €             |
| G9453904 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 4X4X20X60    | 10,98 €             |
| G9453905 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 5X5X25X75    | 12,75 €             |
| G9453906 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 6X6X30X75    | 13,86 €             |
| G9453908 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 8X8X30X75    | 20,56 €             |
| G9453910 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 10X10X40X100 | 26,46 €             |
| G9453912 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 12X12X45X100 | 39,94 €             |
| G9453914 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 14X14X45X100 | 50,78 €             |
| G9453916 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 16X16X45X100 | 69,43 €             |
| G9453918 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 18X18X45X100 | 76,87 €             |
| G9453920 | K-2 VHM FRÄSER, 4 SCHNEIDEN EXTRA LANG        | 20X20X45X100 | 92,87 €             |
| G9454030 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 3X3X5X75     | 10,32 €             |
| G9454040 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 4X4X8X75     | 10,32 €             |
| G9454050 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 5X5X9X75     | 11,21 €             |
| G9454060 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 6X6X10X100   | 12,75 €             |



| EDP Nr.  | Beschreibung                                  | Abmessungen   | Promotion Preis [€] |
|----------|---|---------------|---------------------|
| G9454080 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 8X8X12X100    | 19,23 €             |
| G9454100 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 10X10X14X100  | 32,50 €             |
| G9454120 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 12X12X16X100  | 41,65 €             |
| G9454140 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 14X14X18X100  | 52,55 €             |
| G9454160 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 16X16X22X150  | 71,78 €             |
| G9454200 | K-2, 2 SCHNEIDEN GROßE REICHWEITE STIRNRADIUS | 20X20X26X150  | 110,33 €            |
| G9455903 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 3X3X20X60     | 11,42 €             |
| G9455904 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 4X4X20X60     | 11,94 €             |
| G9455905 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 5X5X25X75     | 14,89 €             |
| G9455906 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 6X6X30X75     | 16,06 €             |
| G9455908 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 8X8X30X75     | 23,60 €             |
| G9455910 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 10X10X40X100  | 33,01 €             |
| G9455912 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 12X12X45X100  | 49,23 €             |
| G9455914 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 14X14X45X100  | 63,09 €             |
| G9455916 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 16X16X45X100  | 83,29 €             |
| G9455918 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 18X18X45X100  | 93,89 €             |
| G9455920 | K-2 VHM, 2 SCHNEIDEN EXTRA LANG STIRNRADIUS   | 20X20X45X100  | 111,44 €            |
| G9527035 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 3.5X3.5X7X50  | 6,41 €              |
| G9527040 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 4X4X8X50      | 6,41 €              |
| G9527045 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 4.5X4.5X8X50  | 6,70 €              |
| G9527050 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 5X5X10X50     | 6,70 €              |
| G9527055 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 5.5X5.5X10X57 | 9,50 €              |
| G9527060 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 6X6X10X57     | 9,50 €              |
| G9527065 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 6.5X6.5X13X60 | 11,06 €             |
| G9527070 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 7X7X13X60     | 11,06 €             |
| G9527075 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 7.5X7.5X16X63 | 11,94 €             |
| G9527080 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 8X8X16X63     | 11,94 €             |
| G9527085 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 8.5X8.5X16X67 | 17,25 €             |
| G9527090 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 9X9X16X67     | 17,25 €             |
| G9527095 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 9.5X9.5X19X72 | 18,28 €             |
| G9527100 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 10X10X19X72   | 18,28 €             |
| G9527110 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 11X11X22X83   | 26,75 €             |
| G9527120 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 12X12X22X83   | 26,75 €             |
| G9527130 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 13X13X22X83   | 33,90 €             |
| G9527140 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 14X14X22X83   | 34,12 €             |
| G9527150 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 15X15X26X92   | 45,03 €             |
| G9527160 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 16X16X26X92   | 45,10 €             |
| G9527180 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 18X18X26X92   | 59,03 €             |
| G9527200 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG               | 20X20X32X104  | 74,15 €             |
| G9528035 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 3.5X3.5X7X50  | 6,41 €              |
| G9528040 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 4X4X8X50      | 6,41 €              |
| G9528045 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 4.5X4.5X8X50  | 6,70 €              |
| G9528050 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 5X5X10X50     | 6,70 €              |
| G9528055 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 5.5X5.5X10X57 | 9,50 €              |
| G9528060 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 6X6X10X57     | 9,50 €              |
| G9528065 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 6.5X6.5X13X60 | 11,06 €             |
| G9528070 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 7X7X13X60     | 11,06 €             |
| G9528075 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 7.5X7.5X16X63 | 11,94 €             |
| G9528080 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 8X8X16X63     | 11,94 €             |
| G9528085 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 8.5X8.5X16X67 | 17,25 €             |

| EDP Nr.  | Beschreibung                                  | Abmessungen   | Promotion Preis [€] |
|----------|---|---------------|---------------------|
| G9528090 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 9X9X16X67     | 17,25 €             |
| G9528095 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 9.5X9.5X19X72 | 18,28 €             |
| G9528100 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 10X10X19X72   | 18,28 €             |
| G9528110 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 11X11X22X83   | 26,75 €             |
| G9528120 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 12X12X22X83   | 26,75 €             |
| G9528130 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 13X13X22X83   | 33,90 €             |
| G9528140 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 14X14X22X83   | 34,12 €             |
| G9528150 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 15X15X26X92   | 45,03 €             |
| G9528160 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 16X16X26X92   | 45,10 €             |
| G9528180 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 18X18X26X92   | 59,03 €             |
| G9528200 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG              | 20X20X32X104  | 74,15 €             |
| G9540035 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 3.5X3.5X10X50 | 6,41 €              |
| G9540040 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 4X4X11X50     | 6,41 €              |
| G9540045 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 4.5X4.5X11X50 | 6,70 €              |
| G9540050 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 5X5X13X50     | 6,70 €              |
| G9540055 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 5.5X5.5X13X57 | 9,50 €              |
| G9540060 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 6X6X13X57     | 9,50 €              |
| G9540065 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 6.5X6.5X16X60 | 11,06 €             |
| G9540070 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 7X7X16X60     | 11,06 €             |
| G9540075 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 7.5X7.5X19X63 | 11,94 €             |
| G9540080 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 8X8X19X63     | 11,94 €             |
| G9540085 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 8.5X8.5X19X67 | 17,25 €             |
| G9540090 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 9X9X19X67     | 17,25 €             |
| G9540095 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 9.5X9.5X22X72 | 18,28 €             |
| G9540100 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 10X10X22X72   | 18,28 €             |
| G9540110 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 11X11X26X83   | 26,75 €             |
| G9540120 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 12X12X26X83   | 26,75 €             |
| G9540130 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 13X13X26X83   | 33,90 €             |
| G9540140 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 14X14X26X83   | 34,12 €             |
| G9540150 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 15X15X32X92   | 45,03 €             |
| G9540160 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 16X16X32X92   | 45,10 €             |
| G9540180 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 18X18X32X92   | 59,03 €             |
| G9540200 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG              | 20X20X38X104  | 74,15 €             |
| G9553005 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 0.5X3X1.5X38  | 6,64 €              |
| G9553006 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 0.6X3X1.5X38  | 6,64 €              |
| G9553008 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 0.8X3X2X38    | 5,82 €              |
| G9553010 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 1X3X2X38      | 5,31 €              |
| G9553012 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 1.2X3X2X38    | 6,93 €              |
| G9553015 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 1.5X3X2X38    | 5,31 €              |
| G9553018 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER | 1.8X3X2X38    | 6,93 €              |
| G9624020 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 2X6X4X48      | 7,66 €              |
| G9624025 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 2.5X6X4X48    | 7,66 €              |
| G9624030 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 3X6X4X48      | 7,66 €              |
| G9624040 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 4X6X6X50      | 8,03 €              |
| G9624050 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 5X6X7X51      | 8,33 €              |
| G9624060 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 6X6X7X51      | 9,07 €              |
| G9624080 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 8X8X9X59      | 14,00 €             |
| G9624100 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 10X10X10X60   | 22,41 €             |
| G9624120 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 12X12X14X71   | 28,81 €             |
| G9624140 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 14X14X14X71   | 33,83 €             |

| EDP Nr.  | Beschreibung                                  | Abmessungen  | Promotion Preis [€] |
|----------|---|--------------|---------------------|
| G9624160 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 16X16X16X76  | 45,32 €             |
| G9624180 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 18X18X18X76  | 49,23 €             |
| G9624200 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 20X20X20X82  | 69,80 €             |
| G9624901 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 4X4X12X40    | 7,74 €              |
| G9624902 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS  | 5X5X14X50    | 8,18 €              |
| G9634020 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 2X6X4X48     | 7,66 €              |
| G9634030 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 3X6X4X48     | 7,66 €              |
| G9634040 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 4X6X6X50     | 8,03 €              |
| G9634050 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 5X6X7X51     | 8,33 €              |
| G9634060 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 6X6X7X51     | 9,07 €              |
| G9634080 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 8X8X9X59     | 14,00 €             |
| G9634100 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 10X10X10X60  | 22,41 €             |
| G9634120 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 12X12X14X71  | 28,81 €             |
| G9634140 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 14X14X14X71  | 33,83 €             |
| G9634160 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 16X16X16X76  | 45,32 €             |
| G9634180 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 18X18X18X76  | 49,23 €             |
| G9634200 | K-2 VHM, 4 SCHNEIDEN KURZ STIRNRADIUS         | 20X20X20X82  | 69,80 €             |
| G9A42060 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 6X6X16X57    | 13,72 €             |
| G9A42080 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 8X8X16X63    | 15,18 €             |
| G9A42100 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 10X10X22X72  | 24,47 €             |
| G9A42120 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 12X12X26X83  | 33,24 €             |
| G9A42140 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 14X14X26X83  | 40,68 €             |
| G9A42160 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 16X16X32X92  | 51,89 €             |
| G9A42180 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 18X18X32X92  | 69,13 €             |
| G9A42200 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 20X20X38X104 | 78,72 €             |
| G9A42250 | K-2 SCHRUPPFÄSER VHM, MEHRSCHEIDEN LANG, GROB | 25X25X45X121 | 167,90 €            |
| G9A68010 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 1X3X3X39     | 5,75 €              |
| G9A68015 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 1 5X3X5X39   | 5,75 €              |
| G9A68020 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 2X3X7X39     | 5,75 €              |
| G9A68025 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 2 5X3X7X39   | 5,75 €              |
| G9A68030 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 3X3X9X39     | 5,75 €              |
| G9A68040 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 4X4X14X51    | 6,41 €              |
| G9A68050 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 5X5X16X51    | 6,70 €              |
| G9A68060 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 6X6X19X64    | 9,65 €              |
| G9A68080 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 8X8X21X64    | 12,01 €             |
| G9A68100 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 10X10X22X70  | 18,12 €             |
| G9A68120 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 12X12X25X76  | 26,75 €             |
| G9A68160 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 16X16X32X89  | 45,10 €             |
| G9A68200 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ               | 20X20X38X102 | 74,15 €             |
| G9A69010 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 1X3X3X39     | 5,75 €              |
| G9A69015 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 1 5X3X5X39   | 5,75 €              |
| G9A69020 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 2X3X7X39     | 5,75 €              |
| G9A69025 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 2 5X3X7X39   | 5,75 €              |
| G9A69030 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 3X3X10X39    | 5,75 €              |
| G9A69040 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 4X4X14X51    | 6,41 €              |
| G9A69050 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 5X5X16X51    | 6,70 €              |
| G9A69060 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 6X6X19X64    | 9,65 €              |
| G9A69080 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 8X8X21X64    | 12,01 €             |
| G9A69100 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 10X10X22X70  | 18,12 €             |
| G9A69120 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ              | 12X12X25X76  | 26,75 €             |

| EDP Nr.  | Beschreibung                                 | Abmessungen      | Promotion Preis [€] |
|----------|--|------------------|---------------------|
| G9A69160 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 16X16X32X89      | 45,10 €             |
| G9A69200 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ             | 20X20X38X102     | 74,15 €             |
| G9A70010 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 1X3X3X39         | 7,22 €              |
| G9A70015 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 1 5X3X5X39       | 7,22 €              |
| G9A70020 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 2X3X7X39         | 7,22 €              |
| G9A70025 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 2 5X3X8X39       | 7,22 €              |
| G9A70030 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 3X3X9X39         | 7,22 €              |
| G9A70040 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 4X4X14X51        | 8,03 €              |
| G9A70050 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 5X5X16X51        | 8,18 €              |
| G9A70060 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 6X6X19X64        | 10,84 €             |
| G9A70080 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 8X8X21X64        | 18,28 €             |
| G9A70100 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 10X10X22X70      | 29,63 €             |
| G9A70110 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 11X11X25X70      | 38,17 €             |
| G9A70120 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 12X12X25X76      | 38,17 €             |
| G9A70160 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 16X16X32X89      | 60,95 €             |
| G9A70200 | K-2 VHM FRÄSER, 2 SCHNEIDEN KURZ STIRNRADIUS | 20X20X38X102     | 93,37 €             |
| G9B80004 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.4X4X0.7(2)X50  | 15,03 €             |
| G9B80005 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.5X4X0.75(2)X50 | 13,78 €             |
| G9B80006 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.6X4X0.9(2)X50  | 13,78 €             |
| G9B80007 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0 7X4X1.1(4)X50  | 12,46 €             |
| G9B80008 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.8X4X1 2(4)X50  | 12,46 €             |
| G9B80009 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.9X4X1.4(6)X50  | 12,46 €             |
| G9B80010 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1X4X1.5(6)X50    | 11,13 €             |
| G9B80012 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1 2X4X1.8(6)X50  | 11,13 €             |
| G9B80015 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1 5X4X2 3(6)X50  | 11,13 €             |
| G9B80020 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(6)X50      | 10,61 €             |
| G9B80025 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2 5X4X3 7(8)X50  | 10,61 €             |
| G9B80030 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 3X6X4.5(8)X50    | 15,93 €             |
| G9B80040 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 4X6X6(12)X50     | 15,93 €             |
| G9B80901 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.4X4X0 7(4)X50  | 15,03 €             |
| G9B80902 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.5X4X0.75(4)X50 | 13,78 €             |
| G9B80903 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.5X4X0.75(6)X50 | 13,78 €             |
| G9B80904 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.6X4X0.9(4)X50  | 13,78 €             |
| G9B80905 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.6X4X0.9(6)X50  | 13,78 €             |
| G9B80906 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0 7X4X1.1(6)X50  | 12,46 €             |
| G9B80907 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.8X4X1 2(6)X50  | 12,46 €             |
| G9B80908 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.8X4X1 2(8)X50  | 12,46 €             |
| G9B80909 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.9X4X1.4(8)X50  | 12,46 €             |
| G9B80910 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 0.9X4X1.4(10)X50 | 12,46 €             |
| G9B80911 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1X4X1.5(8)X50    | 11,13 €             |
| G9B80912 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1X4X1.5(10)X50   | 11,13 €             |
| G9B80913 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1X4X1.5(12)X50   | 11,79 €             |
| G9B80914 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.2X4X1.8(8)X50  | 11,13 €             |
| G9B80915 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.2X4X1.8(10)X50 | 11,13 €             |
| G9B80916 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.2X4X1.8(12)X50 | 11,79 €             |
| G9B80917 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.5X4X2.3(8)X50  | 11,13 €             |
| G9B80918 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.5X4X2.3(10)X50 | 11,13 €             |
| G9B80919 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.5X4X2.3(12)X50 | 11,79 €             |
| G9B80920 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.5X4X2.3(14)X50 | 11,79 €             |
| G9B80921 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.5X4X2.3(16)X50 | 12,30 €             |



| EDP Nr.  | Beschreibung                                 | Abmessungen      | Promotion Preis [€] |
|----------|--|------------------|---------------------|
| G9B80922 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.5X4X2.3(18)X50 | 12,30 €             |
| G9B80923 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 1.5X4X2.3(20)X50 | 12,30 €             |
| G9B80924 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(8)X50      | 10,61 €             |
| G9B80925 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(10)X50     | 10,61 €             |
| G9B80926 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(12)X50     | 10,61 €             |
| G9B80927 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(14)X50     | 10,61 €             |
| G9B80928 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(16)X50     | 10,98 €             |
| G9B80929 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(18)X50     | 10,98 €             |
| G9B80930 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2X4X3(20)X50     | 10,98 €             |
| G9B80931 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2.5X4X3.7(12)X50 | 10,61 €             |
| G9B80932 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2.5X4X3.7(16)X50 | 10,98 €             |
| G9B80933 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 2.5X4X3.7(20)X50 | 10,98 €             |
| G9B80934 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 3X6X4.5(12)X50   | 15,93 €             |
| G9B80935 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 3X6X4.5(16)X60   | 16,36 €             |
| G9B80936 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 3X6X4.5(20)X60   | 16,36 €             |
| G9B80937 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 3X6X4.5(25)X75   | 16,36 €             |
| G9B80938 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 4X6X6(16)X60     | 16,36 €             |
| G9B80939 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 4X6X6(20)X75     | 16,36 €             |
| G9B80940 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 4X6X6(25)X75     | 16,36 €             |
| G9B80941 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 4X6X6(30)X75     | 18,87 €             |
| G9B80942 | K-2 FRÄSER VHM, 2 SCHNEIDEN SCHMALE RIPPEN   | 4X6X6(35)X75     | 20,56 €             |
| G9B81004 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.4X4X0.7(2)X50  | 24,03 €             |
| G9B81005 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.5X4X0.75(2)X50 | 20,79 €             |
| G9B81006 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.6X4X0.9(2)X50  | 20,79 €             |
| G9B81008 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.8X4X1 2(4)X50  | 16,06 €             |
| G9B81010 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1X4X1.5(6)X50    | 14,81 €             |
| G9B81012 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1 2X4X1.8(8)X50  | 14,81 €             |
| G9B81014 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.4X4X2.1(16)X50 | 16,73 €             |
| G9B81015 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1 5X4X2 3(6)X50  | 14,81 €             |
| G9B81016 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.6X4X2.4(8)X50  | 14,81 €             |
| G9B81020 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 2X4X3(8)X50      | 13,86 €             |
| G9B81030 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 3X6X4.5(10)X50   | 16,66 €             |
| G9B81040 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 4X6X6(12)X50     | 16,15 €             |
| G9B81901 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.5X4X0.75(4)X50 | 20,79 €             |
| G9B81902 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.5X4X0.75(6)X50 | 24,03 €             |
| G9B81903 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.6X4X0.9(4)X50  | 20,79 €             |
| G9B81904 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.6X4X0.9(6)X50  | 20,79 €             |
| G9B81905 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.8X4X1 2(6)X50  | 16,06 €             |
| G9B81906 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 0.8X4X1 2(8)X50  | 16,06 €             |
| G9B81907 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1X4X1.5(8)X50    | 14,81 €             |
| G9B81908 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1X4X1.5(10)X50   | 14,81 €             |
| G9B81909 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1X4X1.5(12)X50   | 15,77 €             |
| G9B81910 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.2X4X1.8(12)X50 | 15,77 €             |
| G9B81911 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1 5X4X2 3(8)X50  | 14,81 €             |
| G9B81912 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.5X4X2.3(10)X50 | 14,81 €             |
| G9B81913 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.5X4X2.3(12)X50 | 15,77 €             |
| G9B81914 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.5X4X2.3(16)X50 | 16,73 €             |
| G9B81915 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.5X4X2.3(20)X50 | 16,73 €             |
| G9B81916 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.6X4X2.4(12)X50 | 15,77 €             |
| G9B81917 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.6X4X2.4(16)X50 | 16,73 €             |



| EDP Nr.  | Beschreibung                                 | Abmessungen       | Promotion Preis [€] |
|----------|--|-------------------|---------------------|
| G9B81918 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 1.6X4X2.4(20)X50  | 16,73 €             |
| G9B81919 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 2X4X3(10)X50      | 13,86 €             |
| G9B81920 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 2X4X3(12)X50      | 13,86 €             |
| G9B81921 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 2X4X3(14)X50      | 14,67 €             |
| G9B81922 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 2X4X3(16)X50      | 14,67 €             |
| G9B81923 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 2X4X3(20)X50      | 15,33 €             |
| G9B81924 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 3X6X4.5(12)X50    | 16,66 €             |
| G9B81925 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 3X6X4.5(16)X60    | 20,19 €             |
| G9B81926 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 3X6X4.5(20)X60    | 21,66 €             |
| G9B81927 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 3X6X4.5(25)X75    | 22,41 €             |
| G9B81928 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 4X6X6(16)X60      | 20,19 €             |
| G9B81929 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 4X6X6(20)X75      | 22,41 €             |
| G9B81930 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 4X6X6(25)X75      | 22,41 €             |
| G9B81931 | K-2, 2 SCHNEIDEN STIRNRADIUS, SCHMALE RIPPEN | 4X6X6(30)X75      | 23,29 €             |
| G9B82020 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 2(R0.2)X4X4X50    | 7,74 €              |
| G9B82025 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 2.5(R0 2)X4X5X50  | 7,74 €              |
| G9B82030 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 3(R0.2)X4X6X50    | 7,74 €              |
| G9B82040 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 4(R0.2)X4X8X50    | 7,74 €              |
| G9B82050 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 5(R0.2)X6X10X50   | 11,57 €             |
| G9B82060 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 6(R0.2)X6X12X50   | 11,57 €             |
| G9B82080 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 8(R0.5)X8X16X60   | 14,08 €             |
| G9B82100 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 10(R0.5)X10X20X75 | 21,44 €             |
| G9B82120 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 12(R0.5)X12X24X75 | 30,00 €             |
| G9B82901 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 2(R0.3)X4X4X50    | 7,74 €              |
| G9B82902 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 2(R0.5)X4X4X50    | 7,74 €              |
| G9B82903 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 2.5(R0 3)X4X5X50  | 7,74 €              |
| G9B82904 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 2.5(R0 5)X4X5X50  | 7,74 €              |
| G9B82905 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 3(R0.3)X4X6X50    | 7,74 €              |
| G9B82906 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 3(R0.5)X4X6X50    | 7,74 €              |
| G9B82907 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 3(R1)X4X6X50      | 7,74 €              |
| G9B82908 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 4(R0.3)X4X8X50    | 7,74 €              |
| G9B82909 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 4(R0.5)X4X8X50    | 7,74 €              |
| G9B82910 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 4(R1)X4X8X50      | 7,74 €              |
| G9B82911 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 5(R0.3)X6X10X50   | 11,57 €             |
| G9B82912 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 5(R0.5)X6X10X50   | 11,57 €             |
| G9B82913 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 5(R1)X6X10X50     | 11,57 €             |
| G9B82914 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 6(R0.3)X6X12X50   | 11,57 €             |
| G9B82915 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 6(R0.5)X6X12X50   | 11,57 €             |
| G9B82916 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 6(R1)X6X12X50     | 11,57 €             |
| G9B82917 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 8(R1)X8X16X60     | 14,08 €             |
| G9B82918 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 8(R1.5)X8X16X60   | 14,74 €             |
| G9B82919 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 8(R2)X8X16X60     | 14,74 €             |
| G9B82920 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 8(R2.5)X8X16X60   | 14,74 €             |
| G9B82921 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 10(R1)X10X20X75   | 21,44 €             |
| G9B82922 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 10(R1.5)X10X20X75 | 22,48 €             |
| G9B82923 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 10(R2)X10X20X75   | 22,48 €             |
| G9B82924 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 10(R2.5)X10X20X75 | 22,48 €             |
| G9B82925 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 12(R1)X12X24X75   | 30,00 €             |
| G9B82926 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 12(R1.5)X12X24X75 | 31,47 €             |
| G9B82927 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 12(R2)X12X24X75   | 31,47 €             |

| EDP Nr.  | Beschreibung                                 | Abmessungen        | Promotion Preis [€] |
|----------|--|--------------------|---------------------|
| G9B82928 | K-2 FRÄSER VHM, 2 SCHNEIDEN KURZ ECKENRADIUS | 12(R2.5)X12X24X75  | 31,47 €             |
| G9B83030 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 3(R0.5)X4X6X75     | 8,78 €              |
| G9B83040 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 4(R0.5)X4X8X75     | 8,78 €              |
| G9B83050 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 5(R0.5)X6X10X75    | 12,75 €             |
| G9B83060 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 6(R0.5)X6X12X75    | 12,75 €             |
| G9B83080 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 8(R0.5)X8X16X100   | 16,52 €             |
| G9B83100 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 10(R0.5)X10X20X100 | 25,14 €             |
| G9B83120 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 12(R0.5)X12X24X100 | 32,06 €             |
| G9B83901 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 3(R1)X4X6X75       | 8,78 €              |
| G9B83902 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 4(R1)X4X8X75       | 8,78 €              |
| G9B83903 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 5(R1)X6X10X75      | 12,75 €             |
| G9B83904 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 6(R1)X6X12X75      | 12,75 €             |
| G9B83905 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 8(R1)X8X16X100     | 16,52 €             |
| G9B83906 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 8(R1.5)X8X16X100   | 16,52 €             |
| G9B83907 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 8(R2)X8X16X100     | 16,52 €             |
| G9B83908 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 8(R2.5)X8X16X100   | 16,52 €             |
| G9B83909 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 10(R1)X10X20X100   | 25,14 €             |
| G9B83910 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 10(R1.5)X10X20X100 | 25,14 €             |
| G9B83911 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 10(R2)X10X20X100   | 25,14 €             |
| G9B83912 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 10(R2.5)X10X20X100 | 25,14 €             |
| G9B83913 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 12(R1)X12X24X100   | 32,06 €             |
| G9B83914 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 12(R1.5)X12X24X100 | 32,06 €             |
| G9B83915 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 12(R2)X12X24X100   | 32,06 €             |
| G9B83916 | K-2 FRÄSER VHM, 2 SCHNEIDEN GROÙE REICHWEITE | 12(R2.5)X12X24X100 | 32,06 €             |
| G9B84020 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 2(R0.2)X4X4X50     | 7,74 €              |
| G9B84025 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 2.5(R0.2)X4X5X50   | 7,74 €              |
| G9B84030 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 3(R0 2)X4X6X50     | 7,74 €              |
| G9B84040 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 4(R0 2)X4X8X50     | 7,74 €              |
| G9B84050 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 5(R0.2)X6X10X50    | 11,57 €             |
| G9B84060 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 6(R0.2)X6X12X50    | 11,57 €             |
| G9B84080 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 8(R0.5)X8X16X60    | 14,08 €             |
| G9B84100 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 10(R0.5)X10X20X75  | 21,44 €             |
| G9B84120 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 12(R0.5)X12X24X75  | 30,00 €             |
| G9B84901 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 2(R0 3)X4X4X50     | 7,74 €              |
| G9B84902 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 2(R0 5)X4X4X50     | 7,74 €              |
| G9B84903 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 2.5(R0.3)X4X5X50   | 7,74 €              |
| G9B84904 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 2.5(R0.5)X4X5X50   | 7,74 €              |
| G9B84905 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 3(R0 3)X4X6X50     | 7,74 €              |
| G9B84906 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 3(R0 5)X4X6X50     | 7,74 €              |
| G9B84907 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 3(R1)X4X6X50       | 7,74 €              |
| G9B84908 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 4(R0 3)X4X8X50     | 7,74 €              |
| G9B84909 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 4(R0 5)X4X8X50     | 7,74 €              |
| G9B84910 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 4(R1)X4X8X50       | 7,74 €              |
| G9B84911 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 5(R0.3)X6X10X50    | 11,57 €             |
| G9B84912 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 5(R0.5)X6X10X50    | 11,57 €             |
| G9B84913 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 5(R1)X6X10X50      | 11,57 €             |
| G9B84914 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 6(R0.3)X6X12X50    | 11,57 €             |
| G9B84915 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 6(R0.5)X6X12X50    | 11,57 €             |
| G9B84916 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 6(R1)X6X12X50      | 11,57 €             |
| G9B84917 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS | 8(R1)X8X16X60      | 14,08 €             |

| EDP Nr.  | Beschreibung   | Abmessungen        | Promotion Preis [€] |
|----------|--|--------------------|---------------------|
| G9B84918 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 8(R1.5)X8X16X60    | 14,74 €             |
| G9B84919 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 8(R2)X8X16X60      | 14,74 €             |
| G9B84920 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 8(R2.5)X8X16X60    | 14,74 €             |
| G9B84921 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 10(R1)X10X20X75    | 21,44 €             |
| G9B84922 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 10(R1.5)X10X20X75  | 22,48 €             |
| G9B84923 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 10(R2)X10X20X75    | 22,48 €             |
| G9B84924 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 10(R2.5)X10X20X75  | 22,48 €             |
| G9B84925 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 12(R1)X12X24X75    | 30,00 €             |
| G9B84926 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 12(R1.5)X12X24X75  | 31,47 €             |
| G9B84927 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 12(R2)X12X24X75    | 31,47 €             |
| G9B84928 | K-2 FRÄSER VHM, 4 SCHNEIDEN KURZ ECKENRADIUS               | 12(R2.5)X12X24X75  | 31,47 €             |
| G9B85030 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 3(R0.5)X4X6X75     | 8,78 €              |
| G9B85040 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 4(R0.5)X4X8X75     | 8,78 €              |
| G9B85050 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 5(R0.5)X6X10X75    | 12,75 €             |
| G9B85060 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 6(R0.5)X6X12X75    | 12,75 €             |
| G9B85080 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 8(R0.5)X8X16X100   | 16,52 €             |
| G9B85100 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 10(R0.5)X10X20X100 | 25,14 €             |
| G9B85120 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 12(R0.5)X12X24X100 | 32,06 €             |
| G9B85901 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 3(R1)X4X6X75       | 8,78 €              |
| G9B85902 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 4(R1)X4X8X75       | 8,78 €              |
| G9B85903 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 5(R1)X6X10X75      | 12,75 €             |
| G9B85904 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 6(R1)X6X12X75      | 12,75 €             |
| G9B85905 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 8(R1)X8X16X100     | 16,52 €             |
| G9B85906 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 8(R1.5)X8X16X100   | 16,52 €             |
| G9B85907 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 8(R2)X8X16X100     | 16,52 €             |
| G9B85908 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 8(R2.5)X8X16X100   | 16,52 €             |
| G9B85909 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 10(R1)X10X20X100   | 25,14 €             |
| G9B85910 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 10(R1.5)X10X20X100 | 25,14 €             |
| G9B85911 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 10(R2)X10X20X100   | 25,14 €             |
| G9B85912 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 10(R2.5)X10X20X100 | 25,14 €             |
| G9B85913 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 12(R1)X12X24X100   | 32,06 €             |
| G9B85914 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 12(R1.5)X12X24X100 | 32,06 €             |
| G9B85915 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 12(R2)X12X24X100   | 32,06 €             |
| G9B85916 | K-2 FRÄSER VHM, 4 SCHNEIDEN GROßE REICHWEITE               | 12(R2.5)X12X24X100 | 32,06 €             |
| G9F45030 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 3X4X8X50           | 6,79 €              |
| G9F45040 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 4X4X11X50          | 6,79 €              |
| G9F45050 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 5X6X13X50          | 10,54 €             |
| G9F45060 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 6X6X16X50          | 10,54 €             |
| G9F45080 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 8X8X19X60          | 12,90 €             |
| G9F45100 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 10X10X22X75        | 19,67 €             |
| G9F45120 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 12X12X26X75        | 25,69 €             |
| G9F45140 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 14X14X30X90        | 37,25 €             |
| G9F45160 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 16X16X32X100       | 50,77 €             |
| G9F45180 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 18X18X38X100       | 65,31 €             |
| G9F45200 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 20X20X38X100       | 80,94 €             |
| G9F46120 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 12X12X50X100       | 40,11 €             |
| G9F46160 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 16X16X65X150       | 83,78 €             |
| G9F46200 | K-2 Fräser, VHM, 4 & 6 SCHNEIDEN 45° RECHTSSPIRALE, KURZ / | 20X20X70X150       | 122,80 €            |
| G9G44030 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                            | 3X3X12X32          | 5,75 €              |
| G9G44040 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                            | 4X4X12X40          | 6,41 €              |

| EDP Nr.  | Beschreibung                                       | Abmessungen  | Promotion Preis [€] |
|----------|--|--------------|---------------------|
| G9G44050 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 5X5X14X50    | 6,70 €              |
| G9G44060 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 6X6X16X50    | 7,44 €              |
| G9G44080 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 8X8X20X60    | 12,01 €             |
| G9G44100 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 10X10X22X70  | 18,12 €             |
| G9G44120 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 12X12X22X70  | 24,76 €             |
| G9G44140 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 14X14X25X75  | 33,09 €             |
| G9G44160 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 16X16X25X75  | 43,41 €             |
| G9G44200 | K2 VHM FRÄSER, 2 SCHNEIDEN KURZ                    | 20X20X32X100 | 73,55 €             |
| G9G45030 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 3X6X7X57     | 9,50 €              |
| G9G45040 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 4X6X8X57     | 9,50 €              |
| G9G45050 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 5X6X10X57    | 9,50 €              |
| G9G45060 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 6X6X10X57    | 9,50 €              |
| G9G45080 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 8X8X16X63    | 11,94 €             |
| G9G45100 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 10X10X19X72  | 18,28 €             |
| G9G45120 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 12X12X22X83  | 26,83 €             |
| G9G45140 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 14X14X22X83  | 34,20 €             |
| G9G45160 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 16X16X26X92  | 45,19 €             |
| G9G45200 | K2 VHM FRÄSER, 2 SCHNEIDEN LANG                    | 20X20X32X104 | 74,29 €             |
| G9G46030 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 3X6X5X36     | 6,34 €              |
| G9G46040 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 4X6X7X38     | 6,34 €              |
| G9G46050 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 5X6X8X39     | 6,34 €              |
| G9G46060 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 6X6X8X39     | 6,34 €              |
| G9G46080 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 8X8X11X43    | 9,30 €              |
| G9G46100 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 10X10X13X50  | 13,86 €             |
| G9G46120 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 12X12X15X55  | 16,44 €             |
| G9G46140 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 14X14X15X58  | 24,39 €             |
| G9G46160 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 16X16X18X62  | 28,81 €             |
| G9G46200 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ EINWEGFRÄSER      | 20X20X22X75  | 46,79 €             |
| G9G47030 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 3X3X12X32    | 5,75 €              |
| G9G47040 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 4X4X12X40    | 6,41 €              |
| G9G47050 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 5X5X14X50    | 6,70 €              |
| G9G47060 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 6X6X16X50    | 7,44 €              |
| G9G47080 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 8X8X20X60    | 12,01 €             |
| G9G47100 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 10X10X22X70  | 18,12 €             |
| G9G47120 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 12X12X22X70  | 24,76 €             |
| G9G47140 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 14X14X25X75  | 33,09 €             |
| G9G47160 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 16X16X25X75  | 43,41 €             |
| G9G47200 | K-2 VHM FRÄSER, 3 SCHNEIDEN KURZ                   | 20X20X32X100 | 73,55 €             |
| G9G48030 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 3X6X7X57     | 9,50 €              |
| G9G48040 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 4X6X8X57     | 9,50 €              |
| G9G48050 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 5X6X10X57    | 9,50 €              |
| G9G48060 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 6X6X10X57    | 9,50 €              |
| G9G48080 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 8X8X16X63    | 11,94 €             |
| G9G48100 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 10X10X19X72  | 18,28 €             |
| G9G48120 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 12X12X22X83  | 26,75 €             |
| G9G48140 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 14X14X22X83  | 34,12 €             |
| G9G48160 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 16X16X26X92  | 45,10 €             |
| G9G48200 | K-2 VHM FRÄSER, 3 SCHNEIDEN LANG, ECKFASE          | 20X20X32X104 | 74,15 €             |
| G9G49030 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 3X6X7X57     | 11,42 €             |
| G9G49040 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 4X6X8X57     | 11,42 €             |



| EDP Nr.  | Beschreibung                                       | Abmessungen  | Promotion Preis [€] |
|----------|--|--------------|---------------------|
| G9G49050 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 5X6X10X57    | <b>11,42 €</b>      |
| G9G49060 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 6X6X10X57    | <b>11,42 €</b>      |
| G9G49080 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 8X8X16X63    | <b>14,00 €</b>      |
| G9G49100 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 10X10X19X72  | <b>21,96 €</b>      |
| G9G49120 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 12X12X22X83  | <b>31,69 €</b>      |
| G9G49140 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 14X14X22X83  | <b>40,46 €</b>      |
| G9G49160 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 16X16X26X92  | <b>53,59 €</b>      |
| G9G49200 | K-2 VHM FRÄSER, 3 SCHNEIDEN 45° RECHTSSPIRALE LANG | 20X20X32X104 | <b>84,55 €</b>      |
| G9G50030 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 3X3X12X32    | <b>5,75 €</b>       |
| G9G50040 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 4X4X12X40    | <b>6,41 €</b>       |
| G9G50050 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 5X5X14X50    | <b>6,70 €</b>       |
| G9G50060 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 6X6X16X50    | <b>7,44 €</b>       |
| G9G50080 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 8X8X20X60    | <b>12,01 €</b>      |
| G9G50100 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 10X10X22X70  | <b>18,12 €</b>      |
| G9G50120 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 12X12X22X70  | <b>24,76 €</b>      |
| G9G50140 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 14X14X25X75  | <b>33,09 €</b>      |
| G9G50160 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 16X16X25X75  | <b>43,41 €</b>      |
| G9G50200 | K-2 VHM FRÄSER, 4 SCHNEIDEN KURZ                   | 20X20X32X100 | <b>73,55 €</b>      |
| G9G51030 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 3X6X8X57     | <b>9,88 €</b>       |
| G9G51040 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 4X6X11X57    | <b>10,24 €</b>      |
| G9G51050 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 5X6X13X57    | <b>10,24 €</b>      |
| G9G51060 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 6X6X13X57    | <b>10,24 €</b>      |
| G9G51080 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 8X8X19X63    | <b>12,46 €</b>      |
| G9G51100 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 10X10X22X72  | <b>19,02 €</b>      |
| G9G51120 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 12X12X26X83  | <b>27,50 €</b>      |
| G9G51140 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 14X14X26X83  | <b>35,96 €</b>      |
| G9G51160 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 16X16X32X92  | <b>48,80 €</b>      |
| G9G51200 | K-2 VHM FRÄSER, 4 SCHNEIDEN LANG                   | 20X20X38X104 | <b>77,91 €</b>      |



YD-DD20

PROMOTION

SONDERAKTION

623 DREAM DRILL ARTIKEL

*gültig bis 31.12.2020*



# DREAM DRILLS

VHM-HOCHLEISTUNGS-SPIRALBOHRER

DREAM DRILLS

• **GENERAL** mit / ohne Innenkühlung

Nur Glattschaft, Kein Weldon

Angebot ist begrenzt und ist speziell für Gewerbe, Handwerk, Handel und Industrie.  
Preise in EURO, zzgl. MwSt. - Änderungen, Zwischenverkauf und Irrtümer vorbehalten.  
Der Verkauf ist ausschließlich für den deutschen Markt bestimmt. Ein Verkauf ins Ausland ist untersagt.



# SOLID CARBIDE DREAM DRILLS GENERAL

For General Purpose (HRc30 to HRc45)



Please visit  
[global.yg1.com/mat](http://global.yg1.com/mat)  
for material search

◎ : Excellent ○ : Good

Recommended cutting conditions : P.94

| ISO | VDI 3323  | Material Description                      | Composition / Structure / Heat Treatment       | HB       | HRc |    |
|-----|-----------|---|--|----------|-----|----|
| P   | 1         | Non alloy steel                           | About 0.15% C Annealed                         | 125      |     |    |
|     | 2         |   | About 0.45% C Annealed                         | 190      | 13  | ◎  |
|     | 3         |   | About 0.45% C Quenched & Tempered              | 250      | 25  | ◎  |
|     | 4         |   | About 0.75% C Annealed                         | 270      | 28  | ◎  |
|     | 5         |   | About 0.75% C Quenched & Tempered              | 300      | 32  | ○  |
|     | 6         | Low alloy steel                           | Annealed                                       | 180      | 10  | ◎  |
|     | 7         |   | Quenched & Tempered                            | 275      | 29  | ◎  |
|     | 8         |   | Quenched & Tempered                            | 300      | 32  | ○  |
|     | 9         |   | Quenched & Tempered                            | 350      | 38  | ○  |
|     | 10        |   | High alloyed steel, and tool steel             | Annealed | 200 | 15 |
|     | 11        | Quenched & Tempered                       |  | 325      | 35  | ○  |
| M   | 12        | Stainless steel                           | Ferritic / martensitic Annealed                | 200      | 15  | ○  |
|     | 13        |   | Martensitic Quenched & Tempered                | 240      | 23  | ○  |
|     | 14        |   | Austenitic                                     | 180      | 10  |    |
| K   | 15        | Grey cast iron                            | Pearlitic / ferritic                           | 180      | 10  | ◎  |
|     | 16        |   | Pearlitic (Martensitic)                        | 260      | 26  | ○  |
|     | 17        | Nodular cast iron                         | Ferritic                                       | 160      | 3   | ◎  |
|     | 18        |   | Pearlitic                                      | 250      | 25  | ○  |
|     | 19        | Malleable cast iron                       | Ferritic                                       | 130      |     | ◎  |
| 20  | Pearlitic |   | 230  | 21       | ○   |    |
| N   | 21        | Aluminum wrought alloy                    | Not Curable                                    | 60       |     |    |
|     | 22        |   | Curable Hardened                               | 100      |     |    |
|     | 23        |   | ≤ 12% Si, Not Curable                          | 75       |     |    |
|     | 24        | Aluminum cast, alloyed                    | ≤ 12% Si, Curable Hardened                     | 90       |     |    |
|     | 25        |   | > 12% Si, Not Curable                          | 130      |     |    |
|     | 26        | Copper and Copper Alloys (Bronze / Brass) | Cutting Alloys, PB>1%                          | 110      |     |    |
|     | 27        |   | CuZn, CuSnZn (Brass)                           | 90       |     |    |
|     | 28        |   | CuSn, lead-free copper and electrolytic copper | 100      |     |    |
|     | 29        |   | Duroplastic, Fiber Reinforced Plastic          |          |     |    |
|     | 30        | Non Metallic Materials                    | Rubber, Wood, etc.                             |          |     |    |

| DH424 | DH406 | DH408 | DH4249 |
|-------|-------|-------|--------|
| 5XD   | 3XD   | 5XD   | 5XD    |
| LONG  | SHORT | LONG  | LONG   |
| D1.0  | D3.0  | D1.0  | D3.25  |
| D20.0 | D20.0 | D20.0 | D9.65  |
| 83    | 86    | 89    | -      |

**TiAIN**



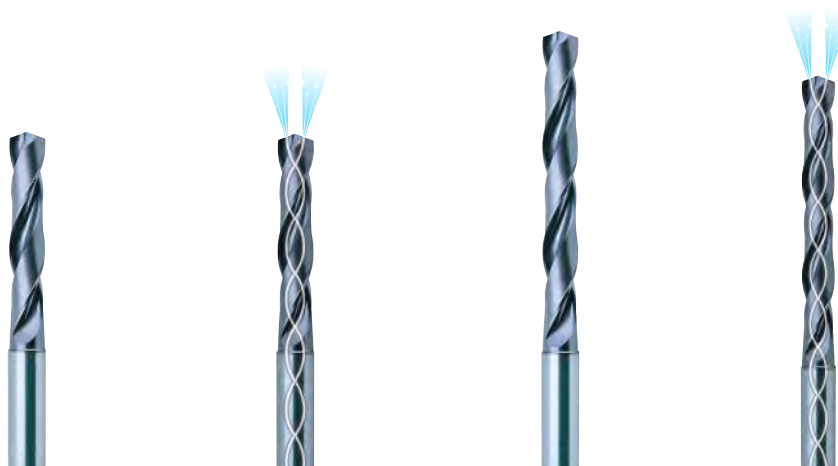
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| ⊙ | ⊙ | ⊙ | ⊙ | 7  |   |
| ○ | ○ | ○ | ○ | 8  |   |
| ○ | ○ | ○ | ○ | 9  |   |
| ⊙ | ⊙ | ⊙ | ⊙ | 10 |   |
| ○ | ○ | ○ | ○ | 11 |   |
| ○ | ○ | ○ | ○ | 12 | M |
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| ⊙ | ⊙ | ⊙ | ⊙ | 17 |   |
| ○ | ○ | ○ | ○ | 18 |   |
| ⊙ | ⊙ | ⊙ | ⊙ | 19 |   |
| ○ | ○ | ○ | ○ | 20 |   |
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|   |   |   |   | 27 |   |
|   |   |   |   | 28 |   |
|   |   |   |   | 29 |   |
|   |   |   |   | 30 |   |
|   |   |   |   | 31 | S |
|   |   |   |   | 32 |   |
|   |   |   |   | 33 |   |
|   |   |   |   | 34 |   |
|   |   |   |   | 35 |   |
|   |   |   |   | 36 |   |
|   |   |   |   | 37 |   |
|   |   |   |   | 38 | H |
|   |   |   |   | 39 |   |
|   |   |   |   | 40 |   |
|   |   |   |   | 41 |   |



3×D

5×D

# DREAM DRILLS GENERAL



| Glatt          | DH423          | DH406*          | DH424           | DH408*          |
|----------------|----------------|-----------------|-----------------|-----------------|
| 1,0 - 2,9 mm   | -              | -               | <b>14,55 €</b>  | <b>22,50 €</b>  |
| 3,0 - 6,0 mm   | <b>11,85 €</b> | <b>19,50 €</b>  | <b>18,31 €</b>  | <b>25,28 €</b>  |
| 6,1 - 8,0 mm   | <b>17,85 €</b> | <b>26,48 €</b>  | <b>22,50 €</b>  | <b>27,99 €</b>  |
| 8,1 - 10,0 mm  | <b>22,81 €</b> | <b>29,71 €</b>  | <b>28,95 €</b>  | <b>33,31 €</b>  |
| 10,1 - 12,0 mm | <b>28,73 €</b> | <b>42,54 €</b>  | <b>45,01 €</b>  | <b>46,82 €</b>  |
| bis 14,0 mm    | <b>42,76 €</b> | <b>59,42 €</b>  | <b>53,34 €</b>  | <b>63,01 €</b>  |
| bis 16,0 mm    | <b>52,51 €</b> | <b>67,29 €</b>  | <b>67,15 €</b>  | <b>83,27 €</b>  |
| bis 18,0 mm    | <b>68,04 €</b> | <b>116,59 €</b> | <b>85,16 €</b>  | <b>124,54 €</b> |
| bis 20,0 mm    | <b>83,57 €</b> | <b>127,31 €</b> | <b>106,76 €</b> | <b>142,54 €</b> |

\* Vom Durchmesser 1,0 (bzw. 3,0) bis 12,00 mm sind alle Bohrer in 0,1 mm Abstufung lieferbar. Nur für Serien DH406/DH408 sind Zwischengrößen ab 12,1 bis 19,9 mm in 0,1 mm Abstufung lieferbar.



3×D

5×D



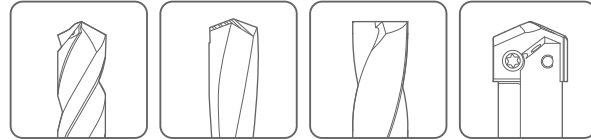
# DREAM DRILLS KERNLOCHBOHRER FÜR GEWINDEFORMER

| Gewinde-<br>größe | EDP Nr.<br>TiAlN | Bohrer | Schaft | Spirallänge | Gesamtlänge |    | Promotion<br>Preis / Stk. |
|-------------------|------------------|--------|--------|-------------|-------------|----|---------------------------|
|                   |                  |        |        |             | Glatt       | D1 |                           |
| M 3.5             | <b>DH424932</b>  | 3,25   | 6      | 28          | 66          |    | <b>23,82 €</b>            |
| MF 4              | <b>DH424937</b>  | 3,75   | 6      | 28          | 66          |    | <b>23,82 €</b>            |
| M 5               | <b>DH424946</b>  | 4,65   | 6      | 36          | 74          |    | <b>23,82 €</b>            |
| MF 5              | <b>DH424947</b>  | 4,75   | 6      | 36          | 74          |    | <b>23,82 €</b>            |
| M 6               | <b>DH424955</b>  | 5,55   | 6      | 44          | 82          |    | <b>23,82 €</b>            |
| MF 6*             | <b>DH424956</b>  | 5,65   | 6      | 44          | 82          |    | <b>23,82 €</b>            |
| MF 6              | <b>DH424957</b>  | 5,75   | 6      | 44          | 82          |    | <b>23,82 €</b>            |
| M 7               | <b>DH424965</b>  | 6,55   | 8      | 53          | 91          |    | <b>28,80 €</b>            |
| MF 7*             | <b>DH424966</b>  | 6,65   | 8      | 53          | 91          |    | <b>28,80 €</b>            |
| MF 8              | <b>DH424976</b>  | 7,65   | 8      | 53          | 91          |    | <b>28,80 €</b>            |
| MF 10             | <b>DH424996</b>  | 9,65   | 10     | 61          | 103         |    | <b>36,94 €</b>            |

\* DIN Profil, kein ISO.



## Global Cutting Tool Leader YG-1



Überreicht durch Ihren YG-1 Fachhandelspartner:



**Industrie-Werkzeuge Stephan GmbH**

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