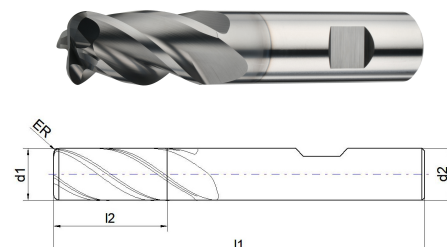
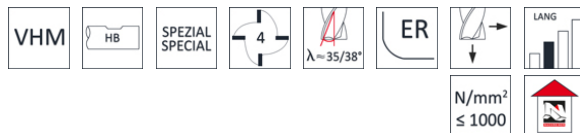


## VHM-HPC-Superstar-Fräser (ungleiche T.) mit Eckenradius

Solid carbide HPC Superstar end mills (unequal pitch) with corner radius



| Artikelnummer<br>Article-No. | d1 | CR +/-0,03 | l1  | l2 | d2 h6 |
|------------------------------|----|------------|-----|----|-------|
| E.7609.1.0400.025            | 4  | 0.25       | 57  | 11 | 6,0   |
| E.7609.1.0400.050            | 4  | 0.5        | 57  | 11 | 6,0   |
| E.7609.1.0400.100            | 4  | 1          | 57  | 11 | 6,0   |
| E.7609.1.0500.050            | 5  | 0.5        | 57  | 13 | 6,0   |
| E.7609.1.0500.100            | 5  | 1          | 57  | 13 | 6,0   |
| E.7609.1.0500.150            | 5  | 1.5        | 57  | 13 | 6,0   |
| E.7609.1.0600.050            | 6  | 0.5        | 57  | 13 | 6,0   |
| E.7609.1.0600.100            | 6  | 1          | 57  | 13 | 6,0   |
| E.7609.1.0600.150            | 6  | 1.5        | 57  | 13 | 6,0   |
| E.7609.1.0600.200            | 6  | 2          | 57  | 13 | 6,0   |
| E.7609.1.0800.050            | 8  | 0.5        | 63  | 19 | 8,0   |
| E.7609.1.0800.100            | 8  | 1          | 63  | 19 | 8,0   |
| E.7609.1.0800.150            | 8  | 1.5        | 63  | 19 | 8,0   |
| E.7609.1.0800.200            | 8  | 2          | 63  | 19 | 8,0   |
| E.7609.1.1000.050            | 10 | 0.5        | 72  | 22 | 10,0  |
| E.7609.1.1000.100            | 10 | 1          | 72  | 22 | 10,0  |
| E.7609.1.1000.150            | 10 | 1.5        | 72  | 22 | 10,0  |
| E.7609.1.1000.200            | 10 | 2          | 72  | 22 | 10,0  |
| E.7609.1.1200.050            | 12 | 0.5        | 83  | 26 | 12,0  |
| E.7609.1.1200.100            | 12 | 1          | 83  | 26 | 12,0  |
| E.7609.1.1200.150            | 12 | 1.5        | 83  | 26 | 12,0  |
| E.7609.1.1200.200            | 12 | 2          | 83  | 26 | 12,0  |
| E.7609.1.1400.100            | 14 | 1          | 83  | 26 | 14,0  |
| E.7609.1.1400.200            | 14 | 2          | 83  | 26 | 14,0  |
| E.7609.1.1600.100            | 16 | 1          | 92  | 32 | 16,0  |
| E.7609.1.1600.150            | 16 | 1.5        | 92  | 32 | 16,0  |
| E.7609.1.1600.200            | 16 | 2          | 92  | 32 | 16,0  |
| E.7609.1.1600.250            | 16 | 2.5        | 92  | 32 | 16,0  |
| E.7609.1.1800.150            | 18 | 1.5        | 92  | 32 | 18,0  |
| E.7609.1.1800.250            | 18 | 2.5        | 92  | 32 | 18,0  |
| E.7609.1.2000.100            | 20 | 1          | 104 | 38 | 20,0  |
| E.7609.1.2000.150            | 20 | 1.5        | 104 | 38 | 20,0  |
| E.7609.1.2000.200            | 20 | 2          | 104 | 38 | 20,0  |
| E.7609.1.2000.250            | 20 | 2.5        | 104 | 38 | 20,0  |
| E.7609.1.2000.300            | 20 | 3          | 104 | 38 | 20,0  |

# PRODUCT DATA SHEET



| Artikelnummer<br>Article-No. | d1 | CR +/-0,03 | l1  | l2 | d2 h6 |
|------------------------------|----|------------|-----|----|-------|
| E.7609.1.2000.400            | 20 | 4          | 104 | 38 | 20,0  |
| E.7609.1.2000.500            | 20 | 5          | 104 | 38 | 20,0  |



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| Materialbezeichnung<br>material description   | Bearbeitung<br>Process  | Vc<br>m/min | fz             |           |           |            |            |                  |                  |  |
|---|-------------------------|-------------|----------------|-----------|-----------|------------|------------|------------------|------------------|--|
|   |                         |             | ∅<br>4.00-5.00 | ∅<br>6.00 | ∅<br>8.00 | ∅<br>10.00 | ∅<br>12.00 | ∅<br>14.00-16.00 | ∅<br>18.00-20.00 |  |
| PA<br>allg. Stähle<br>General steels  | Schruppen<br>roughing   | 155.00      | 0.019          | 0.034     | 0.042     | 0.067      | 0.084      | 0.101            | 0.109            |  |
|   | Schlichten<br>finishing | 220.00      | 0.022          | 0.040     | 0.050     | 0.080      | 0.100      | 0.120            | 0.130            |  |
|   | Schruppen<br>roughing   | 150.00      | 0.019          | 0.034     | 0.042     | 0.067      | 0.084      | 0.101            | 0.109            |  |
|   | Schlichten<br>finishing | 210.00      | 0.022          | 0.040     | 0.050     | 0.080      | 0.100      | 0.120            | 0.130            |  |
|   | Schruppen<br>roughing   | 125.00      | 0.019          | 0.034     | 0.042     | 0.067      | 0.084      | 0.101            | 0.109            |  |
|   | Schlichten<br>finishing | 180.00      | 0.022          | 0.040     | 0.050     | 0.080      | 0.100      | 0.120            | 0.130            |  |
|   | Schruppen<br>roughing   | 115.00      | 0.017          | 0.029     | 0.038     | 0.059      | 0.067      | 0.084            | 0.093            |  |
|   | Schlichten<br>finishing | 160.00      | 0.020          | 0.035     | 0.045     | 0.070      | 0.080      | 0.100            | 0.110            |  |
|   | Schruppen<br>roughing   | 85.00       | 0.010          | 0.017     | 0.029     | 0.038      | 0.051      | 0.067            | 0.080            |  |
|   | Schlichten<br>finishing | 120.00      | 0.012          | 0.020     | 0.035     | 0.045      | 0.060      | 0.080            | 0.095            |  |
| PV<br>Vergütungsstähle < 850N/mm <sup>2</sup><br>Tempering steel < 850N/mm <sup>2</sup> | Schruppen<br>roughing   | 125.00      | 0.019          | 0.034     | 0.042     | 0.067      | 0.084      | 0.101            | 0.109            |  |
|   | Schlichten<br>finishing | 180.00      | 0.022          | 0.040     | 0.050     | 0.080      | 0.100      | 0.120            | 0.130            |  |
|   | Schruppen<br>roughing   | 115.00      | 0.017          | 0.029     | 0.038     | 0.059      | 0.067      | 0.084            | 0.093            |  |
|   | Schlichten<br>finishing | 160.00      | 0.020          | 0.035     | 0.045     | 0.070      | 0.080      | 0.100            | 0.110            |  |
|   | Schruppen<br>roughing   | 85.00       | 0.010          | 0.017     | 0.029     | 0.378      | 0.051      | 0.067            | 0.080            |  |
|   | Schlichten<br>finishing | 120.00      | 0.012          | 0.020     | 0.035     | 0.450      | 0.060      | 0.080            | 0.095            |  |
|   | Schruppen<br>roughing   | 70.00       | 0.010          | 0.017     | 0.029     | 0.038      | 0.051      | 0.067            | 0.080            |  |
|   | Schlichten<br>finishing | 100.00      | 0.012          | 0.020     | 0.035     | 0.045      | 0.060      | 0.080            | 0.095            |  |
| M<br>Rost und säurebeständige Stähle<br>Stainless steels                                | Schruppen<br>roughing   | 85.00       | 0.013          | 0.025     | 0.029     | 0.042      | 0.059      | 0.072            | 0.076            |  |
|   | Schlichten<br>finishing | 120.00      | 0.015          | 0.030     | 0.035     | 0.050      | 0.070      | 0.085            | 0.090            |  |
|   | Schruppen<br>roughing   | 70.00       | 0.013          | 0.021     | 0.025     | 0.034      | 0.046      | 0.059            | 0.067            |  |
|   | Schlichten<br>finishing | 100.00      | 0.015          | 0.025     | 0.030     | 0.040      | 0.055      | 0.070            | 0.080            |  |
| K<br>Gusseisen<br>Cast iron   | Schruppen<br>roughing   | 130.00      | 0.019          | 0.021     | 0.042     | 0.067      | 0.084      | 0.101            | 0.114            |  |
|   | Schlichten<br>finishing | 185.00      | 0.022          | 0.025     | 0.050     | 0.080      | 0.100      | 0.120            | 0.135            |  |
|   | Schruppen<br>roughing   | 115.00      | 0.019          | 0.021     | 0.042     | 0.067      | 0.084      | 0.101            | 0.114            |  |
|   | Schlichten<br>finishing | 160.00      | 0.022          | 0.025     | 0.050     | 0.080      | 0.100      | 0.120            | 0.135            |  |
|   | Schruppen<br>roughing   | 100.00      | 0.017          | 0.029     | 0.038     | 0.055      | 0.076      | 0.084            | 0.101            |  |
|   | Schlichten<br>finishing | 140.00      | 0.020          | 0.035     | 0.045     | 0.065      | 0.090      | 0.100            | 0.120            |  |

# PRODUCT DATA SHEET



| Materialbezeichnung<br>material description |   | Bearbeitung<br>Process         | Vc<br>m/min | fz             |           |           |            |            |                  |                  |  |
|---|---|--------------------------------|-------------|----------------|-----------|-----------|------------|------------|------------------|------------------|--|
|   |   |                                |             | ∅<br>4.00-5.00 | ∅<br>6.00 | ∅<br>8.00 | ∅<br>10.00 | ∅<br>12.00 | ∅<br>14.00-16.00 | ∅<br>18.00-20.00 |  |
| S   | <b>Nickelbasierende Stähle</b><br>Nickel based alloys | <b>Schruppen</b><br>roughing   | 25.00       | 0.008          | 0.010     | 0.017     | 0.025      | 0.038      | 0.051            | 0.063            |  |
|   |   | <b>Schlichten</b><br>finishing | 35.00       | 0.009          | 0.012     | 0.020     | 0.030      | 0.045      | 0.060            | 0.075            |  |
|   | <b>Titan</b><br>Titanium                              | <b>Schruppen</b><br>roughing   | 35.00       | 0.008          | 0.013     | 0.021     | 0.027      | 0.044      | 0.051            | 0.071            |  |
|   |   | <b>Schlichten</b><br>finishing | 50.00       | 0.009          | 0.015     | 0.025     | 0.032      | 0.052      | 0.060            | 0.084            |  |