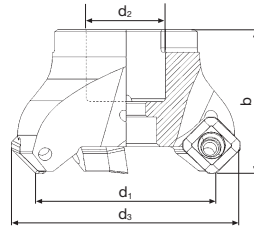


# Planfräser 45° ZX

Wendeplatten 13mm, mit integriertem Luft-/Kühlkanal

|    |                               |
|----|-------------------------------|
| HM | $\lambda$ 13°<br>$\gamma$ -6° |
|    |                               |
|    |                               |
|    |                               |



|             |                |  |  |  |  |  |                   |                |                                       |
|-------------|----------------|--|--|--|--|--|-------------------|----------------|---------------------------------------|
| Rm<br>< 850 | Rm<br>850-1100 |  |  |  |  |  | Inox<br>Stainless | Ti<br>Titanium | Nickel-Alloys<br>Mangan-Steels<br>HSS |
|-------------|----------------|--|--|--|--|--|-------------------|----------------|---------------------------------------|

| Planfräser 45° |     | Lieferumfang: Fräserkörper inkl. Klemmschrauben für Wendeplatten montiert |       |    |                    |   |   |  |
|----------------|-----|---|-------|----|--------------------|---|---|--|
| Bestell-Nr.    | d1  | d2  | d3    | b  | ap <sub>max.</sub> | z |   |  |
| W01410.403     | 40  | 16  | 54.0  | 40 | 6.0                | 3 | ● |  |
| W01410.504     | 50  | 22  | 63.9  | 40 | 6.0                | 4 | ● |  |
| W01410.635     | 63  | 22  | 76.9  | 40 | 6.0                | 5 | ● |  |
| W01410.806     | 80  | 27  | 93.9  | 50 | 6.0                | 6 | ● |  |
| W01410.100     | 100 | 32  | 113.9 | 50 | 6.0                | 7 | ● |  |
| W01410.125     | 125 | 40  | 138.9 | 63 | 6.0                | 8 | ● |  |
|                |     |   |       |    |                    |   |   |  |
|                |     |   |       |    |                    |   |   |  |
|                |     |   |       |    |                    |   |   |  |
|                |     |   |       |    |                    |   |   |  |

| ZX Wendeplatten 13mm |      | Lieferumfang: Verpackungseinheit 10 Stk. |     |  |   |
|----------------------|------|--|-----|--|---|
| Bestell-Nr.          | H    | B  | D   |  |   |
| W51410.013           | 13.0 | 13.0                                     | 4.8 |  | ● |

| Zubehör     |   | Lieferumfang Klemmschrauben für Wendeplatten: Verpackungseinheit 10 Stk. |  |  |   |
|-------------|---|--|--|--|---|
| Bestell-Nr. |   |  |  |  |   |
| W91110.013  | Drehmoment-Schraubendreher 5.0 Nm mit Klinge Torx TX 20   |  |  |  | ● |
| W91111.013  | Wechselklinge zu Drehmoment-Schraubendreher Torx TX 20    |  |  |  | ● |
| W91100.013  | Schraubendreher Torx TX 20                                |  |  |  | ● |
| W91500.013  | Klemmschrauben für Wendeplatten Torx TX 20 / M 4.5 x 10.5 |  |  |  | ● |

**Anwendung**

**Werkstoff**

Nickelbasislegierungen  
[Inconel 718]  
[Hastelloy B-3]  
[Nimonic 90]

| d1 [mm] | z | v <sub>c</sub> [m/min] | f <sub>z</sub> [mm] | a <sub>p</sub> [mm] | a <sub>e</sub> [mm] | n [min <sup>-1</sup> ] | v <sub>f</sub> [mm/min] | Q [cm <sup>3</sup> /min] |
|---------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|
| 40      | 3 | 40                     | 0.060               | 3.0                 | 30.0                | 320                    | 60                      | 5.5                      |
| 50      | 4 | 40                     | 0.060               | 3.0                 | 37.5                | 255                    | 60                      | 7.0                      |
| 63      | 5 | 30                     | 0.060               | 3.0                 | 47.3                | 150                    | 45                      | 6.5                      |
| 80      | 6 | 30                     | 0.060               | 3.0                 | 60.0                | 120                    | 45                      | 8.0                      |
| 100     | 7 | 20                     | 0.060               | 3.0                 | 75.0                | 65                     | 25                      | 5.5                      |
| 125     | 8 | 20                     | 0.060               | 3.0                 | 93.8                | 50                     | 25                      | 7.0                      |

Manganstahl  
Mn > 5%  
[1.3964 / Nitronic]

|     |   |     |       |     |      |     |     |      |
|-----|---|-----|-------|-----|------|-----|-----|------|
| 40  | 3 | 100 | 0.060 | 3.0 | 30.0 | 795 | 145 | 13.0 |
| 50  | 4 | 100 | 0.060 | 3.0 | 37.5 | 635 | 150 | 17.0 |
| 63  | 5 | 90  | 0.060 | 3.0 | 47.3 | 455 | 135 | 19.0 |
| 80  | 6 | 90  | 0.060 | 3.0 | 60.0 | 360 | 130 | 23.5 |
| 100 | 7 | 80  | 0.060 | 3.0 | 75.0 | 255 | 105 | 23.5 |
| 125 | 8 | 80  | 0.060 | 3.0 | 93.8 | 205 | 100 | 28.0 |

Hitzebeständiger Stahl  
Duplex Stahl  
[1.4462]  
[17-4 PH]

|     |   |     |       |     |      |      |     |       |
|-----|---|-----|-------|-----|------|------|-----|-------|
| 40  | 3 | 150 | 0.120 | 4.0 | 30.0 | 1195 | 430 | 51.5  |
| 50  | 4 | 150 | 0.120 | 4.0 | 37.5 | 955  | 460 | 69.0  |
| 63  | 5 | 140 | 0.120 | 4.0 | 47.3 | 705  | 425 | 80.5  |
| 80  | 6 | 140 | 0.120 | 4.0 | 60.0 | 555  | 400 | 96.0  |
| 100 | 7 | 120 | 0.120 | 4.0 | 75.0 | 380  | 320 | 96.0  |
| 125 | 8 | 120 | 0.120 | 4.0 | 93.8 | 305  | 295 | 110.5 |

PM-Schnellarbeitsstahl  
geglüht  
[Böhler S390]  
[ASP 2023]

|     |   |     |       |     |      |     |     |      |
|-----|---|-----|-------|-----|------|-----|-----|------|
| 40  | 3 | 120 | 0.100 | 4.0 | 30.0 | 955 | 285 | 34.0 |
| 50  | 4 | 120 | 0.100 | 4.0 | 37.5 | 765 | 305 | 46.0 |
| 63  | 5 | 100 | 0.100 | 4.0 | 47.3 | 505 | 255 | 48.0 |
| 80  | 6 | 100 | 0.100 | 4.0 | 60.0 | 400 | 240 | 57.5 |
| 100 | 7 | 80  | 0.100 | 4.0 | 75.0 | 255 | 180 | 54.0 |
| 125 | 8 | 80  | 0.100 | 4.0 | 93.8 | 205 | 165 | 62.0 |

**Anwendung**

**Werkstoff**

Nickelbasislegierungen  
[Inconel 718]  
[Hastelloy B-3]  
[Nimonic 90]

| d1 [mm] | z | v <sub>c</sub> [m/min] | f <sub>z</sub> [mm] | a <sub>p</sub> [mm] | a <sub>e</sub> [mm] | n [min <sup>-1</sup> ] | v <sub>f</sub> [mm/min] | Q [cm <sup>3</sup> /min] |
|---------|---|------------------------|---------------------|---------------------|---------------------|------------------------|-------------------------|--------------------------|
| 40      | 3 | 40                     | 0.080               | 0.5                 | 30.0                | 320                    | 75                      | 1.0                      |
| 50      | 4 | 40                     | 0.080               | 0.5                 | 37.5                | 255                    | 80                      | 1.5                      |
| 63      | 5 | 30                     | 0.080               | 0.5                 | 47.3                | 150                    | 60                      | 1.5                      |
| 80      | 6 | 30                     | 0.080               | 0.5                 | 60.0                | 120                    | 60                      | 2.0                      |
| 100     | 7 | 20                     | 0.080               | 0.5                 | 75.0                | 65                     | 35                      | 1.5                      |
| 125     | 8 | 20                     | 0.080               | 0.5                 | 93.8                | 50                     | 30                      | 1.5                      |

Manganstahl  
Mn > 5%  
[1.3964 / Nitronic]

|     |   |     |       |     |      |     |     |     |
|-----|---|-----|-------|-----|------|-----|-----|-----|
| 40  | 3 | 100 | 0.080 | 0.5 | 30.0 | 795 | 190 | 3.0 |
| 50  | 4 | 100 | 0.080 | 0.5 | 37.5 | 635 | 205 | 4.0 |
| 63  | 5 | 90  | 0.080 | 0.5 | 47.3 | 455 | 180 | 4.5 |
| 80  | 6 | 90  | 0.080 | 0.5 | 60.0 | 360 | 175 | 5.5 |
| 100 | 7 | 80  | 0.080 | 0.5 | 75.0 | 255 | 145 | 5.5 |
| 125 | 8 | 80  | 0.080 | 0.5 | 93.8 | 205 | 130 | 6.0 |

Hitzebeständiger Stahl  
Duplex Stahl  
[1.4462]  
[17-4 PH]

|     |   |     |       |     |      |      |     |     |
|-----|---|-----|-------|-----|------|------|-----|-----|
| 40  | 3 | 150 | 0.080 | 0.5 | 30.0 | 1195 | 285 | 4.5 |
| 50  | 4 | 150 | 0.080 | 0.5 | 37.5 | 955  | 305 | 5.5 |
| 63  | 5 | 140 | 0.080 | 0.5 | 47.3 | 705  | 280 | 6.5 |
| 80  | 6 | 140 | 0.080 | 0.5 | 60.0 | 555  | 265 | 8.0 |
| 100 | 7 | 120 | 0.080 | 0.5 | 75.0 | 380  | 215 | 8.0 |
| 125 | 8 | 120 | 0.080 | 0.5 | 93.8 | 305  | 195 | 9.0 |

PM-Schnellarbeitsstahl  
geglüht  
[Böhler S390]  
[ASP 2023]

|     |   |     |       |     |      |     |     |     |
|-----|---|-----|-------|-----|------|-----|-----|-----|
| 40  | 3 | 120 | 0.080 | 0.5 | 30.0 | 955 | 230 | 3.5 |
| 50  | 4 | 120 | 0.080 | 0.5 | 37.5 | 765 | 245 | 4.5 |
| 63  | 5 | 100 | 0.080 | 0.5 | 47.3 | 505 | 200 | 4.5 |
| 80  | 6 | 100 | 0.080 | 0.5 | 60.0 | 400 | 190 | 5.5 |
| 100 | 7 | 80  | 0.080 | 0.5 | 75.0 | 255 | 145 | 5.5 |
| 125 | 8 | 80  | 0.080 | 0.5 | 93.8 | 205 | 130 | 6.0 |