

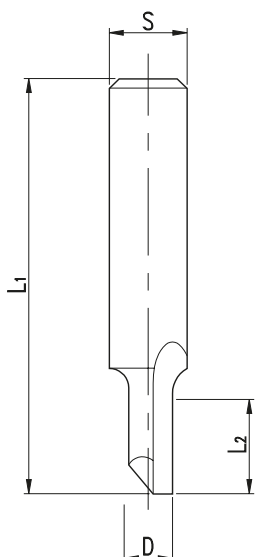
ProChipper®



tooling systems



Fräswerkzeuge mit Schaft
Cutting tools with shank

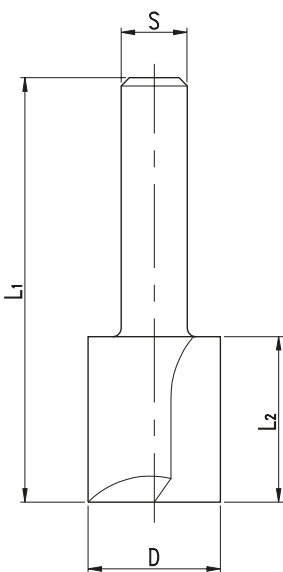
3455**HS Nutschafffräser - Massiv**
HS Grooving cutter - SolidPG
02**HS Nutfräser Z=1**
HS Grooving cutter Z=1

MAN

HS

| D | L2 | L1 | S | Z | Art. Nr. |
|---|----|----|---|---|--------------|
| 2 | 5 | 38 | 6 | 1 | 3455.002.005 |
| | 5 | 38 | 8 | 1 | 3455.002.105 |
| 3 | 8 | 41 | 6 | 1 | 3455.003.008 |
| | 8 | 41 | 8 | 1 | 3455.003.108 |
| 4 | 10 | 43 | 6 | 1 | 3455.004.010 |
| | 10 | 43 | 8 | 1 | 3455.004.110 |
| 5 | 10 | 43 | 6 | 1 | 3455.005.010 |
| | 10 | 43 | 8 | 1 | 3455.005.110 |

- HSS-Nutfräser Z=1, HSS massiv und geradeverzahnt. Anschliff zum Einbohren geeignet.
- HSS-grooving cutter Z=1, solid HSS with straight cut. Ground on end, suitable for plunging.

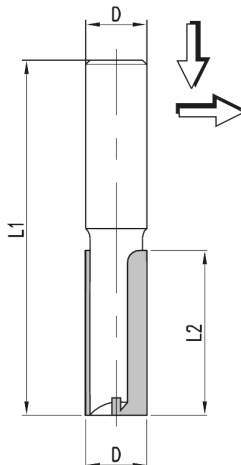
3205**HS Nutschafffräser - Massiv**
HS Grooving cutter - SolidPG
02**HS Nutfräser Z=2**
HS Grooving cutter Z=2

MAN

HS

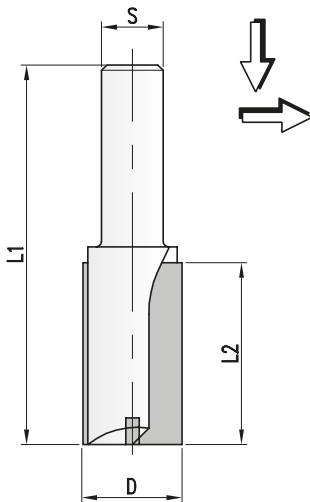
| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|---|---|--------------|
| 6 | 15 | 45 | 6 | 2 | 3205.006.015 |
| | 15 | 45 | 8 | 2 | 3205.006.115 |
| 7 | 20 | 50 | 6 | 2 | 3205.007.020 |
| 8 | 30 | 60 | 6 | 2 | 3205.008.030 |
| | 30 | 60 | 8 | 2 | 3205.008.130 |
| 10 | 30 | 60 | 6 | 2 | 3205.010.030 |
| | 30 | 60 | 8 | 2 | 3205.010.130 |
| 14 | 20 | 50 | 6 | 2 | 3205.014.020 |
| | 20 | 50 | 8 | 2 | 3205.014.120 |
| 18 | 20 | 50 | 6 | 2 | 3205.018.020 |
| | 20 | 50 | 8 | 2 | 3205.018.120 |
| 20 | 20 | 50 | 6 | 2 | 3205.020.020 |
| | 20 | 50 | 8 | 2 | 3205.020.120 |

- Serienartikel, kurzfristige Fertigung bei Bestellung.
- Standard article, short-time production after order.


HW Nutfräser Z=2
TC Grooving cutter Z=2
MAN
HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|---|----------------|
| 3 | 11 | 60 | 6 | 2 | ● 8135.003.010 |
| 4 | 12 | 60 | 6 | 2 | ● 8135.004.012 |
| 5 | 18 | 60 | 6 | 2 | ● 8135.005.018 |
| 6 | 25 | 60 | 6 | 2 | ● 8135.006.025 |
| 8 | 32 | 75 | 12 | 2 | ● 8135.008.032 |
| 9 | 32 | 75 | 12 | 2 | 8135.009.032 |
| 10 | 32 | 75 | 12 | 2 | 8135.010.032 |
| 12 | 38 | 95 | 12 | 2 | 8135.012.038 |
| | 51 | 108 | 12 | 2 | 8135.012.051 |
| 14 | 32 | 70 | 12 | 2 | 8135.014.032 |
| 15 | 32 | 70 | 12 | 2 | 8135.015.032 |
| 16 | 32 | 70 | 12 | 2 | 8135.016.032 |
| 18 | 38 | 80 | 12 | 2 | 8135.018.038 |
| 19 | 51 | 92 | 12 | 2 | 8135.019.051 |
| 20 | 38 | 80 | 12 | 2 | 8135.020.080 |
| 22 | 38 | 80 | 12 | 2 | 8135.022.080 |

- Vollhartmetall-Ausführung
- *Solid carbide*
- HW-Nutfräser Z=2 geradeverzahnt. Stirnseitig zum Einbohren angeschliffen. Lange Ausführung für große Frästiefen. Bis Durchmesser 8mm aus Vollhartmetall, danach HW-bestückt.
- *With alternating axial angle TC-router cutter Z=1+1 with alternating axial angle for tear-free machining on both sides. Ground on end, suitable for plunging. Long style for deep cutting. TC-tipped steel body.*


HW Nutfräser Z=2 geradeverzahnt. Stirnseitig zum Einbohren angeschliffen.
TC-grooving cutter Z=2 with straight cut. Ground on end, suitable for plunging.
MAN
HW

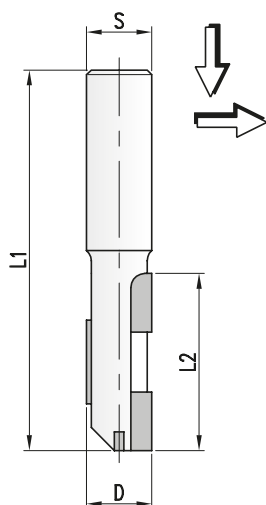
| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|---------|---|----------------|
| 6 | 14 | 48 | 6 | 2 | 8439.006.014 |
| | 14 | 55 | 8 | 2 | 8439.006.114 |
| 8 | 19 | 48 | 6 | 2 | 8439.008.019 |
| | 20 | 55 | 8 | 2 | 8439.008.119 |
| 10 | 20 | 60 | 10x35 | 2 | 8439.008.020 |
| | 19 | 48 | 6 | 2 | 8439.010.019 |
| | 19 | 60 | 8 | 2 | 8439.010.119 |
| | 25 | 70 | 10x35 | 2 | 8439.010.025 |
| 12 | 32 | 90 | 8 | 2 | 8439.010.032 |
| | 40 | 90 | 12x35 | 2 | 8439.010.040 |
| | 19 | 46 | 6 | 2 | 8439.012.019 |
| | 19 | 90 | 8 | 2 | 8439.012.119 |
| 14 | 25 | 70 | 10x35 | 2 | 8439.012.025 |
| | 32 | 90 | 8 | 2 | 8439.012.032 |
| | 40 | 90 | 12x45 | 2 | 8439.012.040 |
| | 19 | 48 | 6 | 2 | 8439.014.019 |
| 16 | 19 | 60 | 10x35 | 2 | 8439.014.119 |
| | 25 | 70 | 8 | 2 | 8439.014.025 |
| | 32 | 90 | 12x45 | 2 | 8439.014.032 |
| | 40 | 90 | 6 | 2 | 8439.014.040 |
| 18 | 25 | 53 | 8 | 2 | 8439.016.025 |
| | 25 | 53 | 10x35 | 2 | 8439.016.125 |
| | 19 | 60 | 8 | 2 | 8439.016.019 |
| | 40 | 70 | 12x45 | 2 | 8439.016.040 |
| 20 | 25 | 53 | 6 | 2 | 8439.018.125 |
| | 25 | 70 | 10x35 | 2 | 8439.018.019 |
| | 19 | 70 | 8 | 2 | 8439.018.025 |
| | 40 | 90 | 12x45 | 2 | 8439.018.040 |
| 22 | 25 | 53 | 6 | 2 | 8439.020.025 |
| | 25 | 70 | 10x35 | 2 | 8439.020.125 |
| | 19 | 70 | 8 | 2 | 8439.020.019 |
| | 40 | 90 | 12x45 | 2 | 8439.020.040 |
| 24 | 16 | 70 | 8 | 2 | 8439.022.016 |
| | 25 | 70 | 10x35 | 2 | 8439.022.025 |
| | 40 | 90 | 12x45 | 2 | 8439.022.040 |
| 25 | 16 | 70 | 8 | 2 | 8439.024.016 |
| | 40 | 90 | 12x45 | 2 | 8439.024.040 |
| | 16 | 70 | 8 | 2 | 8439.025.016 |
| 30 | 25 | 70 | 10x35 | 2 | 8439.025.025 |
| | 25 | 70 | 10x35 | 2 | ◇ 8439.030.025 |
| | 50 | 144 | MK2/Ø20 | 2 | ◇ 8439.030.050 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ Standard article, short-time production after order.

8735

HW Ausschnittfräser - Festbestückt

TC Router cutter - Tipped

PG
02

- Mit Einbohrschneide
- With center tip for plunge cutting

HW Ausschnittfräser Z=1+1

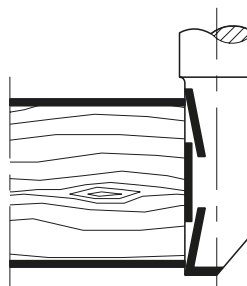
TC Router cutter Z=1+1

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|-------|-----|--------------|
| 14 | 50 | 110 | 12x50 | 1+1 | 8735.014.050 |
| | 50 | 110 | 14x50 | 1+1 | 8735.014.150 |

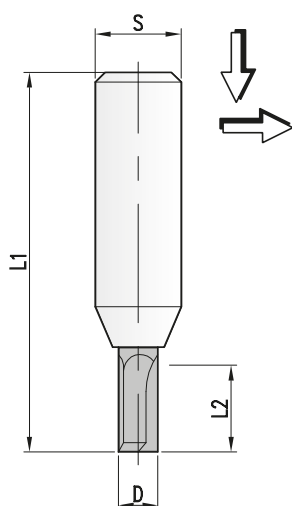
- Mit wechselseitigem Achswinkel
- HW-Ausschnittfräser Z=1+1 mit wechselseitigem Achswinkel für beidseitig ausrissfreie Bearbeitung. Stirnseitig zum Einbohren angeschliffen. Lange Ausführung für große Frästiefen. HW-bestückter Stahlträger.
- With alternating axial angle
- TC-router cutter Z=1+1 with alternating axial angle for tear-free machining on both sides. Ground on end, suitable for plunging. Long style for deep cutting. TC-tipped steel body.



6439

HW-Nutschafffräser - Massiv

TC-Grooving cutter - Solid

PG
02

HW Nutfräser mit Einbohrschneide Z=2

TC Grooving cutter with plunge Z=2

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|---|----|----|----|---|--------------|
| 3 | 8 | 48 | 8 | 2 | 6439.003.008 |
| | 8 | 48 | 10 | 2 | 6439.003.108 |
| 4 | 11 | 51 | 8 | 2 | 6439.004.011 |
| | 11 | 51 | 10 | 2 | 6439.004.111 |
| 5 | 11 | 51 | 8 | 2 | 6439.005.011 |
| | 11 | 51 | 10 | 2 | 6439.005.111 |

- Vollhartmetall-Nutfräser Z=2 geradeverzahnt. Stirnseitig zum Einbohren angeschliffen.
- Solid carbide grooving cutter Z=2 with straight cut. Ground on end, suitable for plunging.

01



02



03



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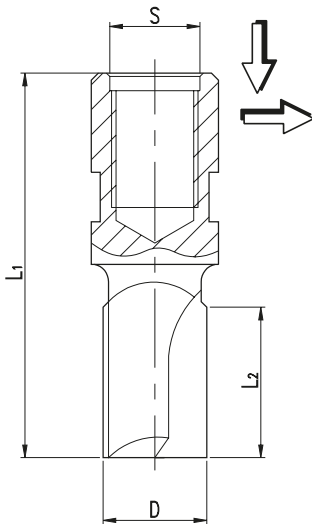


10



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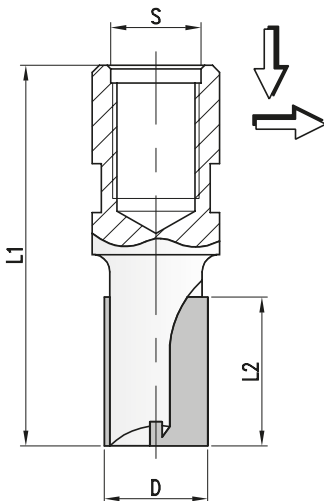
3438
HS Nutschafffräser mit Innengewinde - Massiv
HS Grooving shank cutter with internal thread - Solid
PG
02
HW Nutfräser mit Einbohrschneide Z=2
TC Grooving cutter with plunge Z=2

MAN

HS

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|-------|---|----------------|
| 8 | 20 | 55 | M10 | 2 | ◇ 3438.008.020 |
| | 20 | 60 | M12x1 | 2 | ◇ 3438.008.120 |
| 10 | 20 | 55 | M10 | 2 | ◇ 3438.010.020 |
| 12 | 20 | 55 | M10 | 2 | ◇ 3438.012.020 |
| | 23 | 60 | M12x1 | 2 | ◇ 3438.012.023 |
| 14 | 23 | 60 | M12x1 | 2 | ◇ 3438.014.023 |
| 16 | 25 | 60 | M12x1 | 2 | ◇ 3438.016.025 |
| 25 | 25 | 60 | M12x1 | 2 | ◇ 3438.025.025 |
| 30 | 25 | 60 | M12x1 | 2 | ◇ 3438.030.025 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung
- ◇ *Standard article, short-time production after order*
- Vollhartmetall-Nutfräser Z=2 geradeverzahnt. Stirnseitig zum Einbohren angeschliffen.
- *Solid carbide grooving cutter Z=2 with straight cut. Ground on end, suitable for plunging.*

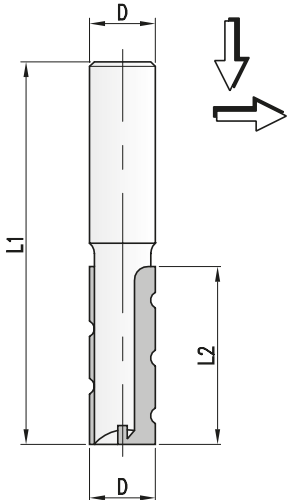
8138
HW Nutschafffräser mit Innengewinde - Festbestückt
TC Grooving shank cutter with internal thread - Tipped
PG
02
HW Nutfräser mit Innengewinde Z=2
TC Grooving cutter with internal thread Z=2

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|-------|---|--------------|
| 8 | 20 | 60 | M12x1 | 2 | 8138.008.020 |
| 10 | 23 | 60 | M12x1 | 2 | 8138.010.023 |
| 12 | 23 | 60 | M12x1 | 2 | 8138.012.023 |
| 14 | 23 | 60 | M12x1 | 2 | 8138.014.023 |
| 16 | 25 | 60 | M12x1 | 2 | 8138.016.025 |
| 18 | 25 | 60 | M12x1 | 2 | 8138.018.025 |
| 20 | 25 | 60 | M12x1 | 2 | 8138.020.025 |
| 22 | 25 | 60 | M12x1 | 2 | 8138.022.025 |
| 24 | 25 | 60 | M12x1 | 2 | 8138.024.025 |
| 25 | 25 | 60 | M12x1 | 2 | 8138.025.025 |
| 30 | 25 | 60 | M12x1 | 2 | 8138.030.025 |

- HW-Nutfräser Z=2 geradeverzahnt mit Innengewindeschäft. Stirnseitig zum Einbohren angeschliffen.
- *TC-Grooving cutter Z=2 with straight cut and internal threaded shank. Ground on end, suitable for plunging.*

8545**HW Ausschnittfräser - Festbestückt**
TC Grooving cutter - TippedPG
02

- Mit Einbohrschneide
- With center tip for plunge cutting

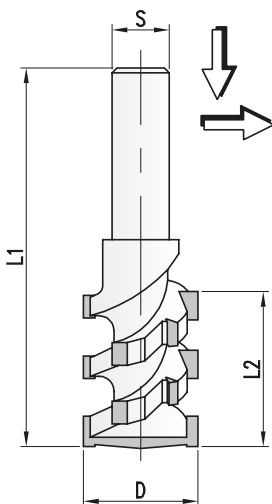
HW Ausschnittfräser Z=2
TC Router cutter Z=2

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|-------|---|----------------|
| 20 | 50 | 95 | 12x40 | 2 | ◇ 8545.020.050 |
| | 50 | 100 | 16x45 | 2 | ◇ 8545.020.150 |
| | 50 | 100 | 18x45 | 2 | ◇ 8545.020.250 |
| | 50 | 110 | 20x55 | 2 | ◇ 8545.020.350 |
| | 50 | 110 | 25x55 | 2 | ◇ 8545.020.450 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung
- ◇ Standard article, short-time production after order
- HW-Ausschnittfräser Z=2 geradeverzahnt mit Spanbrechern geschliffen.
- Stirnseitig zum Einbohren angeschliffen. Lange Ausführung für große Frästiefen.
- HW-bestückter Stahlträger.
- TC-router cutter Z=2, straight cut grinded with chip breakers.
- Ground on end, suitable for plunging. Long style for deep cutting.
- TC-tipped steel body.

8335**HW Vielzahn-Schupfräser - Festbestückt**
TC Roughing cutter - TippedPG
02

- Mit Einbohrschneide
- With center tip for plunge cutting

HW Schupfräser Z=3/6
TC Roughing cutter Z=3/6

MEC

HW

| D | L2 | S | Z | Art. Nr. |
|----|----|-------------|---|----------------|
| 20 | 40 | 12 | 3 | 8335.020.040 |
| | 40 | 18 | 3 | 8335.020.140 |
| | 40 | 20 | 3 | 8335.020.240 |
| | 40 | MK2/Ø20 3 | 3 | ◇ 8335.020.340 |
| | 40 | MK2/M30x1,5 | 3 | ◇ 8335.020.440 |
| 30 | 40 | 18 | 6 | 8335.030.040 |
| | 40 | 20 | 6 | 8335.030.140 |
| | 40 | MK2/Ø20 6 | 6 | ◇ 8335.030.240 |
| 30 | 60 | 19 | 6 | 8335.030.060 |
| | 60 | 20 | 6 | 8335.030.160 |
| | 60 | 25 | 6 | 8335.030.260 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung
- ◇ Standard article, short-time production after order
- HW-Vielzahnfräser Z=3 bis Z=6 mit Spanaufteilung für große Zerspanleistung und verbesserte Späneentsorgung. Stirnseitig zum Einbohren angeschliffen. Unterteilter Schnitt für Reduzierung der Schnittkräfte und des Arbeitsgeräusches. HW-bestückter Stahlträger.
- TC-Multi tip cutter Z=3 until Z=6 with spiral arrangement for high cutting performance and optimised chip removal. Ground on end, suitable for plunging. Staggered cut for reduced cutting forces and radiated noise. TC-tipped steel body.

01



02



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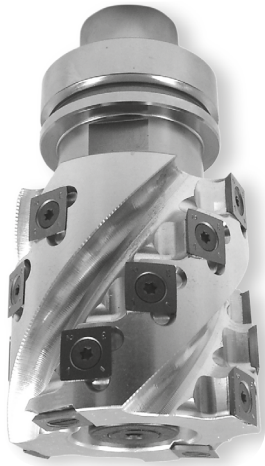


10



11



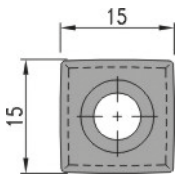

HW Spiralfräsgarnitur Spir.=4, V=2
 TC Helicoidal cutterset Spir.=4, V=2

MEC

HW

| D | L2 | A | Spir. | V | S | Art. Nr. |
|----|-----|-----|-------|---|--------|-----------------------|
| 80 | 80 | 125 | 4 | 2 | HSK63F | * 5942.080.080 |
| | 80 | 155 | 4 | 2 | HSK63F | * 5942.080.081 |
| | 130 | 175 | 4 | 2 | HSK63F | * 5942.080.130 |
| | 130 | 205 | 4 | 2 | HSK63F | * 5942.080.131 |

- * Ausführung mit Leichtmetall-Grundkörper
- * Light alloy body
- Leichtmetallträger in gewendelter Ausführung, bestückt mit HW-Wendemessern Z=4 in spiraler Anordnung für große Zerspanungsleistung und optimierte Späneentsorgung.
- Unterteilter Schnitt zu Reduzierung der Schnittkräfte und des Arbeitsgeräusches.
- Stirnseitig mit Vorschneidern für Falzfräsungen.
- Satz bestehend aus HSK-Fräsdorn und Messerkopf.
- Light alloy tool body in helicoidal layout, tipped with TC reversible knives Z=4 in spiral arrangement for high cutting performance and optimised chip removal.
- Staggered cut for reduced cutting forces and radiated noise.
- Face side with spurs for rebating.
- Cutterset composed by HSK-arbor and cutter.



- Verwendung balliger Wendemesser
- Use of rounded turn-able knives

Wendemesser/Ersatzteile

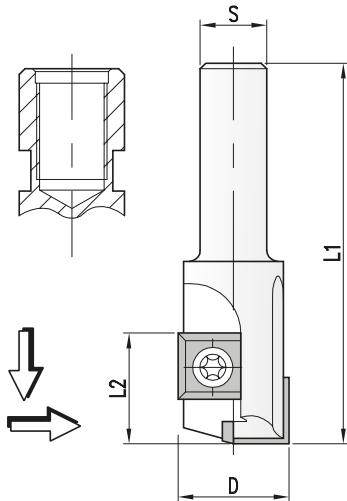
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-----------|-------------------|
| Wendemesser - Reversible knife | 15x15x2,5 | 754.106 |
| Schraube - Screw | M5x14 | 705.320.13 |
| Vorschneider - Spur | 14x14x2 | 750.111 |
| Spannschraube - Screw | M5x7 | 705.425 |
| Torx Schlüssel - Torx wrench | T20 | 706.305 |

5138

HW Nutschafffräser - Wendemesser
TC Grooving cutter - Reversible knife

PG
02



HW Nutfräser Z=2
TC Grooving cutter Z=2

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|-------|-----|----------------|
| 16 | 20 | 70 | 8 | 1+1 | 5138.016.008 |
| | 20 | 70 | 10 | 1+1 | 5138.016.010 |
| | 20 | 65 | M10 | 1+1 | ◇ 5138.016.110 |
| | 20 | 65 | M12x1 | 1+1 | ◇ 5138.016.012 |
| 18 | 20 | 70 | 8 | 1+1 | 5138.018.008 |
| | 20 | 70 | 10 | 1+1 | 5138.018.010 |
| 20 | 20 | 65 | M10 | 1+1 | ◇ 5138.018.110 |
| | 20 | 70 | 8 | 1+1 | 5138.020.008 |
| | 20 | 70 | 10 | 1+1 | 5138.020.010 |
| 20 | 20 | 65 | M10 | 1+1 | ◇ 5138.020.110 |
| | 20 | 65 | M12x1 | 1+1 | ◇ 5138.020.012 |
| | 20 | 70 | 8 | 1+1 | 5138.022.008 |
| 22 | 20 | 70 | 8 | 1+1 | 5138.022.008 |
| | 20 | 70 | 10 | 1+1 | 5138.022.010 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- WP-Nutfräser Z=1+1 geradeverzahnt. Bestückt mit HW-Wendemessern Z=4.
- Stirnseitiges HW-Wendemesser als Einbohrschneide.
- *TC-grooving cutter Z=1+1 with reversible knives. Turnable knives with 4 cutting edges.*
- *Face turnable knife suitable for plunging.*

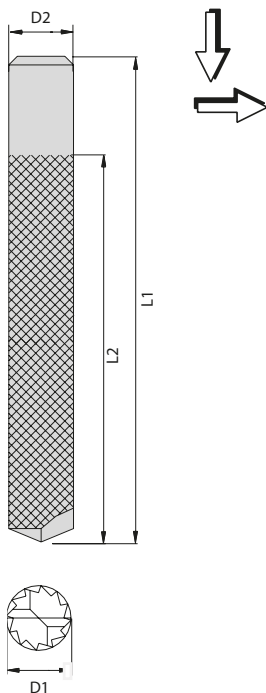
Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|-----------|----------|
| Wendemesser - <i>Reversible knife</i> | 12x12x1,5 | 754.102 |
| Torx Schraube - <i>Torx Screw</i> | M4x6 | 705.351 |
| Torx Schlüssel - <i>Torx wrench</i> | T15 | 706.302 |

6445

HW Vielzahnfräser "CarbonLine" - Massiv
TC Multitoothed cutter "CarbonLine" - Solid

PG
02



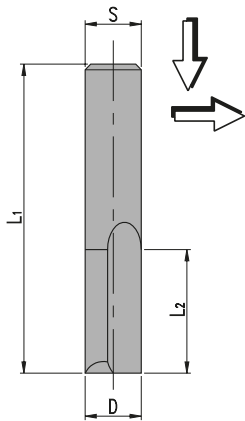
HW Nutfräser Z=2
TC Grooving cutter Z=2

MEC

HW

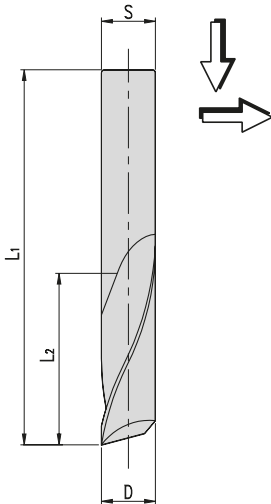
| D | L2 | L1 | S | Art. Nr. |
|----|-----|-----|----|----------------|
| 2 | 7 | 40 | 2 | 6445.002.007 |
| 3 | 10 | 40 | 3 | 6445.003.010 |
| 4 | 15 | 40 | 4 | 6445.004.015 |
| 5 | 16 | 50 | 5 | 6445.005.016 |
| 6 | 18 | 50 | 6 | 6445.006.018 |
| 8 | 25 | 63 | 8 | 6445.008.025 |
| 10 | 30 | 72 | 10 | 6445.010.030 |
| 12 | 32 | 82 | 12 | 6445.012.032 |
| 14 | 50 | 100 | 14 | ◇ 6445.014.050 |
| 16 | 80 | 130 | 16 | ◇ 6445.016.080 |
| 18 | 80 | 130 | 18 | ◇ 6445.018.080 |
| 20 | 100 | 155 | 20 | ◇ 6445.020.100 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- VHM-Vielzahnfräser mit Pyramidenverzahnung. Stirnseitiger Anschliff zum Einbohren. Ausführung für die Zerspaltung von Composite Werkstoffen (Carbon, AFK, GFK, CFK) und Schaumwerkstoffen. Auch als Ausführung zum Nutenfräsen mit Einbohrschneiden verfügbar.
- *Solid carbide grooving cutter with diamond cut. Face ground with drilling end. Designed to machine fiber composite plastics (Carbon, AFK, GFK, CFK) and foam materials. Also available for grooving operations with plunging knives.*

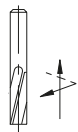
6435**HW Nutschafffräser - Massiv**
TC Grooving cutter - Solid**PG**
02**HW Oberfräser Z=2**
TC Grooving cutter Z=2**MAN****HW**

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|----|---|--------------|
| 2 | 7 | 40 | 6 | 2 | 6435.002.007 |
| 3 | 10 | 55 | 8 | 2 | 6435.003.010 |
| 4 | 12 | 55 | 8 | 2 | 6435.004.012 |
| 5 | 12 | 55 | 8 | 2 | 6435.005.012 |
| 6 | 12 | 55 | 8 | 2 | 6435.006.012 |
| 8 | 20 | 55 | 8 | 2 | 6435.008.020 |
| 10 | 20 | 60 | 10 | 2 | 6435.010.020 |
| 12 | 26 | 64 | 12 | 2 | 6435.012.026 |

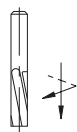
- VHM-Nutschlichtfräser Z=2 geradeverzahnt. Stirnseitiger Anschliff zum Einbohren.
- Kurze Ausführung mit erhöhter Stabilität für schwingungsarmes Fräsen.
- Solid carbide finishing router cutter Z=2 with straight cut. Face ground with drilling end for plunging.
- Short design for increased stability and low-vibration.

6335**HW Nutschafffräser - Massiv**
TC Grooving cutter - Solid**PG**
02**HW Schlichtfräser Z=1**
TC Finishing cutter Z=1**MEC****HW**

| D | L2 | L1 | S | Z | Art. Nr. Hp | Art. Nr. Hn |
|----|-----|-----|----|----|--------------|--------------|
| 2 | 10 | 40 | 2 | 1L | 6335.002.010 | |
| 3 | 12 | 40 | 3 | 1L | 6335.003.012 | |
| | 12 | 50 | 3 | 1 | 6335.003.112 | 6335.003.212 |
| 4 | 15 | 40 | 4 | 1L | 6335.004.015 | |
| | 15 | 50 | 4 | 1 | 6335.004.115 | 6335.004.215 |
| 5 | 17 | 50 | 5 | 1 | 6335.005.017 | 6335.005.117 |
| | 16 | 50 | 5 | 1L | 6335.005.016 | |
| 6 | 22 | 60 | 6 | 1 | 6335.006.022 | 6335.006.122 |
| | 20 | 60 | 6 | 1L | 6335.006.020 | |
| 8 | 8 | 58 | 5 | 1L | 6335.008.008 | |
| | 22 | 63 | 8 | 1L | 6335.008.122 | |
| | 32 | 70 | 8 | 1 | 6335.008.032 | 6335.008.132 |
| 10 | 25 | 72 | 10 | 1L | 6335.010.025 | |
| | 42 | 100 | 10 | 1 | 6335.010.042 | 6335.010.142 |
| | 52 | 100 | 10 | 1 | 6335.010.052 | 6335.010.152 |
| 12 | 30 | 83 | 12 | 1L | 6335.012.030 | |
| | 52 | 100 | 12 | 1 | 6335.012.052 | 6335.012.152 |
| 14 | 30 | 83 | 14 | 1L | 6335.014.030 | |
| | 52 | 100 | 14 | 1 | 6335.014.052 | 6335.014.152 |
| 16 | 35 | 92 | 16 | 1L | 6335.016.035 | |
| | 62 | 130 | 16 | 1 | 6335.016.062 | 6335.016.162 |
| | 72 | 130 | 16 | 1 | 6335.016.072 | 6335.016.172 |
| 18 | 35 | 92 | 18 | 1L | 6335.018.035 | |
| | 72 | 130 | 18 | 1 | 6335.018.072 | |
| 20 | 40 | 104 | 20 | 1L | 6335.020.040 | |
| | 72 | 130 | 20 | 1 | 6335.020.072 | |
| | 85 | 150 | 20 | 1 | 6335.020.085 | |
| | 102 | 160 | 20 | 1 | 6335.020.102 | |



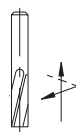
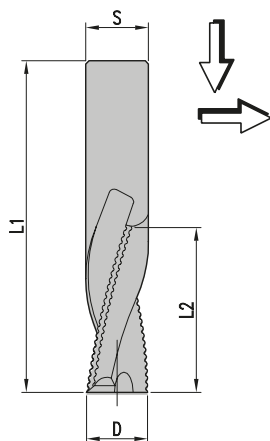
Hp
Positive Spirale
Rechtslauf/Rechtsdrall
Positive helix



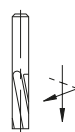
Hn
Negative Spirale
Rechtslauf/Linksdrall
Negative helix

L Ausführung mit Lappschliff für perfekte Aluminium- und Kunststoffbearbeitung
L Lapgrinded type for better machining of aluminium and plastics

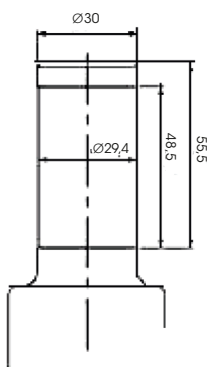
- VHM-Spiralschlichtfräser Z=1 Rechtsschneidend mit positiver (Hp) oder negativer Spirale (Hn). Positive Spirale (Hp) für Spanabfuhr nach oben, negative Spirale (Hn) für Spanabfuhr nach unten.
- Solid carbide finishing cutter Z=1 Right hand rotation with positive (Hp) or negativ spiral (Hn). Positive spiral (Hp) to remove chips upward, negative spiral (Hn) to remove chips downward.



Hp
Positive Spirale
Rechtslauf/Rechtsdrall
Positive helix



Hn
Negative Spirale
Rechtslauf/Linksdrall
Negative helix



Ausführung Schaft $d = 30$ mm
Design shaft $d = 30$ mm

HW Schruppfräser Z=2-3
TC Roughing cutter Z=2-3

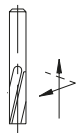
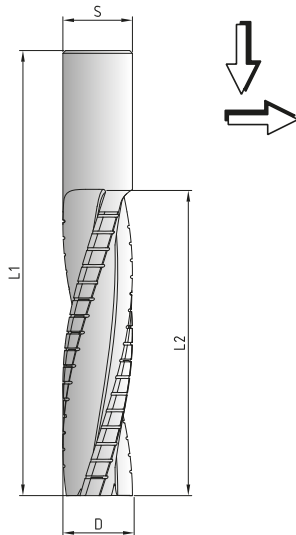
MEC

HW/HS

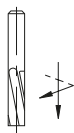
| D | L2 | L1 | S | Z | Art. Nr. Hp | Art. Nr. Hn |
|----|-----|-----|----|---|------------------------|---------------------|
| 8 | 32 | 70 | 8 | 2 | 6535.008.032 | 6535.008.132 |
| 10 | 42 | 100 | 10 | 2 | 6535.010.042 | 6535.010.142 |
| 12 | 52 | 100 | 12 | 2 | 6535.012.052 | 6535.012.152 |
| 8 | 22 | 70 | 8 | 3 | 6535.008.022 | 6535.008.122 |
| | 32 | 70 | 8 | 3 | 6535.008.232 | 6535.008.332 |
| | 42 | 70 | 10 | 3 | 6535.010.032 | 6535.010.132 |
| 10 | 42 | 100 | 10 | 3 | 6535.010.242 | 6535.010.342 |
| | 52 | 100 | 10 | 3 | 6535.010.052 | 6535.010.152 |
| | 32 | 80 | 12 | 3 | 6535.012.032 | 6535.012.132 |
| 12 | 42 | 100 | 12 | 3 | 6535.012.042 | 6535.012.142 |
| | 52 | 100 | 12 | 3 | 6535.012.252 | 6535.012.352 |
| | 42 | 100 | 14 | 3 | 6535.014.042 | 6535.014.142 |
| 14 | 52 | 100 | 14 | 3 | 6535.014.052 | 6535.014.152 |
| | 42 | 100 | 16 | 3 | 6535.016.042 | 6535.016.142 |
| | 52 | 100 | 16 | 3 | 6535.016.052 | 6535.016.152 |
| 16 | 62 | 130 | 16 | 3 | 6535.016.062 | 6535.016.162 |
| | 72 | 100 | 16 | 3 | 6535.016.072 | 6535.016.172 |
| | 52 | 100 | 18 | 3 | 6535.018.052 | 6535.018.152 |
| 18 | 72 | 130 | 18 | 3 | 6535.018.072 | 6535.018.172 |
| | 42 | 100 | 20 | 3 | 6535.020.042 | 6535.020.142 |
| | 52 | 100 | 20 | 3 | 6535.020.052 | 6535.020.152 |
| 20 | 72 | 130 | 20 | 3 | 6535.020.072 | 6535.020.172 |
| | 85 | 150 | 20 | 3 | 6535.020.085 | 6535.020.185 |
| | 102 | 160 | 20 | 3 | 6535.020.102 | 6535.020.202 |
| 25 | 52 | 100 | 25 | 3 | 6535.025.052 | 6535.025.152 |
| | 72 | 130 | 25 | 3 | 6535.025.072 | 6535.025.172 |
| | 85 | 150 | 25 | 3 | 6535.025.085 | 6535.025.185 |
| 40 | 102 | 160 | 25 | 3 | 6535.025.102 | 6535.025.202 |
| | 120 | 195 | 30 | 3 | HS 3535.040.120 | |
| | 160 | 235 | 30 | 3 | HS 3535.040.165 | |
| 50 | 215 | 295 | 30 | 3 | HS 3535.050.215 | |

- VHM-Spiralschruppfräser Z=2 bzw. Z=3 Rechtsschneidend mit positiver (Hp) oder negativer Spirale (Hn).
- Positive Spirale (Hp) für Spanabfuhr nach oben, negative Spirale (Hn) für Spanabfuhr nach unten.
- *Solid carbide finishing router cutter Z=2 with straight cut. Face ground with drilling end for plunging.*
- *Short design for increased stability and low-vibration.*





Hp
Positive Spirale
Rechtslauf/Rechtsdrall
Positive helix



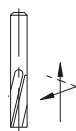
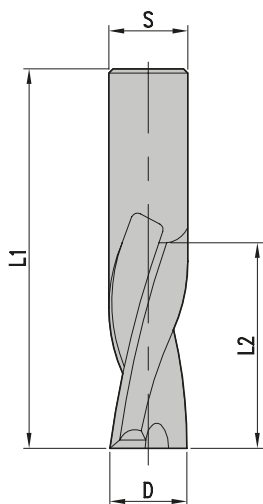
Hn
Negative Spirale
Rechtslauf/Linksdrall
Negative helix

HW Schrupp-Schlichtfräser Z=2 bzw. Z=3
TC Roughing-Finishing cutter Z=2 or Z=3

MEC
HW

| D | L2 | L1 | S | Z | Art. Nr. Hp | Art. Nr. Hn |
|----|-----|-----|----|---|---------------------|---------------------|
| 8 | 32 | 70 | 8 | 2 | 6575.008.032 | 6575.008.132 |
| 10 | 42 | 100 | 10 | 2 | 6575.010.042 | 6575.010.142 |
| | 52 | 100 | 10 | 2 | 6575.010.052 | 6575.010.152 |
| 12 | 42 | 100 | 12 | 2 | 6575.012.042 | 6575.012.142 |
| | 52 | 100 | 12 | 2 | 6575.012.052 | 6575.012.152 |
| 14 | 52 | 100 | 14 | 2 | 6575.014.052 | 6575.014.152 |
| 16 | 52 | 100 | 16 | 2 | 6575.016.052 | 6575.016.152 |
| | 62 | 130 | 16 | 2 | 6575.016.062 | 6575.016.162 |
| | 72 | 130 | 16 | 2 | 6575.016.072 | 6575.016.172 |
| 18 | 72 | 130 | 18 | 2 | 6575.018.072 | 6575.018.172 |
| 20 | 72 | 130 | 20 | 2 | 6575.020.072 | 6575.020.172 |
| | 85 | 150 | 20 | 2 | 6575.020.085 | 6575.020.185 |
| | 102 | 160 | 20 | 2 | 6575.020.102 | 6575.020.202 |
| 8 | 22 | 70 | 8 | 3 | 6575.008.022 | 6575.008.122 |
| | 32 | 70 | 8 | 3 | 6575.008.232 | 6575.008.322 |
| 10 | 32 | 70 | 10 | 3 | 6575.010.032 | 6575.010.132 |
| | 42 | 100 | 10 | 3 | 6575.010.242 | 6575.010.342 |
| | 52 | 100 | 10 | 3 | 6575.010.252 | 6575.010.352 |
| 12 | 32 | 80 | 12 | 3 | 6575.012.032 | 6575.012.132 |
| | 42 | 100 | 12 | 3 | 6575.012.242 | 6575.012.342 |
| | 52 | 100 | 12 | 3 | 6575.012.252 | 6575.012.352 |
| 14 | 52 | 100 | 14 | 3 | 6575.014.252 | 6575.014.352 |
| 16 | 42 | 100 | 16 | 3 | 6575.016.042 | 6575.016.142 |
| | 52 | 100 | 16 | 3 | 6575.016.252 | 6575.016.352 |
| | 62 | 130 | 16 | 3 | 6575.016.262 | 6575.016.362 |
| | 72 | 130 | 16 | 3 | 6575.016.272 | 6575.016.372 |
| 18 | 52 | 100 | 18 | 3 | 6575.018.052 | 6575.018.152 |
| | 72 | 130 | 18 | 3 | 6575.018.272 | 6575.018.372 |
| 20 | 42 | 100 | 20 | 3 | 6575.020.042 | 6575.020.142 |
| | 52 | 100 | 20 | 3 | 6575.020.052 | 6575.020.152 |
| | 72 | 130 | 20 | 3 | 6575.020.272 | 6575.020.372 |
| | 85 | 150 | 20 | 3 | 6575.020.285 | 6575.020.385 |
| | 102 | 160 | 20 | 3 | 6575.020.302 | 6575.020.402 |
| 25 | 72 | 130 | 25 | 3 | 6575.025.072 | 6575.025.172 |
| | 85 | 150 | 25 | 3 | 6575.025.085 | 6575.025.185 |
| | 102 | 160 | 25 | 3 | 6575.025.102 | 6575.025.202 |

- VHM-Spiralschruppschlichtfräser Z=2 bzw. Z=3 mit positiver (Hp) oder negativer Spirale (Hn). Positive Spirale (Hp) für Spanabfuhr nach oben, negative Spirale (Hn) für Spanabfuhr nach unten. Schruppschlichtfräser sind mit Spanteilerrillen geschliffen und ermöglichen höhere Vorschübe als herkömmliche Schlichtfräser. Die Aufteilung der Späne führt zu reduzierter Antriebsleistung und verbessert die Laufruhe. Minimiertes Arbeitsgeräusch.
- Solid carbide roughing finishing cutter Z=2 or Z=3 with positive (Hp) or negative spiral (Hn). Positive spiral (Hp) to remove chips to upward, negative spiral (Hn) to remove chips downward. Roughing Finishing cutters are grinded with chipbreakers reduce the cutting power, allow higher feed speeds and smooth operation.



Hp
Positive Spirale
Rechtsschneidung/Rechtsdrehung
Positive helix



Hn
Negative Spirale
Rechtsschneidung/Linksdrehung
Negative helix

VHM-Spiralschlichtfräser Z=2 bzw. Z=3.
Rechtsschneidung mit positiver (Hp)
oder negativer Spirale (Hn). Positive
Spirale (Hp) für Spanabfuhr nach oben,
negative Spirale (Hn) für Spanabfuhr
nach unten.

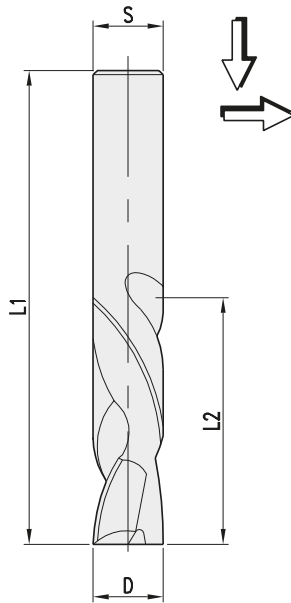
*Solid carbide finishing cutter Z=2 or Z=3.
Right hand rotation with positive (Hp) or
negative spiral (Hn). Positive spiral (Hp) to
remove chips to upward, negative spiral
(Hn) to remove chips downward.*

L = Ausführung mit Lappenschliff für
perfekte Aluminium- und Kunststoffbear-
beitung

*L = Lapgrinded type for better machining
of aluminium and plastics*

HW Schlichtfräser Z=2-3
TC Finishing cutter Z=2-3
MEC**HW**

| D | L2 | L1 | S | Z | Art. Nr. Hp | Art. Nr. Hn | |
|----|-----|-----|-----|----|---------------------|---------------------|---------------------|
| 3 | 12 | 40 | 3 | 2L | 6375.003.212 | | |
| | 12 | 50 | 3 | 2 | 6375.003.012 | 6375.003.112 | |
| 4 | 14 | 40 | 4 | 2L | 6375.004.014 | | |
| | 15 | 50 | 4 | 2 | 6375.004.015 | 6375.004.115 | |
| 5 | 16 | 50 | 5 | 2L | 6375.005.016 | | |
| | 17 | 50 | 5 | 2 | 6375.005.017 | 6375.005.117 | |
| 6 | 18 | 50 | 6 | 2L | 6375.006.018 | | |
| | 22 | 60 | 6 | 2 | 6375.006.022 | 6375.006.122 | |
| 8 | 20 | 63 | 8 | 2L | 6375.008.020 | | |
| | 32 | 70 | 8 | 2 | 6375.008.032 | 6375.008.132 | |
| 10 | 25 | 72 | 10 | 2L | 6375.010.025 | | |
| | 32 | 70 | 10 | 2 | 6375.010.032 | | |
| | 42 | 100 | 10 | 2 | 6375.010.042 | 6375.010.142 | |
| 12 | 52 | 100 | 10 | 2 | 6375.010.052 | 6375.010.152 | |
| | 30 | 83 | 12 | 2L | 6375.012.030 | | |
| | 42 | 100 | 12 | 2 | 6375.012.042 | 6375.012.142 | |
| 14 | 52 | 100 | 12 | 2 | 6375.012.052 | 6375.012.152 | |
| | 52 | 100 | 14 | 2 | 6375.014.052 | 6375.014.152 | |
| | 62 | 130 | 14 | 2 | 6375.014.062 | 6375.014.162 | |
| 16 | 35 | 92 | 16 | 2L | 6375.016.035 | | |
| | 42 | 100 | 16 | 2 | 6375.016.242 | 6375.016.342 | |
| | 52 | 100 | 16 | 2 | 6375.016.052 | 6375.016.152 | |
| 18 | 62 | 130 | 16 | 2 | 6375.016.062 | 6375.016.162 | |
| | 72 | 130 | 16 | 2 | 6375.016.072 | 6375.016.172 | |
| | 72 | 130 | 18 | 2 | 6375.018.252 | 6375.018.352 | |
| 20 | 72 | 130 | 18 | 2 | 6375.018.072 | 6375.018.172 | |
| | 42 | 100 | 20 | 2 | 6375.020.242 | 6375.020.342 | |
| | 45 | 104 | 20 | 2L | 6375.020.045 | | |
| 25 | 52 | 100 | 20 | 2 | 6375.020.252 | 6375.020.352 | |
| | 72 | 130 | 20 | 2 | 6375.020.072 | 6375.020.172 | |
| | 85 | 150 | 20 | 2 | 6375.020.085 | 6375.020.185 | |
| 30 | 102 | 160 | 20 | 2 | 6375.020.102 | 6375.020.202 | |
| | 8 | 22 | 70 | 8 | 3 | 6375.008.022 | 6375.008.122 |
| | 32 | 70 | 8 | 3 | 6375.008.232 | 6375.008.332 | |
| 10 | 32 | 70 | 10 | 3 | 6375.010.132 | 6375.010.232 | |
| | 42 | 100 | 10 | 3 | 6375.010.242 | 6375.010.342 | |
| | 52 | 100 | 10 | 3 | 6375.010.252 | 6375.010.352 | |
| 12 | 32 | 80 | 12 | 3 | 6375.012.032 | 6375.012.132 | |
| | 42 | 100 | 12 | 3 | 6375.012.242 | 6375.012.342 | |
| | 52 | 100 | 12 | 3 | 6375.012.252 | 6375.012.352 | |
| 14 | 52 | 100 | 14 | 3 | 6375.014.252 | 6375.014.352 | |
| | 16 | 42 | 100 | 16 | 3 | 6375.016.042 | 6375.016.142 |
| | 52 | 100 | 16 | 3 | 6375.016.252 | 6375.016.352 | |
| 16 | 62 | 130 | 16 | 3 | 6375.016.262 | 6375.016.362 | |
| | 72 | 130 | 16 | 3 | 6375.016.272 | 6375.016.372 | |
| | 42 | 100 | 18 | 3 | 6375.018.042 | 6375.018.142 | |
| 18 | 52 | 100 | 18 | 3 | 6375.018.052 | 6375.018.152 | |
| | 72 | 130 | 18 | 3 | 6375.018.272 | 6375.018.372 | |
| | 42 | 100 | 20 | 3 | 6375.020.042 | 6375.020.142 | |
| 20 | 52 | 100 | 20 | 3 | 6375.020.052 | 6375.020.152 | |
| | 72 | 130 | 20 | 3 | 6375.020.272 | 6375.020.372 | |
| | 85 | 150 | 20 | 3 | 6375.020.285 | 6375.020.085 | |
| 25 | 102 | 160 | 20 | 3 | 6375.020.302 | 6375.020.402 | |
| | 52 | 100 | 25 | 3 | 6375.025.052 | 6375.025.152 | |
| | 72 | 130 | 25 | 3 | 6375.025.072 | 6375.025.172 | |
| 30 | 85 | 150 | 25 | 3 | 6375.025.085 | 6375.025.185 | |
| | 102 | 160 | 25 | 3 | 6375.025.102 | 6375.025.202 | |

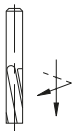
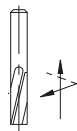
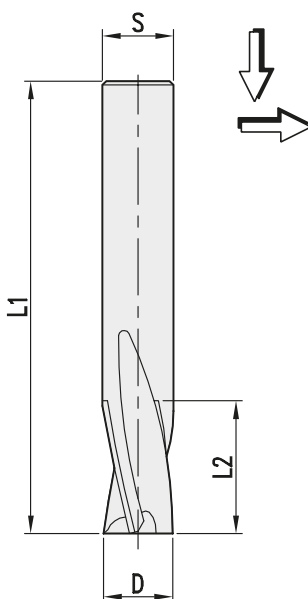

HW Schlichfräser Z=2+2 / 3+3
TC Finishing cutter Z=2+2 / 3+3

MEC

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|-----|---------------------|
| 8 | 32 | 70 | 8 | 2+2 | 6735.008.032 |
| 10 | 32 | 70 | 10 | 2+2 | 6735.010.032 |
| 12 | 32 | 80 | 12 | 2+2 | 6735.012.032 |
| | 42 | 100 | 12 | 2+2 | 6735.012.042 |
| 14 | 52 | 100 | 14 | 2+2 | 6735.014.052 |
| 16 | 42 | 100 | 16 | 2+2 | 6735.016.042 |
| | 52 | 100 | 16 | 3+3 | 6735.016.052 |
| 18 | 52 | 100 | 18 | 3+3 | 6735.018.052 |
| 20 | 52 | 100 | 20 | 3+3 | 6735.020.052 |
| | 72 | 130 | 20 | 2+2 | 6735.020.072 |

- VHM-Spiralschlichfräser Z=2+2 bzw. Z=3+3 Rechtsschneidend mit positiver (Hp) und negativer Spirale (Hn). Positive Spirale (Hp) für Spanabfuhr nach oben, negative Spirale (Hn) für Spanabfuhr nach unten. Schneiden mit wechselseitigem Achswinkel für beidseitig ausrissfreie Bearbeitung.
- Solid carbide finishing cutter Z=2 or Z=3 Right hand rotation with positive (Hp) and negative spiral (Hn). Positive spiral (Hp) to remove chips to upward, negative spiral (Hn) to remove chips downward. Cutting edges with alternating shear angle for tear-free edges on both sides.

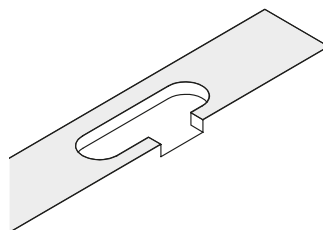

Hn
 oberer Schneidenteil
upper cutting part

Hp
 unterer Schneidenteil
lower cutting part

HW Schlichfräser Z=2
TC Hinge cutter Z=2

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. LH | Art. Nr. RH |
|----|----|----|-------|---|---------------------|---------------------|
| 10 | 10 | 64 | 10x40 | 2 | 6385.010.110 | 6385.010.010 |
| 12 | 10 | 64 | 12x40 | 2 | 6385.012.110 | 6385.012.010 |
| | 10 | 64 | 12x40 | 3 | 6385.012.310 | 6385.012.210 |

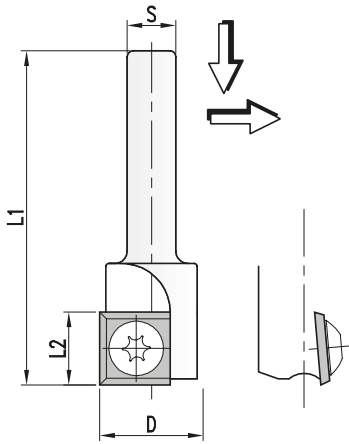
- VHM-Spiralschlichfräser Z=2 bzw. Z=3 Rechtsschneidend mit positiver Spirale (Hp) Positive Spirale (Hp) zum ausrissfreien Ausfräsen von Beschlagtaschen.
- Solid carbide finishing cutter Z=2 or Z=3 Right hand rotation with positive spiral (Hp). Positive spiral (Hp) for tear-free edges of hinge cuts.



5639

HW Schlichfräser für Beschläge - Wendemesser
TC Hinge cutter - Reversible knife

PG
02



HW Schlichfräser Z=2
TC Hinge cutter Z=2

MAN

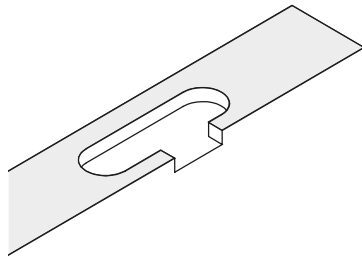
HW

| D | L2 | L1 | S | Z | Art. Nr. LH | Art. Nr. RH |
|----|----|----|-------|---|--------------|--------------|
| 16 | 12 | 64 | 12x40 | 2 | 5639.016.012 | 5639.016.112 |

- WP-Nutfräser Z=2 mit Achswinkel für Beschlagtaschen. Bestückt mit HW-Wendemessern Z=4.
- Stirnseitiges HW-Wendemesser als Einbohrschneide.
- *TC-Grooving cutter Z=2 with reversible knives for hinge cuts. Turnable knives with cutting edges.*
- *Face turnable knife suitable for plunging.*

Wendemesser/Ersatzteile
Reversible knives/Spare parts

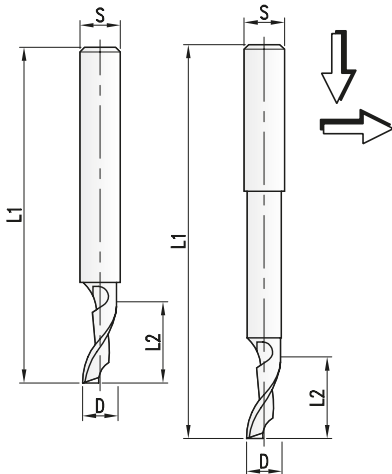
| | Dim. | Art. Nr. |
|--------------------------------|-----------|----------|
| Wendemesser - Reversible knife | 12x12x1,5 | 754.102 |
| Schraube - Screw | M4x6 | 705.351 |
| Torx Schlüssel - Torx wrench | T15 | 706.302 |



3335

HS Wasserschlitzzfräser - Massiv
HS Drainage slot cutter - Solid

PG
02



HS Schlichtoberfräser Z=1
HS Finishing router cutter Z=1

MAN

HS

| D | L2 | L1 | S | Z | Art. Nr. |
|---|----|----|---|---|--------------|
| 5 | 12 | 60 | 8 | 1 | 3335.005.012 |
| 6 | 14 | 60 | 8 | 1 | 3335.006.014 |
| 8 | 16 | 80 | 8 | 1 | 3335.008.016 |

- HS-Wasserschlitzzfräser Z=1 aus Hochleistungsschnellstahl. Rechtsschneidend mit positiver Spirale.
- Zur Verwendung auf Kopier- oder Wasserschlitzzfräsmaschinen. Zum Fräsen und Bohren von Profilen aus KU(PVC)-, Alu-, und NE-Metallen.
- *HS-Drainage slot router Z=1 made from highspeedsteel. Right hand rotation with positive spiral.*
- *For use on copy routers or drainage slot routers. To slot and drill profiles made from PVC-, Alu-, or NE-metals.*

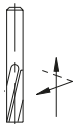
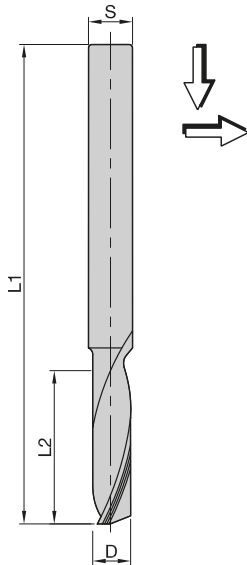
HS Schlichtoberfräser Z=1
HS Finishing router cutter Z=1

MAN

HS

| D | L2 | L1 | S | Z | Art. Nr. |
|---|-------|-----|---|---|--------------|
| 5 | 16/45 | 90 | 8 | 1 | 3335.005.016 |
| 6 | 16/45 | 90 | 8 | 1 | 3335.006.016 |
| 8 | 14/68 | 100 | 8 | 1 | 3335.008.014 |

- Zur Herstellung der Entwässerungsnut in ALU/KU-Fensterprofile geeignet
- *For machining drainage grooves in aluminium/plastic window profiles*



Hp
Positive Spirale
Rechtlauf/Rechtsdrill
Positive helix

HS Schlichtoberfräser Z=1
HS Finishing router cutter Z=1
MAN
HW

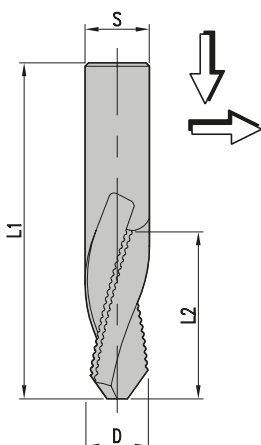
| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|----|----|---------------------|
| 3 | 8 | 58 | 6 | 1L | 6395.003.008 |
| 4 | 8 | 58 | 6 | 1L | 6395.004.008 |
| 5 | 10 | 58 | 6 | 1L | 6395.005.010 |
| 6 | 10 | 58 | 6 | 1L | 6395.006.010 |
| 8 | 10 | 75 | 8 | 1L | 6395.008.010 |
| 10 | 25 | 80 | 10 | 1L | 6395.010.025 |
| 12 | 25 | 83 | 12 | 1L | 6395.012.025 |

- HW-Wasserschlitzfräser Z=1 aus Vollhartmetall. Rechtsschneidend mit positiver Spirale.
- Zur Verwendung auf Kopier- oder Wasserschlitzfräsmaschinen.
- Zum Fräsen und Bohren von Profilen aus KU(PVC)-, Alu-, und NE-Metallen
- *TC-Drainage slot router Z=1 made from solid carbide. Right hand rotation with positive spiral.*
- *for use on copy routers or drainage slot routers.*
- *To slot and drill profiles made from PVC-, Alu-, or Ne-metals.*

| D | L2 | L1 | S | Z | Art. Nr. |
|----|-------|-----|----|----|---------------------|
| 3 | 15 | 100 | 8 | 1L | 6395.003.015 |
| 4 | 20 | 100 | 8 | 1L | 6395.004.020 |
| 5 | 22 | 100 | 8 | 1L | 6395.005.022 |
| 6 | 25 | 100 | 8 | 1L | 6395.006.025 |
| 8 | 30 | 100 | 8 | 1L | 6395.008.030 |
| 10 | 30 | 100 | 10 | 1L | 6395.010.030 |
| 12 | 35/75 | 100 | 12 | 1L | 6395.012.035 |

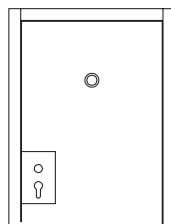
- L Ausführung mit Lappschliff für perfekte Aluminium- und Kunststoffbearbeitung
 L *Lapgrinded type for better amchining of aluminium and plastics*

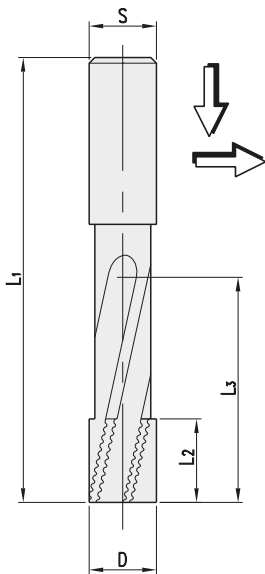
- Zur Herstellung der Entwässerungsnut in ALU/KU-Fensterprofile geeignet
- *For machining drainage grooves in aluminium/plastic window profiles*


HW Schlüssellochfräser Z=3
TC Keyholecutter Z=3
MEC
HW

| D | L2 | L1 | S | Z | Hp | Art. Nr. |
|----|--------|-----|----|---|----|---------------------|
| 12 | 15/75 | 120 | 12 | 3 | Hp | 6595.012.075 |
| 14 | 62 | 130 | 14 | 3 | Hp | 6595.014.062 |
| 16 | 62 | 130 | 16 | 3 | Hp | 6595.016.062 |
| | 73 | 140 | 16 | 3 | Hp | 6595.016.073 |
| | 50/105 | 170 | 16 | 3 | Hp | 6595.016.105 |

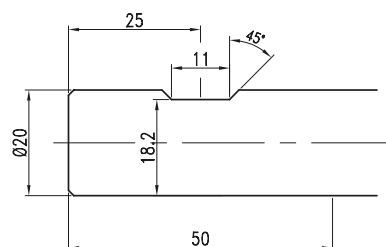
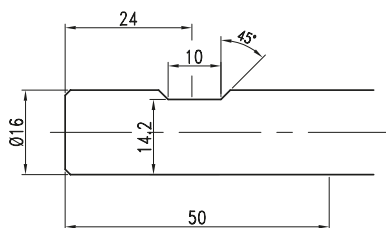
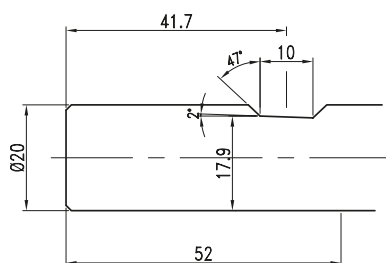
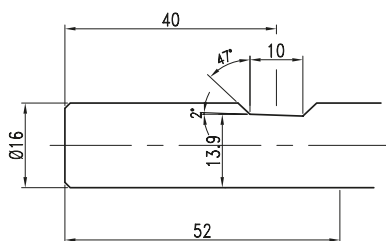
- VHM-Spiralschruppfräser Z=3 Rechtsschneidend mit positiver Spirale (Hp).
- Positive Spirale (Hp) für Spanabfuhr nach oben.
- *Solid carbide roughing cutter Z=3 Right hand rotation with positive spiral (Hp)*
- *Positive spiral (Hp) to remove chips to upward.*



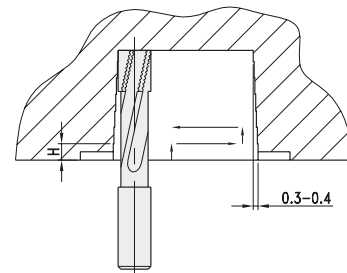

HW Schlosskastenfräser Z=3
TC Lockset cutter Z=3
MEC
HW

| D | L3 | L2 | L1 | S | Z | Hp | Art. Nr. |
|----|-----|----|-----|----|---|----|---------------------|
| 14 | 95 | 45 | 150 | 14 | 3 | Hp | 6585.014.095 |
| | 95 | 30 | 155 | 14 | 3 | Hp | 6585.014.195 |
| 16 | 95 | 45 | 150 | 16 | 3 | Hp | 6585.016.095 |
| | 115 | 30 | 175 | 16 | 3 | Hp | 6585.016.115 |
| 18 | 95 | 50 | 150 | 18 | 3 | Hp | 6585.018.095 |
| | 115 | 30 | 175 | 18 | 3 | Hp | 6585.018.115 |
| 20 | 95 | 50 | 150 | 18 | 3 | Hp | 6585.018.095 |
| | 95 | 45 | 150 | 20 | 3 | Hp | 6585.020.195 |

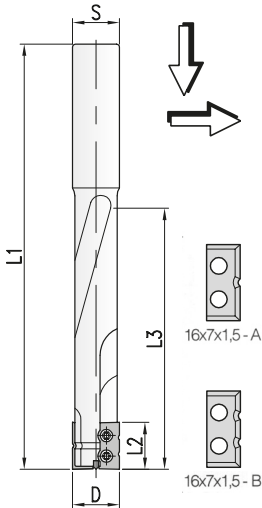
- VHM-Spiralschlosskastenfräser Z=3 Rechtsschneidend mit positiver Spirale (Hp).
- Positive Spirale (Hp) für Spanabfuhr nach oben. Gesamte Frästiefe durch mehrere Zustellungen herstellen.
- Auf Wunsch mit Ultra-Beschichtung für verlängerte Standzeit.
- *Solid carbide lockset cutter Z=3 Right hand rotation with positive spiral (Hp).*
- *Positive spiral (Hp) to remove chips to upward Machine the complete cutting depth with several steps.*
- *On demand with Ultra coating for higher tool life.*



H = 4 - 15mm
 je nach Holzart
dependent on type of wood



- Bei Verwendung der Schlosskastenfräser in Aggregaten mit Klemmschrauben erfolgt die Auslieferung mit Schaft-Spannfläche.
- Bitte den Maschinentyp bzw. das Aggregat angeben.
- *For use in aggregates with flank-clamping delivery with grinding of the weldon slot.*
- *Please specify machine type or type of used aggregate.*



HW Schlosskastenfräser Z=2
TC Lockset cutter Z=2

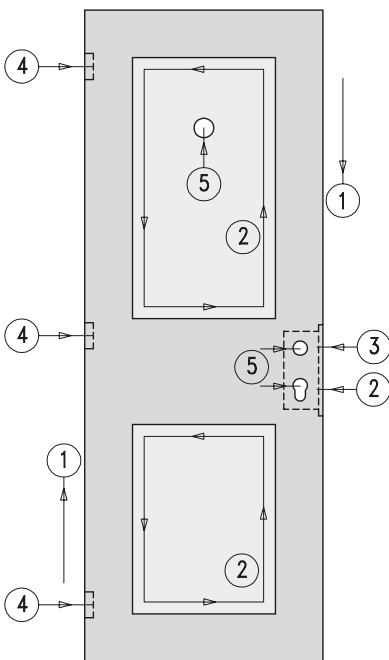
MEC

HW

| D | L2 | L3 | L1 | S | Z | Art. Nr. |
|----|----|-----|-----|----|---|---------------------|
| 16 | 16 | 105 | 150 | 16 | 2 | 4435.016.016 |
| | 16 | 95 | 170 | 16 | 2 | 4435.016.116 |

Ersatzteile
Spare parts

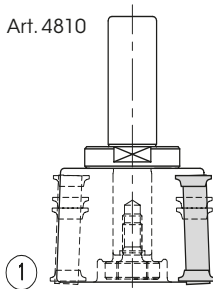
| | Dim. | Art. Nr. |
|---|-----------|-------------------|
| Wechselmesser A - <i>Reversible knife A</i> | 16x17x1,5 | 757.551 |
| Wechselmesser B - <i>Reversible knife B</i> | 16x17x1,5 | 757.552 |
| Schraube - <i>Screw</i> | M3x4 | 705.356.04 |
| Torx Schlüssel - <i>Torx wrench</i> | T9 | 706.301 |



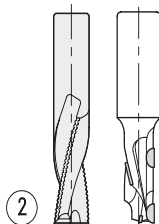
HW Schlosskastenfräser Z=3
TC Lockset cutter Z=3

| Nr. | D | L2 | S | Z | | Art. Nr. |
|-----|----|----|----|-----|----|------------------------|
| 1 | 80 | 50 | 20 | 2 | HW | 4810.080.020 |
| 2 | 16 | 55 | 16 | 3 | HW | 6535.016.055 |
| | 16 | 35 | 16 | 1+1 | DP | 7775.016.035 |
| 3 | 16 | 50 | 16 | 3 | HW | 6585.016.095 |
| | 17 | 25 | 16 | 2 | DP | 7435.017.025 |
| 4 | 12 | 10 | 16 | 2 | HW | RH 6385.012.010 |
| | | 10 | 12 | | HW | LH 6385.012.110 |
| 5 | 16 | 55 | | 3 | HW | 6575.016.055 |

Art. 4810

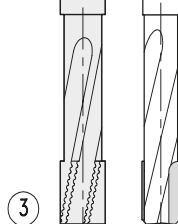


Art. 6535
Art. 6575



Art. 7775

Art. 6585



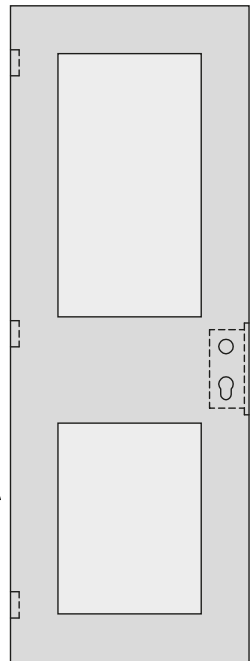
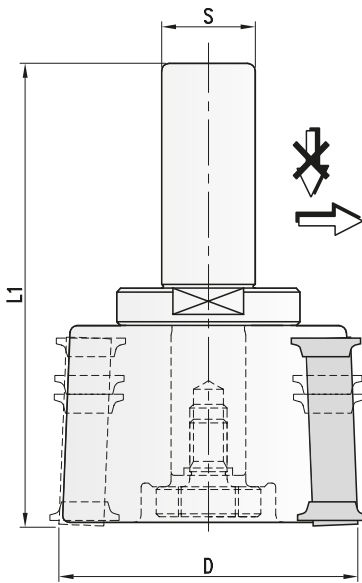
Art. 7435

Art. 6385



Art. 6575




HW Abrund-Fügeschafffräser Z=2
TC Rounding-rebating cutter Z=2

MEC

HW

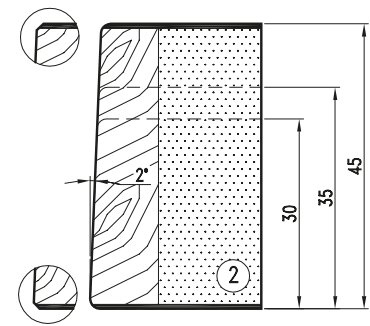
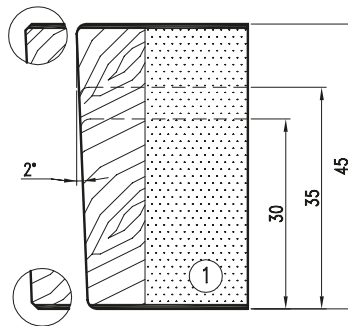
| Nr. | D | L1 | S | Z | C | Art. Nr. |
|-----|----|-----|----|---|-----|--------------|
| 1 | 80 | 115 | 20 | 2 | 2+2 | 4810.080.020 |
| 2 | 80 | 115 | 20 | 2 | 2+2 | 4810.080.120 |

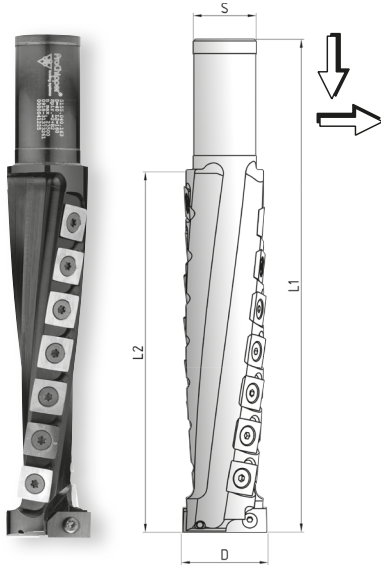
- Auslieferung standardmäßig mit Abrundmesser R=1,5
- Zum Fügen und gleichzeitigem Abrunden oder Anfasen der 2° schrägen Fügeflächen.
- Kantenrunder bzw. Fasemesser verstellbar für Holzstärke 30mm bis 45mm.
- *Cutterhead supplied with rounding knife R=1,5*
- *For jointing and rounding or bevelling of 2° angular jointing area.*
- *Rounding- or Bevelling knives adjustable from 30mm to 45mm wood size.*

Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|------------|------------|
| Wendemesser - <i>Reversible knife</i> | 50x12x1,5 | 750.106 |
| Spannkeil - <i>Clamping wedge</i> | | 707.002.48 |
| Gewindestift - <i>Screw</i> | M8x12 | 705.541 |
| Abrundmesser - <i>Rounding knife</i> | R1,5 | 780.205 |
| Fasemesser - <i>Bevelling knife</i> | 45° | 780.103 |
| Schraube - <i>Screw</i> | M5x13,5 | 705.318 |
| Sechskantschlüssel - <i>T Wrench</i> | SW2,5 (M5) | 706.102 |
| | SW4 (M8) | 706.104 |

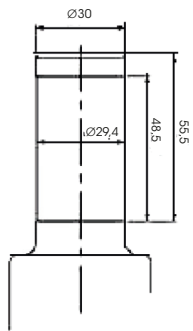
- Füge-Wendemesser sind 2° geschwenkt, Abrundmesser stufenlos verstellbar.
- *Rebating-Knives are swivelled 2°. Rounding knives adjustable.*



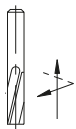

HW Spiralfräser Z=2R/R
TC Helicoidal shank cutter Z=2R/R
MEC**HW**

| D | L2 | L1 | S | Spir. + B | Art. Nr. |
|---------|-----|-----|-----|---------------------|---------------------|
| 30 | 95 | 140 | 25 | 3+2 | 5155.030.095 |
| | 125 | 205 | 25 | 3+2 | 5155.030.126 |
| 40 | 100 | 170 | 25 | 2+2 | 5155.040.100 |
| | 120 | 195 | 25 | 2+2 | 5155.040.128 |
| | 120 | 195 | 30 | 2+2 | 5155.040.120 |
| | 160 | 227 | 25 | 2+2 | 5155.040.166 |
| 50 | 160 | 227 | 30 | 2+2 | 5155.040.163 |
| | 175 | 250 | 25 | 2+1 | 5155.050.175 |
| | 210 | 280 | 30 | 2+1 | 5155.050.210 |
| 100/230 | 290 | 32 | 2+2 | 5155.050.232 | |

- Bohrspiralschafffräser mit 4-fach HW-Wendemessern. Geräuscharm, geringe Leistungsaufnahme und leichter Lauf durch Aufteilung der Späne. Glatte Oberflächen durch bombierte Schneidkanten.
- Tragkörper aus Stahl.
- *Helicoidal shank cutter with 4x TC turnable knives. Low-noise, segmentation of chip removal leads to reduced input power. Smooth surfaces from radius cutting edges.*
- *Steel tool body.*



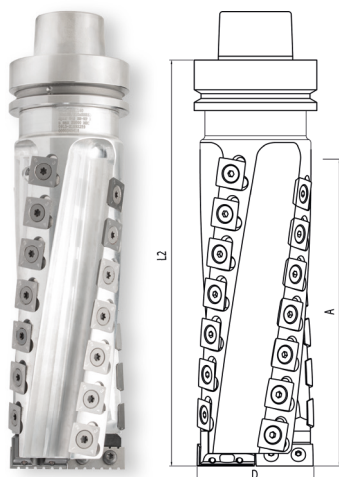
Ausführung Schaft d = 30 mm
Design shaft d = 30 mm



Hp
 Positive Spirale
 Rechtslauf/Rechtsdrill
Positive helix

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-------------------|-------------------|
| Wendemesser - Turnable knife | Ø30 10,5x10,5x1,5 | S750.1241 |
| | 10,5x10,5x1,5 | 750.207 |
| Bohrschneide - Plunging insert | Ø40 15x15x2,5 | 754.306 |
| | Ø50 15x15x2,5 | 754.106 |
| | Ø40 20,2x12x1,5 | S750.2609 |
| | 15x12x1,5 | S750.2574 |
| Torx Schraube - Torx screw | Ø50 25,4x12x1,5 | S750.2761 |
| | 25,4x12x1,5 | S750.2762 |
| | Ø30 M4x9 | 705.310.09 |
| Torx Schlüssel - Torx wrench | Ø40 M5x13 | 705.320.13 |
| | M3,5x7 | 705.350 |
| Torx Schlüssel - Torx wrench | Ø50 M5x13 | 705.320.13 |
| | M3,5x7 | 705.350 |
| Torx Schlüssel - Torx wrench | Ø30 T15 | 706.302 |
| | Ø40+Ø50 T20 | 706.305 |


HW Spiralfräser Z=2R/R
TC Helicoidal cutter Z=2R/R

MEC

HW

| D | L2 | A | S | Z | Art. Nr. |
|----|-----|-----|--------|-----|----------------|
| 60 | 130 | 210 | HSK63F | 4+2 | * 5232.060.130 |
| | 130 | 210 | HSK63E | 4+2 | * 5232.060.230 |
| | 160 | 210 | HSK63F | 4+2 | * 5232.060.160 |
| | 160 | 210 | HSK63E | 4+2 | * 5232.160.160 |
| | 170 | 250 | HSK63F | 4+2 | * 5232.060.170 |
| | 170 | 250 | HSK63E | 4+2 | * 5232.160.170 |
| | 200 | 250 | HSK63F | 4+2 | * 5232.060.200 |
| | 200 | 250 | HSK63E | 4+2 | * 5232.160.200 |
| 80 | 170 | 250 | HSK63F | 4+2 | * 5232.080.170 |
| | 170 | 250 | HSK63E | 4+2 | * 5232.180.170 |
| | 200 | 250 | HSK63F | 4+2 | * 5232.080.200 |
| | 200 | 250 | HSK63E | 4+2 | * 5232.180.200 |

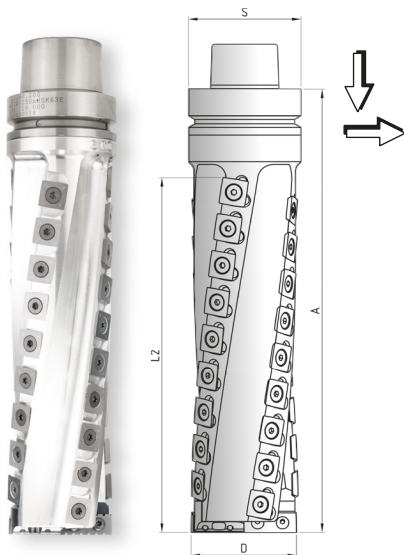
- * Ausführung mit Leichtmetall-Grundkörper
- * Light alloy body

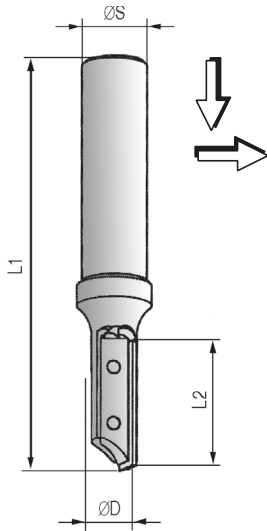
- Spiralbohrhobelgarnitur mit 4-fach HW-Wendemessern und Stahl-Bohrkopf.
- Tragkörper aus Leichtmetall. Werkzeug und HSK sind unlösbar miteinander verbunden.
- Geräuscharm, geringe Leistungsaufnahme und leichter Lauf durch Aufteilung der Späne.
- Glatte Oberflächen durch bombierte Schneidkanten.

- Helicoidal drilling planing cutterset with 4x TC turnable knives.
- Aluminium tool body. Cutter and HSK are shrink-fit together.
- Low-noise, segmentation of chip removal leads to reduced input power.
- Smooth surfaces from radius cutting edges.

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|---------------------|------------|
| Wendemesser - Turnable knife | Ø60 - Ø80 15x15x2,5 | 754.106 |
| Bohrschneide - Plunging insert | Ø60 29,6x12x1,5 | S750.2595 |
| | 29,5x12x1,5 | 753.207 |
| | Ø80 40,6x12x1,5 | S750.2620 |
| | 39,5x12x1,5 | 753.271 |
| Bohrkopf - Borehead | Ø60 | S709.6445 |
| | Ø80 | S709.5447 |
| Schraube - Screw | M4x20 | 705.468 |
| Schraube - Screw | M6x16 | 705.703 |
| Torx Schraube - Torx Screw | Ø60 - Ø80 M4x6 | 705.351 |
| | M5x14 | 705.320.13 |
| Torx Schlüssel - Torx wrench | Ø60 - Ø80 T15 | 706.302 |
| | T20 | 706.305 |



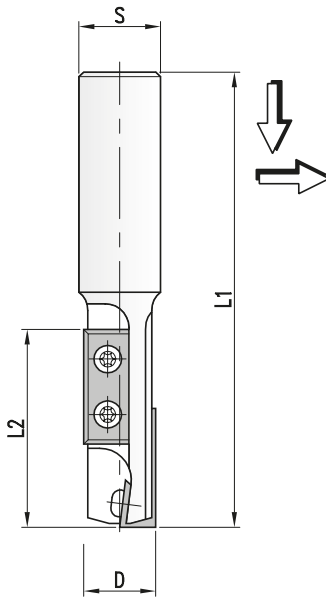

HW Nutfräser Z=1
TC Grooving cutter Z=1
MAN**HW**

| D | L2 | L1 | S | Z | Art. Nr. LH | Art. Nr. RH |
|----|----|----|----|---|---------------------|-----------------------|
| 8 | 20 | 65 | 10 | 1 | 5135.108.020 | 5135.008.020 |
| | 20 | 65 | 10 | 1 | | ● 5135.208.020 |
| 9 | 20 | 65 | 10 | 1 | 5135.109.020 | 5135.009.020 |
| 10 | 20 | 70 | 10 | 1 | | 5135.010.020 |
| | 25 | 70 | 10 | 1 | 5135.110.025 | 5135.010.025 |
| 11 | 25 | 70 | 12 | 1 | | 5135.011.025 |
| 12 | 20 | 65 | 10 | 1 | | 5135.012.020 |
| | 30 | 75 | 10 | 1 | 5135.112.030 | 5135.012.030 |
| 13 | 30 | 75 | 12 | 1 | | 5135.013.030 |
| 14 | 30 | 75 | 12 | 1 | | 5135.014.030 |
| | 40 | 85 | 12 | 1 | 5135.114.040 | 5135.014.040 |

- Grundkörper in Schwermetall
- *Heavy steel tool body*
- Oberfräser zum Formatieren und Nuten in Schlichtqualität.
- Für Nutfräsungen mit konstantem Werkzeugdurchmesser. HW-Wendemesser mit Spannbacken geklemmt.
- Ausführung zum fliegenden Einbohren.
- *Router cutter for sizing and grooving to finish quality. For grooving with constant tool diameter.*
- *Tungsten carbide turnblade knife clamped by wedge.*
- *Suitable for ramp plunging.*

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | | | Dim. | Art. Nr. |
|------------------------------|-----------|-------|-------------------|-------------------|
| Wendemesser - Turnable knife | Ø8 - Ø9 | L20 | 20x4,1x1,1 | 758.411 |
| | Ø10 - Ø12 | L20 | 20x5,5x1,1 | 758.511 |
| | Ø10 - Ø11 | L25 | 25x5,5x1,1 | 758.512 |
| | Ø12 - Ø14 | L30 | 30x5,5x1,1 | 758.503 |
| | Ø14 | L40 | 40x5,5x1,1 | 758.504 |
| Spannkeil - Clamping wedge | Ø8 - Ø9 | L20RH | | 707.001.20 |
| | Ø8 - Ø9 | L20LH | | 707.002.20 |
| | Ø10 | L20RH | | 707.003.20 |
| | Ø10 - Ø11 | L25RH | | 707.001.25 |
| | Ø10 - Ø11 | L25LH | | 707.002.25 |
| | Ø12 | L20RH | | 707.004.20 |
| | Ø12 - Ø14 | L30RH | | 707.001.30 |
| | Ø12 - Ø14 | L30LH | | 707.002.30 |
| | Ø14 | L40RH | | 707.001.40 |
| Ø14 | L40LH | | 707.002.40 | |
| Torx Schraube - Torx screw | Ø8 - Ø9 | | M2,5x5 | 705.281.25 |
| | Ø10 - Ø11 | | M2,5x6 | 705.281.25 |
| | Ø12 - Ø14 | | M3x7 | 705.312.30 |
| Torx Schlüssel - Torx wrench | Ø8 - Ø11 | | T8 | 706.234 |
| | Ø12 - Ø14 | | T9 | 706.301 |



- Mit Einbohrschneide
- With center tip for plunge cutting

HW Nutfräser Z=1+1
TC Grooving cutter Z=1+1

MEC

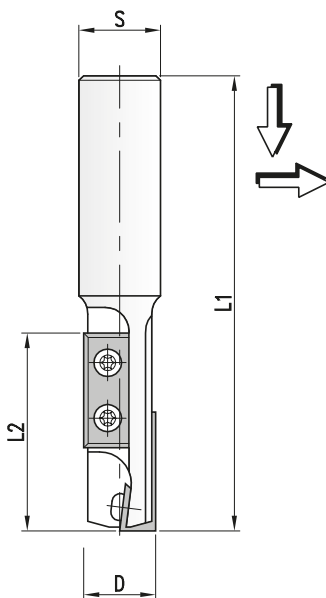
HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|-----|---------------------|
| 16 | 30 | 90 | 18 | 1+1 | 5145.016.030 |
| | 30 | 100 | 20 | 1+1 | 5145.016.130 |
| 18 | 30 | 100 | 25 | 1+1 | 5145.016.230 |
| | 50 | 110 | 18 | 1+1 | 5145.018.050 |
| | 50 | 120 | 20 | 1+1 | 5145.018.150 |
| 20 | 50 | 120 | 25 | 1+1 | 5145.018.250 |
| | 50 | 110 | 18 | 1+1 | 5145.020.050 |
| | 50 | 120 | 20 | 1+1 | 5145.020.150 |
| | 50 | 120 | 25 | 1+1 | 5145.020.250 |

- WP-Oberfräser für Nutfräsungen mit konstantem Werkzeugdurchmesser. Achsparallele Schneiden. Nutzlänge auf versetzte Messer aufgeteilt. Schneidenübergänge können sich am Werkstück abzeichnen. Fliegendes Eintauchen über HW-Wendemesser Einbohrschneide.
- Router cutter with TC turnable knives for rooving with constant tool diameter. Straight cut. Useable length split with staggered knives. Cutting edge overlap may be visible on the workpiece. With tungsten carbide turnblade knife plunging tip.

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-------------|----------------|
| Wendemesser - Reversible knife | 29,5x12x1,5 | 753.207 |
| | Ø16 - Ø18 | 750.097 |
| | Ø20 | 750.096 |
| Schraube - Screw | M4x4 | 705.353 |
| | M3,5x5 | 705.352 |
| Torx Schlüssel - Torch wrench | T15 | 706.302 |


HW Nutfräser Z=1+1
TC Grooving cutter Z=1+1

MEC

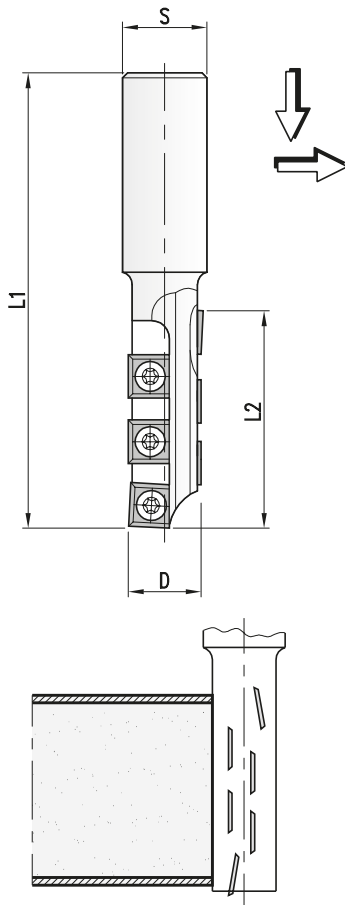
HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|---|---------------------|
| 16 | 45 | 105 | 18 | 2 | 5165.016.045 |
| | 45 | 115 | 20 | 2 | 5165.016.145 |
| | 45 | 115 | 25 | 2 | 5165.016.245 |
| 18 | 50 | 110 | 18 | 2 | 5165.018.050 |
| | 50 | 120 | 20 | 2 | 5165.018.150 |
| | 50 | 120 | 25 | 2 | 5165.018.250 |
| 20 | 50 | 110 | 18 | 2 | 5165.020.050 |
| | 50 | 120 | 20 | 2 | 5165.020.150 |
| | 50 | 120 | 25 | 2 | 5165.020.250 |

- WP-Oberfräser für Nutfräsungen mit konstantem Werkzeugdurchmesser. Achsparallele Schneiden. Nutzlänge auf versetzte Messer aufgeteilt. Schneidenübergänge können sich am Werkstück abzeichnen. Fliegendes Eintauchen über HW-Wendemesser Einbohrschneide.
- Router cutter with TC turnable knives for rooving with constant tool diameter. Straight cut. Useable length split with staggered knives. Cutting edge overlap may be visible on the workpiece. With tungsten carbide turnblade knife plunging tip.

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-------------|----------------|
| Wendemesser - Reversible knife | 29,5x12x1,5 | 753.207 |
| | 12x12x1,5 | 754.102 |
| Schraube - Screw | M4x6 | 705.351 |
| Torx Schlüssel - Torch wrench | T15 | 706.302 |


HW Nutfräser Z=1+1
TC Grooving cutter Z=1+1
MEC**HW**

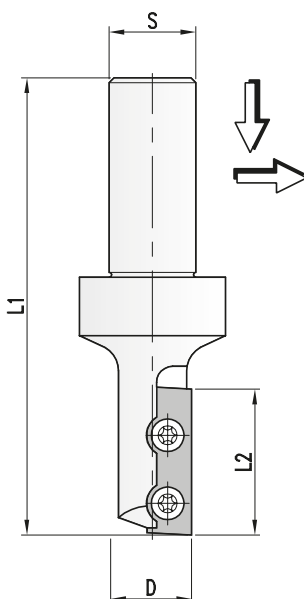
| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|-----|---------------------|
| 22 | 42 | 115 | 20 | 1+1 | 5645.022.042 |
| | 42 | 115 | 25 | 1+1 | 5645.022.142 |
| | 60 | 131 | 20 | 1+1 | 5645.022.060 |
| | 60 | 131 | 25 | 1+1 | 5645.022.160 |

- WP-Oberfräser für Format- und Nutfräsungen.
Außenschneiden mit wechselseitigem Achswinkel für beidseitig ausrissfreie Schnittkanten.
Nutzlänge auf versetzte Messer aufgeteilt.
Schneidenübergänge können sich am Werkstück abzeichnen.
Fliegendes Eintauchen über HW-Wendemesser Einbohrschneide.
- Router cutter with TC turnable knives for sizing and grooving.
Outer knives with alternate shear angles, for tear-free cut edges on both sides.
Useable length split with staggered knives. Cutting edge overlap may be visible on the workpiece.
With tungsten carbide turnblade knife plunging tip.

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|------------|----------------|
| Wendemesser - Reversible knife | 12x12x1,5 | 754.102 |
| | 12x12x1,5* | 752.100 |
| Schraube - Screw | M4x6 | 705.351 |
| Torx Schlüssel - Torx wrench | T15 | 706.302 |

- * Für MDF und besonders abrasive Werkstoffe
- * For MDF and abrasive material


HW Nutfräser Z=1
TC Grooving cutter Z=1
MEC**HW**

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|---|---------------------|
| 16 | 30 | 91 | 20 | 1 | 5175.016.030 |
| | 50 | 111 | 20 | 1 | 5175.016.050 |
| 18 | 30 | 91 | 20 | 1 | 5175.018.030 |
| | 50 | 111 | 20 | 1 | 5175.018.050 |

- WP-Oberfräser für Format- und Nutfräsungen in Schlichtqualität.
- Ausführung zum fliegenden Einbohren geeignet.
- Messerbestückung ausgelegt für absatzfreien Schnitt.
- Router cutter with tungsten carbide turnable knife for sizing and grooving to finish quality.
- For grooving with constant tool diameter. Suitable for ramp plunging.
- Straight cut. One piece cutting edge.

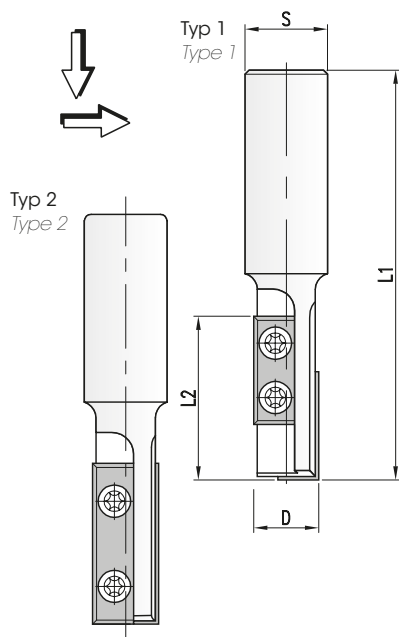
Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|------|-------------|
| Wendemesser - Reversible knife | Ø | 29,5x9x1,5 |
| | | 49,5x9x1,5 |
| | Ø18 | 29,5x12x1,5 |
| | | 49,5x12x1,5 |
| Schraube - Screw | | M3,5x5 |
| Torx Schlüssel - Torx wrench | | T15 |

5185

HW Nutfräser - Wendemesser

TC Grooving cutter - Reversible knife

PG
02

HW Nutfräser Z=1+1

TC Grooving cutter Z=1+1

MEC

HW

| Nr. | D | L2 | L1 | S | Z | Art. Nr. |
|-----|--|-----|-----|-----|-----|--------------|
| 1 | 16 | 35 | 105 | 20 | 1+1 | 5185.016.035 |
| | 18 | 45 | 115 | 20 | 1+1 | 5185.018.045 |
| | 45 | 115 | 25 | 1+1 | | 5185.018.145 |
| | 20 | 50 | 125 | 20 | 1+1 | 5185.020.050 |
| | 50 | 125 | 25 | 1+1 | | 5185.020.150 |
| | 22 | 55 | 135 | 20 | 1+1 | 5185.022.055 |
| | 55 | 135 | 25 | 1+1 | | 5185.022.155 |
| | Mit 2-Schneider - With 2 straight knives | | | | | |
| 2 | 16 | 30 | 100 | 20 | 2 | 5185.016.030 |
| | 50 | 120 | 20 | 2 | | 5185.016.050 |
| | 20 | 50 | 125 | 20 | 2 | 5185.020.250 |

- WP-Oberfräser für Formatieren und Nuten in Schlichtqualität.
- Ausführung zum fliegenden Einbohren geeignet.
- Messerbestückung von Typ 2 ausgelegt für absatzfreien Schnitt bei erhöhten Vorschüben.
- Router cutter with tungsten carbide turnable knife for sizing and grooving to finish quality.
- For grooving with constant tool diameter. Suitable for ramp plunging.
- Type 2 with 2 straight knives for increased feed speeds.

Wendemesser/Ersatzteile

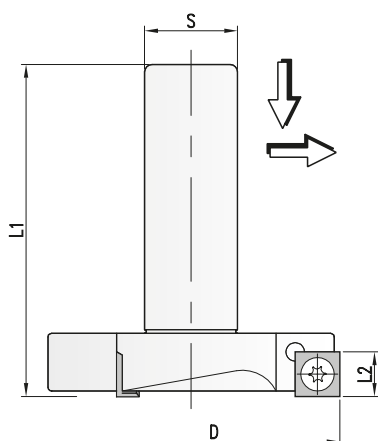
Reversible knives/Spare parts

| | Nr. | Dim. | Art. Nr. | |
|--------------------------------|-----|-------------|-------------|---------|
| Wendemesser - Reversible knife | 1 | 29,5x12x1,5 | 753.207 | |
| | 2 | D16 | 753.204 | |
| | 2 | D16 | 49,5x9x1,5 | 753.304 |
| | 2 | D20 | 49,5x12x1,5 | 753.307 |
| | 2 | D16 | M3,5x5 | 705.352 |
| Torx Schraube - Torx screw | 2 | D16 | M3,5x5 | 705.351 |
| Torx-Schlüssel - Torx wrench | 1+2 | M4x6 | 706.302 | |
| | | T15 | 706.302 | |

5195

HW Planfräser - Wendemesser

TC Facemilling cutter - Reversible knife

PG
02

HW Planfräser Z=3

TC Face milling cutter Z=3

MEC

HW

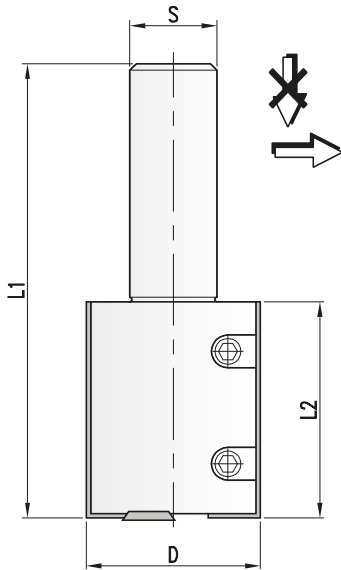
| D | L2 | L1 | S | Z | Art. Nr. |
|-----|----|----|----|---|--------------|
| 40 | 12 | 75 | 20 | 3 | 5195.040.012 |
| | 12 | 75 | 25 | 3 | 5195.040.112 |
| 80 | 12 | 75 | 20 | 3 | 5195.080.012 |
| | 12 | 75 | 25 | 3 | 5195.080.112 |
| 150 | 15 | 90 | 25 | 6 | 5195.150.015 |

- Wp-Planfräser zum Planfräsen von Flächen, zum Planen von Schonerplatten oder zum Fräsen großer Fälze. Wendemesser mit vier Schneidkanten.
- For planing large-surface workpieces, planing slave panelsands or for cutting big rebates. Turnable knives with four cutting edges.

Wendemesser/Ersatzteile

Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-----------|-----------|
| Wendemesser - Reversible knife | 12x12x1,5 | 754.102 |
| | D150 | 15x15x2,5 |
| Schraube - Screw | M4x6 | 705.351 |
| | D150 | M5x13 |
| Torx-Schlüssel - Torx wrench | T15 | 706.302 |
| | D150 | T20 |



HW Falzfräser Z=2 V=2

TC Jointing- and rebating cutter Z=2 V=2

MEC

HW

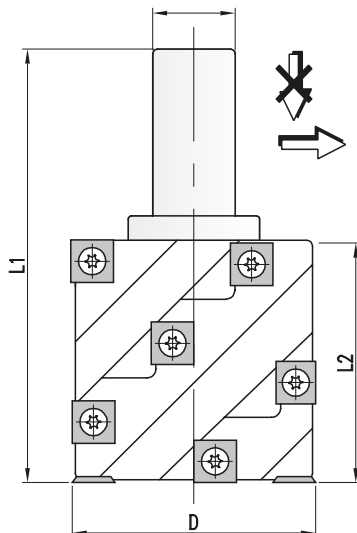
| D | L2 | L1 | S | Z | V | Art. Nr. |
|----|----|-----|----|---|---|--------------|
| 40 | 30 | 75 | 18 | 2 | 2 | 5245.040.030 |
| | 30 | 85 | 20 | 2 | 2 | 5245.040.130 |
| | 30 | 85 | 25 | 2 | 2 | 5245.040.230 |
| | 50 | 95 | 18 | 2 | 2 | 5245.040.050 |
| | 50 | 105 | 20 | 2 | 2 | 5245.040.150 |
| | 50 | 105 | 25 | 2 | 2 | 5245.040.250 |

- WP-Füge-Falzmesserkopf zum Fügen und Falzen mit konstantem Werkzeugdurchmesser.
- Spannkeilgeklebte HW-Wendemesser mit achsparallelen Schneiden zum Fräsen absatzfreier Flächen. Stirnseitig mit Vorschneidern für Falzfräsungen.
- *Jointing-rebating cutterhead with TC reversible knives.*
For jointing and rebating with constant tool diameter.
- *Wedge clamped TC-reversible knives with straight one-piece cutter. Face-side with spurs for rebating.*

Wendemesser/Ersatzteile

Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-----------|----------|
| Wendemesser - Reversible knife | 30x12x1,5 | 750.104 |
| | 50x12x1,5 | 750.106 |
| Spannkeil - Clamping wedge | | 707.760 |
| | | 707.762 |
| Gewindestift - Screw | M6x10 | 705.352 |
| Vorschneider - Spur | 14x14x2 | 750.111 |
| Spannschraube - Screw | M5x7 | 705.425 |
| Sechskantschlüssel - T Key | SW3 | 706.103 |



HW Spiralfräser Z=2 V=2

TC Helicoidal cutter Z=2 V=2

MAN

HW

| D | L2 | S | Spir. | V | Art. Nr. |
|----|-----|----|-------|---|----------------|
| 80 | 80 | 20 | 2 | 4 | * 5240.080.080 |
| | 80 | 25 | 2 | 4 | * 5240.080.180 |
| | 130 | 20 | 4 | 2 | * 5240.080.130 |
| | 130 | 25 | 4 | 2 | * 5240.080.230 |

- * Ausführung mit Leichtmetall-Grundkörper
- * *Light alloy body*
- Leichtmetall-Füge-Falzmesserkopf in gewendelter Ausführung, bestückt mit HW-Wendemessern Z=4 in spiraler Anordnung für große Zerspanungsleistung und optimierte Späneentsorgung. Unterteilter Schnitt zu Reduzierung der Schnittkräfte und des Arbeitsgeräusches.
- Stirnseitig mit Vorschneidern für Falzfräsungen.
- *Light alloy jointing and rebating cutter in helicoidal layout, tipped with TC reversible knives Z=4 in spiral arrangement for high cutting performance and optimised chip removal.*
Staggered cut for reduced cutting forces and radiated noise.
- *Face side with spurs for rebating.*

Wendemesser/Ersatzteile

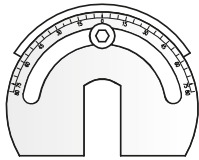
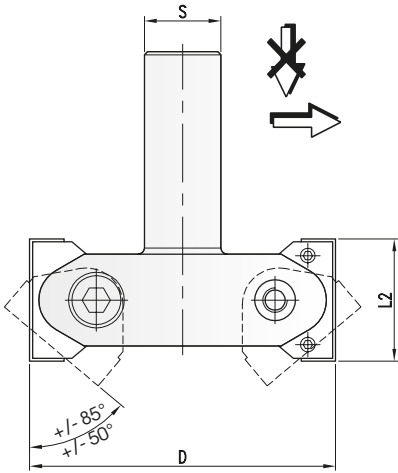
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-----------|------------|
| Wendemesser - Reversible knife | 15x15x2,5 | 754.106 |
| Schraube - Screw | M5x14 | 705.320.13 |
| Vorschneider - Spur | 14x14x2 | 750.111 |
| Spannschraube - Screw | M5x7 | 705.425 |
| Torx Schlüssel - Torx wrench | T20 | 706.305 |

5205

HW Schwenkmesserkopf - Wendemesser
TC Adjustable bevelling cutter - Reversible knife

PG
02



Art.726.102 - Einstellehre, Skala mit 1° Markierung

Ref. 726.102 - Gauge for adjustment, Scale in 1° increment

HW Schwenkmesserkopf Z=2
TC Adjustable bevelling cutter Z=2

MAN

HW

| D | Dmax | L2 | W | S | Z | Art. Nr. |
|-----|------|----|---------|----|---|---------------------|
| 100 | 117 | 40 | +/- 85° | 20 | 2 | 5205.100.040 |
| | 117 | 40 | +/- 85° | 25 | 2 | 5205.100.140 |
| 105 | 121 | 40 | +/- 50° | 20 | 2 | 5205.105.040 |
| | 121 | 40 | +/- 50° | 25 | 2 | 5205.105.140 |

- WP-Füge-Falzmesserkopf zum Fügen und Falzen mit konstantem Werkzeugdurchmesser.
- Spannkeilgeklammte HW-Wendemesser mit achsparallelen Schneiden zum Fräsen absatzfreier Flächen. Stirnseitig mit Vorschneidern für Falzfräsungen.
- *Jointing-rebating cutterhead with TC reversible knives.*
- *For jointing and rebating with constant tool diameter.*
- *Wedge clamped TC-reversible knives with straight one-piece cutter. Face-side with spurs for rebating.*

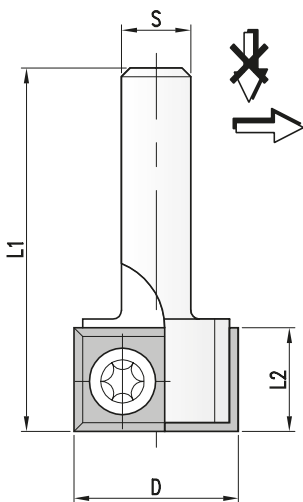
Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|-----------|----------------|
| Wendemesser - <i>Reversible knife</i> | 40x12x1,5 | 750.105 |
| Spannkeil - <i>Clamping wedge</i> | | 707.761 |
| Gewindestift - <i>Screw</i> | M6x10 | 705.532 |
| Sechskantschlüssel - <i>T Key</i> | SW3 | 706.103 |

5139

HW Bündigfräser - Wendemesser
TC Grooving cutter - Reversible knife

PG
02



HW Bündigfräser Z=2
TC Grooving cutter Z=2

MAN

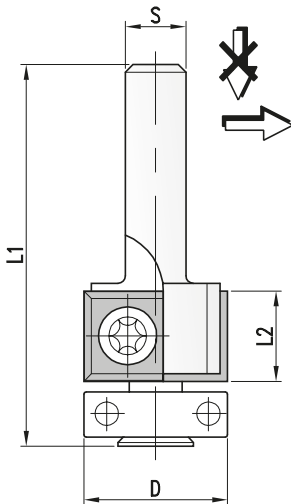
HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|---|---|---------------------|
| 19 | 12 | 45 | 6 | 2 | 5139.019.012 |
| | 12 | 45 | 8 | 2 | 5139.019.112 |
| 20 | 12 | 45 | 6 | 2 | 5139.020.012 |

- WP-Bündigfräser zum Fräsen mit Anschlag oder Führungsschiene auf Handoberfräsmaschinen. Wendemesser mit 4 Schneidkanten.
- *TC jointing cutter with turnable knives for edge trimming for work with limit stop or guide rail system on portable routers. Turnable knives with four cutting edges.*

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|-----------|----------------|
| Wendemesser - <i>Reversible knife</i> | 12x12x1,5 | 754.102 |
| Torx Schraube - <i>Torx screw</i> | M4x6 | 705.351 |
| Torx Schlüssel - <i>Torx wrench</i> | T15 | 706.302 |

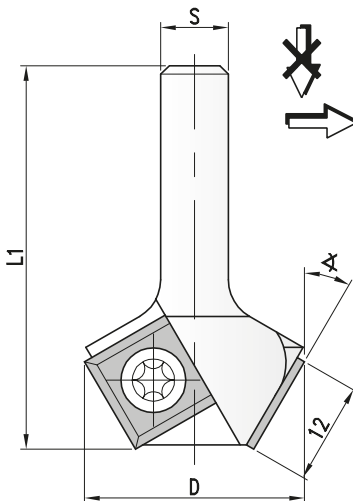

HW Bündigfräser Z=2
TC Grooving cutter Z=2
MAN
HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|---|---|---------------------|
| 19 | 12 | 59 | 6 | 2 | 5106.019.012 |
| | 12 | 59 | 8 | 2 | 5106.019.112 |

- WP-Bündigfräser mit Kugellager-Anlauflager zur Führung des Werkzeuges am Werkstück.
- Wendemesser mit 4 Schneidkanten.
- *TC jointing cutter with ball bearing guide for working tool guided along workpiece.*
- *Turnable knives with four cutting edges.*

Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|-----------|----------------|
| Wendemesser - <i>Reversible knife</i> | 12x12x1,5 | 754.102 |
| Torx Schraube - <i>Torx screw</i> | M4x6 | 705.351 |
| Kugellager - <i>Ball bearing</i> | 19x6x6 | 701.054 |
| Torx Schlüssel - <i>Torx wrench</i> | T15 | 706.302 |


HW Bündigfräser Z=2
TC Grooving cutter Z=2
MAN
HW

| D | α | L1 | S | Z | Art. Nr. |
|----|-----|----|---|---|---------------------|
| 24 | 22° | 45 | 6 | 2 | 5179.024.045 |
| 26 | 30° | 45 | 6 | 2 | 5179.026.045 |
| | 30° | 45 | 8 | 2 | 5179.026.145 |
| 29 | 45° | 45 | 6 | 2 | 5179.029.045 |
| | 45° | 45 | 8 | 2 | 5179.029.145 |

- WP-Bündig-Fasefräser zum Fräsen mit Anschlag oder Führungsschiene auf Handoberfräsmaschinen. Wendemesser mit 4 Schneidkanten.
- *TC jointing-beveling cutter with turnable knives for edge trimming for work with limit stop or guide rail system on portable routers. Turnable knives with four cutting edges.*

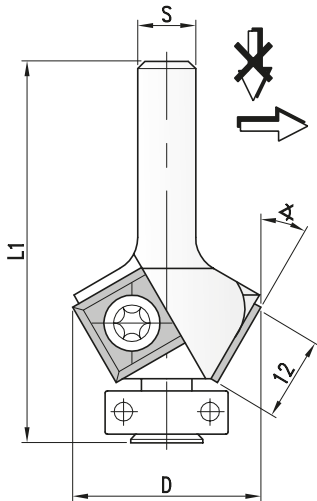
Wendemesser/Ersatzteile
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|-----------|----------------|
| Wendemesser - <i>Reversible knife</i> | 12x12x1,5 | 754.102 |
| Torx Schraube - <i>Torx screw</i> | M4x6 | 705.351 |
| Torx Schlüssel - <i>Torx wrench</i> | T15 | 706.302 |

5176

HW Bündig-Fasefräser mit Anlauflager - Wendemesser

TC Beveling cutter with ball bearing guide - Reversible knife

PG
02

HW Bündig-Fasefräser Z=2

TC Beveling cutter Z=2

MAN

HW

| D | α | L1 | S | Z | Art. Nr. |
|----|-----|----|---|---|--------------|
| 27 | 22° | 65 | 6 | 2 | 5176.027.065 |
| | 22° | 65 | 8 | 2 | 5176.027.165 |
| 30 | 30° | 65 | 6 | 2 | 5176.030.065 |
| | 30° | 65 | 8 | 2 | 5176.030.165 |
| 32 | 45° | 65 | 6 | 2 | 5176.032.065 |
| | 45° | 65 | 8 | 2 | 5176.032.165 |

- WP-Bündig-Fasefräser zum Fräsen mit Anschlag oder Führungsschiene auf Handoberfräsmaschinen. Wendemesser mit 4 Schneidkanten.
- TC jointing-beveling cutter with turnable knives for edge trimming for work with limit stop or guide rail system on portable routers. Turnable knives with four cutting edges.

Wendemesser/Ersatzteile

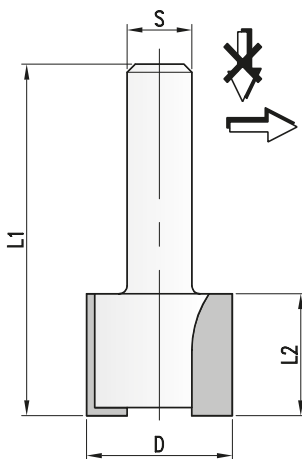
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|-----------|----------|
| Wendemesser - Reversible knife | 12x12x1,5 | 754.102 |
| Torx Schraube - Torx screw | M4x6 | 705.351 |
| Kugellager - Ball bearing | 19x6x6 | 701.054 |
| Torx Schlüssel - Torx wrench | T15 | 706.302 |

8409

HW Bündigfräser - Festbestückt

TC Edge trimming cutter - Tipped

PG
02

HW Bündig-Fasefräser Z=2

TC Edge trimming cutter Z=2

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|---|---|--------------|
| 18 | 19 | 45 | 6 | 2 | 8409.018.019 |
| | 19 | 45 | 8 | 2 | 8409.018.119 |

- HW Bündigfräser zum Fräsen mit Anschlag oder Führungsschiene auf Handoberfräsmaschinen. HW-festbestückte Ausführung.
- TC jointing cutter for edge trimming for work with limit stop or guide rail system on portable routers. TC-tipped layout.

01



Sägen

02



Hobeln / Fräsen

03



Hobeln / Fräsen

04



Profilfräsen

05



Nut- und Federfräsen

06



Oberfräsen

07



Bohren

08



PKD-Werkzeuge

09



Spannen

10

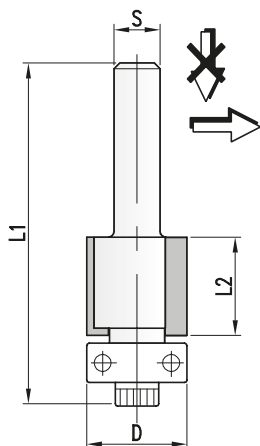


Ersatzteile

11



Informationen


HW Bündigfräser Z=2
TC Edge trimming cutter Z=2

MAN

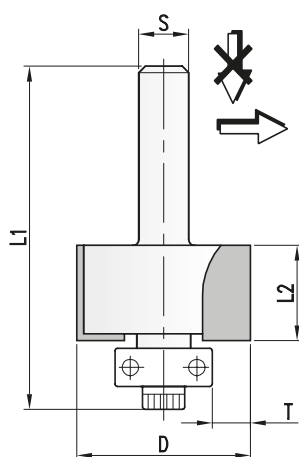
HW

| D | L2 | L1 | S. | Z | Art. Nr. |
|------|------|----|----|---|---------------------|
| 12,7 | 12,7 | 56 | 6 | 2 | 8106.013.013 |
| | 12,7 | 56 | 8 | 2 | 8106.013.113 |
| 12,7 | 25,4 | 67 | 6 | 2 | 8106.013.025 |
| | 25,4 | 67 | 8 | 2 | 8106.013.125 |

- HW-Bündigfräser mit Kugellager-Anlaufring zur Führung des Werkzeuges am Werkstück.
- HW-festbestückte Ausführung.
- *TC jointing cutter with ball bearing guide for working tool guided along workpiece.*
- *HW-tipped layout.*

Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------|------------|----------------|
| Kugellager - Ball bearing | 12,7x5x4,7 | 701.053 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |


HW Bündigfräser Z=2
TC Edge trimming cutter Z=2

MAN

HW

| D | L2 | L1 | Tmax. | S | Z | T | Art. Nr. |
|------|------|----|-------|---|---|-----|---------------------|
| 31,8 | 12,7 | 51 | 9,5 | 6 | 2 | 9,5 | 8176.032.013 |
| | 12,7 | 51 | 9,5 | 8 | 2 | 9,5 | 8176.032.113 |

- HW-Falzfräser mit Kugellager-Anlaufring zur Führung des Werkzeuges am Werkstück. Zum Fräsen eines 9,5mm tiefen Falzes. HW-festbestückte Ausführung.
- *TC jointing cutter with ball bearing guide for working tool guided along workpiece. To joint a 9,5mm deep rebate. HW-tipped layout.*

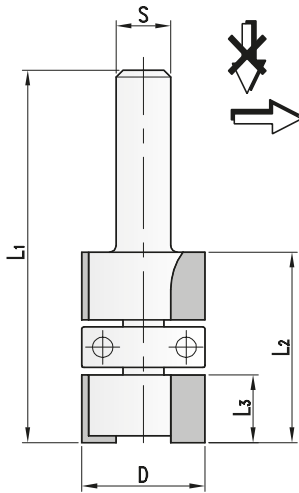
Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------|------------|----------------|
| Kugellager - Ball bearing | 12,7x5x4,7 | 701.053 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |

8206

HW Doppel-Bündigfräser mit Anlauflager - Festbestückt

TC Double-Edge trimming cutter with ball bearing guide - Tipped

PG
02

HW Doppel-Bündigfräser Z=2

TC Double-Edge trimming cutter Z=2

MAN

HW

| D | L3 | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|----|---|---|--------------|
| 19 | 10 | 21 | 70 | 6 | 2 | 8206.019.010 |
| | 10 | 21 | 70 | 8 | 2 | 8206.019.110 |

- HW-Bündigfräser mit Kugellager-Anlaufring zur Führung des Werkzeuges am Werkstück.
- HW-festbestückte Ausführung.
- TC jointing cutter with ball bearing guide for working tool guided along workpiece.
- HW-tipped layout.

Ersatzteile

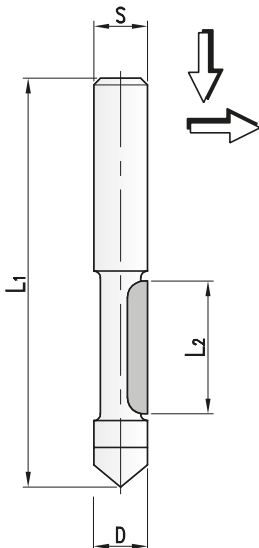
Spare parts

| Dim. | Art. Nr. |
|---------------------------|-------------------|
| Kugellager - Ball bearing | 19x6x6 701.054 |

8153

HW Kopier- und Ausschnittfräser - Festbestückt

TC Panel pilot cutter - Tipped

PG
02

HW Kopierfräser Z=1

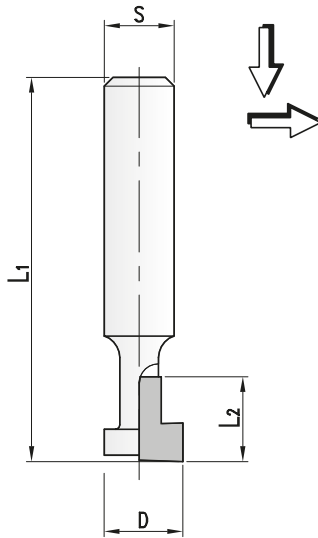
TC Panel pilot cutter Z=1

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|------|----|----|---|---|--------------|
| 6,35 | 19 | 62 | 6 | 1 | 8153.006.019 |
| | 19 | 62 | 8 | 1 | 8153.006.119 |
| 8 | 19 | 62 | 6 | 1 | 8153.008.019 |
| | 19 | 62 | 8 | 1 | 8153.008.119 |

- HW-Oberfräser zum Einbohren und Auffräsen überfurnierter bzw. überbeschichteter Ausschnitte in Plattenwerkstoffen. Zum Bündigfräsen von Furnier- oder Beschichtungsüberständen auf Handoberfräsen. Achsparallele HW-Schneide und Einbohrschneide, mit Anlaufbund. HW-bestückte Ausführung.
- TC-Router cutter for plunging and cutting veneered or coated openings in panel materials. For edge trimming veneer or coating protrusions on portable routers. Straight cut with V-point plunging tip and with guide collar. TC-tipped layout.

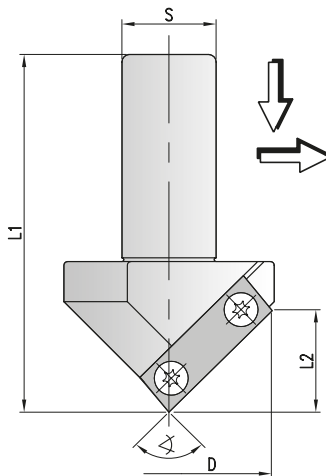
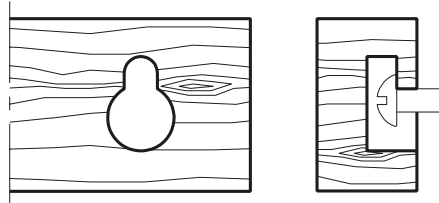

HW T-Nutenfräser Z=1
TC T-slot cutter Z=1

MAN

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|-----|-----|----|---|---|---------------------|
| 9,5 | 9,5 | 40 | 6 | 1 | 8193.010.010 |
| | 9,5 | 47 | 8 | 1 | 8193.010.110 |

- HW T-Nutenfräser zum Fräsen mit Anschlag oder Führungsschiene auf handoberfräsmaschinen.
- HW-festbestückte Ausführung.
- *TC T-slot cutter to work with limit stop or guide rail system on portable routers.*
- *TC-tipped layout.*


HW Foldingschafffräser Z=1
TC Folding shank cutter Z=1

MEC

HW

| D | L2 | L1 | α | S | Z | Art. Nr. |
|----|----|-----|------|----|---|---------------------|
| 43 | 41 | 115 | 45° | 20 | 1 | 4135.043.041 |
| 55 | 24 | 95 | 90° | 25 | 1 | 4135.055.024 |
| 71 | 35 | 95 | 90° | 25 | 1 | 4135.071.035 |
| 90 | 18 | 95 | 135° | 20 | 1 | 4135.090.018 |

- WP-Nutenfräser zum Fräsen eines V-Nutprofils. Zum Anfasen, für Ziernuten und Foldingschnitte in Holz- und Plattenwerkstoffen auf CNC-Maschinen. Öffnungsprofil bei Foldingschnitten materialabhängig größer als 90°, bei Spanplatten z.B. 91°. Stirnschneidende Ausführung, am Grund absolut spitz auslaufend. WP-Anschlag für einfache Messereinstellung beim Wenden oder Austauschen.
- *TC V-groover with reversible knife for cutting V-groove profiles. For cutting V-grooves and rebates, drawer elements, door frames, bevelling, engraving, etc. Opening angle depending on Material bigger 90°, in chipboard 91°. Facecutting layout for particle and fibre materials (MDF etc.) uncoated, veneered, plastic- and paper-coated. Knife seat with stop for easy turn and change.*

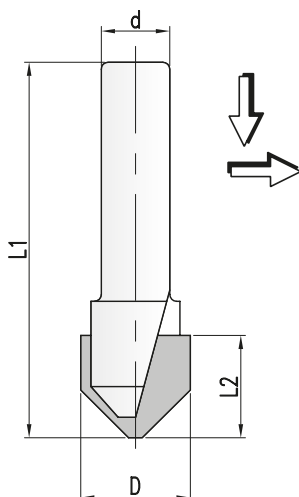
Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---|-------------|----------------|
| Wendemesser - <i>Reversible knife</i> | 39,5x12x1,5 | 757.250 |
| Wechselmesser - <i>Reversible knife</i> | 49,5x12x1,5 | 757.251 |

8179

HW Foldingschafffräser - Festbestückt

TC Folding shank cutter - Tipped

PG
02

HW Foldingschafffräser

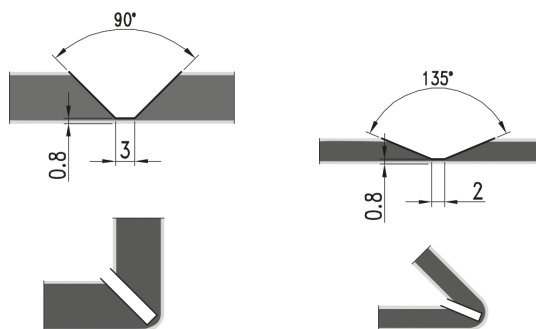
TC Folding shank cutter

MAN

HW

| D | L2 | ∠ | S | Z | Art. Nr. |
|------|----|------|----|---|--------------|
| 15 | 17 | 45° | 8 | 1 | 8179.015.017 |
| 18,5 | 13 | 90° | 8 | 2 | 8179.018.013 |
| 32 | 16 | 90° | 8 | 2 | 8179.032.016 |
| 51 | 25 | 90° | 8 | 2 | 8179.051.025 |
| 22 | 8 | 90° | 12 | 2 | 8179.022.008 |
| 18,5 | 8 | 135° | 8 | 2 | 8179.018.008 |
| 65 | 13 | 135° | 8 | 2 | 8179.065.013 |
| 42 | 10 | 135° | 12 | 2 | 8179.042.010 |

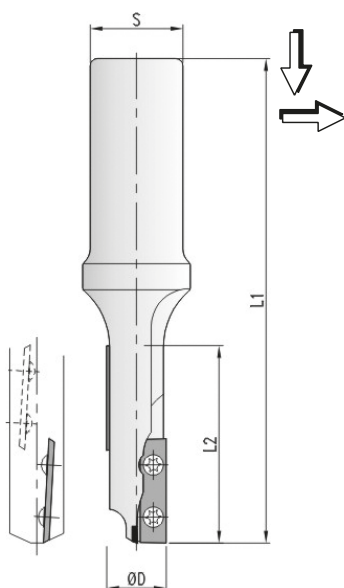
- HW-Nutenfräser zum Fräsen eines V-Nutprofils. Zum Anfasen, für Ziernuten und Foldingschnitte in Holz- und Plattenwerkstoffen auf Handoberfräsen oder CNC-Maschinen.
- Nutenfräser zum V-Nutfräsen bei der Fräskanttechnik in Alucobondplatten. HW-bestückte Ausführung.
- TC V-groover for cutting V-groove profiles. For cutting V-grooves and rebates, bevelling, engraving, etc.
- Router cutter for folding technique of Alucobondboards.
- TC-tipped layout.



5635

HW Ausschnittfräser - Wechselsmesser

TC Router cutter - Reversible knife

PG
02

HW Ausschnittfräser

TC Router cutter

MEC

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|-----|--------------|
| 16 | 50 | 125 | 20 | 1+1 | 5635.016.050 |
| | 50 | 125 | 25 | 1+1 | 5635.016.150 |
| 20 | 50 | 125 | 20 | 2+2 | 5635.020.050 |
| | 50 | 125 | 25 | 2+2 | 5635.020.150 |

- WP-Oberfräser zum Fräsen von Ausschnitten. Ausführung mit wechselseitigen Achswinkeln für saubere Deckschichten. Zum Fräsen mit konstantem Werkzeugdurchmesser. Mit Einbohrschneide zum fliegenden Einbohren geeignet. Durchmesser 20mm als 2-Schneider für erhöhte Vorschübe.
- Router cutter with tungstencarbide turnable knife for cutting openings. Layout with alternating shear angles for good top layer quality. For grooving with constant tool diameter. Suitable for ramp plunging. Diameter 20mm with 2 straight knives for increased feed speeds.

Wendemeser/Ersatzteile

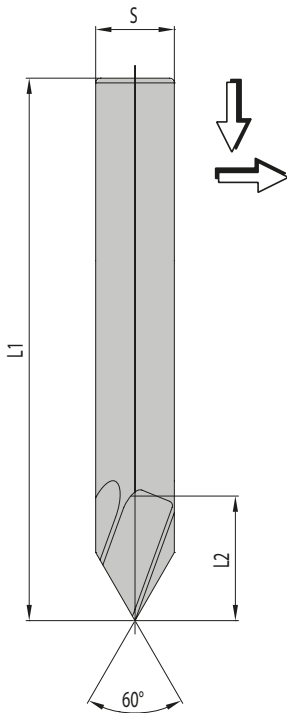
Reversible knives/Spare parts

| | Dim. | Art. Nr. |
|-------------------------------|----------|------------|
| Wendemeser - Reversible knife | 28x7x1,5 | 757.550 |
| Schraube - Screw | M3x4 | 705.356.04 |
| Torx Schlüssel - Torx wrench | T9 | 706.301 |

6635

HW Ausspitzschafffräser - Massiv
TC Scribing shank cutter - Solid

PG
02



HW Ausspitzfräser Z=2
TC Scribing shank cutter Z=2

MEC

HW

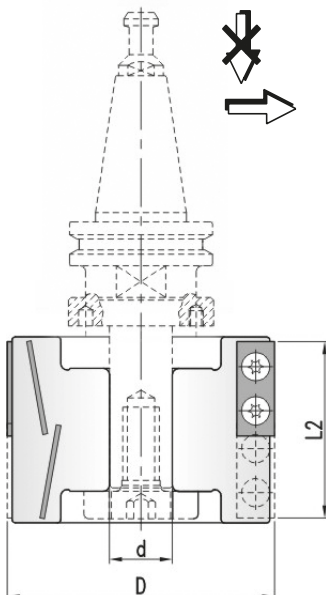
| D | L2 | L1 | α | S | Z | Art. Nr. |
|----|----|-----|-----|----|---|--------------|
| 16 | 14 | 120 | 60° | 16 | 2 | 6635.016.014 |

- Vollhartmetallfräser zum Ausspitzen von Innenecken an Ausschnitten bei der 5-Achsbearbeitung. Auch zum Fräsen eines V-Nutprofils oder als Schriftenfräser einsetzbar.
- *Solid carbide scribing cutter. For finish cutting of radiuses on 5-axes overhead routers for finishing of opening-radiuses on 5-axes overhead routers. Also for cutting of V-groove profiles and for engraving.*

5202

HW Fügemesserkopf - Wendemesser
TC Jointing cutter - Reversible knife

PG
02



HW Fügemesserkopf
TC Jointing cutter

MEC

HW

| D | B | d | Z | Art. Nr. |
|-----|----|----|-----|--------------|
| 85 | 56 | 20 | 2+2 | 5202.085.056 |
| 100 | 56 | 30 | 3+3 | 5202.100.056 |

- WP-Fügemessergarnitur zum Fügen im Gleich- und Gegenlauf. Messerkopf mit Wendemessern, geteilten Schneiden und wechselseitige Achswinkel für eine ausrissfreie Fügekante.
- *TC-Jointing cutterhead with reversible knives for jointing with feed and against feed. Cutterhead with reversible, staggered cutting edges and alternate shear angle for tear-free edges.*

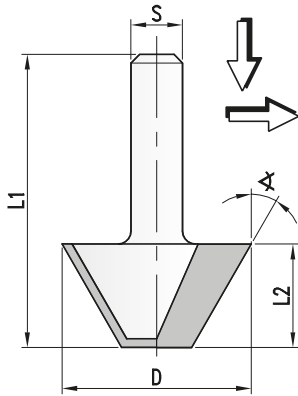
Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|-----------|----------|
| Wendemesser - <i>Reversible knife</i> | 30x12x1,5 | 752.102 |
| Torx Schraube - <i>Torx screw</i> | M4x6 | 705.351 |
| Torx Schlüssel - <i>Torx wrench</i> | T15 | 706.302 |

8133

HW Fasefräser - Festbestückt

TC Bevel trimming cutter - Tipped

PG
02

HW Fasefräser Z=2
TC Bevel trimming cutter Z=2

MAN

HW

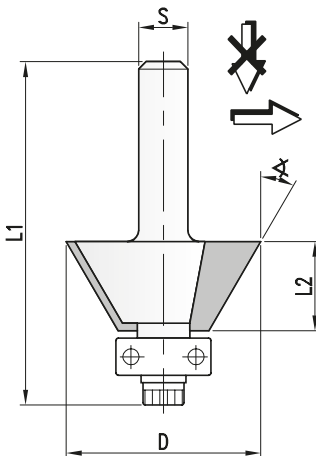
| D | L2 | L1 | α | S | Z | Art. Nr. |
|------|------|------|-----|---|---|---------------------|
| 12,7 | 12,7 | 51,0 | 15° | 6 | 2 | 8133.013.013 |
| | 12,7 | 51,0 | 15° | 8 | 2 | 8133.013.113 |
| 25,4 | 10,0 | 38,5 | 30° | 6 | 2 | 8133.025.010 |
| | 10,0 | 38,5 | 30° | 8 | 2 | 8133.025.110 |
| 34,9 | 10,0 | 38,5 | 45° | 6 | 2 | 8133.035.010 |
| | 10,0 | 38,5 | 45° | 8 | 2 | 8133.035.110 |

- HW-Fasefräser zum Fräsen mit Anschlag oder Führungsschiene auf Handoberfräsmaschinen. Hartmetall-bestückte Ausführung.
- TC-bevelling cutter for edge trimming for work with limit stop or guide rail system on portable routers. Tungsten carbide tipped.

8186

HW Fasefräser mit Anlaufring - Festbestückt

TC Bevel trimming cutter with ball bearing guide - Tipped

PG
02

HW Fasefräser Z=2
TC Bevel trimming cutter Z=2

MAN

HW

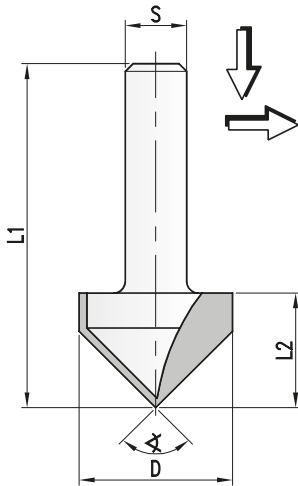
| D | L2 | L1 | α | S | Z | Art. Nr. |
|------|----|----|-----|---|---|---------------------|
| 19 | 10 | 49 | 15° | 6 | 2 | 8186.019.010 |
| | 10 | 49 | 15° | 8 | 2 | 8186.019.110 |
| 22,2 | 10 | 49 | 25° | 6 | 2 | 8186.022.010 |
| | 10 | 49 | 25° | 8 | 2 | 8186.022.110 |
| 30 | 10 | 49 | 45° | 6 | 2 | 8186.030.010 |
| | 10 | 49 | 45° | 8 | 2 | 8186.030.110 |

- HW-Fasefräser mit Kugellager Anlaufring zur Führung des Werkzeuges am Werkstück.
- Hartmetall-bestückt.
- TC-bevelling cutter with ball bearing guide for working tool guided along workpiece.
- Tungsten carbide tipped.

Ersatzteile

Spare parts

| | Dim. | Art. Nr. |
|---------------------------|--------|----------------|
| Kugellager - Ball bearing | 16x5x5 | 701.058 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |

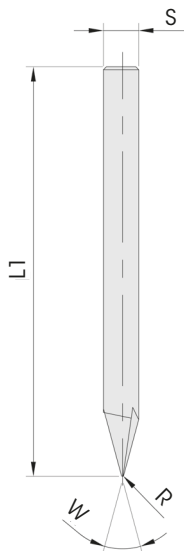

HW Nut- u. Schriftenfräser Z=2
TC Bevel and V-groove cutter Z=2

MAN

HW

| D | L2 | L1 | α | S | Z | Art. Nr. |
|------|------|------|-----|---|---|---------------------|
| 12,7 | 16,0 | 44,5 | 60° | 6 | 2 | 8155.013.016 |
| | 16,0 | 47,5 | 60° | 8 | 2 | 8155.013.116 |
| 12,7 | 12,7 | 41,5 | 90° | 6 | 2 | 8155.013.013 |
| | 12,7 | 44,0 | 90° | 8 | 2 | 8155.013.113 |
| 19,1 | 16,0 | 45,0 | 90° | 6 | 2 | 8155.019.016 |
| | 16,0 | 48,0 | 90° | 8 | 2 | 8155.019.116 |
| 25,4 | 19,0 | 48,0 | 90° | 6 | 2 | 8155.025.019 |
| | 19,0 | 51,0 | 90° | 8 | 2 | 8155.025.119 |

- HW-V-Nut und Schriftenfräser, stirnschneidend, zum Fräsen von V-Nutprofilen sowie zum Ausspitzen von Ziernutprofilen. Auch als Schriftenfräser einsetzbar. Zum Einsatz auf Handfräsmaschinen oder Oberfräsmaschinen mit Frässpindeln zur Aufnahme von Schaftwerkzeugen.
- Hartmetall-festbestückt.
- *TC-Bevel- and V-groove cutter for cutting V-groove profiles and for finish-cutting decorative routers with/without CNC control, special routers with spindles for shank tools.*
- *Tungsten carbide tipped.*


HW Schriftenfräser Z=2
TC Engraving cutter Z=2

MAN

HW

| D | L1 | R | W. | S | Z | Art. Nr. |
|----|----|-----|-----|----|---|---------------------|
| 6 | 70 | 0,5 | 30° | 6 | 2 | 6413.030.050 |
| | 70 | 0,7 | 30° | 6 | 2 | 6413.030.070 |
| | 70 | 1,0 | 30° | 6 | 2 | 6413.030.100 |
| | 70 | 0,5 | 60° | 6 | 2 | 6413.060.050 |
| | 70 | 0,7 | 60° | 6 | 2 | 6413.060.070 |
| | 70 | 1,0 | 60° | 6 | 2 | 6413.060.100 |
| 10 | 80 | 1,0 | 60° | 10 | 2 | 6413.060.110 |

- HW-Schriftenfräser aus Vollhartmetall, zum Fräsen von V-Nutprofilen sowie zum Ausspitzen von Ziernutprofilen. Zum Einsatz auf Handfräsmaschinen oder Oberfräsmaschinen mit/ohne CNC-Steuerung, Sonderfräsmaschinen mit Frässpindeln zur Aufnahme von Schaftwerkzeugen.
- *TC-Engraving cutter made from solid carbide. For engraving, can also be used for V-groove profiles and for finish-cutting decorative groove profiles. For use on portable routers or overhead routers with/without CNC control, special routers with spindles for shank tools.*

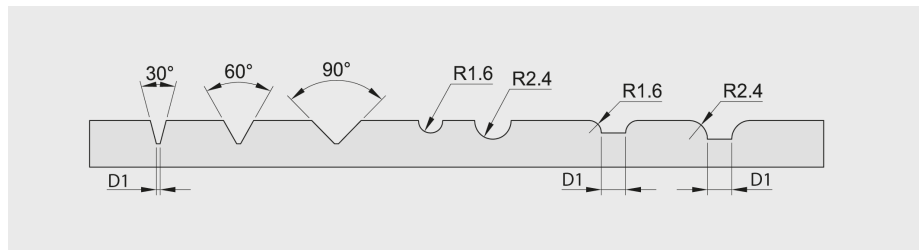

HW Gravierschaftfräser
TC Engraving cutter
MAN
HW

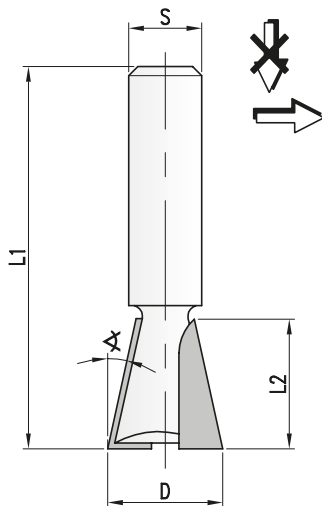
| D | L1 | S | Z | Art. Nr. |
|----|----|----|---|---------------------|
| 12 | 65 | 12 | 1 | 4285.012.065 |

- WP-Schriftenfräser, zum Fräsen von V-Nutprofilen sowie zum Ausspitzen von Ziernutprofilen.
- Zum Einsatz auf Handfräsmaschinen oder Oberfräsmaschinen oder Sonderfräsmaschinen mit Frässpindeln zur Aufnahme von Schaftwerkzeugen.
- Schaftfräser ohne HW-Wechselplatten
- *WP type milling cutter, for milling V-groove profiles and for pointing decorative groove profiles.*
- *For use on hand-held milling machines or routing machines or Special milling machines with milling spindles for holding shank tools.*
- *Shank cutter without TC knives*

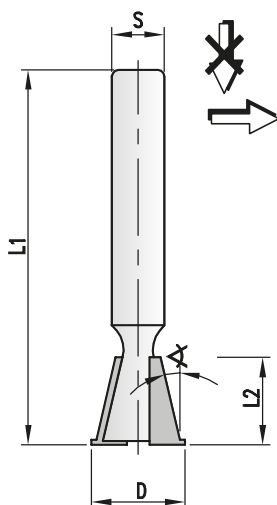
Wechselmesser / Ersatzteile
Reversible knives / Spare parts
MAN
HW

| | ♀ | D1 | Dim. | Art. Nr. |
|---------------------------------------|-----|-----|----------|-------------------|
| Wechselmesser - <i>Profile knives</i> | 30 | 0,5 | 35x9x1,5 | 767.548.01 |
| | 30 | 0,7 | 35x9x1,5 | 767.548.02 |
| | 30 | 1 | 35x9x1,5 | 767.548.03 |
| | 60 | 0,5 | 35x9x1,5 | 767.548.04 |
| | 60 | 0,7 | 35x9x1,5 | 767.548.05 |
| | 60 | 1 | 35x9x1,5 | 767.548.06 |
| | 90 | 0,5 | 35x9x1,5 | 767.548.07 |
| | 90 | 1 | 35x9x1,5 | 767.548.08 |
| | 1,6 | | 35x9x1,5 | 767.548.09 |
| | 2,4 | | 35x9x1,5 | 767.548.10 |
| | 1,6 | 3,2 | 35x9x1,5 | 767.548.11 |
| | 2,4 | 3,2 | 35x9x1,5 | 767.548.12 |
| Torx Schraube - <i>Torx screw</i> | | | M4x6 | 705.323.06 |
| Torx Schlüssel - <i>Torx wrench</i> | | | SW3 | 706.153 |




HW Grat- und Zinkenfräser Z=2
TC Dovetail cutter Z=2
MEC**HW**

| D | L2 | α | S | Z | Art. Nr. |
|------|-------|-------|----|---------------------|---------------------|
| 10,4 | 13 | 8,0° | 8 | 2 | 8129.010.013 |
| 13,8 | 16 | 10,0° | 10 | 2 | 8129.014.016 |
| 14,8 | 19 | 8,0° | 12 | 2 | 8129.015.019 |
| 15,0 | 15 | 10,0° | 12 | 2 | 8129.015.015 |
| 15,0 | 10 | 14,0° | 9 | 2 | 8129.015.010 |
| 10 | 14,0° | 10 | 2 | 8129.015.110 | |
| 10 | 14,0° | W3/8" | 2 | 8129.015.210 | |
| 10 | 14,0° | W3/8" | 2 | 8129.015.310 | |
| 12 | 12,0° | 9 | 2 | 8129.015.012 | |
| 12 | 12,0° | 10 | 2 | 8129.015.112 | |
| 12 | 12,0° | W3/8" | 2 | 8129.015.212 | |
| 12 | 12,0° | W3/8" | 2 | 8129.015.312 | |
| 14 | 10,0° | 9 | 2 | 8129.015.014 | |
| 14 | 10,0° | 10 | 2 | 8129.015.114 | |
| 14 | 10,0° | W3/8" | 2 | 8129.015.214 | |
| 14 | 10,0° | W3/8" | 2 | 8129.015.314 | |
| 15 | 9,5° | 9 | 2 | 8129.015.115 | |
| 15 | 9,5° | 10 | 2 | 8129.015.215 | |
| 15 | 9,5° | W3/8" | 2 | 8129.015.315 | |
| 15 | 9,5° | W3/8" | 2 | 8129.015.415 | |
| 16,0 | 23 | 8,0° | 12 | 2 | 8129.016.023 |
| 18,5 | 26 | 8,0° | 12 | 2 | 8129.019.026 |
| 19,0 | 18 | 12,0° | 12 | 2 | 8129.019.018 |
| 20,0 | 30 | 8,0° | 12 | 2 | 8129.020.030 |


HW Grat- und Zinkenfräser Z=2
TC Dovetail cutter Z=2
HW

| D | L2 | L1 | α | S | Z | Art. Nr. |
|------|------|-----|-----|---|---------------------|--------------------------------|
| 5,3 | 4,0 | 43 | 17° | 6 | 2 | Hoffmann ● 8129.005.004 |
| 7,9 | 6,0 | 43 | 18° | 6 | 2 | Hoffmann ● 8129.008.006 |
| 9,3 | 7,3 | 43 | 19° | 6 | 2 | Hoffmann ● 8129.009.007 |
| 14,7 | 14,3 | 58 | 12° | 6 | 2 | 8129.015.414 |
| 14,3 | 58 | 12° | 8 | 2 | 8129.015.514 | |

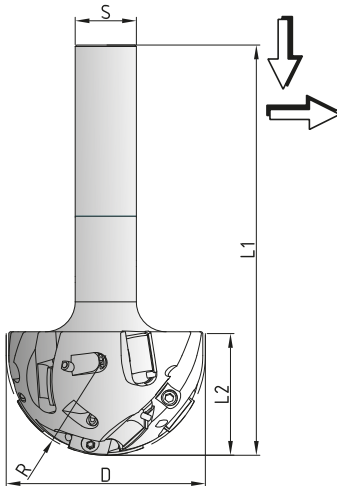
- Hartmetall massiv
- Solid t.c.

HW Grat- und Zinkenfräser Z=2
TC Dovetail cutter Z=2
HW

| D | L2 | L1 | α | S | Z | Art. Nr. |
|------|------|-----|-----|---|---------------------|---------------------|
| 14,3 | 13,5 | 55 | 13° | 6 | 2 | 8129.014.014 |
| 13,5 | 58 | 13° | 8 | 2 | 8129.014.114 | |

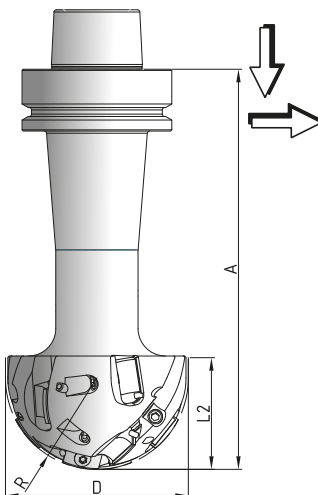
- HW-Gratfräser zum Fräsen von Gratnuten. Zum Einsatz auf Handfräsmaschinen oder Oberfräsmaschinen mit/ohne CNC-Steuerung, Sonderfräsmaschinen mit Frässpindeln zur Aufnahme von Schaftwerkzeugen. Hartmetallbestückt bzw. aus Vollhartmetall gefertigt.

- *TC-Dovetail cutter for cutting grooves. For use on portable routers or overhead routers with/without CNC control, special routers with spindles for shank tools. Tungsten carbide tipped or made from solid carbide.*


HW Kugelschafffräser Z=1
TC Ballnose cutter Z=1
MAN
HW

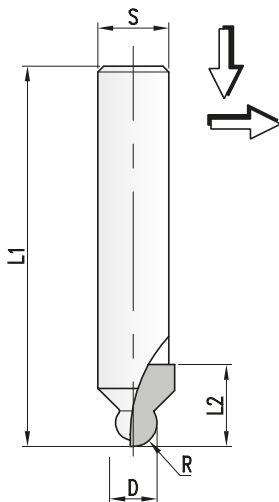
| D | L2 | L1 | R | S | Z | Art. Nr. |
|----|----|-----|----|----|-----|---------------------|
| 10 | 11 | 100 | 5 | 20 | 1 | 5212.010.100 |
| 12 | 14 | 100 | 6 | 20 | 1 | 5212.012.100 |
| 16 | 19 | 110 | 8 | 20 | 1 | 5212.016.110 |
| 20 | 19 | 110 | 10 | 20 | 1 | 5212.020.110 |
| 30 | 25 | 110 | 15 | 20 | 2 | 5212.030.110 |
| | 27 | 128 | 15 | 20 | 2 | 5212.030.128 |
| 40 | 33 | 136 | 20 | 20 | 2 | 5212.040.136 |
| 60 | 45 | 112 | 30 | 20 | 2 | 5212.060.112 |
| 80 | 62 | 76 | 40 | 20 | 2+2 | 5212.080.076 |
| | 64 | 140 | 40 | 20 | 2 | 5212.080.140 |

- Kugelschafffräser, bestückt mit HW-Wendmessern Z=1 bzw. Z=2 große Zerspanungsleistung und optimierte Späneentsorgung. Kugelschafffräser werden primär zum Profilfräsen von 3D-Formen verwendet (Freiformflächen). Die Kugelschaffausführungen eignen sich sowohl zum Schruppen als auch zum Schlichten.
- *Ballnose cutter, tipped with TC reversible knives Z=1 or Z=2 for high cutting performance and optimised chip removal. Ball nose cutters are primarily used for profile milling of 3D shapes (sculptured surfaces) Ball nose design is suitable for roughing or finishing operations.*


Wendmesser/Ersatzteile
Reversible knives/Spare parts

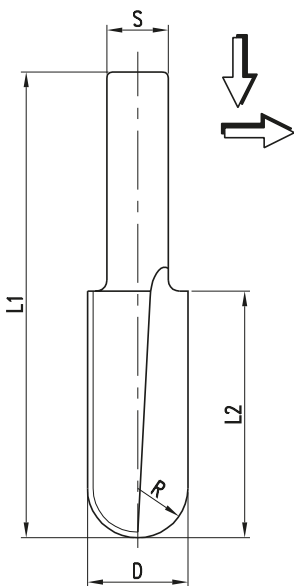
| | | Dim. | Art. Nr. |
|--------------------------------------|---------------|------------------|-----------------------|
| Profilmesser / Profile knife | R5 | 12,5x8,25x1,5 | 756.123 |
| | R6 | 12,5x9,25x1,5 | 756.132 |
| | R8 | 14,5x11,5x1,5 | 756.144 |
| | R10 | 19,5x11,5x1,5 | 756.153 |
| | R15 | 2x 29,4x12,9x2,0 | 756.157 |
| | R15 | 15,2x25x2,0 | 756.153 |
| | R20 | 2x 34,8x17,6x2,0 | 756.162 |
| | R30 | 2x 53,7x19,1x2,0 | 756.164 |
| | R30 | 2x 49,6x22,5x2,0 | 756.172 |
| | R40 | 35x29x2,0 | 756.177 |
| Torx Schraube - Torx screw | R40 | 2x 59,4x26,8x2,0 | 756.179 |
| | R40 | 2x 73x28,6x2,0 | 756.181 |
| | R5 | M3,5x5 | 705.352 |
| | R6, 8, 10, 15 | M3,5x6 | 705.350 |
| Spannkeil / Clamping wedge | R10, 20, 30 | M4x6 | 705.351 |
| | R40 | | 707.007.40 |
| | R40 | | 707.008.40 |
| Schraube / Screw | R40 | | 707.009.40 |
| | R40 | M6x8 | 705.531 |
| | R40 | M8x12 | 705.541 |
| | R40 | M8x16 | 705.542 |
| SK40 Schrumpffutter / Shrink chuck | d20 | d20 A80 SK40 | 81.020.080.040 |
| | d25 | d25 A80 SK40 | 81.025.080.040 |
| HSK63F Schrumpffutter / Shrink chuck | d20 | d20 A75 HSK63F | 81.020.075.063 |
| | d25 | d25 A75 HSK63F | 81.025.075.063 |



8115**HW Kugelschaftfräser - Festbestückt**
*TC Ballnose cutter - Tipped***PG
02****HW Kugelschaftfräser Z=1**
*TC Ballnose cutter Z=1***MAN****HW**

| D | L2 | R | S | Z | Art. Nr. |
|----|----|---|----|---|---------------------|
| 6 | 12 | 3 | 12 | 1 | 8115.006.012 |
| 8 | 14 | 4 | 12 | 1 | 8115.008.014 |
| 10 | 17 | 5 | 12 | 1 | 8115.010.017 |

- HW-Kugelfräser zum Profilfräsen und fräsen von Holkehlen. zum Einsatz auf Handfräsmaschinen oder Oberfräsmaschinen mit/ohne CNC-Steuerung, Sonderfräsmaschinen mit Frässpindeln zur Aufnahme von Schaftwerkzeugen. Hartmetallbestückte Ausführung.
- *TC Ballnose cutter for profile milling and cutting of cravings. For use on portable routers or overhead routers with/without CNC control, special routers with spindles for shank tools. Tungsten carbide tipped layout.*

3415**HS Hohlkehlfräser - Massiv**
*HS Carving bit - Solid***PG
02****HW Kugelschaftfräser Z=2**
*TC Ballnose cutter Z=2***MEC****HS**

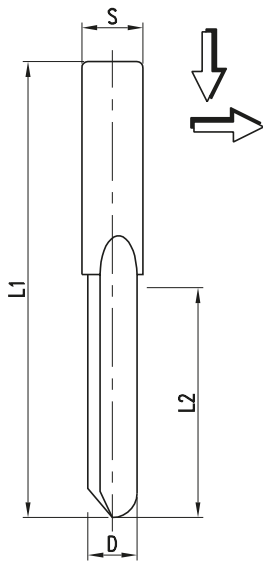
| D | L2 | L1 | R | S | Z | Art. Nr. LH | Art. Nr. RH |
|----|----|----|------|----|---|---------------------|---------------------|
| 10 | 40 | 85 | 5,0 | 11 | 2 | 3415.010.140 | 3415.010.040 |
| 12 | 40 | 85 | 6,0 | 11 | 2 | 3415.012.140 | 3415.012.040 |
| 14 | 40 | 85 | 7,0 | 11 | 2 | 3415.014.140 | 3415.014.040 |
| 15 | 45 | 85 | 7,5 | 11 | 2 | 3415.015.145 | 3415.015.045 |
| 18 | 45 | 85 | 9,0 | 11 | 2 | 3415.018.145 | 3415.018.045 |
| 20 | 45 | 85 | 10,0 | 11 | 2 | 3415.020.145 | 3415.020.045 |
| 24 | 45 | 85 | 12,0 | 11 | 2 | 3415.024.145 | 3415.024.045 |

- HSS-Hohlkehlschnittfräser zum Kopierfräsen mit großen Spanabnahmen bei Bildschnitzarbeiten. Stirn- und umfangschneidend. Massive HSS-Ausführung mit großer Nachschärfzone.
- *HSS Carving bit for copy-shaping with large chip removal when carving. Cutting in end grain and on periphery. Solid HSS-layout with large resharpening area.*

3435

HS Bildschnitzfräser - Massiv

HS Carving bit - Solid

PG
02

HS Bildschnitffräser Z=1

HS Carving bit Z=1

MEC

HS

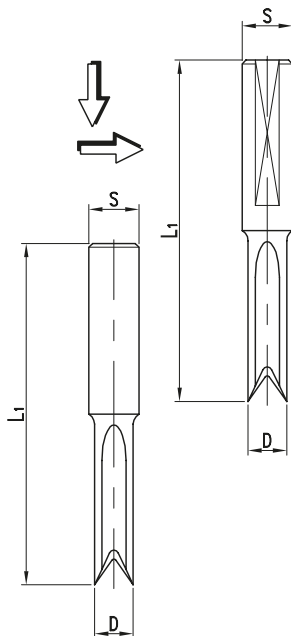
| D | L2 | L1 | R | S | Z | Art. Nr. LH | Art. Nr. RH |
|----|----|----|-----|----|---|--------------|--------------|
| 3 | 12 | 85 | 1,5 | 11 | 1 | 3435.003.112 | 3435.003.012 |
| 4 | 20 | 85 | 2,0 | 11 | 1 | 3435.004.120 | 3435.004.020 |
| 5 | 30 | 85 | 2,5 | 11 | 1 | 3435.005.130 | 3435.005.030 |
| 6 | 30 | 85 | 3,0 | 11 | 1 | 3435.006.130 | 3435.006.030 |
| 8 | 40 | 85 | 4,0 | 11 | 1 | 3435.008.140 | 3435.008.040 |
| 10 | 40 | 85 | 5,0 | 11 | 1 | 3435.010.140 | 3435.010.040 |

- HSS-Bildschnitzfräser zum Kopierfräsen mit großen Spanabnahmen bei Bildschnitzarbeiten. Stirn- und umfangschneidend. Massive Ausführung mit großer Nachschärfzone.
- HSS-Carving bit for copy-shaping with large chip removal when carving. Cutting in end grain and on periphery. Solid layout with large resharpening area.

3475

HS Pendelschlitzfräser Z=2 - Massiv

HS Mortise bit Z=2 - Solid

PG
02

Schaft ø 12 mm

Shank ø 12 mm

MEC

HS

| D | L1 | S | Z | Art. Nr. |
|----|----|-------|---|--------------|
| 6 | 60 | 12x30 | 2 | 3475.006.060 |
| 8 | 60 | 12x30 | 2 | 3475.008.060 |
| 10 | 60 | 12x30 | 4 | 3475.010.060 |
| 12 | 60 | 12x30 | 4 | 3475.012.060 |
| 14 | 60 | 12x30 | 4 | 3475.014.060 |

Schaft ø 13 mm

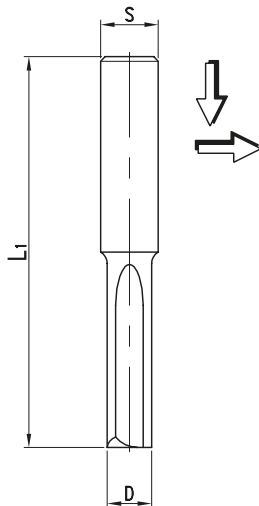
Shank ø 13 mm

MEC

HS

| D | L1 | S | Z | Art. Nr. |
|----|-----|-------|---|--------------|
| 8 | 95 | 13x40 | 2 | 3475.008.095 |
| 10 | 105 | 13x40 | 2 | 3475.010.105 |
| 12 | 115 | 13x40 | 2 | 3475.012.115 |

- HS-Pendelschlitzfräser zum Fräsen ausrissfreier Längsschlitz bei oszillierender Arbeitsbewegung mit stufenweiser Zustellung. Für Rechts- und Linkslauf geeignet, Werkzeuge an der Stirnseite nachschärfbar. Nach dem Schärfen Durchmesser konstant. HSS-Ausführung.
- HS-Oscillating slotting cutter to produce tear-free longitudinal slots using oscillating cutting strokes with stepwise infeed. Suitable for right hand and left hand rotation, tools resharpenable on narrow side. Diameter constant after sharpening. Solid HSS-layout.

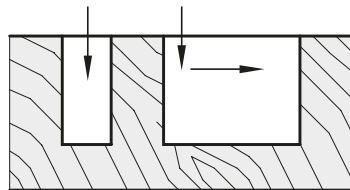
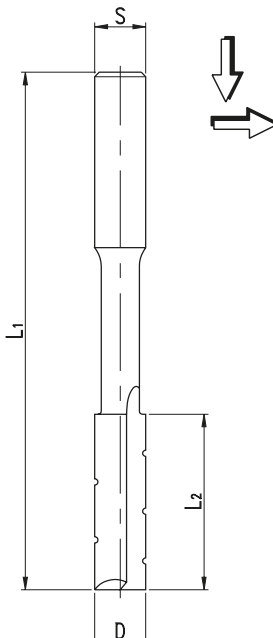
3485**HS Pendelschlitzfräser - Massiv**
HS Mortise bit - SolidPG
02Schaft ø 13 mm
Shank ø 13 mm

MEC

HS

| D | L2 | L1 | S | Z | Art. Nr. LH | Art. Nr. RH |
|----|----|-----|----|---|--------------|--------------|
| 6 | 50 | 90 | 13 | 3 | 3485.006.150 | 3485.006.050 |
| 8 | 55 | 95 | 13 | 3 | 3485.008.155 | 3485.008.055 |
| 10 | 65 | 105 | 13 | 3 | 3485.010.165 | 3485.010.065 |
| 12 | 75 | 115 | 13 | 3 | 3485.012.175 | 3485.012.075 |
| 14 | 85 | 125 | 13 | 3 | 3485.014.185 | 3485.014.085 |
| 16 | 90 | 130 | 13 | 3 | 3485.016.190 | 3485.016.090 |
| 18 | 90 | 130 | 13 | 3 | 3485.018.190 | 3485.018.090 |

- HS-Pendelschlitzfräser zum Fräsen ausrissfreier Längsschlitz bei oszillierender Arbeitsbewegung mit stufenweiser Zustellung. Für Rechts- und Linkslauf geeignet. Werkzeuge an der Stirnseite nachschärfbar. Nach dem Schärfen Durchmesser konstant. Massive HSS-Ausführung.
- HS-Oscillating slotting cutter to produce tear-free longitudinal slots using oscillating cutting strokes with stepwise infeed. Made from solid high speed steel. Suitable for right hand and left hand rotation, tools resharpenable on narrow side. Diameter constant after sharpening.

**3535****HS Pendelschlitzfräser - Massiv**
HS Mortise bit - SolidPG
02Schaft ø 13 mm
Shank ø 13 mm

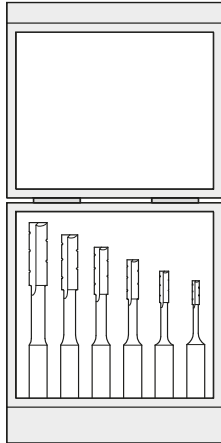
MEC

SP

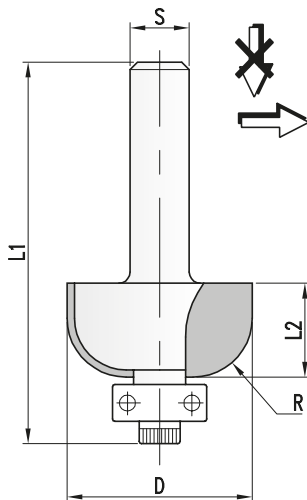
| D | L2 | L1 | S | Z | Art. Nr. LH | Art. Nr. RH |
|----|----|-----|----|---|--------------|--------------|
| 6 | 40 | 120 | 13 | 2 | 3535.006.135 | 3535.006.035 |
| 7 | 40 | 125 | 13 | 2 | 3535.007.135 | 3535.007.035 |
| 8 | 40 | 130 | 13 | 2 | 3535.008.138 | 3535.008.038 |
| 9 | 45 | 135 | 13 | 2 | 3535.009.140 | 3535.009.040 |
| 10 | 45 | 140 | 13 | 2 | 3535.010.142 | 3535.010.042 |
| 11 | 50 | 145 | 13 | 2 | 3535.011.145 | 3535.011.045 |
| 12 | 50 | 150 | 13 | 2 | 3535.012.148 | 3535.012.048 |
| 13 | 55 | 155 | 13 | 2 | 3535.013.150 | 3535.013.050 |
| 14 | 55 | 160 | 13 | 2 | 3535.014.154 | 3535.014.054 |
| 15 | 60 | 165 | 13 | 2 | 3535.015.157 | 3535.015.057 |
| 16 | 65 | 170 | 13 | 2 | 3535.016.157 | 3535.016.057 |
| 18 | 70 | 180 | 13 | 2 | 3535.018.165 | 3535.018.065 |
| 20 | 75 | 185 | 13 | 2 | 3535.020.170 | 3535.020.070 |
| 22 | 75 | 195 | 13 | 2 | 3535.022.170 | 3535.022.070 |
| 24 | 80 | 200 | 13 | 2 | 3535.024.275 | 3535.024.075 |
| 26 | 90 | 210 | 13 | 2 | 3535.026.183 | 3535.026.083 |

Lieferbar auch mit S=16mm
Also available with S=16mm

- SP-Langlochfräsbohrer zum Fräsen von ausrissfreien Längsschlitz bei stufenweiser Zustellung. Achsparallele Schneiden mit Spanbrechern für reduzierte Schnittkräfte. Hohe Festigkeit der Werkzeuge durch speziell abgestimmte Wärmebehandlung. Ausführung aus SP-Stahl.
- SP-Slot mortise bits for cutting tear-free longitudinal slots with stepwise infeed. Straight cut with chip breaker for reduced cutting forces. High tool rigidity from specially adapted heat treatment. SP-steel layout.

3535**SP Langlochfräsbohrer - Satz in Holzetui**
*SP Slot mortise bit - Set in wooden case***PG
02****6-teiliger Satz im Holzetui**
*Set of 6 slot mortise bit***MEC**

| D | S | Art. Nr. LH | Art. Nr. RH |
|-----------------|----|---------------------|---------------------|
| 6/8/10/12/14/16 | 13 | 3535.001.013 | 3535.000.013 |
| 6/8/10/12/14/16 | 16 | 3535.001.016 | 3535.000.016 |

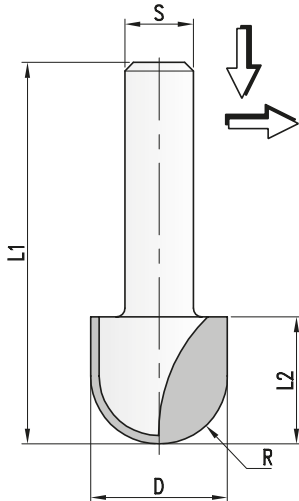
8616**HW Hohlkehlfräser mit Anlauflager - Festbestückt**
*TC Cove cutter with ball bearing guide - Tipped***PG
02****HW Hohlkehlfräser Z=2**
*TC Cove cutter Z=2***MAN****HW**

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|------|----|------|---|---|---------------------|
| 19,1 | 14,3 | 51 | 4,8 | 6 | 2 | 8616.019.006 |
| | 14,3 | 51 | 4,8 | 8 | 2 | 8616.019.008 |
| 22,2 | 14,3 | 51 | 6,3 | 6 | 2 | 8616.022.006 |
| | 14,3 | 51 | 6,3 | 8 | 2 | 8616.022.008 |
| 25,4 | 14,3 | 52 | 7,9 | 6 | 2 | 8616.025.006 |
| | 14,3 | 52 | 7,9 | 8 | 2 | 8616.025.008 |
| 34,9 | 16,7 | 55 | 12,7 | 6 | 2 | 8616.035.006 |
| | 16,7 | 55 | 12,7 | 8 | 2 | 8616.035.008 |

- HW-Hohlkehlfräser mit Kugellager-Anlauftring zur Führung des Werkzeuges am Werkstück. HW festbestückte Ausführung.
- TC Covecutter with ball bearing guide for working tool guided along workpiece. HW-tipped layout.

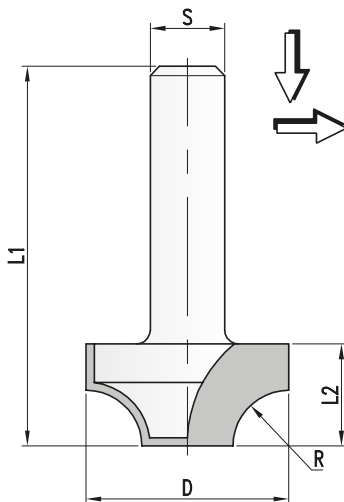
Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------|-------------|----------------|
| Kugellager - Ball bearing | 9,5x3,9x3,1 | 701.051 |
| Schraube - Screw | 3/32W | 705.502 |
| Schlüssel - Wrench | 5/64" | 706.162 |


HW Hohlkehlfräser Z=2
TC Core box cutter Z=2
MAN
HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|----|----|----|----|---|---|---------------------|
| 8 | 12 | 49 | 4 | 6 | 2 | 8615.008.006 |
| | 12 | 49 | 4 | 8 | 2 | 8615.008.008 |
| 10 | 12 | 46 | 5 | 6 | 2 | 8615.010.006 |
| | 12 | 46 | 5 | 8 | 2 | 8615.010.008 |
| 12 | 14 | 46 | 6 | 6 | 2 | 8615.012.006 |
| | 14 | 46 | 6 | 8 | 2 | 8615.012.008 |
| 14 | 14 | 46 | 7 | 6 | 2 | 8615.014.006 |
| | 14 | 46 | 7 | 8 | 2 | 8615.014.008 |
| 16 | 16 | 48 | 8 | 6 | 2 | 8615.016.006 |
| | 16 | 48 | 8 | 8 | 2 | 8615.016.008 |
| 20 | 16 | 48 | 10 | 6 | 2 | 8615.020.006 |
| | 16 | 48 | 10 | 8 | 2 | 8615.020.008 |
| 24 | 16 | 48 | 12 | 8 | 2 | 8615.024.008 |

- HW-Hohlkehlfräser zum Fräsen von Hohlkehlen auf Handoberfräsmaschinen.
- führung durch Anlauftring oder Anschlag- bzw. Führungsschienensystem notwendig.
- HW-bestückte Ausführung.
- *TC-Fluting cutter for cutting flutes on portable routers.*
- *Must be guided with separate guide ring or stop unit or guide rail system.*
- *TC-tipped layout.*


HW Viertelstabfräser Z=2
TC Quarter round cutter Z=2
MAN
HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|-----|----|------|------|---|---|-----------------------|
| 9,5 | 8 | 43,0 | 3,2 | 6 | 2 | 8675.009.006 |
| | 8 | 43,0 | 3,2 | 8 | 2 | 8675.009.008 |
| 15 | 9 | 40,5 | 5,0 | 6 | 2 | 8675.015.006 |
| | 9 | 40,5 | 5,0 | 8 | 2 | 8675.015.008 |
| 20 | 9 | 40,5 | 4,0 | 6 | 2 | 8675.020.006 |
| | 9 | 40,5 | 4,0 | 8 | 2 | 8675.020.008 |
| 22 | 10 | 44,0 | 5,0 | 6 | 2 | ◇ 8675.022.006 |
| | 10 | 44,0 | 5,0 | 8 | 2 | ◇ 8675.022.008 |
| 24 | 11 | 44,0 | 6,0 | 6 | 2 | 8675.024.006 |
| | 11 | 44,0 | 6,0 | 8 | 2 | 8675.024.008 |
| 26 | 12 | 44,0 | 7,0 | 6 | 2 | ◇ 8675.026.006 |
| | 12 | 44,0 | 7,0 | 8 | 2 | ◇ 8675.026.008 |
| 28 | 13 | 46,0 | 8,0 | 6 | 2 | ◇ 8675.028.006 |
| | 13 | 46,0 | 8,0 | 8 | 2 | ◇ 8675.028.008 |
| 32 | 15 | 46,0 | 10,0 | 6 | 2 | 8675.032.006 |
| | 15 | 46,0 | 10,0 | 8 | 2 | 8675.032.008 |

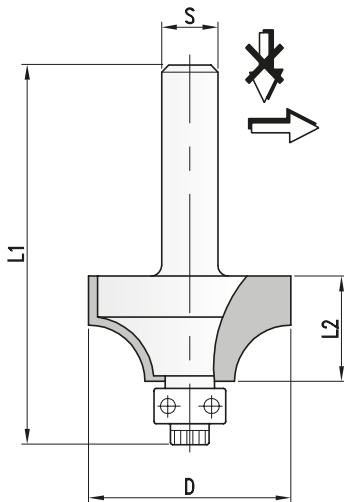
- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*

- HW-Viertelstabfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlauftring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- *TC-Quarterroundcutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.*

8676

HW Abrundfräser mit Anlauflager - Festbestückt

TC Quarter round cutter with ball bearing guide - Tipped

PG
02

HW Abrundfräser Z=2

TC Rounding over cutter Z=2

MAN

HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|------|------|------|---|---|--------------|
| 15,9 | 8,0 | 47,0 | 1,6 | 6 | 2 | 8676.016.006 |
| | 8,0 | 50,0 | 1,6 | 8 | 2 | 8676.016.008 |
| 19,1 | 9,5 | 50,0 | 3,2 | 6 | 2 | 8676.019.006 |
| | 9,5 | 53,0 | 3,2 | 8 | 2 | 8676.019.008 |
| 22,2 | 12,7 | 52,0 | 4,8 | 6 | 2 | 8676.022.006 |
| | 12,7 | 55,5 | 4,8 | 8 | 2 | 8676.022.008 |
| 25,4 | 12,7 | 51,5 | 6,3 | 6 | 2 | 8676.025.006 |
| | 12,7 | 55,0 | 6,3 | 8 | 2 | 8676.025.008 |
| 28,6 | 13,5 | 53,0 | 7,9 | 6 | 2 | 8676.029.006 |
| | 13,5 | 56,0 | 7,9 | 8 | 2 | 8676.029.008 |
| 31,8 | 16,0 | 55,5 | 9,5 | 6 | 2 | 8676.032.006 |
| | 16,0 | 59,0 | 9,5 | 8 | 2 | 8676.032.008 |
| 38,1 | 19,0 | 58,0 | 12,7 | 6 | 2 | 8676.038.006 |
| | 19,0 | 61,0 | 12,7 | 8 | 2 | 8676.038.008 |

- HW-Viertelstabfräser mit Kugellager-Anlaufring zur Führung des Werkzeuges am Werkstück. HW-festbestückte Ausführung.
- TC Quarter round cutter with ball bearing guide for working tool guided along workpiece. HW-tipped layout.

Ersatzteile

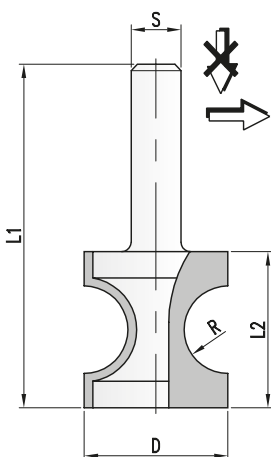
Spare parts

| | Dim. | Art. Nr. |
|---------------------------|-------------|----------|
| Kugellager - Ball bearing | 9,5x3,1x4,7 | 701.052 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |

8675

HW Halbstabfräser - Festbestückt

TC Halfround cutter - Tipped

PG
02

HW Halbstabfräser Z=2

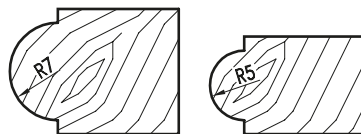
TC Halfround cutter Z=2

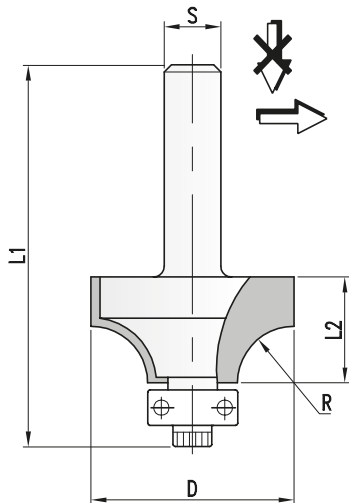
MAN

HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|----|----|-----|---|---|--------------|
| 19,8 | 19 | 51 | 5,2 | 6 | 2 | 8685.020.006 |
| | 19 | 51 | 5,2 | 8 | 2 | 8685.020.008 |
| 23 | 26 | 58 | 6,8 | 6 | 2 | 8685.023.006 |
| | 26 | 58 | 6,8 | 8 | 2 | 8685.023.008 |

- HW-Halbstabfräser zum Fräsen Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW bestückte Ausführung.
- TC-Halfround cutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or rail system. TC-Tipped layout.



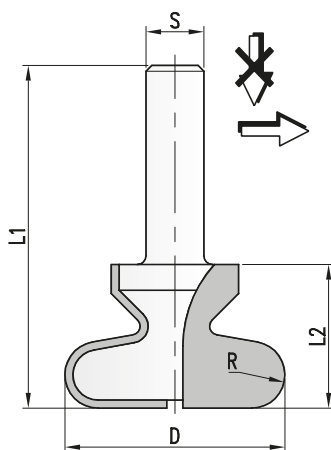

HW Abrundfräser Z=2
TC Rounding cutter Z=2
MAN
HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|------|------|------|---|---|---------------------|
| 15,9 | 7,9 | 47,0 | 1,6 | 6 | 2 | 8686.016.006 |
| | 7,9 | 50,0 | 1,6 | 8 | 2 | 8686.016.008 |
| 19,1 | 9,5 | 50,0 | 3,2 | 6 | 2 | 8686.019.006 |
| | 9,5 | 53,0 | 3,2 | 8 | 2 | 8686.019.008 |
| 22,2 | 12,7 | 52,0 | 4,8 | 6 | 2 | 8686.022.006 |
| | 12,7 | 55,5 | 4,8 | 8 | 2 | 8686.022.008 |
| 25,4 | 12,7 | 51,5 | 6,3 | 6 | 2 | 8686.025.006 |
| | 12,7 | 55,0 | 6,3 | 8 | 2 | 8686.025.008 |
| 28,6 | 13,5 | 53,0 | 7,9 | 6 | 2 | 8686.029.006 |
| | 13,5 | 56,0 | 7,9 | 8 | 2 | 8686.029.008 |
| 31,8 | 16,0 | 55,5 | 9,5 | 6 | 2 | 8686.032.006 |
| | 16,0 | 59,0 | 9,5 | 8 | 2 | 8686.032.008 |
| 38,1 | 19,0 | 58,0 | 12,7 | 6 | 2 | 8686.038.006 |
| | 19,0 | 61,0 | 12,7 | 8 | 2 | 8686.038.008 |

- HW-Abrundfräser mit Kugellager-Anlaufring zur Führung des Werkzeuges am Werkstück. HW-festbestückte Ausführung.
- *TC Rounding cutter with ball bearing guide for working tool guided along workpiece. HW-tipped out.*

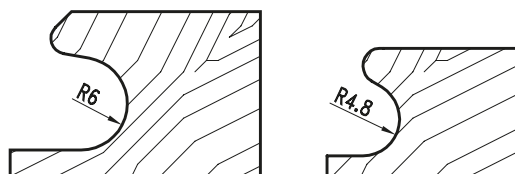
Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------|-------------|----------------|
| Kugellager - Ball bearing | 9,5x3,1x4,7 | 701.053 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |


HW Griffmuldenfräser Z=2
TC Finger grip cutter Z=2
MAN
HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|----|----|-----|----|---|---------------------|
| 19,1 | 19 | 57 | 4,8 | 10 | 2 | 8699.019.010 |
| | 19 | 57 | 4,8 | 12 | 2 | 8699.019.012 |
| 38,1 | 21 | 59 | 6,0 | 10 | 2 | 8699.038.010 |
| | 21 | 59 | 6,0 | 12 | 2 | 8699.038.012 |

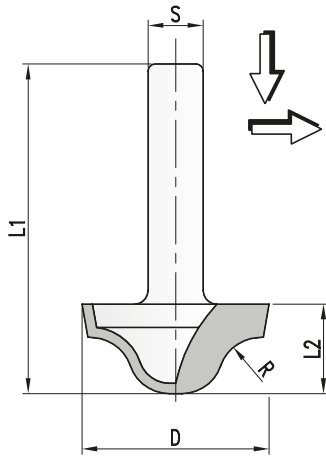
- HW-Griffmuldenfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- *TC-Finger grip cutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.*



8175

HW Profilfräser - Festbestückt
TC Profilecutter - Tipped

PG
02



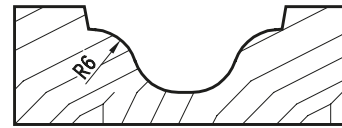
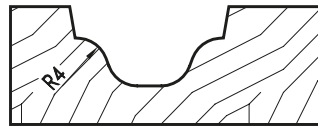
HW Profilfräser Z=2
TC Profilecutter Z=2

MAN

HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|----|----|----|---|---|---|--------------|
| 21 | 10 | 42 | 4 | 6 | 2 | 8175.021.006 |
| | 10 | 42 | 4 | 8 | 2 | 8175.021.008 |
| 21 | 13 | 45 | 6 | 6 | 2 | 8175.027.006 |
| | 13 | 45 | 6 | 8 | 2 | 8175.027.008 |

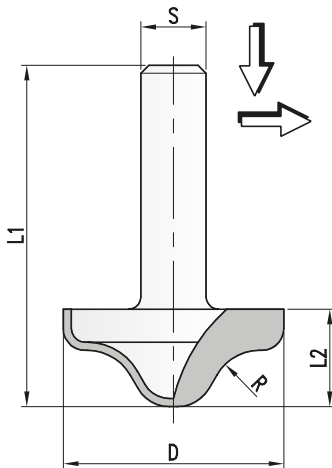
- HW-Profilfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- TC-Profilecutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.



8299

HW Profilfräser - Festbestückt
TC Profilecutter - Tipped

PG
02



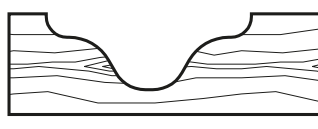
HW Profilfräser Z=2
TC Profilecutter Z=2

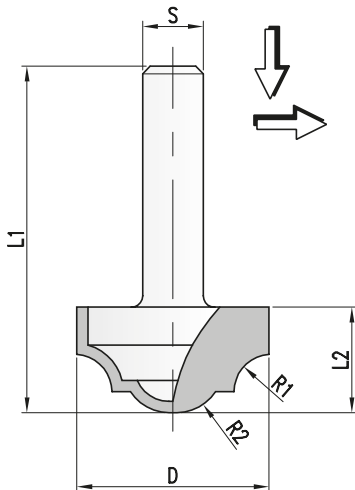
MAN

HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|----|------|----|---|----|---|----------------|
| 27 | 11,9 | 52 | 6 | 6 | 2 | 8299.027.006 |
| | 11,9 | 52 | 6 | 8 | 2 | 8299.027.008 |
| | 11,9 | 57 | 6 | 12 | 2 | ◇ 8299.027.012 |

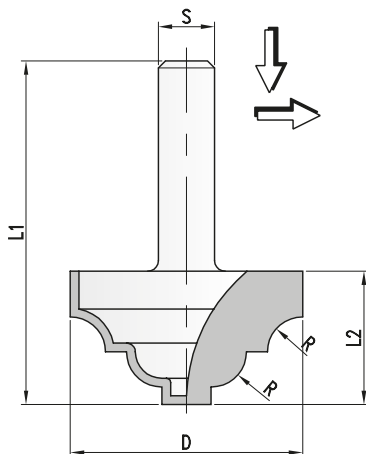
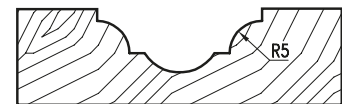
- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ Standard article, short-time production after order.
- HW-Profilfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- TC-Profilecutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.




HW Profilfräser Z=2
TC Profilecutter Z=2
MAN**HW**

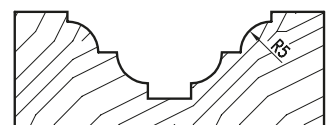
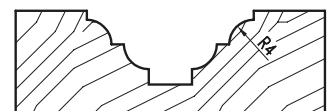
| D | L2 | L1 | R1/R2 | S | Z | Art. Nr. |
|------|------|----|---------|---|---|---------------------|
| 12,7 | 10,5 | 51 | 2,5/3,5 | 6 | 2 | 8399.013.006 |
| | 10,5 | 51 | 2,5/3,5 | 8 | 2 | 8399.013.008 |
| 19,1 | 12,7 | 54 | 3,7/4,0 | 6 | 2 | 8399.019.006 |
| | 12,7 | 54 | 3,7/4,0 | 8 | 2 | 8399.019.008 |
| 25,4 | 17,5 | 73 | 5,0/6,3 | 6 | 2 | 8399.025.006 |
| | 17,5 | 73 | 5,0/6,3 | 8 | 2 | 8399.025.008 |

- HW-Profilfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- *TC-Profilecutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.*


HW Profilfräser Z=2
TC Profilecutter Z=2
MAN**HW**

| D | L2 | L1 | R/R | S | Z | Art. Nr. |
|----|----|------|-----|----|---|-----------------------|
| 27 | 13 | 45,0 | 4/4 | 8 | 2 | 8499.027.008 |
| | 13 | 50,0 | 4/4 | 10 | 2 | ◇ 8499.027.010 |
| | 13 | 55,0 | 4/4 | 12 | 2 | ◇ 8499.027.012 |
| 33 | 17 | 49,0 | 5/5 | 8 | 2 | 8499.033.008 |
| | 17 | 51,5 | 5/5 | 10 | 2 | ◇ 8499.033.010 |
| | 17 | 56,5 | 5/5 | 12 | 2 | ◇ 8499.033.012 |

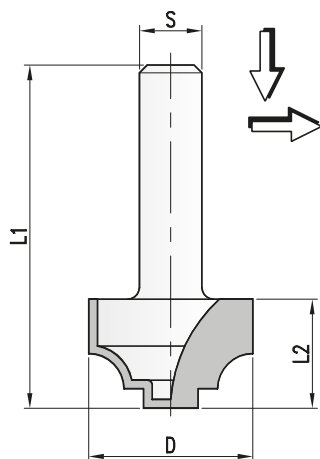
- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- HW-Profilfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- *TC-Profilecutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.*



8599

HW Profilfräser - Festbestückt

TC Profilecutter - Tipped

PG
02

HW Profilfräser Z=2

TC Profilecutter Z=2

MAN

HW

| D | L2 | L1 | R1/R2 | S | Z | Art. Nr. |
|----|----|----|-------|----|---|----------------|
| 21 | 14 | 46 | 4,5 | 6 | 2 | 8599.021.006 |
| | 14 | 46 | 4,5 | 8 | 2 | 8599.021.008 |
| | 14 | 46 | 4,5 | 10 | 2 | ◇ 8599.021.010 |
| | 14 | 46 | 4,5 | 12 | 2 | ◇ 8599.021.012 |

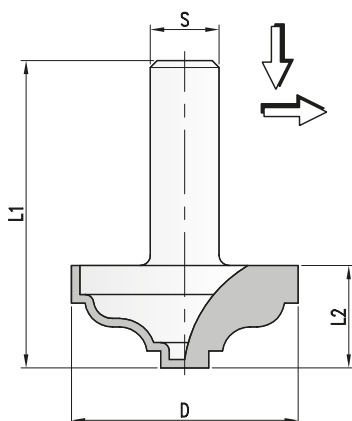
- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- HW-Profilfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- *TC-Profilecutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.*



8799

HW Profilfräser - Festbestückt

TC Profilecutter - Tipped

PG
02

HW Profilfräser Z=2

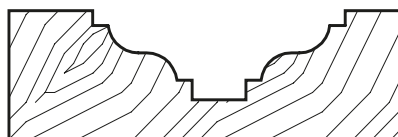
TC Profilecutter Z=2

MAN

HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|----|----|----|---|----|---|----------------|
| 33 | 15 | 47 | 4 | 8 | 2 | 8799.033.008 |
| | 15 | 47 | 4 | 10 | 2 | ◇ 8799.033.010 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- HW-Profilfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- *TC-Profilecutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.*



01



Sägen

02



Bohren

03



Hobeln / Fräsen

04



Profilfräsen

05



Nut- und Federfräsen

06



Oberfräsen

07



Bohren

08



PKD-Werkzeuge

09



Spannen

10

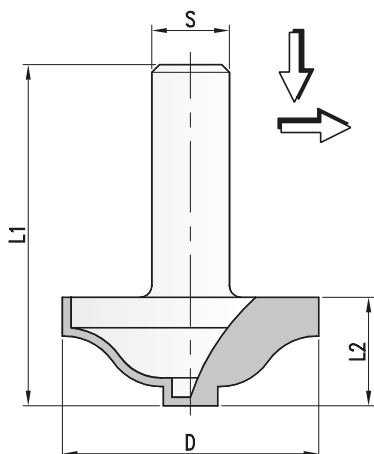


Ersatzteile

11



Informationen


HW Profilfräser Z=2
TC Profilecutter Z=2

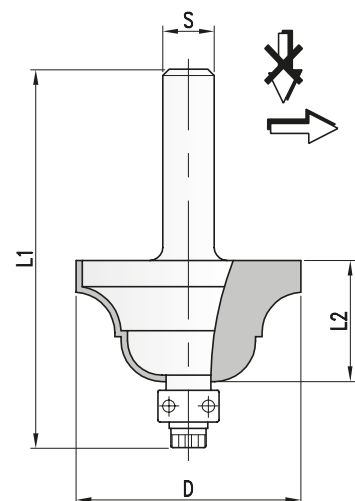
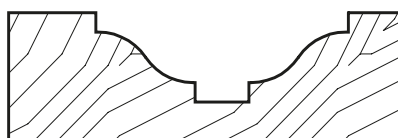
MAN

HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|----|----|----|-----|----|---|-----------------------|
| 33 | 14 | 49 | 7,5 | 8 | 2 | 8899.033.008 |
| | 14 | 49 | 7,5 | 10 | 2 | ◇ 8899.033.010 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*

- HW-Profilfräser zum Fräsen auf Handoberfräsmaschinen. Führung durch Anlaufring oder Anschlag- bzw. Führungsschienensystem notwendig. HW-bestückte Ausführung.
- *TC-Profilecutter for cutting on portable routers. Must be guided with separate guide ring or stop unit or guide rail system. TC-tipped layout.*


HW Profilfräser Z=2
TC Profilecutter Z=2

MAN

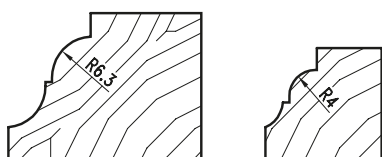
HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|----|----|-----|---|---|---------------------|
| 25,4 | 16 | 57 | 4,0 | 6 | 2 | 8396.025.006 |
| | 16 | 57 | 4,0 | 8 | 2 | 8396.025.008 |
| 34,9 | 20 | 60 | 6,3 | 6 | 2 | 8396.035.006 |
| | 20 | 60 | 6,3 | 8 | 2 | 8396.035.008 |

- HW-Profilfräser mit Kugellager-Anlaufring zu Führung des Werkzeuges am Werkstück.
- HW-festbestückte Ausführung.
- *TC Profilecutter with ball bearing guide for working tool guided along workpiece.*
- *TC-tipped layout.*

Ersatzteile
Spare parts

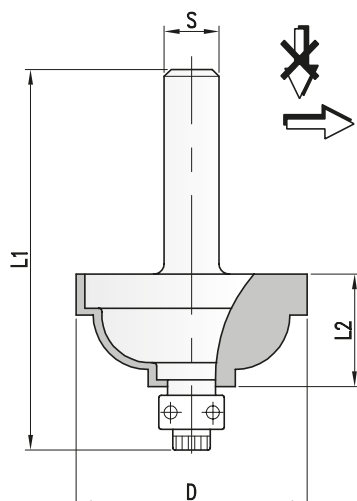
| | Dim. | Art. Nr. |
|----------------------------------|-------------|----------------|
| Kugellager - <i>Ball bearing</i> | 9,5x3,9x3,1 | 701.051 |
| Schraube - <i>Screw</i> | 3/32W | 705.502 |
| Schlüssel - <i>Wrench</i> | 5/64" | 706.162 |



8496

HW Profilfräser mit Anlauflager - Festbestückt

TC Profilecutter with ball bearing guide - Tipped

PG
02

HW Profilfräser Z=2

TC Profilecutter Z=2

MAN

HW

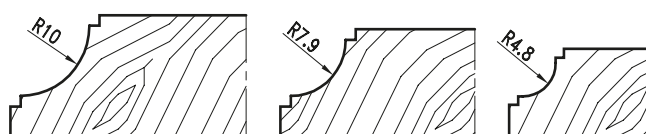
| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|------|----|------|---|---|----------------|
| 28,6 | 12,7 | 51 | 4,8 | 6 | 2 | ◇ 8496.029.006 |
| | 12,7 | 51 | 4,8 | 8 | 2 | ◇ 8496.029.008 |
| 34,9 | 15,9 | 55 | 7,9 | 6 | 2 | ◇ 8496.035.006 |
| | 15,9 | 55 | 7,9 | 8 | 2 | ◇ 8496.035.008 |
| 37,7 | 18,0 | 57 | 10,0 | 6 | 2 | ◇ 8496.038.006 |
| | 18,0 | 57 | 10,0 | 8 | 2 | ◇ 8496.038.008 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- HW-Profilfräser mit Kugellager-Anlaufring zur Führung des Werkzeuges am Werkstück.
HW-festbestückte Ausführung.
- *TC Profilecutter with ball bearing guide for working tool guided along workpiece.
TC-tipped layout.*

Ersatzteile

Spare parts

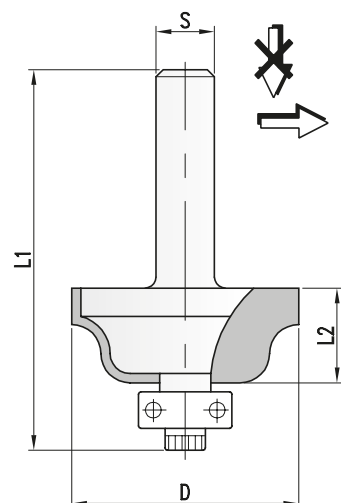
| | Dim. | Art. Nr. |
|---------------------------|------------|----------|
| Kugellager - Ball bearing | 12,7x5x4,7 | 701.053 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |



8196

HW Profilfräser mit Anlauflager - Festbestückt

TC Profilecutter with ball bearing guide - Tipped

PG
02

HW Profilfräser Z=2

TC Profilecutter Z=2

MAN

HW

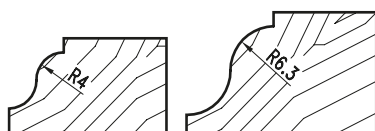
| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|------|----|-----|---|---|--------------|
| 25,4 | 15,9 | 54 | 4,0 | 6 | 2 | 8196.025.006 |
| | 15,9 | 54 | 4,0 | 8 | 2 | 8196.025.008 |
| 34,9 | 20,0 | 57 | 6,3 | 6 | 2 | 8196.035.006 |
| | 20,0 | 57 | 6,3 | 8 | 2 | 8196.035.008 |

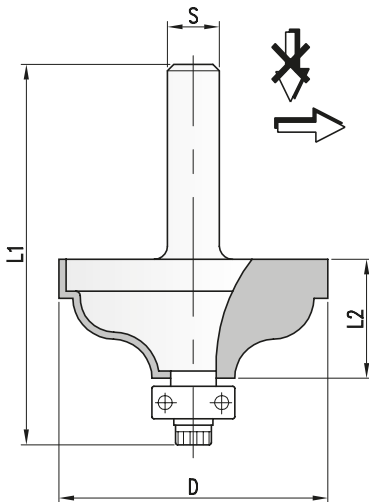
- HW-Profilfräser mit Kugellager-Anlaufring zur Führung des Werkzeuges am Werkstück.
HW-festbestückte Ausführung.
- *TC Profilecutter with ball bearing guide for working tool guided along workpiece.
TC-tipped layout.*

Ersatzteile

Spare parts

| | Dim. | Art. Nr. |
|---------------------------|-------------|----------|
| Kugellager - Ball bearing | 9,5x3,9x3,1 | 701.051 |
| Schraube - Screw | 3/32W | 705.502 |
| Schlüssel - Wrench | 5/64" | 706.162 |



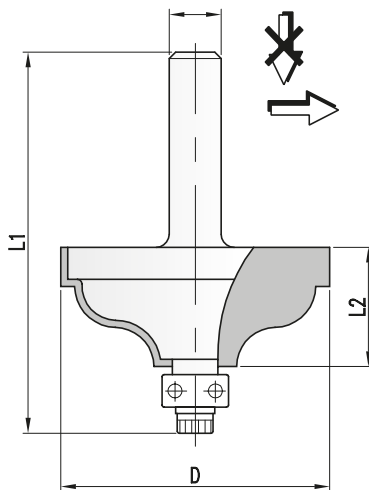
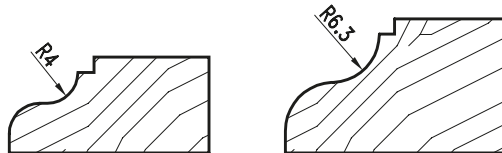

HW Profilfräser Z=2
TC Profilecutter Z=2
MAN
HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|------|----|-----|---|---|---------------------|
| 34,9 | 13,5 | 53 | 4,0 | 6 | 2 | 8896.035.006 |
| | 13,5 | 53 | 4,0 | 8 | 2 | 8896.035.008 |
| 41,3 | 19,1 | 68 | 6,3 | 6 | 2 | 8896.041.006 |
| | 19,1 | 68 | 6,3 | 8 | 2 | 8896.041.008 |

- HW-Profilfräser mit Kugellager- Anlaufring zur Führung des Werkzeuges am Werkstück.
- HW-festbestückte Ausführung.
- *TC Profilecutter with ball bearing guide for working tool guided along workpiece.*
- *TC-tipped layout.*

Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------|------------|----------------|
| Kugellager - Ball bearing | 12,7x5x4,7 | 701.053 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |

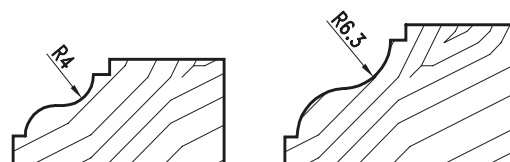

HW Profilfräser Z=2
TC Profilecutter Z=2
MAN
HW

| D | L2 | L1 | R | S | Z | Art. Nr. |
|------|------|----|-----|---|---|---------------------|
| 34,9 | 13,5 | 53 | 4,0 | 6 | 2 | 8796.035.006 |
| | 13,5 | 53 | 4,0 | 8 | 2 | 8796.035.008 |
| 41,3 | 19,1 | 68 | 6,3 | 6 | 2 | 8796.041.006 |
| | 19,1 | 68 | 6,3 | 8 | 2 | 8796.041.008 |

- HW-Profilfräser mit Kugellager- Anlaufring zur Führung des Werkzeuges am Werkstück.
- HW-festbestückte Ausführung.
- *TC Profilecutter with ball bearing guide for working tool guided along workpiece.*
- *TC-tipped layout.*

Ersatzteile
Spare parts

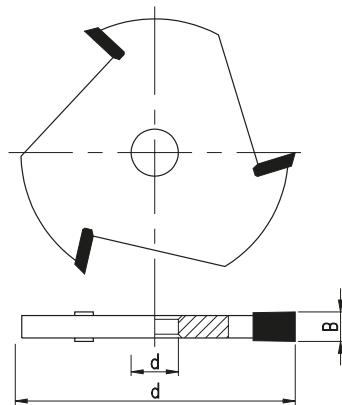
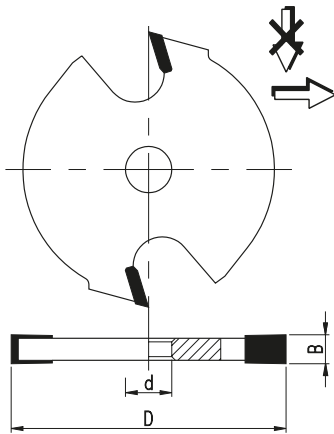
| | Dim. | Art. Nr. |
|---------------------------|-------------|----------------|
| Kugellager - Ball bearing | 9,5x3,1x4,7 | 701.052 |
| Schraube - Screw | 1/8W | 705.501 |
| Schlüssel - Wrench | 3/32" | 706.161 |



8434

HW Nutfräser - Festbestückt

TC Grooving cutter - Tipped

PG
02

HW-Nutfräser Z=2

TC Grooving cutter Z=2

MAN

HW

| D | B | d | Z | Art. Nr. |
|----|-----|---|---|--------------|
| 40 | 1,5 | 8 | 2 | 8434.040.002 |
| | 2,0 | 8 | 2 | 8434.040.102 |
| | 2,5 | 8 | 2 | 8434.040.003 |
| | 3,0 | 8 | 2 | 8434.040.103 |
| | 4,0 | 8 | 2 | 8434.040.004 |

HW-Nutfräser Z=2

TC Grooving cutter Z=2

MAN

HW

| D | B | d | Z | Art. Nr. |
|------|-----|---|---|--------------|
| 47,6 | 1,5 | 8 | 3 | 8434.048.002 |
| | 2,0 | 8 | 3 | 8434.048.102 |
| | 2,5 | 8 | 3 | 8434.048.003 |
| | 3,0 | 8 | 3 | 8434.048.103 |
| | 3,5 | 8 | 3 | 8434.048.004 |
| | 4,0 | 8 | 3 | 8434.048.104 |
| | 5,0 | 8 | 3 | 8434.048.005 |
| | 6,0 | 8 | 3 | 8434.048.006 |

- HW-Profilfräser mit Flachzahn zum Aufstecken auf Aufnahmeodern.
HW-bestückte Ausführung für Handvorschub.

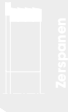
- Grooving cutter with square tooth for working on an arbor.
TC-tipped layout for manual feed.

01



Sägen

02



Hobeln / Fräsen

03



Hobeln / Fräsen

04



Profilfräsen

05



Nut- und Federfräsen

06



Oberfräsen

07



Bohren

08



PKD-Werkzeuge

09



Spannen

10

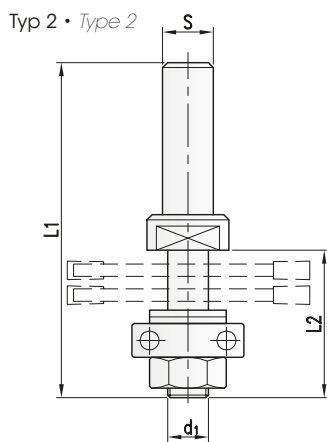
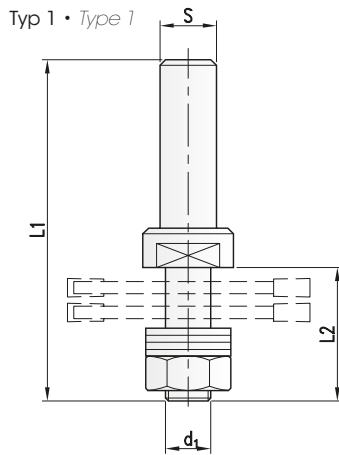


Ersatzteile

11



Informationen


HW Profilfräser Z=2
TC Profilecutter Z=2

MAN

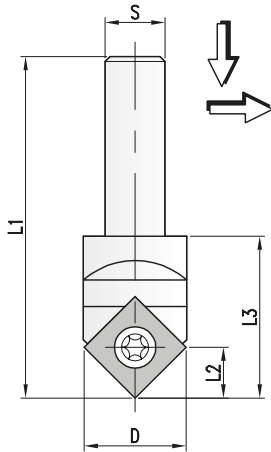
| d1 | L2 | L1 | S | Art. Nr. |
|---|----|----|---|---------------------|
| Typ 1 ohne Anlaufflager - Type 1 without ball bearing | | | | |
| 8 | 25 | 66 | 6 | 3033.008.025 |
| | 25 | 66 | 8 | 3033.008.125 |
| 8 | 38 | 79 | 6 | 3033.008.038 |
| | 38 | 79 | 8 | 3033.008.138 |
| Typ 2 mit Anlaufflager - Type 2 with ball bearing | | | | |
| 8 | 25 | 66 | 6 | 3033.008.225 |
| | 25 | 66 | 8 | 3033.008.325 |
| 8 | 38 | 79 | 6 | 3033.008.238 |
| | 38 | 79 | 8 | 3033.008.338 |

- Lieferung inkl. Zwischenringsatz - Supplied with spacers
- Aufnahmedorn zum Aufstecken von Nutfräsern und Zwischenringen. Mit Kugellager zur Führung des Werkzeuges am Werkstück. Ohne Kugellager zur Führung durch Anlauffring oder Anschlag- bzw. Führungsschienensystem.

- Supplied with spacers
- Arbor for grooving cutter and spacers. With ball bearing guide for working tool guided along work-piece. Without ball bearing to be guided with separate guide ring or stop unit or guide rail system.

Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---------------------------|----------|-------------------|
| Kugellager - Ball bearing | 22x7x8 | 701.055 |
| Sechskantmutter - Nut | M8 | 705.900.08 |
| Zwischenringe - Spacers | 16x0,1x8 | 703.150.08 |
| | 16x0,4x8 | 703.151.08 |
| | 16x0,5x8 | 703.152.08 |
| | 16x1x8 | 703.153.08 |
| | 16x3x8 | 703.154.08 |
| | 16x6x8 | 703.155.08 |



HW Ziernutprofilfräser Z=1
 TC Multi profilecutter Z=1

MAN

HW

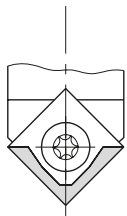
| D | L2 | L3 | S | Z | Art. Nr. |
|----|-----|----|----|---|---------------------|
| 17 | 8,5 | 27 | 8 | 1 | 5839.017.009 |
| | 8,5 | 27 | 10 | 1 | 5839.017.109 |
| | 8,5 | 27 | 12 | 1 | 5839.017.209 |

- Ohne Wendemesser
- WP-Profilmesserkopf mit Schaff für WP-Profilmesser. Profilerter Tragkörper. Die Profilierung der Messer erfolgt nach Vorgabe. Für Wendemesser mit einer Schneidkante.
- *Knives not included*
- *TC-Profile cutterhead with shank for TC-profileknives. Profiled tool body. Profiling of blank knives as required. For profileknives with one cutting edge.*

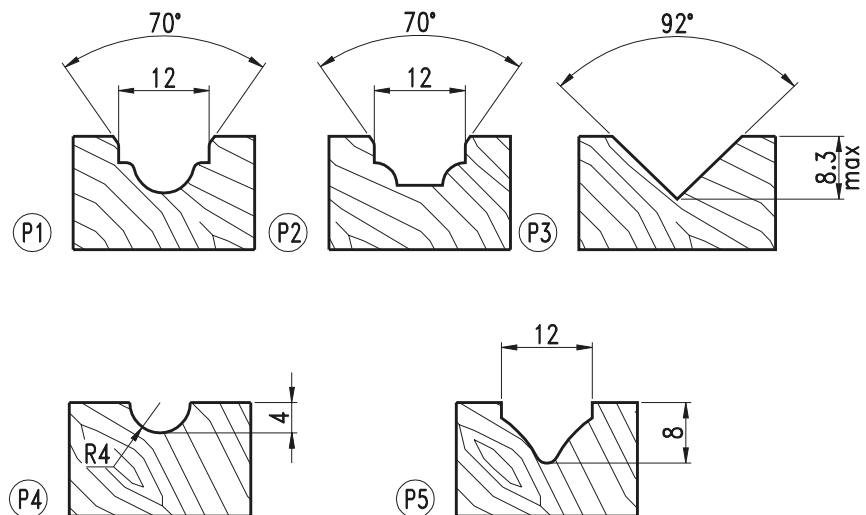
Ersatzteile
 Spare parts

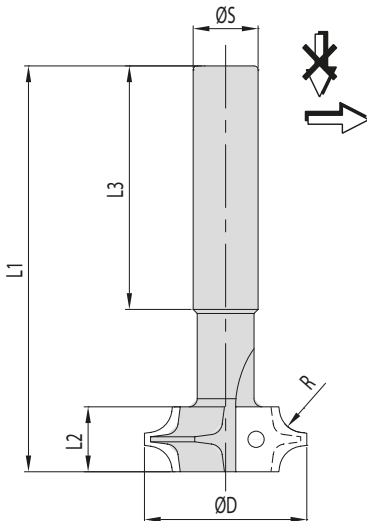
| | Dim. | Art. Nr. |
|----------------------------------|------------|----------------|
| Wechselmesser - Reversible knife | 12x12x1,5* | 754.102 |
| | P1 | 767.301 |
| | P2 | 767.302 |
| | P3 | 767.303 |
| | P4 | 767.304 |
| | P5 | 767.305 |
| Schraube - Screw | M3,5x6 | 705.350 |
| Torx Schlüssel - Torx wrench | T15 | 706.302 |

Profilier Zone (1:1)
 Available area for profiling (1:1)



- * Wendemesser ohne Profil
- * *Not profiled*




HW Abrund / Fasefräser Z=2
TC Rounding / Chamferingcutter Z=2

MEC

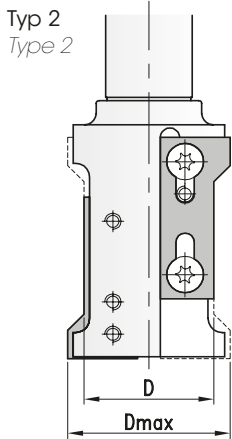
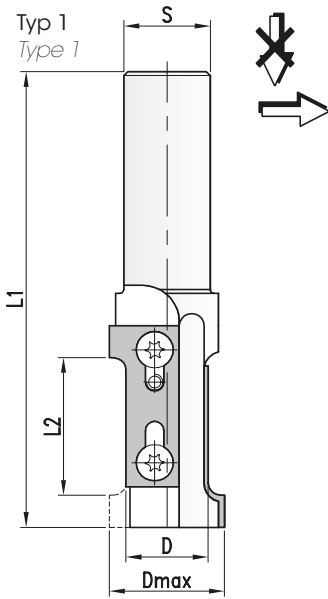
HW

| D | L2 | L1 | L3 | R | Art. Nr. |
|----|----|-----|----|------------|---------------------|
| 40 | 16 | 120 | 60 | 1-6/45° 16 | 4295.040.016 |

- WP-Oberfräser zum beidseitigen Abrunden oder Anfasen von Werkstückkanten.
Schafffräser-Grundkörper geeignet für alle Standard-Radius/Fasemesser von R=1 bis R=6mm/45°. 50mm maximal thickness of workpiece, to round/chamfer both edges.
- TC-Router cutter with reversible cutter for bevelling or chamfering of workpiece edges.
Toolbody of shankcutter suitable for standard-radius/chamferknives.
50mm maximal thickness of workpiece, to round/chamfer both edges.

Ersatzteile
Spare parts

| R | Dim. | Art. Nr. |
|----------------------------|-------------------|-----------------------|
| 2x R=1 | 1 16x17,5x2,0 | 765.100 |
| 2x R=2 | 2 16x17,5x2,0 | 765.101 |
| 2x R=3 | 3 16x17,5x2,0 | 765.102 |
| 2x R=4 | 4 16x17,5x2,0 | 765.103 |
| 2x R=5 | 5 16x17,5x2,0 | 765.104 |
| 2x R=5 | 6 16x17,5x2,0 | 765.105 |
| 2x 45° | 7x45° 16x17,5x2,0 | 765.501 |
| Torx-Schraube - Torx screw | | M3,5x8 705.350 |



HW Füge-Abrundfräser Z=1+1
 TC Jointing-Rounding-cutter Z=1+1

MAN

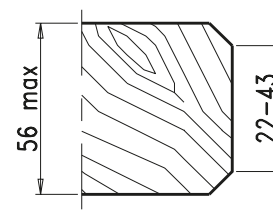
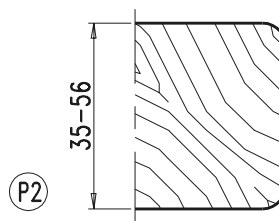
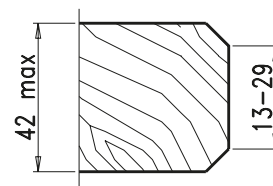
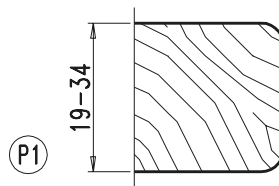
HW

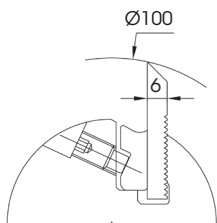
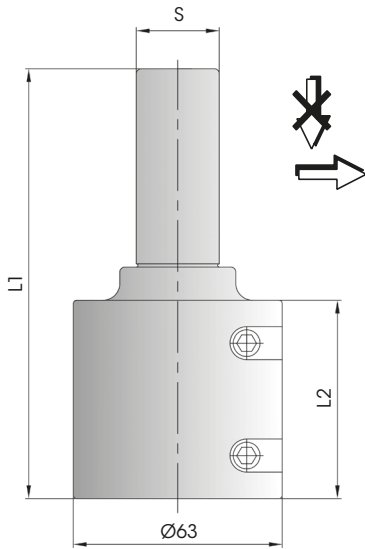
| Nr. | Dmax | D | L1 | S | Z | Art. Nr. |
|-----|-------|----|-----|----|-----|---------------------|
| 1 | 28-34 | 20 | 113 | 20 | 1+1 | 4815.020.020 |
| | 28-34 | 20 | 113 | 25 | 1+1 | 4815.020.025 |
| 2 | 49-57 | 35 | 150 | 25 | 1+1 | 4815.035.025 |

- WP-Abrund-Fügeschafffräser zum beidseitigen Abrunden oder Anfasen. Zwei verschiebbare HW-Wechselmesser zur Einstellung der Holzstärke. Zwei verschiedene Tragkörper für verschiedene Abrund- oder Fasemesser vom Typ P1 oder P2.
- TC-Rounding or bevelling shank cutter for rounding or bevelling on both sides. Tool body with two interchangeable HW knives, movable towards each other, optionally for rounding or bevelling applications. In the same tool body, type P1 or P2, either rounding knives or 45° bevelling knives can be used alternatively.

Wechselmesser/Ersatzteile
 Reversible knives/Spare parts

| | R | Dim. | | Art. Nr. |
|---|-----|------------------------------|------|----------------|
| Wechselmesser Typ 1 - Reversible knife type 1 | 3 | 40x17,2x2,2 | SUP | 788.101 |
| | | | INF | 788.102 |
| | 4 | 40x18,2x2,2 | SUP | 788.103 |
| | | | INF | 788.104 |
| | 5 | 40x19,2x2,2 | SUP | 788.105 |
| | | | INF | 788.106 |
| | 6 | 40x20,2x2,2 | SUP | 788.107 |
| | | | INF | 788.108 |
| | 45° | 40x20,2x2,2 | SUP | 788.109 |
| | | | INF | 788.110 |
| Wechselmesser Typ 2 - Reversible knife type 2 | 6 | 50x20,3x2,2 | SUP | 788.111 |
| | | | INF | 788.112 |
| | 8 | 50x20,3x2,2 | SUP | 788.113 |
| | | | INF | 788.114 |
| | 10 | 50x24,3x2,2 | SUP | 788.115 |
| | | | INF | 788.116 |
| | 45° | 50x24,3x2,2 | SUP | 788.117 |
| | | | INF | 788.118 |
| | | Schraube - Screw | M4x6 | 705.351 |
| | | Torx Schlüssel - Torx wrench | T15 | 706.302 |





HS/HW Profilschafffräser Z=2
HS/TC Profleshankcutter Z=2

MEC

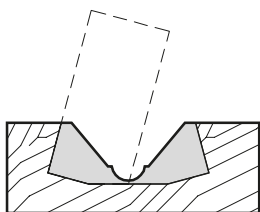
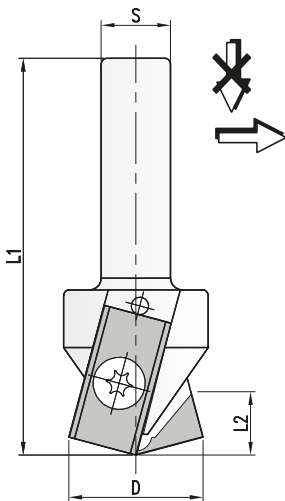
HW

| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|-----|----|---|--------------|
| 63 | 40 | 110 | 20 | 2 | 2215.040.020 |
| | 40 | 110 | 25 | 2 | 2215.040.025 |
| 63 | 60 | 120 | 20 | 2 | 2215.060.020 |
| | 60 | 120 | 25 | 2 | 2215.060.025 |

- Profilschafffräser, rückenverzahnt zum Fräsen verschiedener Profile. Hochgenaue Messerspannung durch rückenverzahnte Messer. Große Auswahl verschiedener Schneidstoffe für optimale Anpassung an den Werkstückstoff.
- *Serrated back Profleshankcutter for different profiles. High-precision clamped serrated back knives. Wide selection of different cutting materials for optimum choice with regard to the workpiece material.*

Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|---|-----------|------------|
| Rückenverzahntes HS Blankett - <i>Backserrated HS blank knife</i> | 40x40x6,0 | 774.040.40 |
| | 40x50x6,0 | 774.040.51 |
| | 40x60x6,0 | 774.040.06 |
| | 60x40x6,0 | 774.060.40 |
| | 60x50x6,0 | 774.060.51 |
| | 60x60x6,0 | 774.060.06 |
| Spannkeil - <i>Clamping wedge</i> | 40 | 707.524.40 |
| | 60 | 707.524.60 |
| Schraube - <i>Screw</i> | M8x16 | 705.542 |



Profilier Zone (1:1)
Available area for profiling (1:1)

HW Stirn-Profilschafffräser Z=2
TC Front profilecutter Z=2

MEC

HW

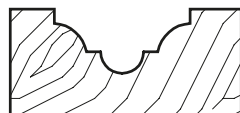
| D | L2 | L1 | S | Z | Art. Nr. |
|----|----|----|----|---|--------------|
| 20 | 9 | 74 | 12 | 2 | 4935.020.009 |
| | 9 | 89 | 20 | 2 | 4935.020.109 |

- WP-Profilschafffräser mit Schaff für stirnprofilierte Blanketts. Profilierter Tragkörper. Die Profilierung des Blanketts erfolgt nach Vorgabe. Für Wendemesser mit zwei Schneidkanten.
- *TC-Profile cutterhead with shank for faceprofiles blank knives. Profiled tool body. Profiling of blank knives as required. For profileknives with two cutting edges.*

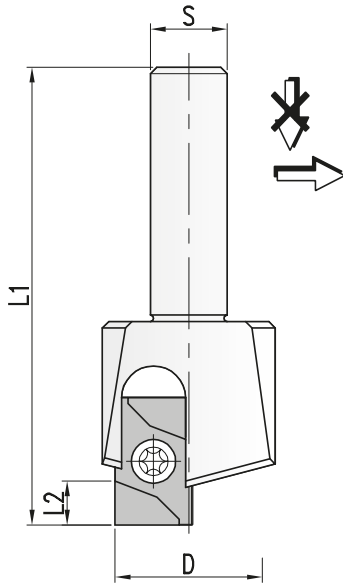
Wechselsmesser/Ersatzteile
Reversible knife/Spare parts

| | Dim. | Art. Nr. |
|--|--------------|----------|
| Wechselsmesser - <i>Reversible knife</i> | 24,7x12x1,5* | 750.103 |
| Schraube - <i>Screw</i> | M4x6 | 705.351 |
| Torx Schlüssel - <i>Torx wrench</i> | T15 | 706.302 |

* Messer ohne Profil
 * *Not profiled*



Profilier Beispiele
Examples of profiles



HW Stirn-profilschafffräser Z=1
TC Front profilecutter Z=1

MEC

HW

| D | L2 | L1 | S | Z | Art. Nr. |
|--|----|-----|----|---|----------------|
| 23 | 8 | 69 | 12 | 1 | * 4915.023.008 |
| | 8 | 105 | 20 | 1 | * 4915.023.108 |
| Satz mit Schafffräser und Profilmesser - Set with cutterhead and knife | | | | | ◇ 4915.000.012 |
| | | | | | ◇ 4915.000.020 |

- * Ohne Wendemesser
- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- * Knives not included
- ◇ Standard article, short-time production after order.
- WP-Profilschafffräser mit Schaff für stirnprofilierte Blanketts. Profilerter Tragkörper. Die Profilierung der Blanketts erfolgt nach Vorgabe. Für wendemesser mit zwei Schneidekanten. Als Set im Holzetui mit 12 verschiedenen Stirnfräsprofilen lieferbar.
- TC-Profile cutterhead with shank for faceprofiles blank knives. Profiled tool body. Profiling of blank knives as required. For profileknives with two cutting edges. As set in wooden case with 12 different facecutting profiles available.

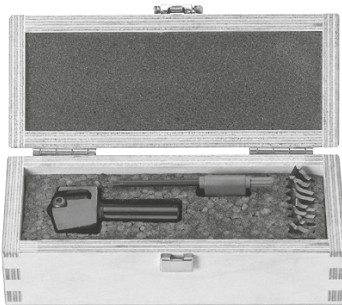
Ersatzteile
Spare parts

| | Dim. | Art. Nr. |
|--------------------------------|------------|----------|
| Wendemesser - Reversible knife | 20x12x1,5* | 750.102 |
| | P1 | 767.401 |
| | P2 | 767.402 |
| | P3 | 767.403 |
| | P4 | 767.404 |
| | P5 | 767.405 |
| | P6 | 767.406 |
| | P7 | 767.407 |
| | P8 | 767.408 |
| | P9 | 767.409 |
| Schraube - Screw | M3,5x6 | 705.350 |
| Torx Schlüssel - Torx wrench | T15 | 706.302 |

- * Messer ohne Profil
- * Not profiled

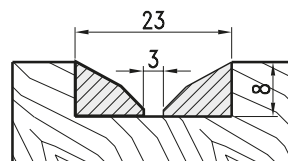
Zur Aufnahme einer HW-Profil-Wendeplatte, beidseitig profiliert, mehrfach nachschärfbar

Cutterhead with reversible knife, profiled on both sides with possibility of reground several times (depending on profile depth)

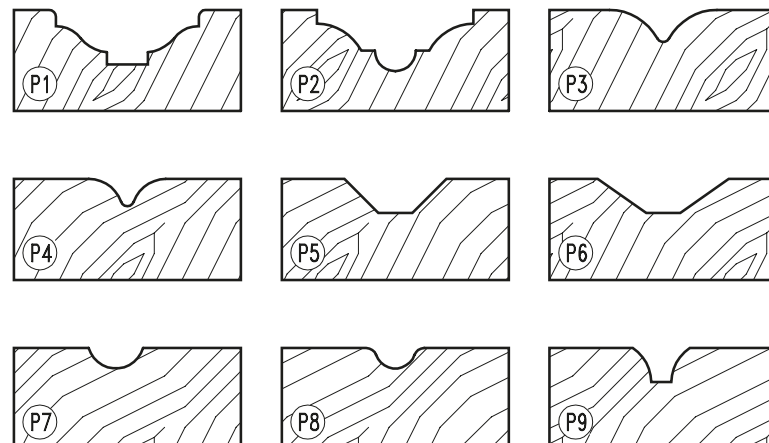


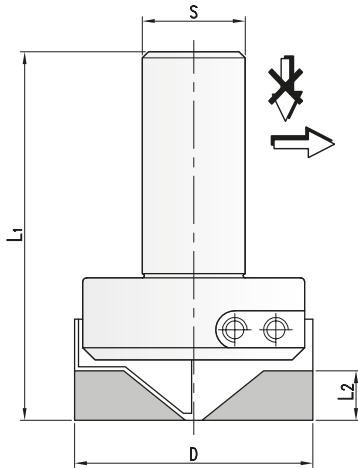
4915.000.012 Satz bestehend aus 1 St. Schafffräser mit 9 Profilmessern und Schlüssel in Holzkiste.

4915.000.012 Set composed by 1 cutterhead, 1 of each knife (P1 to P9) and 1 torx wrench in wooden box.



Profilier Zone (1:1)
 Available area for profiling (1:1)




HW Multi-Profilschafffräser Z=2
TC multi-Profile cutter Z=2
MEC
HW

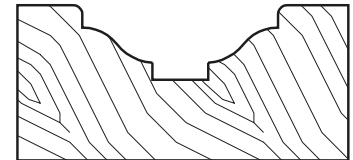
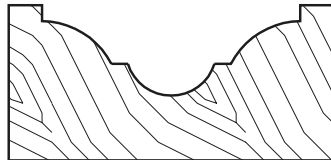
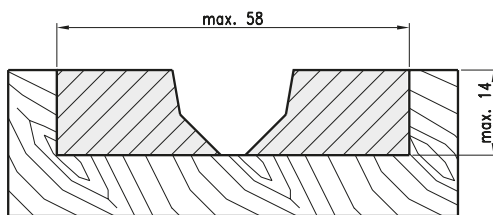
| D | L2 | S | Z | Art. Nr. |
|----|----|----|---|---------------------|
| 58 | 14 | 20 | 2 | 4945.058.014 |
| | 14 | 25 | 2 | 4945.058.114 |

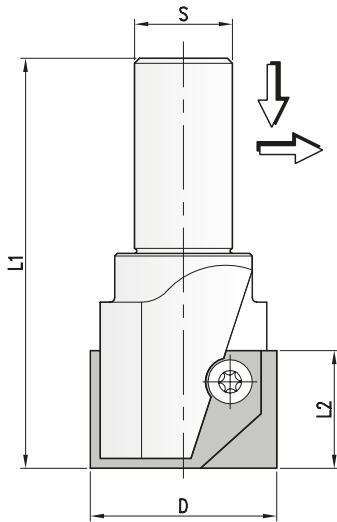
- Uni-Profilmesserkopf Z=2 zum Fräsen von Ziernuten, Innenprofilen sowie kombinierten Außen- und Innenprofilen. Messerkopf für HW-Profilwechselmesser mit Stützplatte. Ein Messer zentrumschneidend ausgeführt. Für unterschiedliche Profile in einem Tragkörper. Sonderprofile auf Wunsch in Blankett und Stützplatte einschleifbar.
- *Universal profile cutterhead Z=2 for cutting decorative grooves, internal profiles and combined external and internal profiles. Cutterhead for profiled TC-knives with back support. One knife to centre-cutting design. Different profiles in one tool body. Special profiles can be ground into blank knives and backing plates upon request.*

Wechselmesser/Ersatzteile
Reversible knife/Spare parts

| | Dim. | Art. Nr. |
|---------------------------------------|------------|----------------|
| Wendemesser - <i>Reversible knife</i> | 30x25x1,5* | 769.601 |
| Stützplatte - <i>Back support</i> | | 710.101 |
| Spannkeil - <i>Clamping wedge</i> | | 707.800 |
| Gewindestift - <i>Screw</i> | M6x12 | 705.533 |
| Torx Schlüssel - <i>Torx wrench</i> | SW3 | 706.103 |

- * Messer ohne Profil
- * *Not profiled*





Profilier Zone (1:1)
 Available area for profiling (1:1)

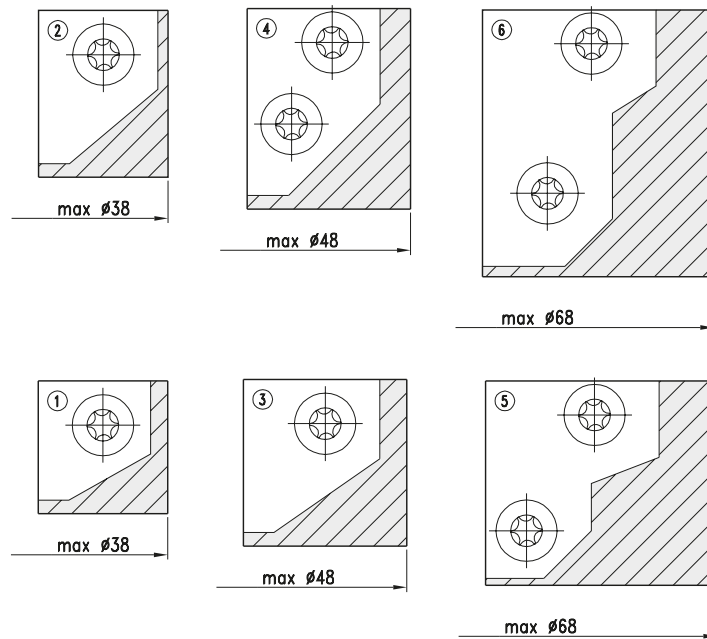
HW Multi-Profilschafffräser Z=2
 TC Multi-profilecutter Z=2

MEC

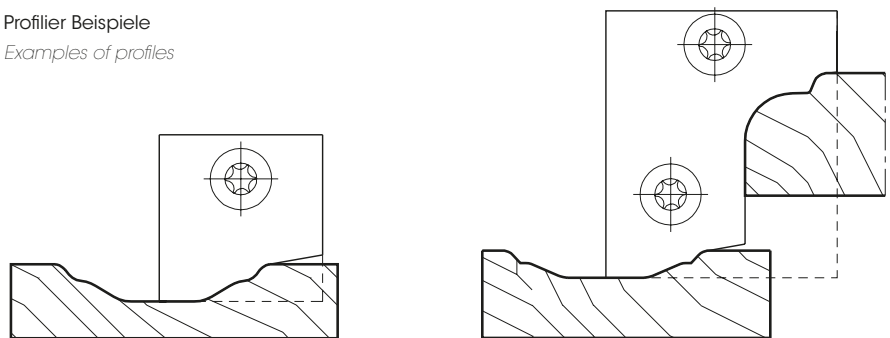
HW

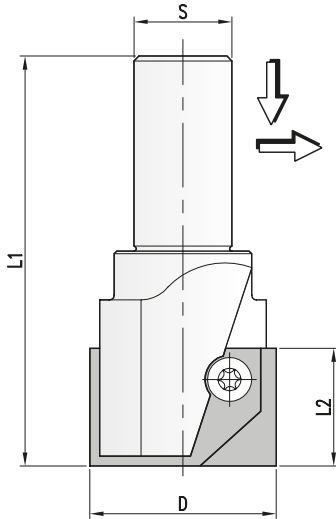
| Nr. | D | L2 | S | Z | Art. Nr. |
|-----|----|----|----|---|----------------|
| 1 | 38 | 20 | 20 | 2 | ◇ 4975.038.020 |
| 2 | 38 | 25 | 20 | 2 | ◇ 4975.038.025 |
| 3 | 48 | 25 | 20 | 2 | ◇ 4975.048.025 |
| 4 | 48 | 30 | 20 | 2 | ◇ 4975.048.030 |
| 5 | 68 | 30 | 20 | 2 | ◇ 4975.068.030 |
| 6 | 68 | 40 | 20 | 2 | ◇ 4975.068.040 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
 ◇ Standard article, short-time production after order.
- WP-Profilmesserkopf mit Schaff für Blanketts .Profilerter Tragkörper.
 Die Profilierung der Blanketts erfolgt nach Vorgabe.
 Für Wendemesser mit einer Schneidekante.
 Der Grundkörper wird dem jeweiligen Messerprofil individuell angepasst.
- TC-Profile cutterhead with shank for blank knives. Profiled tool body.
 Profiling of blank knives as required.
 For profileknives with one cutting edge.
 The steel body is manufactured according to the profile shape.



Profilier Beispiele
 Examples of profiles





Profiler Zone (1:1)
 Available area for profiling (1:1)

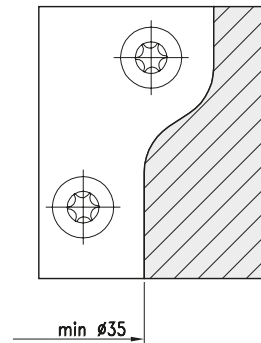
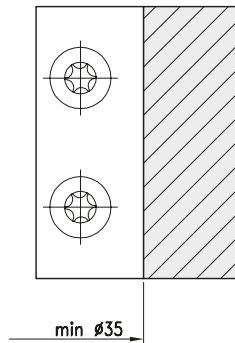
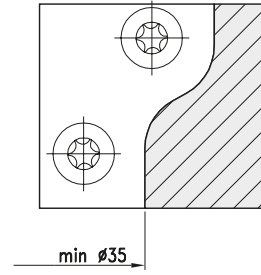
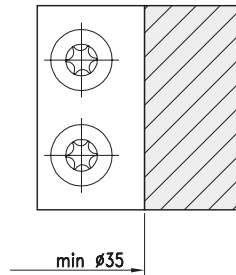
HW Multi-Profileschafffräser Z=2
 TC Multi-profilecutter Z=2

MEC

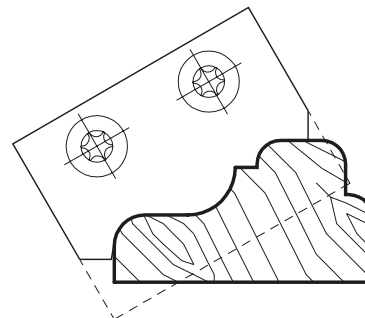
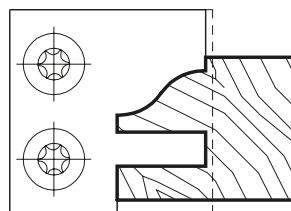
HW

| D | L2 | S | Z | Art. Nr. |
|----|----|----|---|----------------|
| 62 | 30 | 20 | 2 | ◇ 4985.062.030 |
| 72 | 30 | 25 | 2 | ◇ 4985.072.030 |
| 62 | 40 | 20 | 2 | ◇ 4985.062.040 |
| 72 | 40 | 25 | 2 | ◇ 4985.072.040 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- WP-Profilmesserkopf mit Schaff für Blanketts. Profilerter Tragkörper.
- Die Profilerung der Blanketts erfolgt nach Vorgabe.
- Für Wendemesser mit einer Schneidekante.
- Der Grundkörper wird dem jeweiligen Messerprofil individuell angepasst.
- *TC-Profile cutterhead with shank for blank knives. Profilered tool body.*
- *Profilering of blank knives as required.*
- *For profileknives with one cutting edge.*
- *The steel body is manufactured according to the profile shape.*



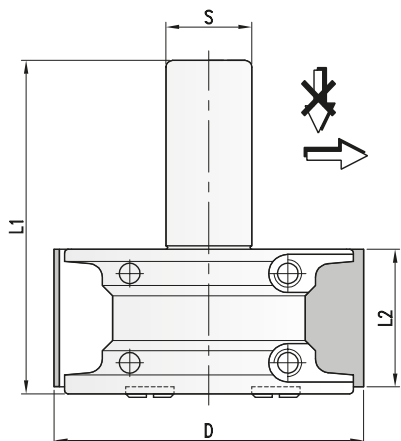
Profiler Beispiele
 Examples of profiles



9115

HW Multi-Profilschafffräser Typ C - Wechselmesser
TC Multi-Profilecutter Type C - Reversible knife

PG
02



Profilier Zone (1:1)

Available area for profiling (1:1)

HW Multi-Profilschafffräser Z=2
TC Multi-profilecutter Z=2

MEC

HW

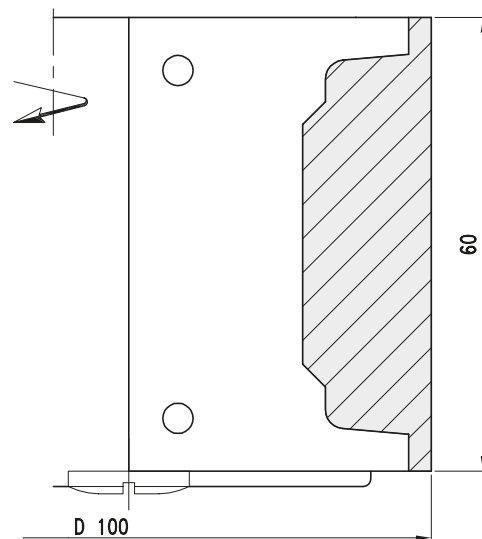
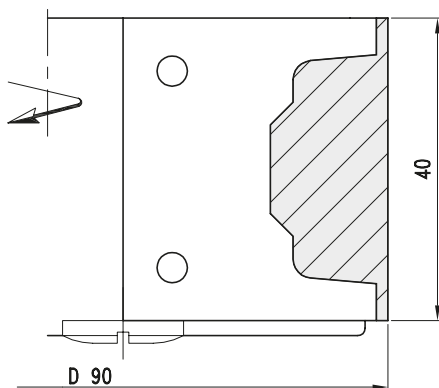
| D. | L2 | S | Z | Art. Nr. |
|-----|----|----|---|--------------|
| 90 | 40 | 25 | 2 | 9115.090.040 |
| 100 | 60 | 25 | 2 | 9115.100.060 |

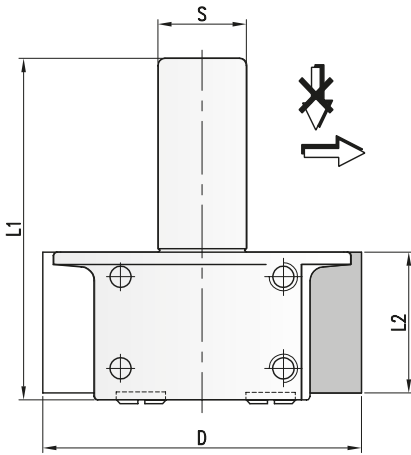
- Ohne Wechselmesser und Stützplatten.
- WP-Profilmesserkopf mit Schaff zum Fräsen von Profilen. Für unterschiedliche Profile mit max. 20mm Profiltiefe. Messerkopf für HW-Profilwechselmesser mit Stützplatte. 3-4 mal nachschärfbar.

- *Knives and back support not included*
- *TC-Profile cutterhead Z=2 for profiles with max. 20mm profile depth. Cutterhead for profiled TC-knives with back support. Different profiles in one tool body. Special profiles can be ground into blank knives and backing plates upon request. Resharpenable 3 to 4 times.*

Wechselmesser/Ersatzteile
Reversible knife/Spare parts

| | D | Dim. | Art. Nr. |
|---|-----|-----------|----------|
| Wechselmesser - <i>Reversible knife</i> | 90 | 40x35x2 | 769.204 |
| | 100 | 60x40x2 | 769.209 |
| Stützplatte - <i>Back support</i> | 90 | 38x31x3,8 | 710.210 |
| | 100 | 58x36x3,8 | 710.222 |
| Spannkeil - <i>Clamping wedge</i> | 90 | | 707.801 |
| | 100 | | 707.802 |
| Gewindestift - <i>Screw</i> | | M8x16 | 705.542 |
| T-Schlüssel - <i>Twrench</i> | | SW4 | 706.104 |





Profilier Zone (1:1)
 Available area for profiling (1:1)

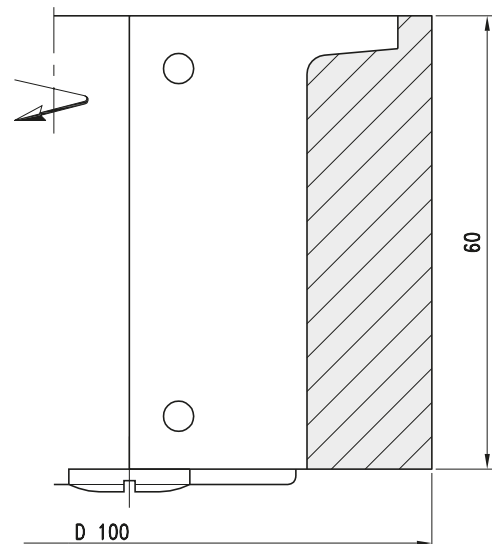
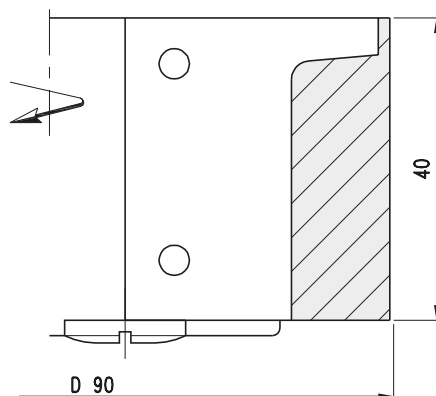
HW Multi-Profilschafffräser Z=2
TC Multi-profilecutter Z=2
MAN
HW

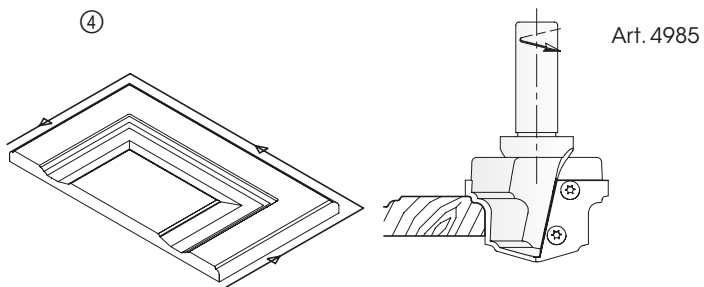
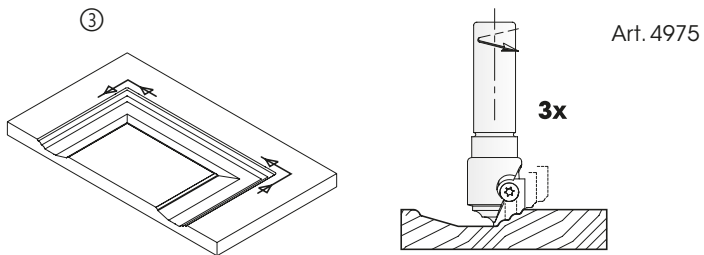
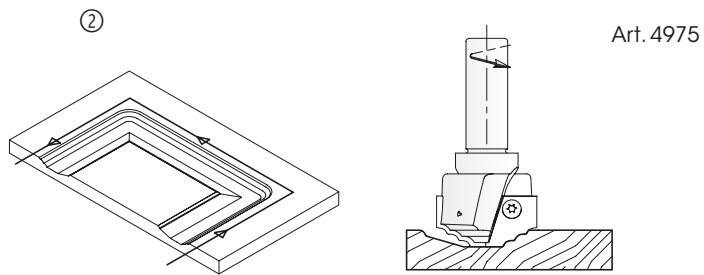
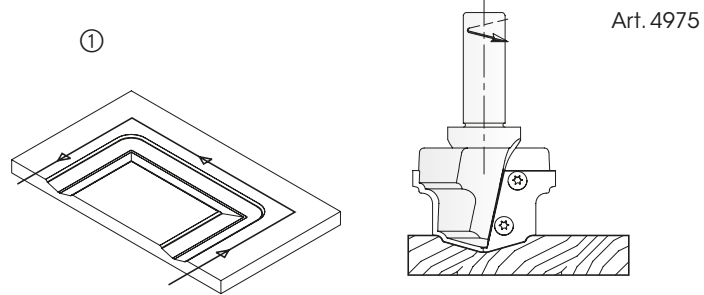
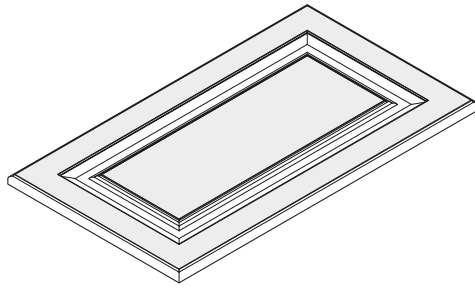
| D. | L2 | S | Z | Art. Nr. |
|-----|----|----|---|---------------------|
| 90 | 40 | 25 | 2 | 9175.090.040 |
| 100 | 60 | 25 | 2 | 9175.100.060 |

- Ohne Wechselmesser und Stützplatten
- WP-Profilmesserkopf Z=2 zum Fräsen von Profilen. Für unterschiedliche Profile mit max. 20mm profiltiefe. Messerkopf für HW-Profilmesserkopf mit Stützplatte. 3 bis 4 mal nachschärfbar.
- *Knives and back support not included*
- *TC Profile cutterhead Z=2 for profiles with max. 20mm profile depth. Cutterhead for profiled TC-knives with back support. Different profiles in one tool body. Special profiles can be ground into blank knives and backing plates upon request. Resharpenable 3 to 4 times.*

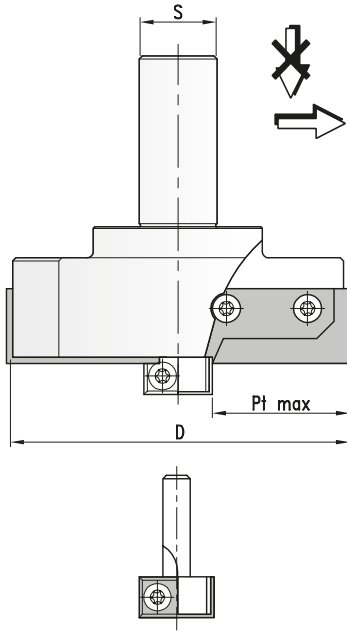
Wechselmesser/Ersatzteile
Reversible knife/Spare parts

| | D | Dim. | Art. Nr. |
|----------------------------------|-----|-----------|----------------|
| Wechselmesser - Reversible knife | 90 | 40x35x2 | 769.204 |
| | 100 | 60x40x2 | 769.209 |
| Stützplatte - Back support | 90 | 38x31x3,8 | 710.210 |
| | 100 | 58x36x3,8 | 710.222 |
| Spannkeil - Clamping wedge | 90 | | 707.801 |
| | 100 | | 707.802 |
| Gewindestift - Screw | | M8x16 | 705.542 |
| T-Schlüssel - T-wrench | | SW4 | 706.104 |





- 01 Sägen
- 02 Hobeln
- 03 Hobeln / Fräsen
- 04 Profilfräsen
- 05 Nut- und Federfräsen
- 06 Oberfräsen**
- 07 Bohren
- 08 PKD-Werkzeuge
- 09 Spannen
- 10 Ersatzteile
- 11 Informationen



HW Abplattfräser Z=2
TC Profile panel raising cutter Z=2

MEC

HW

| Nr. | D | L2 | Pt max | S | Z | Art. Nr. |
|-----|-----|-------|--------|----|---|--------------|
| 1 | 100 | 20/30 | 39 | 20 | 2 | 4215.100.020 |
| 2 | 120 | 20/30 | 49 | 25 | 2 | 4215.120.020 |
| 3 | 130 | 20/30 | 54 | 25 | 2 | 4215.130.020 |

- ◇ Serienartikel, kurzfristige Fertigung bei Bestellung.
- ◇ *Standard article, short-time production after order.*
- WP-Abplattmesserkopf Z=2 zum Fräsen von Abplattprofilen. Für unterschiedliche Profil. Messerkopf für HW-Profilwechsellmesser mit Stützplatte. 3 bis 4 mal nachschärfbar.
- *TC-Panel raising cutterhead Z=2 for panel raising profiles. Cutterhead for profiled TC-knives with back support. Different profiles in one tool body. Special profiles can be ground into blank knives and backing plates upon request. Resharpenable 3 to 4 times.*

Wechselmesser/Ersatzteile
Reversible knife/Spare parts

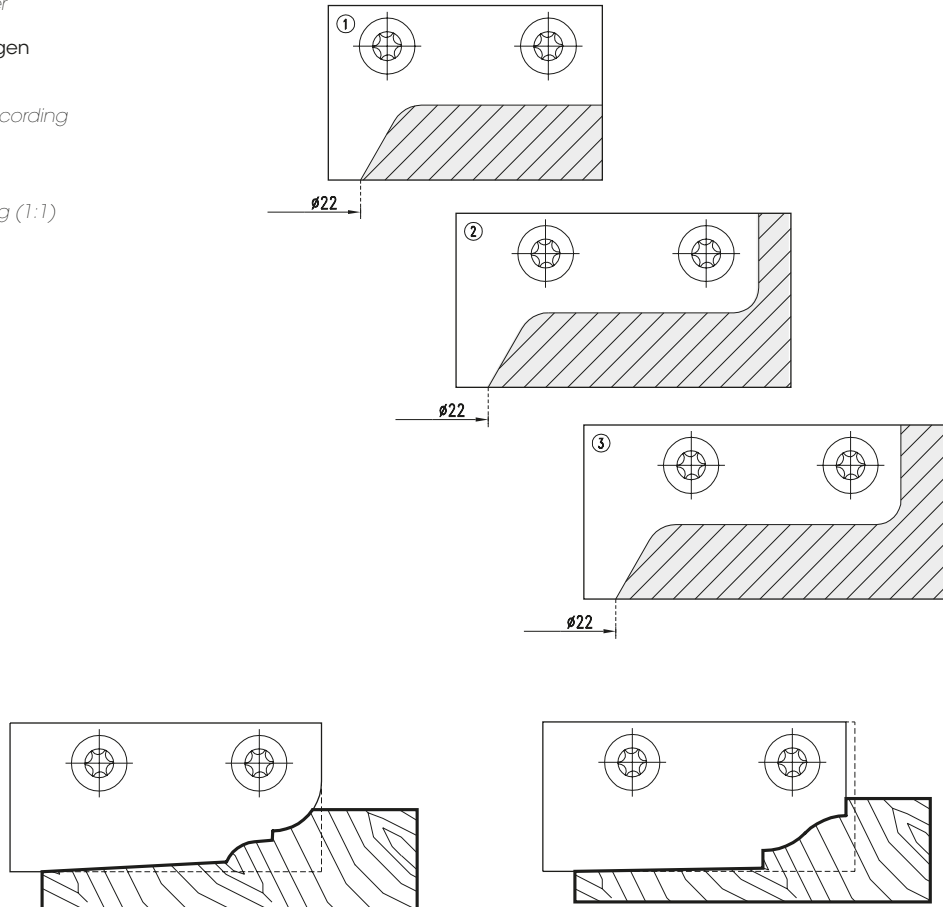
| | Dim. | Art. Nr. |
|---|------------|--------------|
| Bündigfräser - <i>Jointing cutter</i> | Ø22x12 S=8 | 4215.022.012 |
| Ersatzteile für Bündigfräser - Spare parts for jointing cutter | | |
| Wechselmesser - <i>Reversible knife</i> | 12x12x1,5 | 754.102 |
| Schraube - <i>Screw</i> | M4x6 | 705.351 |
| Torx Schlüssel - <i>Torx wrench</i> | T15 | 706.302 |

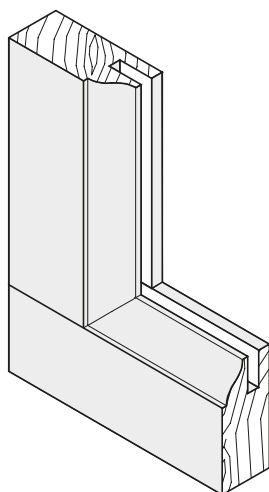
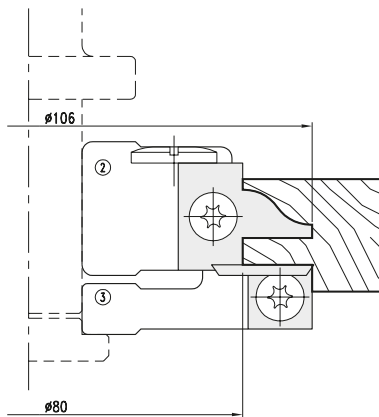
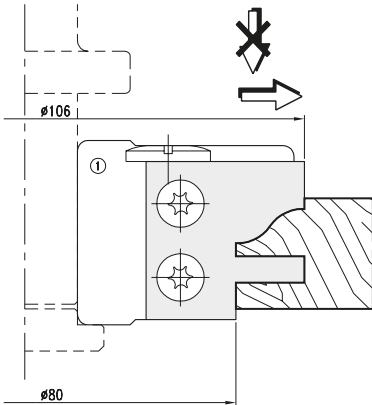
Bündigfräser - Square trimming cutter

Der Grundkörper wird dem jeweiligen Messerprofil individuell angepasst

The steel body is manufactured according to the profile shape.

Profilier Zone (1:1)
Available area for profiling (1:1)



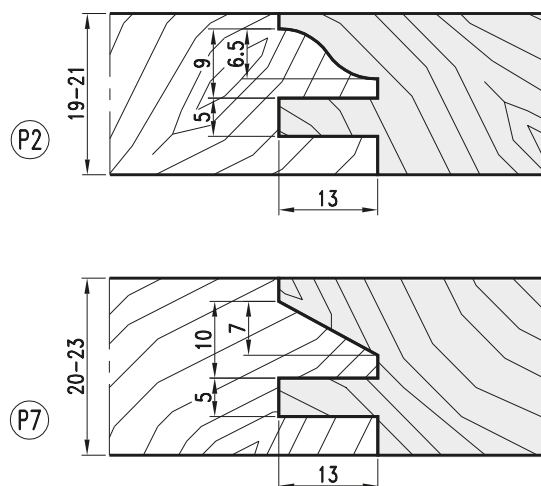

HW Multi-Profilschafffräser Z=2
TC Multi-profilecutter Z=2
MEC
HW

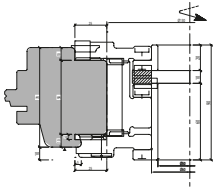
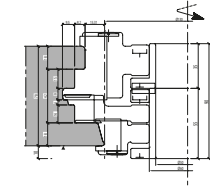
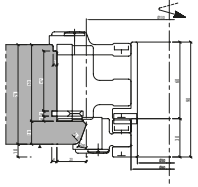
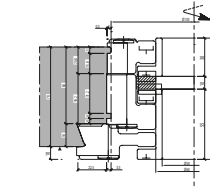
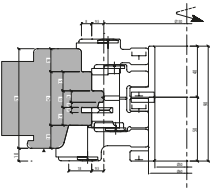
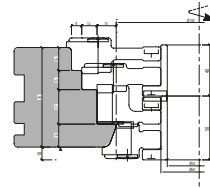
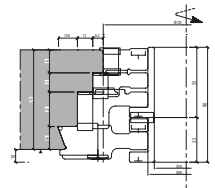
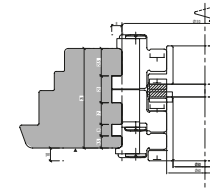
| Nr. | D | L2 | d | Z | V | Art. Nr. |
|-----|----|-----|----|----|---|----------------|
| 1 | P2 | 106 | 30 | 20 | 2 | * 4275.106.030 |
| | P7 | 106 | 30 | 20 | 2 | * 4275.106.130 |
| 2 | P2 | 106 | 20 | 20 | 2 | * 4275.106.020 |
| | P7 | 106 | 20 | 20 | 2 | * 4275.106.120 |
| 3 | | 106 | 12 | 20 | 2 | * 4275.106.012 |

- * Ausführung mit Leichtmetall-Grundkörper
* *Light alloy body*
- WP-Profilmesserkopf mit Schaft für Blanketts .Profiliertes Tragkörper.
Die Profilierung der Blanketts erfolgt nach Vorgabe.
Für Wendemesser mit einer Schneidekante.
Der Grundkörper wird dem jeweiligen Messerprofil individuell angepasst.
- *TC-Profile cutterhead with shank for blank knives. Profiled tool body.*
Profiling of blank knives as required.
For profileknives with one cutting edge.
The steel body is manufactured according to the profile shape.

Wechselmesser/Ersatzteile
Reversible knife/Spare parts

| | Nr. | Dim. | Art. Nr. |
|---|-----|--------------|----------|
| Wechselmesser - <i>Reversible knife</i> | 1 | 30x30x2 (P2) | 790.101 |
| | 1 | 30x30x2 (P7) | 790.103 |
| | 2 | 25x20x2 (P2) | 790.104 |
| | 2 | 25x20x2 (P7) | 790.106 |
| | 3 | 12x12x1,5 | 754.102 |
| Schraube - <i>Screw</i> | | M4x9 | 705.354 |
| Vorschneider - <i>Spur</i> | 3 | 14x14x2 | 750.111 |
| Spannschraube - <i>Screw</i> | | M5x7 | 705.425 |
| Torx Schlüssel - <i>Torx wrench</i> | | T15 | 706.302 |




 Unteres Blendrahmenholz
 I/78 Innenprofilierung

 Vertikalflüster-Blendrahmen
 I/78 Konterprofilierung

 Unteres Flügelholz
 I/78 Gasdichtprofilierung

 Flügel-Konterprofil
 I/78 Konterprofilierung

 Unteres Blendrahmenholz
 I/78 Außenprofilierung

 Oberes Blendrahmenholz
 I/78 Doppelprofilierung

 Flüster-Konterprofil
 I/78 Konterprofilierung

 Flügel-Konterprofil
 I/78 Konterprofilierung

Werkzeuge zur Fensterherstellung für alle Bearbeitungsmaschinen (manueller oder mechanischer Vorschub). Hergestellt konform zur Norm DIN EN-847-1.

Window tooling for all types of machinery (hand or mechanical feed), designed according to the European standard EN 847-1. Tools for CNC machines with all types of shanks for the production of windows.

