
LSE445/NSE300/400

ALLGEMEINE PLANFRÄSERSERIE FÜR ZUVERLÄSSIGE
UND EFFIZIENTE BEARBEITUNG



*M*plus...

LSE445

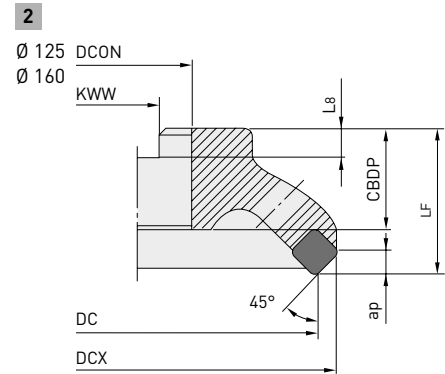
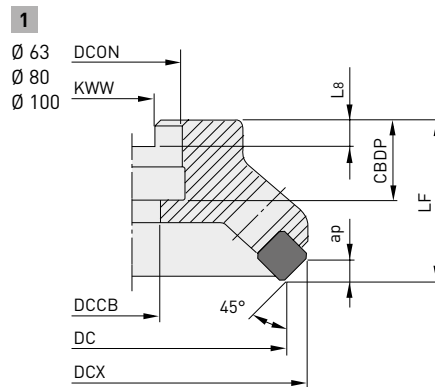


45° PLANFRÄSER FÜR DIE ALLGEMEINE BEARBEITUNG

P M K N



CH:45°
A.R:+19° T:+13°
RR:-2° I:+15°



AUFSTECKFRÄSER

| Bestellnummer | Lager | | ZEFP | DC | DCX | LF | DCON | CBDP | DCCB | KWW | L8 | WT | APMX | Typ |
|--------------------|-------|---|------|-----|-------|----|------|------|------|------|-----|-----|------|-----|
| | R | L | | | | | | | | | | | | |
| LSE445-063A05R/L-E | ● | □ | 5 | 63 | 76.5 | 40 | 22 | 20 | 11 | 10.4 | 6.4 | 0.8 | 5.5 | 1 |
| LSE445-080A06R/L-E | ● | □ | 6 | 80 | 93.5 | 50 | 27 | 22 | 13.5 | 12.4 | 7.0 | 1.0 | 5.5 | 1 |
| LSE445-100A07R/L-E | ● | □ | 7 | 100 | 113.5 | 50 | 32 | 25 | 17.5 | 14.4 | 8.0 | 1.4 | 5.5 | 1 |
| LSE445-125B09R/L-E | □ | □ | 9 | 125 | 138.5 | 50 | 40 | 32 | — | 16.4 | 9.0 | 2.0 | 5.5 | 2 |
| LSE445-160B11R/L-E | □ | □ | 11 | 160 | 173.5 | 50 | 40 | 32 | — | 16.4 | 9.0 | 3.0 | 5.5 | 2 |



ERSATZTEILE

| Referenzprodukt | *1 | | | | | |
|---------------------|----------------|---------------------|-----------|---------------|-----------|-----------|
| | Unterlegplatte | Schraube f. Unterl. | Klemmkeil | Spannschraube | Schlüssel | Schlüssel |
| LSE445 -063A05R/L-E | | | | LS10T | | |
| LSE445 -080A04R/L-E | | | | | | |
| LSE445-100A07R/L-E | STBE445NF | CS300890T | CWSE445TR | LS15T | TKY25T | TKY08F |
| LSE445-125B09R/L-E | | | | | | |
| LSE445 -160B11R/L-E | | | | | | |

*1 Spannmoment (N • m) : LS10T=8.5. LS15T=8.5. CS300890T=1.0

WSP

| | | | | | | | | | | |
|---|---------------------|---|---|---|---|---|---|---|---|---|
| P | Stahl | ● | ● | | ● | ● | ● | ● | ● | Schnittbedingungen: ●: Stabile Bearbeitung ●: Allgemeine Bearbeitung ⚠: Instabile Bearbeitung Verfassung: E: Verrundet F: Scharf S: Abgeschrägt + Verrundet T: Abgeschrägt Z: Stabil |
| M | Rostfreier Stahl | ● | ● | | ● | ● | ● | ● | | |
| K | Guss | | | ● | ⚠ | ● | ● | ⚠ | ● | |
| N | Nicht-Eisen Metalle | | | | | | | | ● | |

| Bestellnummer | Toleranz | Verfassung | F7010 | F7030 | MC5020 | VP15TF | NX2525 | NX4545 | UT120T | HT110 | IC | S | BS | RE | Form |
|---------------|----------|------------|-------|-------|--------|--------|--------|--------|--------|-------|------|------|-----|-----|------|
| SECN1203AFTN1 | C | T | | | | | | ★ | | | 12.7 | 3.18 | 1.4 | 1.0 | |
| SEEN1203AFFN1 | E | F | | | | | | | ● | | 12.7 | 3.18 | 1.4 | 1.0 | |
| SEEN1203AFEN1 | E | E | | | | ● | | | | | 12.7 | 3.18 | 1.4 | 1.0 | |
| SEEN1203AFTN1 | E | T | ● | | | | ● | ● | ● | | 12.7 | 3.18 | 1.4 | 1.0 | |
| SEEN1203AFTN3 | E | T | ● | | | | | ● | ★ | | 12.7 | 3.18 | 1.4 | — | |
| SEEN1203AFSN1 | E | S | | ● | ● | | | | | | 12.7 | 3.18 | 1.4 | 1.0 | |
| SEEN1203AFSN3 | E | S | | ● | | | | | | | 12.7 | 3.18 | 1.4 | — | |
| SEEN1203AFZN1 | E | Z | | | | | ● | | | | 12.7 | 3.18 | 1.4 | 1.0 | |

WSP mit Spanbrecher

| | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|--|--|--|--|------|------|-----|-----|--|
| SEER1203AFEN-JS | E | E | ● | ● | ● | ● | | | | | 12.7 | 3.18 | 1.4 | 1.0 | |
| SEER1204AFEN-JS | E | E | ● | | | | | | | | 12.7 | 3.18 | 1.4 | 1.0 | |

Breitschicht-WSP

| | | | | | | | | | | | | | | | |
|-------------|---|---|--|--|--|--|---|--|--|--|---|------|---|-----|--|
| WEC42AFTR5C | C | T | | | | | ● | | | | — | 3.18 | 5 | 1.0 | |
|-------------|---|---|--|--|--|--|---|--|--|--|---|------|---|-----|--|



LSE445

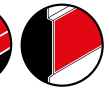
SCHNITTDATENEMPFEHLUNGEN

| Material | Härte | Sorte | Vc | fz |
|---------------------------------|-----------------------|---------------|-----------------|------------------|
| P Allgemeiner Baustahl | <180HB | F7030 | 300 (200–360) | 0.2 (0.1–0.3) |
| | | NX4545 | | |
| | | UTi20T | 240 (170–300) | |
| | | UP20M | | |
| P C-Stahl Legierter Stahl | 180–280HB | F7030 | 250 (170–300) | 0.2 (0.1–0.3) |
| | | NX4545 | 200 (140–240) | |
| | UTi20T | 140 (100–170) | | |
| | UP20M | | | |
| M Rostfreier Stahl | <200HB | UP20M | 200 (140–240) | 0.2 (0.1–0.3) |
| | | UTi20T | | |
| K Guss | Zugfestigkeit <450MPa | MC5020 | 200 (130–240) | 0.2 (0.1–0.3) |
| | | F5010 | | |
| | | F5020 | 160 (110–190) | |
| | | HTi10 | | |
| N Aluminiumlegierung | — | MD220 | 1000 (200–1500) | 0.15 (0.05–0.25) |
| | | HTi10 | 1000 (700–1200) | 0.12 (0.05–0.2) |

1. Drehzahl (min^{-1}) = $(1000 \times \text{Schnittgeschw.}) \div (3.14 \times \text{ØD1})$
2. Tischvorschub (mm/min) = Vorschub pro Zahn \times Zähnezahl \times Drehzahl



NSE300/400



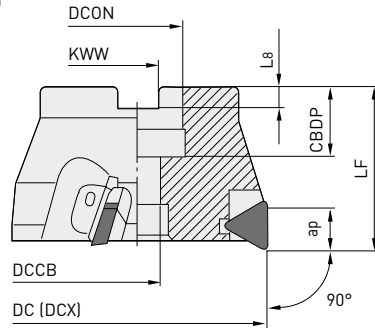
90° PLANFRÄSER FÜR DIE ALLGEMEINE BEARBEITUNG

P M K N

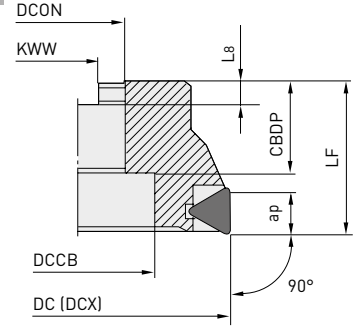


C H: 0°
A.R: +16° T: +5° - +8°
R.R: +5° - +8° l: +16°

1



2



3

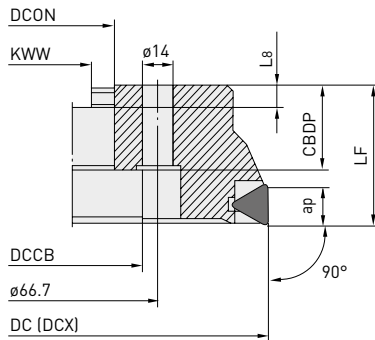


Abb. zeigt Rechtsausführung.

AUFSTECKFRÄSER

| Bestellnummer | Lager | ZEFP | DC | DCX | LF | DCON | CBDP | DCCB | KWW | L8 | WT | APMX | Typ |
|------------------|-------|------|-----|-----|----|------|------|------|------|-----|-----|------|-----|
| NSE300-050A04R-E | ● | 4 | 50 | 50 | 40 | 22 | 20 | 11 | 10.4 | 6.3 | 0.3 | 12.5 | 1 |
| NSE300-063A05R-E | ● | 5 | 63 | 63 | 40 | 22 | 20 | 11 | 10.4 | 6.3 | 0.5 | 12.5 | 1 |
| NSE300-080A06R-E | ● | 6 | 80 | 80 | 50 | 27 | 22 | 13.5 | 12.4 | 7 | 1.1 | 12.5 | 1 |
| NSE300-100A08R-E | ● | 8 | 100 | 100 | 50 | 32 | 25 | 17.5 | 14.4 | 8 | 2.1 | 12.5 | 1 |
| NSE300-125B10R-E | ● | 10 | 125 | 125 | 63 | 40 | 32 | 56 | 16.4 | 9 | 3.2 | 12.5 | 2 |
| NSE300-160C12R-E | □ | 12 | 160 | 160 | 63 | 40 | 29 | 56 | 16.4 | 9 | 5.4 | 12.5 | 3 |
| NSE400-080A06R-E | □ | 6 | 80 | 80 | 50 | 27 | 22 | 13.5 | 12.4 | 7 | 1.1 | 17 | 1 |
| NSE400-100A07R-E | □ | 7 | 100 | 100 | 50 | 32 | 25 | 17.5 | 14.4 | 8 | 2.1 | 17 | 1 |
| NSE400-125B08R-E | □ | 8 | 125 | 125 | 63 | 40 | 32 | 56 | 16.4 | 9 | 3.2 | 17 | 2 |
| NSE400-160C10R-E | □ | 10 | 160 | 160 | 63 | 40 | 29 | 56 | 16.4 | 9 | 5.4 | 17 | 3 |



ERSATZTEILE

Referenzprodukt




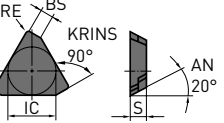

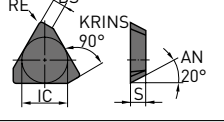

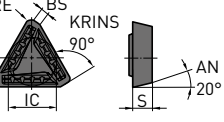


Klemmkeil Klemmkeil-T Klemmkeil Klemmkeil-T Spannschraube Klemmkeil Schraube Schlüssel (Spannschraube) Schlüssel (Separater Verkauf)

| | | | | | | | | | | | | |
|------------------|-----------|--|------------|-----------|-----------|--|--|--------|------|--|--------|--------|
| NSE300-050A04R-E | | | CWTSE300TR | | | | | LS19T | | | TKY15T | |
| NSE300-063A05R-E | SPTSE300R | | | | | | | | | | | |
| NSE300-080A06R-E | | | CWNSE300TR | | | | | LS10T | TS32 | | | TKY08F |
| NSE300-160C12R-E | | | | | | | | | | | TKY25T | |
| NSE400-E | | | | SPTSE400R | CWSE300TR | | | LS10TS | | | | |

* Spannmoment (N • m) : LS10T=8.5. LS10TS=8.5. LS19T=5.0. TS32=1.0

● : Lagerstandard. □ : Herstellung nur auf Anfrage.

| Bestellnummer | Toleranz | Verfassung | F7030 | MC5020 | VP15TF | UP20M | NX2525 | NX4545 | UT120T | HT110 | IC | S | BS | RE | Form |
|----------------------------|----------|------------|-------|--------|--------|-------|--------|--------|--------|-------|--|-------|-----|-----|---|
| P Stahl | | | ● | ● | ● | ● | ● | ● | ● | ● | Schnittbedingungen : ●:Stabile Bearbeitung ●:Allgemeine Bearbeitung ✖:Instabile Bearbeitung | | | | |
| M Rostfreier Stahl | | | ● | ● | ● | ● | ● | ● | ● | ● | Verfassung: E:Verrundet F:Scharf S:Abgeschrägt + Verrundet T:Abgeschrägt | | | | |
| K Guss | | | ● | ✖ | ● | ● | ● | ✖ | ● | ● | Z:Stabil | | | | |
| N Nicht-Eisen Metalle | | | ● | ● | ● | ● | ● | ● | ● | ● | | | | | |
| TECN1603PEFR1W | C | F | | | | | | | | ★ | 9.525 | 3.175 | 1.4 | 0.4 |  |
| TECN1603PEER1W | C | E | | | | | | | | ★ | 9.525 | 3.175 | 1.4 | 0.4 |  |
| TECN1603PETR1W | C | T | | | | | ★ | ★ | ★ | | 9.525 | 3.175 | 1.4 | 0.4 |  |
| TEEN1603PEFR1 | E | F | | | | | | | | ● | 9.525 | 3.175 | 1.4 | 0.4 | |
| TEEN1603PEER1 | E | E | | | | | | | | ● | 9.525 | 3.175 | 1.4 | 0.4 | |
| TEEN1603PETR1 | E | T | | | | ● | ● | ● | ● | | 9.525 | 3.175 | 1.4 | 0.4 |  |
| TEEN1603PESR1 | E | S | ● | ● | | | | | | | 9.525 | 3.175 | 1.4 | 0.4 | |
| TEEN1603PEZR1 | E | Z | | | | | ● | | | | 9.525 | 3.175 | 1.4 | 0.4 | |
| TECN2204PEFR1 | C | F | | | | | | | | ★ | 12.7 | 4.76 | 1.4 | 1.0 |  |
| TECN2204PETR1 | C | T | | | | | | | ★ | | 12.7 | 4.76 | 1.4 | 1.0 | |
| TEEN2204PEFR1 | E | F | | | | | | | | ● | 12.7 | 4.76 | 1.4 | 1.0 | |
| TEEN2204PEER1 | E | E | | | ★ | | | | | ● | 12.7 | 4.76 | 1.4 | 1.0 |  |
| TEEN2204PETR1 | E | T | | | | ● | ★ | ● | ● | | 12.7 | 4.76 | 1.4 | 1.0 | |
| TEEN2204PESR1 | E | S | ● | ● | | | | | | | 12.7 | 4.76 | 1.4 | 1.0 | |
| WSP mit Spanbrecher | | | | | | | | | | | | | | | |
| TEER1603PEER-JS | E | E | ● | | | | | | | ● | 9.525 | 3.175 | 1.4 | 0.4 |  |
| TEER2204PEER-JS | E | E | ● | | | | | | | ★ | 12.7 | 4.76 | 1.4 | 1.0 |  |

NSE300/400

SCHNITTDATENEMPFEHLUNGEN

| Material | Härte | Sorte | Vc | fz | |
|---------------------------------|--------------------------|---------------|-----------------|------------------|---------------|
| P Allgemeiner Baustahl | <180HB | F7030 | 240 (160-290) | 0.2 (0.1-0.3) | |
| | | NX4545 | | | |
| | | UTi20T | 190 (125-230) | | |
| | | UP20M | | | |
| P C-Stahl Legierter Stahl | 180-280HB | F7030 | 200 (135-240) | 0.2 (0.1-0.3) | |
| | | NX4545 | | | |
| | UTi20T | 160 (110-190) | | | |
| | UP20M | | | | |
| M Rostfreier Stahl | <200HB | UTi20T | 110 (80-135) | 0.15 (0.1-0.2) | |
| | | UP20M | | | |
| K Guss | Zugfestigkeit <450MPa | MC5020 | 200 (130-240) | | 0.2 (0.1-0.3) |
| | | F5010 | | | |
| | | F5020 | | | |
| | | HTi10 | 160 (110-190) | | |
| | | UTi20T | | | |
| N Aluminiumlegierung | - | MD220 | 1000 (200-1500) | 0.15 (0.05-0.25) | |
| | | HTi10 | 800 (560-960) | 0.12 (0.05-0.2) | |

1. Drehzahl (min^{-1}) = $(1000 \times \text{Schnittgeschw.}) / (3.14 \times \text{ØD1})$
2. Tischvorschub (mm/min) = $\text{Vorschub pro Zahn} \times \text{Zähnezahl} \times \text{Drehzahl}$





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VERTRIEB DURCH:

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Bestellnummer: MP103D 

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