

Viel-Funktions-Werkzeug 90°, 8 Operationen

Outil-Multi-Fonctions 90°, 8-Operations

Multi-function-tool 90°, 8 operations

Ideales Werkzeug für den Einsatz auf BA-Zentren und NC-Maschinen

L'outil idéal p. les centres d'usage et les machines à commandes numériques:

Ideal tooling for the application on machining centres and NC-machines

Komb.Mehrfachbearbeit.: Reduktion der Rüstzeit, Reduktion der Bearbeitungszeit

Usinage multiples comb.: Diminuation des temps de réglage, réduct. des temps de cycles.

Comb.multi machining: Reduction of set-up times, reduction of cycle times.

Verbesserte Leistung Sehr feine Schnittkanten, verbesserte Schnittwirkung und Oberflächen-Finish

Performances accrues: arrête de coupe très fine, pénétration et état de surface améliorés, carbures micro-grains monobloc: Meilleure résistance à l'usure et rigidité garanties, hélice 30°: évaluation des copeaux favorisée.

Improved performance Very fine cutting edges, improved cutting applications and surface finish.

FeinstKorn K15: Beste Verschleissfestigkeit und Härte garantiert. Drallwinkel 30°: Späneabfuhr verbessert.

Stockage facilité: diminution du nombre d'outils utilisés, réduction du stock.

Facilitated stock-management. Reduced number of tool variants results to the reduction of stock. **Coating: TiALN on request.** Small Ø with reinforced Shank T=Seelendurchmesser=0,1xd1 Toleranzen (alle Dim. in mm):

Erleichterte Lagerhaltung: Kleinere Anzahl Werkzeugvarianten führt zur Reduktion des Lagers. **Beschichtung: TiALN zur Wahl**

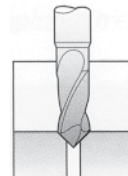
Revêtement: TiALN à choix petits Ø = queues renforcées T = 0,1xd1 épaisseur d'âme Tolerances (tous dim. en mm): Toleranzen/tolérances

Facilitated stock-management. Reduced number of tool variants results to the reduction of stock. **Coating: TiALN on request.** Small Ø with reinforced Shank T=Seelendurchmesser=0,1xd1 Toleranzen (alle Dim. in mm):

Kleine Ø mit verstärkt.Schaft T=Seelendurchmesser=0,1xd1 Toleranzen (alle Dim. in mm):

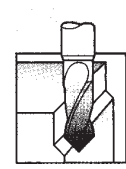
petits Ø = queues renforcées T = 0,1xd1 épaisseur d'âme Tolerances (tous dim. en mm): Toleranzen/tolérances

| d1 | α | l1 | l2 | d2 |
|----------------|------|-----|----|----------|
| ∅ 0,5-10 = h9 | ± 1° | ± 1 | +1 | h6 |
| ∅ 12 - 20 = d9 | | | | 4354VTOL |



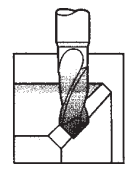
60 - 90-120°

Senken
chanfreinage
champhering



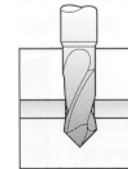
60 - 90 - 120°

Längs-Entgratsenken/chanfreins longitudinaux
longitudinal champhering



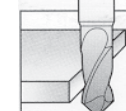
90-120°

Zentrieren
centrage
centering



90 - 120°

Bohren
perçage
drilling



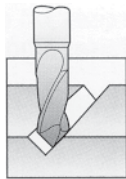
60 - 90 - 120°

Konturfräsen
contournage
contouring



90 - 120°

Bearbeitung mit Interpolation
usinage par interpolation
maching with interpolation

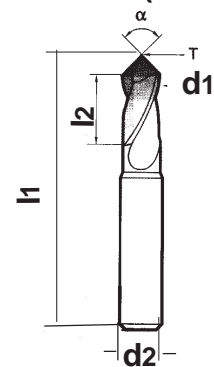


90 - 120°
"V"-Nutenfräsen
rainurage en "V"
"V" slotting

| 4.354V1029 | | | | | 90° | |
|------------|----|-----|----|------|-----------|-----|
| d1 | d2 | l2 | l1 | T | 4354V10.. | CHF |
| h9 | h6 | | | | | |
| 0.5 | 3 | 1.0 | 39 | 0.05 | 46.30 | |
| 0.6 | 3 | 1.2 | 39 | 0.06 | 46.30 | |
| 0.7 | 3 | 1.4 | 39 | 0.07 | 46.30 | |
| 0.8 | 3 | 1.6 | 39 | 0.08 | 46.30 | |
| 0.9 | 3 | 1.8 | 39 | 0.09 | 46.30 | |
| 1.0 | 3 | 2.0 | 39 | 0.10 | 46.30 | |
| 1.2 | 3 | 2.4 | 39 | 0.12 | 46.30 | |
| 1.4 | 3 | 2.8 | 39 | 0.14 | 46.30 | |
| 1.5 | 3 | 3.0 | 39 | 0.15 | 46.30 | |
| 1.8 | 3 | 3.6 | 39 | 0.18 | 46.30 | |
| 2.0 | 3 | 4.0 | 39 | 0.20 | 46.30 | |

| 4.354V1029 | | | | | 90° | |
|------------|----|------|-----|------|-----------|-----|
| d1 | d2 | l2 | l1 | T | 4354V10.. | CHF |
| h9 | h6 | | | | | |
| 2.5 | 3 | 5.0 | 39 | 0.25 | 46.30 | |
| 3.0 | 4 | 6.0 | 50 | 0.30 | 54.00 | |
| 4.0 | 5 | 8.0 | 50 | 0.40 | 64.60 | |
| 5.0 | 6 | 10.0 | 50 | 0.50 | 74.00 | |
| 6.0 | 8 | 12.0 | 60 | 0.60 | 91.00 | |
| 8.0 | 10 | 16.0 | 70 | 0.80 | 134.95 | |
| 10.0 | 12 | 18.0 | 70 | 1.00 | 135.00 | |
| 12.0 | 12 | 20.0 | 70 | 1.20 | 146.00 | |
| 16.0 | 16 | 26.0 | 80 | 1.60 | 159.00 | |
| 20.0 | 20 | 32.0 | 100 | 2.00 | 281.90 | |

90°
4354V10...
4354V12...(TiALN)



4354V12..(TiALN) auf Anfrage / sur demande / on request

60/120°
4354V60..
4354V120...
4354V60H..
4354V120H..
TiALN



| Winkel | | | | | 60° | | 120° | |
|--------|----|------|-----|------|--------------------|------------|------------|-------------|
| d1 | d2 | l2 | l1 | T | 4354V60.. | 4354V60H.. | 4354V120.. | 4354V120H.. |
| h9* | h6 | | | | CHF | TiALN CHF | CHF | TiALN CHF |
| 1.0 | 3 | 2.0 | 39 | 0.10 | | | | |
| 1.5 | 3 | 3.0 | 39 | 0.15 | | | | |
| 2.0 | 3 | 4.0 | 39 | 0.20 | | | | |
| 2.5 | 3 | 5.0 | 39 | 0.25 | Preise auf Anfrage | | | |
| 3.0 | 4 | 6.0 | 50 | 0.30 | Prix sur demande | | | |
| 4.0 | 5 | 8.0 | 50 | 0.40 | | | | |
| 5.0 | 6 | 10.0 | 50 | 0.50 | | | | |
| 6.0 | 8 | 12.0 | 60 | 0.60 | Prices on request | | | |
| 8.0 | 10 | 16.0 | 70 | 0.80 | | | | |
| 10.0 | 12 | 18.0 | 70 | 1.00 | | | | |
| 12.0 | 12 | 20.0 | 70 | 1.20 | | | | |
| 16.0 | 16 | 26.0 | 80 | 1.60 | | | | |
| 20.0 | 20 | 32.0 | 100 | 2.00 | | | | |

* ab/dès ∅ 12 mm d 9

4.354V60110