



BASS
TECHNIK FÜR GEWINDE

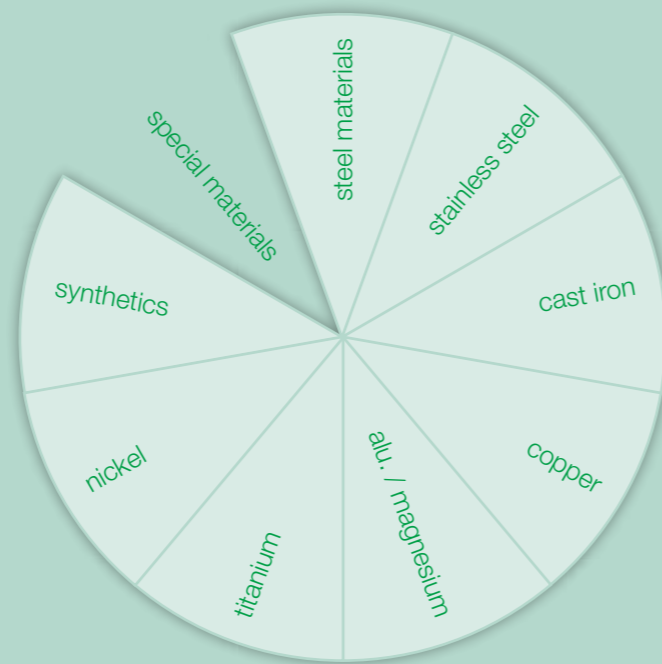
ALLROUNDER

CUTTING TAPS

ALLROUNDER

Our multi-purpose cutting taps cover a comprehensive range of materials. They can be applied for the reliable machining of various materials ranging from steel materials to plastics.

Your benefit: one tool for many applications omitting the need for re-tooling and considerably reducing the tool variety in stock.



coolant supply
axial internal coolant for improved coolant-lubrication and chip transportation in blind holes



coating
TIN for high cutting speed and high tool life
HL for high cutting speed & tool life, for thread depths up to 3xD



HSSE-PM (powder metal)
increased tool life up to 30%, improved thread surface and process reliability compared to HSSE



long shank (SL)
for deep-seated threads



tolerances
VARIANT VA:
ISO2/6H, ISO3/6G and 2B.
DOMINANT VA45:
ISO2/6H, ISO3/6G, 7G,
6H+0,1, 6H mod, 2B and 3B.
Other tolerances upon request.



chamfer forms
according to DIN 2197
B / 3,5-5,5 teeth
for through hole threads
with spiral point



C / 2-3 teeth
for standard applications



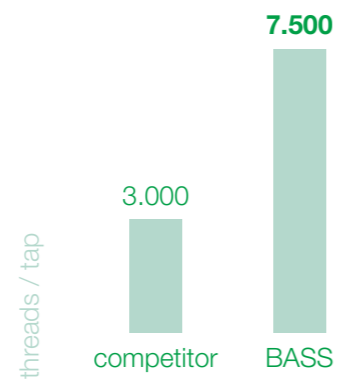
E / 1,5-2 teeth
for blind hole threads
with short run-out



3xD

VARIANT VA

The cutting tap for through holes.



application example

| | |
|----------------|------------------|
| dimension | M10 ISO2/6H |
| coating | HL |
| material | 1.4301 |
| thread depth | 24 mm |
| machine | machining center |
| cooling | emulsion 6% |
| v _c | 10 m/min |

customer benefit

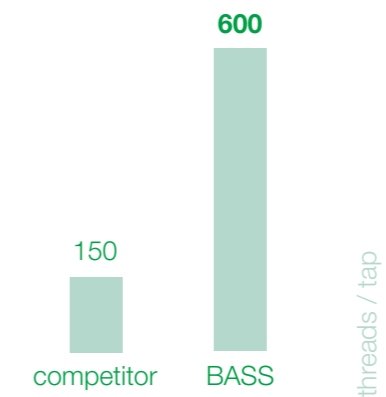
- one tool for various materials and applications
- reduced tool variety in stock
- less frequent tool changes
- high cutting speed
- high tool life

types

- h9-shank tolerance
- HSSE-PM (powder metal)
- also available with extended shank
- also available with radial coolant (KR) upon request

DOMINANT VA45

The cutting tap for blind holes.



application example

| | |
|----------------|------------------|
| dimension | M16 ISO2/6H |
| coating | HL |
| material | 1.4408 |
| thread depth | 30 mm |
| machine | machining center |
| cooling | emulsion 5% |
| v _c | 10 m/min |

application

- conventional machines
- modern machining centers
- HL surface treatment guarantees optimized chip evacuation even with MQL

materials

- steel materials up to 1,250 N/mm²
- VA stainless steels
- cast iron
- aluminum
- copper alloys



3xD

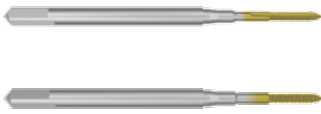
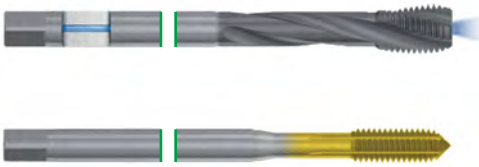


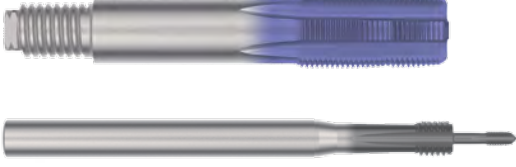




| model | VAP HSSE-PM | TIN HSSE-PM | TIN SL HSSE-PM | HL HSSE-PM | VAP HSSE-PM | TIN HSSE-PM | HL HSSE-PM | HL HSSE-PM | HL SL HSSE-PM | KA HL HSSE-PM |
|--------------------------|-------------|--------------------------|----------------|--------------------------|-------------|--|--|------------------------------------|---------------|---------------|
| chamfer | B / 3,5-5,5 | B / 3,5-5,5 | B / 3,5-5,5 | B / 3,5-5,5 | C / 2-3 | C / 2-3 | C / 2-3 | E / 1,5-2 | C / 2-3 | C / 2-3 |
| thread types | M | M / MF UNC / UNF G | M | M / MF UNC / UNF G | M | M / MF UNC / UNF G | M / MF UNC / UNF G | M / EG | M | M |
| thread tolerances | ISO2/6H | ISO2/6H ISO3/6G 2B | ISO2/6H | ISO2/6H 2B | ISO2/6H | ISO2/6H ISO3/6G 7G 6H+0,1 2B | ISO2/6H ISO3/6G 7G 6H+0,1 2B | ISO2/6H ISO3/6G 6H mod 3B | ISO2/6H | ISO2/6H |

| application | examples of materials | N/mm ² | HB | | | | | | | | | |
|--|-----------------------|-------------------|-------------|----------------|----------------|----------------|----------------|---------|----------------|----------------|----------------|----------------|
| 1 steel materials | | | | | | | | | | | | |
| 1.1 magnetic soft steel | FeP01 | > 100 < 450 | 10 - 15 | 20 - 30 | 20 - 30 | 20 - 30 | 10 - 15 | 20 - 30 | 20 - 30 | 20 - 30 | 20 - 30 | 20 - 30 |
| 1.2 construction steel / case hardening steel | En40B | > 300 < 700 | 10 - 20 | 20 - 30 | 20 - 30 | 20 - 30 | 10 - 20 | 20 - 30 | 20 - 30 | 20 - 30 | 20 - 30 | 20 - 30 |
| 1.3 carbon steel | 080M46 | > 400 < 950 | 10 - 20 | 20 - 30 | 20 - 30 | 20 - 30 | 10 - 20 | 20 - 30 | 20 - 30 | 20 - 30 | 20 - 30 | 20 - 30 |
| 1.4 alloyed / heat-treatable steel | En19A | > 450 < 950 | 10 - 15 | 15 - 35 | 15 - 35 | 15 - 35 | 10 - 15 | 15 - 35 | 15 - 35 | 15 - 35 | 15 - 35 | 15 - 35 |
| 1.5 alloyed steel | BD2 | > 800 < 1250 | > 235 < 370 | 10 - 20 | 10 - 20 | 10 - 20 | 5 - 10 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 |
| 2 stainless steel | | | | | | | | | | | | |
| 2.1 ferritic / martensitic steel | 420S37 | > 450 < 1200 | | 4 - 6 | 6 - 12 | 6 - 12 | 6 - 12 | 4 - 6 | 6 - 12 | 6 - 12 | 6 - 12 | 6 - 12 |
| 2.2 austenitic steel | 320S18 | > 400 < 950 | | 3 - 8 | 6 - 12 | 6 - 12 | 6 - 12 | 4 - 8 | 6 - 12 | 6 - 12 | 6 - 12 | 6 - 12 |
| 2.3 high temperature steel | 301S81 | > 850 < 1550 | > 250 < 455 | 1 - 4 | 3 - 8 | 3 - 8 | 3 - 8 | 3 - 6 | 3 - 6 | 3 - 6 | 3 - 6 | 3 - 6 |
| 3 cast iron | | | | | | | | | | | | |
| 3.2 cast iron with nodular graphite | Grade 420/12 | > 350 < 1000 | > 100 < 350 | | 8 - 20 | 8 - 20 | 8 - 20 | | | | | 8 - 15 |
| 3.3 malleable cast iron | EN-GJMB-350-10 | > 300 < 700 | > 100 < 200 | | 15 - 25 | 15 - 25 | 15 - 25 | | 15 - 25 | 15 - 25 | 15 - 25 | 15 - 25 |
| 4 copper | | | | | | | | | | | | |
| 4.1 copper non-alloyed | Cu-ETP-2 C 101 | > 200 < 400 | > 60 < 120 | | 10 - 25 | 10 - 25 | 10 - 25 | | 10 - 25 | | | 10 - 25 |
| 4.3 brass (long chipping) | CZ 108 | > 150 < 700 | > 45 < 200 | | 15 - 35 | 15 - 35 | 15 - 35 | | 15 - 35 | | | 15 - 35 |
| 4.4 copper-alu-nickel alloyed (short chipping) | CN 102 | > 150 < 700 | > 45 < 200 | | 10 - 20 | 10 - 20 | | | | | | |
| 5 aluminium / magnesium | | | | | | | | | | | | |
| 5.1 alu wrought alloy Si ≤0,5% | 1B | > 100 < 700 | > 30 < 200 | | | | | | 15 - 35 | 15 - 35 | 15 - 35 | 15 - 35 |
| 5.2 alu alloyed Si ≤6% | LM22 | > 150 < 700 | > 45 < 200 | | 15 - 40 | 15 - 40 | 15 - 40 | | 15 - 40 | 15 - 40 | 15 - 40 | 15 - 40 |
| 5.3 alu alloyed Si >6% | LM9 | > 150 < 900 | > 45 < 265 | | 15 - 40 | 15 - 40 | 15 - 40 | | 15 - 40 | 15 - 40 | 15 - 40 | 15 - 40 |

tool well suitable

tool suitable

| our products | examples |
|--|--|
| small dimensions starting with Ø 1.0 mm |  |
| tools with extended shank |  |
| solid carbide |  |
| MQL tools |  |
| special tools for all product groups |  |
| thread milling systems with solid carbide inserts |  |
| HST SYNCHRO tap holders and accessories |  |

certified according to: ISO 9001, VDA 6.4, ISO 14001, ISO 50001



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