



BASS
TECHNIK FÜR GEWINDE

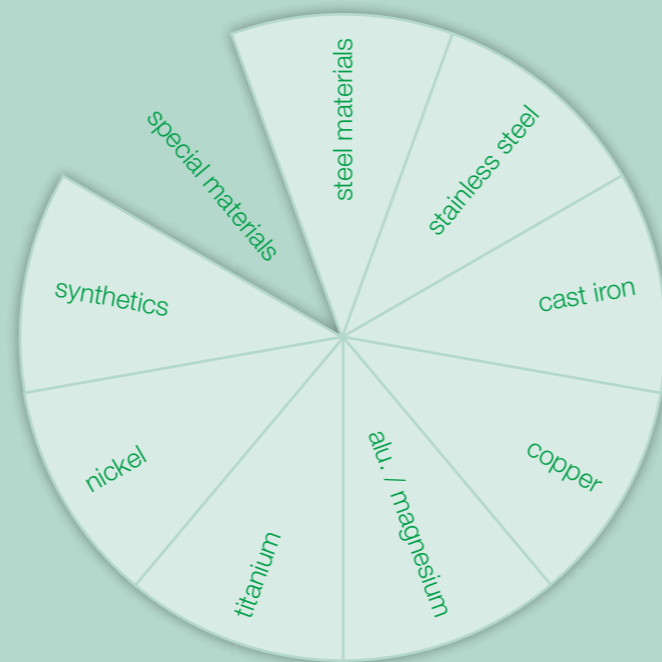
ALLROUNDER

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

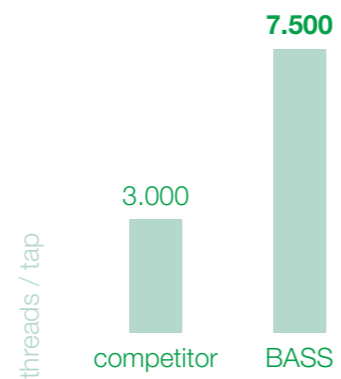


E / 1,5-2 teeth
for blind hole threads
with short run-out



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

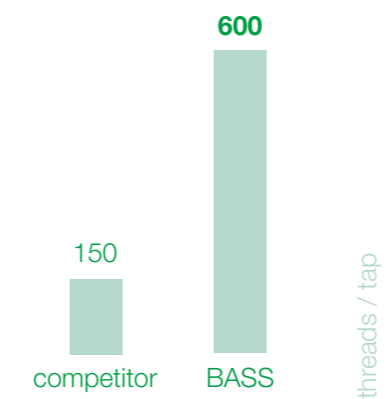
- one tool for various materials and applications
- reduced tool variety in stock
- less frequent tool changes
- high cutting speed
- high tool life

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



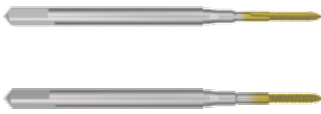
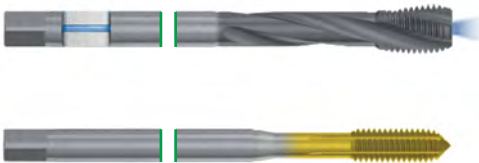


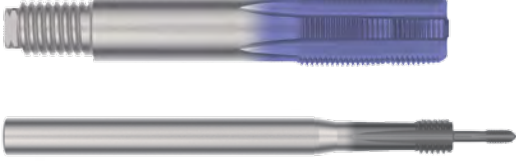




model	VAP HSSE-PM	TIN HSSE-PM	TIN SL HSSE-PM	HL HSSE-PM	VAP HSSE-PM	TIN HSSE-PM	HL HSSE-PM	HL HSSE-PM	HL SL HSSE-PM	KA HL HSSE-PM
chamfer	B / 3,5-5,5	B / 3,5-5,5	B / 3,5-5,5	B / 3,5-5,5	C / 2-3	C / 2-3	C / 2-3	E / 1,5-2	C / 2-3	C / 2-3
thread types	M	M / MF UNC / UNF G	M	M / MF UNC / UNF G	M	M / MF UNC / 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/mm²	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
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
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
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
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
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 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
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
5.2	alu alloyed Si ≤6%	LM22	> 150 < 700	> 45 < 200		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

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

BASS

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