



**BASS**  
TECHNIK FÜR GEWINDE

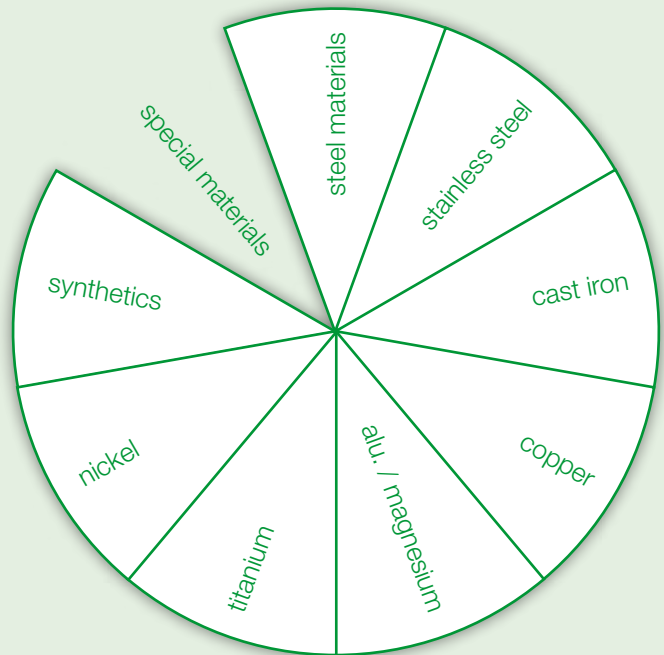
**ALLROUNDER**

CUTTING TAPS

## ALLROUNDER

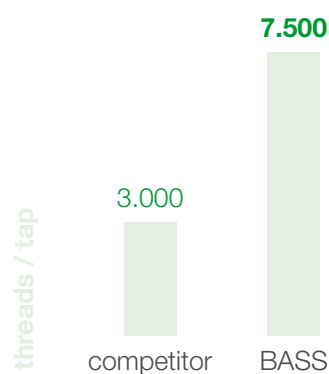
Our multi-purpose cutting taps cover a comprehensive range of materials. They can be applied for the reliable machining of various materials ranging from steel materials to plastics.

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



## VARIANT VA

The cutting tap for through holes.



### application example

dimension	M10 ISO2/6H
coating	HL
material	1.4301   V2A
thread depth	24 mm
machine	machining center
lubrication	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

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



**coolant supply**

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

**coating / surface**

VAP for conventional use at low cutting speeds



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 threads  
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

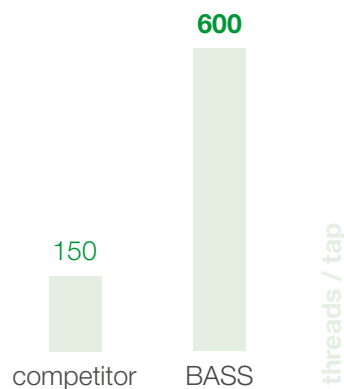


# DOMINANT VA45

The cutting tap for blind holes.

**application example**

dimension	M16 ISO2/6H
coating	HL
material	1.4408
thread depth	30 mm
machine	machining center
lubrication	emulsion 5%
$v_c$	10 m/min



**customer benefit**

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

**types**

- steel materials up to 1,250 N/mm<sup>2</sup>
- VA stainless steels
- cast iron
- aluminum
- copper alloys



Variant VA	Variant VA	Variant VA	Variant VA	Variant VA	Dominant VA45	Dominant VA45	Dominant VA45	Dominant VA45	Dominant VA45	Dominant VA45
VAP HSSE-PM	TIN 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 HSSE-PM	KA HL HSSE-PM
M	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
ISO2/6H	ISO2/6H ISO3/6G 2B	ISO2/6H	ISO2/6H	ISO2/6H 2B	ISO2/6H	ISO2/6H	ISO2/6H ISO3/6G 7G 6H+0,1 2B	M / MF UNC / UNF / G	M / MF UNC / UNF / G	M
model										
chamfer										
thread types										
thread tolerances										

Application	Examples of materials	N/mm²	HB
<b>1 Steel materials</b>			
1.1 Magnetic soft steel	FeP01	> 100 < 450	10 - 15
1.2 Construction steel / case hardening steel	En40B	> 800 < 700	10 - 20
1.3 Carbon steel	080M46	> 400 < 950	10 - 20
1.4 Alloyed / heat-treatable steel	En19A	> 450 < 950	10 - 15
1.5 Alloyed steel	BD2	> 800 < 1250	> 235 < 370
1.6 Alloyed steel	En19A	> 1100 < 1400	> 325 < 410
<b>2 Stainless steel</b>			
2.1 Ferritic / martensitic steel	420S37	> 450 < 1200	4 - 6
2.2 Austenitic steel	320S18	> 400 < 950	3 - 8
2.3 High temperature steel	301S81	> 850 < 1550	> 250 < 455
<b>3 Cast iron</b>			
3.1 Grey cast iron	EN-GJL-200	> 150 < 1000	> 100 < 300
3.2 Cast iron with nodular graphite	Grade 420/12	> 350 < 1000	> 100 < 350
3.3 Malleable cast iron	EN-GJM-B-350-10	> 300 < 700	> 100 < 200
3.4 Cast iron with vermicular graphite	EN-GJV-300	> 700 < 1000	> 200 < 300
<b>4 Copper</b>			
4.1 Copper non-alloyed	Cu-ETP-2 C 101	> 200 < 400	> 60 < 120
4.3 Copper alloyed (long chipping)	CZ 108	> 150 < 700	> 45 < 200
4.4 Copper-alu-nickel alloyed (short chipping)	CN 102	> 150 < 700	> 45 < 200
<b>5 Aluminium / Magnesium</b>			
5.1 Alu wrought alloy Si ≤ 0,5%	1B	> 100 < 700	> 30 < 200
5.2 Alu alloyed Si ≤ 6%	LM22	> 150 < 700	> 45 < 200
5.3 Alu alloyed Si > 6%	LM9	> 150 < 900	> 45 < 285

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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