

# THREADING TOOLS FOR THE PRODUCTION OF NUTS



#### **NUT TAPS**

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#### Application

- for fully automatic tapping of nuts with through hole threads in a run-over tapping process
- for nut height up to max. 1.5×d

#### Your advantage

- high productivity due to process-reliable chip evacuation and low tool wear
- qualified technical consulting by BASS specialists

# **AMGB R**



Dimensio	ons
М	M3 – M12
MF	M4×0.5 – M12×1.5
UNC	UNC No8-32 - UNC7/16"-14
UNF	UNF No8-36 - UNF7/16"-20

## AMGB L

for soldering



Dimensio	ons
М	M8 – M36
MF	M8×1 – M36×1.5
UNC	UNC5/16"-18 - UNC1.1/4"-7
UNF	UNF5/16"-24 - UNF1.1/4"-12

# AMGB V

AMGB F

screw system (spring)

screw system (cartridge)



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Dimensio	ons
М	M10 – M36
MF	M12×1.5 – M36×1.5
UNC	UNC7/16"-14 - UNC1.1/4"-7
UNF	UNF7/16"-20 - UNF1.1/4"-12

Dimensio	ons
М	M12 – M36
MF	M12×1.5 – M36×1.5
UNC	UNC7/16"-14 - UNC1.1/4"-7
UNF	UNF7/16"-20 - UNF1.1/4"-12

#### Cartridge

for AMGB V

#### Application

The cartridge connects the tap nib with the bent shank. If the torque gets too high (tool wear) the cartridge breaks, disconnecting the assembly.

#### Your advantage

The cartridge saves shank and tap from breaking so that both are reusable.

Dimensio	ons
М	M10 – M36
MF	M12×1.5 – M36×1.5
UNC	UNC7/16"-14 - UNC1.1/4"-7
UNF	UNF7/16"-20 - UNF1.1/4"-12

# for welding

L.				

Model	
tool material	HSSE-PM
thread length	standard 24 thread turns, different th
thread tolerance	customizable
coating	TIN / TICN
nut material	cold and hot formed steels up to grad
shank connection	AMGB R for welding AMGB L for soldering AMGB V with screw system (cartridg AMGB F with screw system (spring)

# Shank

for AMGB V

#### Model

according to the machine type - or according to customer specifications

Dimensio	ons
М	M10 – M36
MF	M12×1.5 – M36×1.5
UNC	UNC7/16"-14 - UNC1.1/4"-7
UNF	UNF7/16"-20 - UNF1.1/4"-12



fferent thread lengths on request

up to grade 10

(cartridge)







#### **TAPS FOR UNION NUTS**

#### **CUTTING TAPS**

### **VARIO K RZ**

cutting tap with reamer

#### Application

- for fully automatic tapping of union nuts in a reversing tapping cycle
- chamfer length min. 1.5 thread turns

#### Your advantage

Customized high quality cutting taps convince through best perfomance.



Dimensi	ons	
MF	M8×1 – M36×2	
G	G1/4" – G1"	
UNF	on request	

#### Model

tool material	HSSE-PM
dimensions	customizable
thread tolerance	customizable
coating	TIN / HL
nut material	cold and hot formed steels up to grade 10

## **DURAMAX K RZ**

roll tap with reamer

#### Application

for union nuts with chamfer length min. 1 thread turns

#### Your advantage

Customized high quality roll taps convince through best perfomance.



# Dimensions M8×1 – M24×1.5 MF UNF on request

#### Model

tool material	HSSE-PM
dimensions	customizable
thread tolerance	customizable
coating	TIN / TICN / BT
nut material	cold formed steels

### **VARIANT H**

cutting tap with spiral point

#### Application

for tapping of nuts with through hole threads in a reversing tapping cycle

#### Your advantage

Constant quality and high availability in different thread tolerances offer planning reliability.

Dimensio	ns
М	M2 – M24
MF	M8×1 – M30×1.5
UNC	UNC1/4"-20 - UNC1"-8
UNF	UNF1/4"-28 – UNF1"-12

MF	M8×1 – M30×1.5		
UNC	UNC1/4"-20 - UNC	1"-8	
UNF	UNF1/4"-28 – UNF <sup>-</sup>	1"-12	
Model			
tool mate	rial	HSSE-PM	
chamfer f	orm	B / 3.5–5.5	
thread tolerance 6H /		6H / 6G / 7G / 6H+0.1 / on request	
coating TIN / T		TIN / TICN / HL	
dimensions DIN		DIN 371 / DIN 376	
nut material cold and hot formed steels up to grade 10			

#### **AVANT H25**

cutting tap with spiral flute 25°

#### Application

for tapping of nuts with blind hole threads in a reversing tapping process

#### Your advantage

- high process reliability due to optimal evacuation of chips
- high tool life

Dimensions			
M2 – M24			
M8×1 – M30×1.5			
UNC1/4"-20 - UNC1"-8			
UNF1/4"-28 - UNF1"-12			
G1/8" – G1"			

#### Model

tool material	HSSE-PM
chamfer form	E/1.5-2
thread tolerance	6HX / 6GX / on request
coating	HL
dimensions	DIN 371 / DIN 376
nut material	cold and hot formed steels up





to grade 10



#### **TECHNICAL INFORMATION – YOUR INQUIRY**

# **DURAMAX H**

roll tap

#### Application

for chipless threading of nuts with through or blind hole threads in a reversing tapping cycle

# Your advantage

- high tool life
- qualified technical consulting by BASS specialists



Dimensions			
Μ	M2 – M16		
MF	M8×1 – M24×1.5		
UNC	UNC1/4"-20 - UNC5/8"-11		
UNF	UNF1/4"-28 – UNF3/4"-16		

#### Model

tool material	HSSE-PM
chamfer form	C/2-3 / E/1.5-2
thread tolerance	6HX / 6GX / on request
coating	TIN / TICN / BT
internal coolant	axial (KA), radial (KR)
dimensions	DIN 371 / DIN 376
nut material	cold formed steels

# **Streicher Tapping Machines Partner of BASS**





# **RUN-OVER TAPPING PROCESS**

Thread	dimension	tolerance	cutting direction RH LH	nut height
Nut material	material	cold formed hot formed	resistance [N/mm <sup>2</sup> ]	hardness
Tool data	thread length [turns]		number of flutes	coating
	sketch			
	shank connection screw system (cartridge) screw system (spring)		for soldering for welding	
	further tool data (dimensions,)		gauge dimension go: gauge dimension no-go:	
Machine	manufacturer	machine type	nut type	processing horizontal vertical
	number of spindles	coolant lubrication	cutting speed $v_{e}$ [m/min]	rotation speed rpm [1/min]

# **REVERSING TAPPING PROCESS**

Thread	dimension	tolerance
Inread	bore depth [mm]	thread depth [mm]
Nut material	material	cold formed hot formed
	chamfer form	flute form / design
	l1 [mm]	12 [mm]
Tool data	14 [mm]	d2 [mm]
	a [mm]	d3 [mm]
	further tool data (dimensions,)	
	manufacturer	machine type
Machine	tool clamping	number of spindles
	cutting speed $v_{\rm c}[m/min]$	



cutting direction RH LH	bore hole through hole blind hole
bore hole diameter	process thread cutting thread roll forming
resistance [N/mm <sup>2</sup> ]	hardness
number of flutes	coating
g 	
II	- 12 - 4-
gauge dimension go: gauge dimension no-go:	
workpiece clamping	processing horizontal vertical
coolant lubrication	
rotation speed rpm [1/min]	





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