

**SCHUMACHER**  
PRECISION TOOLS SINCE 1918

CATALOGUE NO. 124 G - THREADING TECHNOLOGY

Die Digitale Produktion  
Bausteine der Umsetzung

KST. 2080 Qualitätskontrolle

Start

1.

2.



Edition  
**Threading Technology**  
Products | Applications | Services

Catalogue No. 124 G  
Threading Technology  
Products | Applications | Services



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product range design



geometry development



fully-automated measurement process for new developments

## Research & Development

Research and Development focuses on two crucial areas: tool know-how and machining technology by **Schumacher Precision Tools (SPT)** and systems for digital process control in small and medium-sized enterprises by **GAP (Gesellschaft für angewandte Prozesslenkung)**.

For the development of new machining technology, **Schumacher** utilizes the standardized product technology database of the module **ToolDesign**, which contains more than 20,000 tool variants. This technology can be used for both new designs and ongoing developments, drawing upon algorithms. CAD-variant construction will be deployed for the respective tool models.

**Schumacher** can rely on an established network of renowned institutions in research disciplines such as high-speed steel and carbide substrates, heat and surface treatment, or hard material coating.

The management and technology modules developed by **GAP** in cooperation with technical universities ensure a consistent digital networking within the company. Data base-oriented product design with the module **ToolDesign** combined with the digital control system of the module **ToolProduction** fulfill the objectives of the government's initiative 'Industry 4.0'. **ToolProduction** represents digital process structures in production, a know-how advantage that is applied for the internal process optimization of **Schumacher Precision Tools**. Moreover, the cross-departmental nature of **ToolProduction** allows partial or complete synchronization with partner companies in designated sections.

**SCHUMACHER**  
PRECISION TOOLS SINCE 1918

**RWTHAACHEN**  
UNIVERSITY

research cooperation with  
various technical universities

**BASIC STRUCTURE**



R&D  
by Schumacher

**MACHINE DATA**

**WORK**

**PRODUCTION PLAN**

**INFO I Evaluation  
Machine Performance**

**Data from Production Master Sheet**

**INFO I Evaluation Pro-  
duction Status of Order**

**Data from Production Master Sheet**

**INFO I Evaluation  
Staff Performance**

**Data from Production Master Sheet**



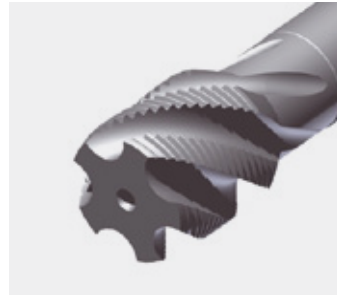
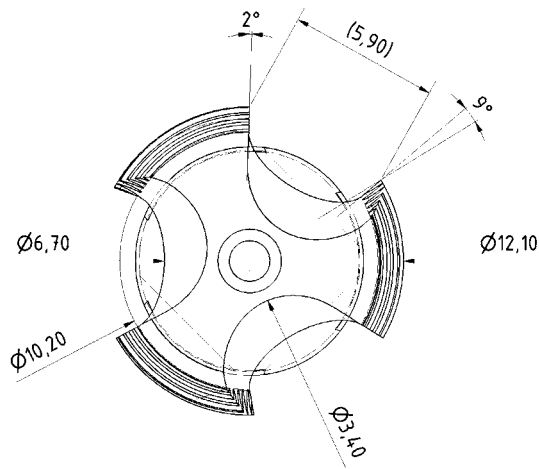
**ToolDesign**  
by Schumacher



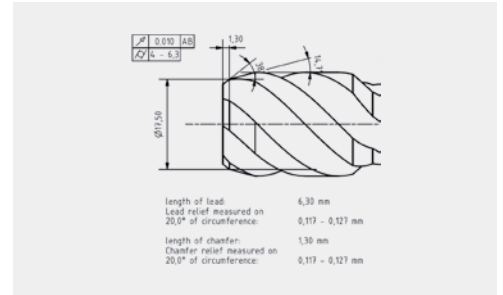
**ToolSimulation**  
by Schumacher

#### **ToolDesign – FEATURES:**

- › Pricing for Quotation Management
- › Parameterized 3D-volume models
- › Production drawings
- › Data generation and transfer for CNC-production machine tools
- › Providing know-how data for B2B and B2C-Partners



3D model precision tool



Drawing detail

CAD-construction using algorithms  
and methods of variant construction

## Design & Simulation

### The ToolDesign Principle

#### The objective:

The GAP-module **ToolDesign** supports and automatizes the development, construction, production, and administration of rotation-symmetric precision tools.

**ToolDesign** serves as the core of Schumacher's process control in the **ToolProduction** module – as overall technology hub for products and production parameters. The system is founded on the parameter-based item structure with the construction features of all available tool variants. This standardized technology structure allows the automatic generation of constructive, production-technical, and calculative framework conditions for manufacturing rotation-symmetric precision tools.

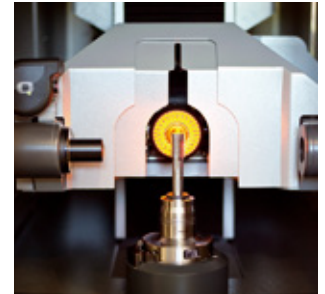




measurement process



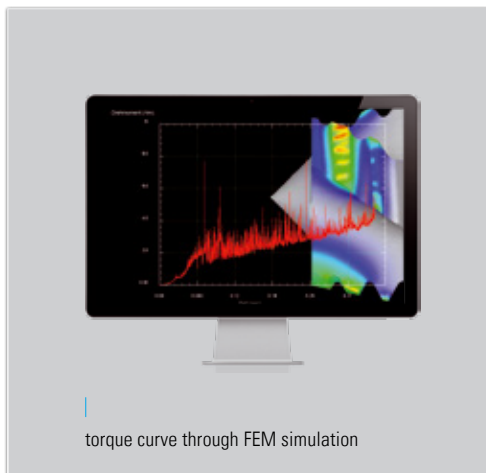
profile inspection



digital measurement process

Simulation-based test runs before start of production increase the quality of new tool variants development

## Design & Simulation



torque curve through FEM simulation

### The ToolSimulation Principle

#### The Objective:

The GAP-module **Tool-Simulation** uses the **FEM method** to simulate the cutting performance of precision tools. In this context, 3D tool models from **ToolDesign** can be tested virtually in defined work pieces with their material properties before tool production begins.

The simulation process was realized with high computer processing power through extensive modification of a standard simulation software. At the start, an interactive work piece description for the process is provided to the user of **ToolSimulation**. This digital work piece receives information about all material properties that are necessary for the simulation process from an edited system data base. The geometry variations and material properties of the precision tools are available through the 3D volume models from **ToolDesign**.



**ToolDesign**  
by Schumacher



**ToolSimulation**  
by Schumacher

#### **ToolSimulation – FEATURES:**

- › Digital preparation of 3D volume models for simulation process
- › Data transfer of 3D volume tool models from ToolDesign
- › Development of 3D volume work piece models
- › Material classification of the work piece and tool models
- › Simulation – testing new tool variants
- › Interpretation of results





**ToolProduction**  
by Schumacher



**DigitalProcessPlanning**  
by Schumacher



# Production & Digital Process Control

## The ToolProduction Principle

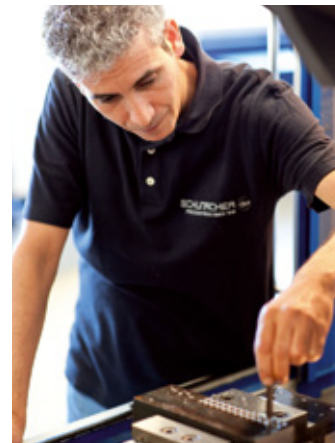
**The Objective: Introduction of Digital Process Control according to 'Industry 4.0'**

The required framework conditions for a successful introduction of digital and decentralized process control at SPT were provided through various modules of computer-aided information processing in all departments. By the early 1990s, SPT had completed connecting all departments related to production with a cross-departmental information system. This was part of the introduction of a CIM strategy (Computer Integrated Manufacturing).

Smart services for customers through data generated during production



Robot-loaded grinding center



Examination of test results

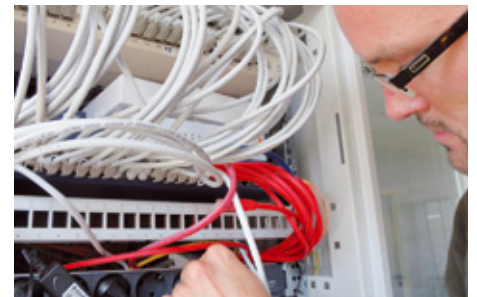


Performance tests

## Location-independent digital description of entire processing

# GAP

Gesellschaft für angewandte Prozesslenkung



**As of Today, use of IT comprises the following technical-organizational sections:**

- › stock management
- › sales
- › development and design
- › production scheduling
- › production planning and control
- › manufacturing
- › logistics and quality control
- › finance

## Production & Digital Process Control

The current GAP-initiative **ToolProduction** with many features from 'Industry 4.0' considers the change in the industry's framework conditions and leads to the digital transformation of all processes. This is related to the introduction of **Smart Services**, a platform making any relevant process and technology data generated during production available in real-time.



**ToolProduction**  
by Schumacher



**DigitalProcessPlanning**  
by Schumacher

# GAP

Gesellschaft für angewandte Prozesslenkung

Digital Process Planning for SMEs | The Modular Principle

Navigator



## 1.12 Product Overview

suitability code	■ well-suited	□ suited
core hole types	1 blind holes	2 through holes
	3 blind and through holes	4 blind holes > 2 xd
coolant	O cutting oil	E emulsion
	P paraffin	A air

Reference cutting speeds  $V_c$  page 8.5

Type of Thread & Catalogue 124 page	M
	MF
	G
	UNC/UNF
	NPT
	PG
	TR

Material Groups DIN ISO 513	Description	Examples	Lubricating Coolant
<b>P</b>	P1 General construction steels ( $\leq 800N$ )	St37-2, 16 MnCr5, C60	E, O
	P2 Cementation, Heat-treatable, Nitriding steels ( $\leq 1200N$ )	42CrMo4, 30CrNiMo8	E, O
	P3 High-alloyed steels, Heat-resistant steels ( $\leq 1400N$ )	X38CrMoV5-3, Toolox44	O
<b>M</b>	M1 Stainless steels austenitic	X 5 Cr Ni 18 10, X 6 Ni Mo Ti 17 12 2, X 10 Cr Ni S 18 9	O
	M1 Stainless steels ferritic, martensitic	X 6 Cr 13, X 4 Cr Mo S 18, X 30 Cr 13, X 12 Cr Mo S 17	O
	M2 Duplex steels	X2CrNiMoN22-5-3	O, P
<b>K</b>	K1 Grey cast iron	EN-GJL-200 (GG 20), EN-GJL-300 (GG 30)	E, O
	K2 Nodular cast iron	EN-GJS-400-15 (GGG 40), EN-GJS-600-3 (GGG 60)	E, O
	K3 Malleable cast iron	EN-GJMB-450-06 (GTS 45), EN-GJMW-350-04 (GTW 35)	E, O
<b>N</b>	N1 Aluminium wrought alloys	Al Mg Si, Al Mn 1	E, O
	N1 Aluminium cast alloys < 10 % Si ( $< 10\% Si$ )	G-Al Mg 3, G-Al Si 9 Cu 3	E, O
	N2 Aluminium cast alloys $\geq 10\% Si$ ( $\geq 10\% Si$ )	G-Al Si 10 Mg, G-AISI 12	E, O
	N3 Copper alloys	E-Cu, SE-Cu	E, O
	N3 Special copper alloys (AMPCO)	Ampco 18, Ampco 20, Ampco 25	dry
	N4 Brass long chipping	Cu Zn 30	E, O
	N4 Brass short chipping	Cu Zn 39 Pb 2 (MS 58), Cu Zn 40 Al 2	E, O
	N5 Bronze long chipping	G Cu Sn 10 Zn (Rg 10)	E, O
	N5 Bronze short chipping	G Cu Pb 5 Sn (RG 5), Cu Sn 8 (Rg 7)	E, O
	N6 Thermoplastics	Hostalen/Makrolon/PS/PVC	E, O
	N7 Duroplastics/Fibre reinforced	Bakelit/Pertinax/Ferrozell/Resopal	E, O
N8 Magnesium alloys	Az 91	O, A	
N9 Graphite	C 8000	A	
<b>S</b>	S1 Pure titanium/titanium alloys	Ti 99, 5, Ti 99, 4, Ti Al 5 Sn 2, Ti Al 6 V 4	E, O, P
	S2 Pure nickel/nickel alloys	Ni 99,6, Inconel 718	O, P
<b>H</b>	H1 Hard materials up to 50 HRC	Hardox 450	O, P
	H2 Hard materials up to 60 HRC	Hardox 550	O, P

Core hole types



2.2	2.5	2.6	2.6	2.6	2.8	2.10	2.11	2.11	2.13	2.13	2.13	2.15	2.15	2.15
3.1		3.5							3.6				3.6	
4.1		4.2							4.3				4.3	
5.1		5.3							5.5				5.5	
5.18		5.20							5.22				5.22	
6.4														



ST HSS-E	MS HSS-E	GG HSS-E	GG HSS-E	GG HSS-E	Hard HSS-E/PM	MG HSS-E/PM	AL HSS-E/PM	AL HSS-E/PM	ST HSS-E	ST 6G HSS-E	ST 7G HSS-E	ST LH HSS-E	ST HSS-E	ST 2xL1 HSS-E
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3	3	3	3	3	3	1	2	2	2	2	2	2	2	2
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2.38	2.38	2.40	2.41	2.43	2.45	2.45	2.45	2.47	2.47	2.47	2.48	2.48	2.52	2.54
					3.12					3.12				
					4.6					4.6				
		5.9	5.10		5.12					5.12				
			5.26		5.27					5.27				




VG HSS-E	VG HSS-E	VG HSS-E	NI HSS-E/PM	TI HSS-E/PM	ST HSS-E	ST 6G HSS-E	ST 7G HSS-E	ST LH HSS-E	ST HSS-E	ST 2xL1 HSS-E	ST, CNC HSS-E/PM	ST, CNC HSS-E/PM	ST HSS-E	Uni HSS-E
□	□	□	■		■	■	■	■	■	■	■	■	■	■
■	■	■	■		□	□	□	□	□	□	□	□	□	■
■	■	■	■	■							■	■		■
											■	■		■
		■									■	■		■
			■	■	■	■	■	■	■	■	■	■	■	■
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			■	■										■
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					□	□	□	□	□	□	□	□	□	■
				■										
			■											
1	1	1	1	1	1	1	1	1	1	1	4	4	4	1

2.54	2.56	2.58	2.58	2.59	2.62	2.62	2.64	2.64	2.66	2.67	2.67	2.68	2.72	2.72
		3.13	3.13											
		4.7	4.7											
		5.14	5.14										5.16	5.16
		5.29	5.29											





Uni HSS-E	VG HSS-E/PM	INOX HSS-E	INOX HSS-E	INOX HSS-E/PM	AL HSS-E/PM	AL HSS-E/PM	VG HSS-E	VG HSS-E	Uni HSS-E/PM	AL HSS-E/PM	AL HSS-E/PM	ST, CNC HSS-E/PM	ST HSS-E	ST HSS-E
■	■			■			□	□	■			■	■	■
■	■	■	■	■			■	■	■			■	■	■
■	■	■	■	■					■			■	□	□
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									■				■	■
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■					■	■								
		□	□	□										
1	4	1	1	4	4	4	1	1	3	3	3	3	3	3

2.72					2.80	2.81	2.81	2.82	2.83	2.83
							3.17			
	6.1	6.2								
			6.6	6.6						



ST 6GX HSS-E	ST HSS-E	VG HSS-E/PM	ST HSS-E	ST LH HSS-E	Hard VHM	Hard VHM	Hard VHM	Uni VHM	ST VHM	ST VHM
■	■	□	■	■				■	■	■
■	■	■	■	■				■	■	■
		■						■		
□								■	■	■
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3	3	1	2	2	2	3	3	1	3	3



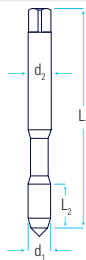
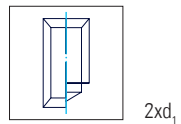
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2.80	ISO Metric Coarse Thread DIN 13	M / <b>VHM</b> 
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3.17	ISO Metric Fine Thread DIN 13	MF / <b>VHM</b> 
4.1	Whitworth Pipe Thread DIN ISO 228	G
5.1	Unified Coarse Thread ANSI B1.1	UNC
5.18	Unified Fine Thread ANSI B1.1	UNF
6.1	American Tapered Pipe Thread ANSI B 1.20.1	NPT
6.4	Steel Conduit Thread DIN 40430	PG
6.6	ISO Metric Trapezoidal Thread DIN 103 1977	TR
7.1	Tap Holder	
7.2	ER Collet Tap Holder for machines with synchronous spindle	
7.5	Quick Change Tap Holder for machines with synchronous spindle	
7.8	Quick Change Tap Holder Conventional	

Machine Taps

DIN 371 HSS-E  
straight flutes  
for general construction steel

Group 3000  
for blind and through holes

STEEL



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5

30000

C / 2-3 x P

bright

ISO2 (6H) | ISO1 (4H)

P1 general construction steel

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨													
M 1	0.25	40	5.5	2.5	2.1	0.75		■											
M 1.2	0.25	40	5.5	2.5	2.1	0.95		■											
M 1.4	0.3	40	7	2.5	2.1	1.1		■											
M 1.6	0.35	40	8	2.5	2.1	1.25		■											
M 1.7	0.35	40	8	2.5	2.1	1.35		■											
M 1.8	0.35	40	8	2.5	2.1	1.45		■											
M 2	0.4	45	8	2.8	2.1	1.6		■											
M 2.2	0.45	45	8	2.8	2.1	1.75		■											
M 2.3	0.4	45	8	2.8	2.1	1.9		■											
M 2.5	0.45	50	9	2.8	2.1	2.05		■											
M 2.6	0.45	50	9	2.8	2.1	2.15		■											

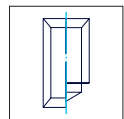
Continuation »

Machine Taps

DIN 371 HSS-E  
straight flutes  
for general construction steel

Group 3000  
for blind and through holes

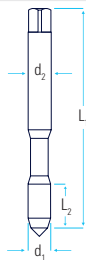
STEEL



2x d<sub>1</sub>



- Art.-No.
- Technology i Page 8.1
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- Tolerance i Page 8.4
- Cutting Data i Page 8.5



30000
C / 2-3 x P
bright
ISO2 (6H)
P1 general construction steel

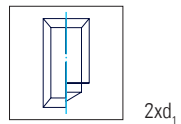
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 3	0.5	56	11	3.5	2.7	2.5	■			
M 3.5	0.6	56	12	4	3	2.9	■			
M 4	0.7	63	13	4.5	3.4	3.3	■			
M 5	0.8	70	15	6	4.9	4.2	■			
M 6	1	80	17	6	4.9	5.0	■			
M 7	1	80	17	7	5.5	6.0	■			
M 8	1.25	90	20	8	6.2	6.8	■			
M 9	1.25	90	20	9	7	7.8	■			
M 10	1.5	100	22	10	8	8.5	■			
M 12	1.75	110	24	12	9	10.2	■			



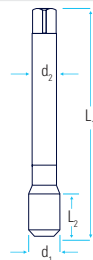
Machine Taps

DIN 376 HSS-E  
straight flutes  
for general construction steel

Group 4000  
for blind and through holes



- Art.-No.
- Technology i Page 8.1
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40000
C / 2-3 x P
bright
ISO2 (6H)
P1 general construction steel

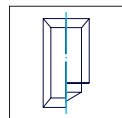
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 6	1	80	17	4.5	3.4	5.0	■			
M 7	1	80	17	5.5	4.3	6.0	■			
M 8	1.25	90	20	6	4.9	6.8	■			
M 9	1.25	90	20	7	5.5	7.8	■			
M 10	1.5	100	22	7	5.5	8.5	■			
M 12	1.75	110	24	9	7	10.2	■			
M 14	2	110	26	11	9	12.0	■			
M 16	2	110	27	12	9	14.0	■			
M 18	2.5	125	30	14	11	15.5	■			
M 20	2.5	140	32	16	12	17.5	■			
M 22	2.5	140	32	18	14.5	19.5	■			
M 24	3	160	34	18	14.5	21.0	■			
M 27	3	160	36	20	16	24.0	■			
M 30	3.5	180	40	22	18	26.5	■			
M 33	3.5	180	40	25	20	29.5	■			
M 36	4	200	50	28	22	32.0	■			

Machine Taps

DIN 371 HSS-E

straight flutes  
for copper alloys

Group 3020  
for blind and through holes



2xd<sub>1</sub>

Cutting Data



Art.-No.

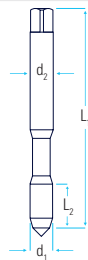
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



30200

E / 1.5-2 x P

bright

ISO2 (6H)

N3 copper alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 1.7	0.35	40	8	2.5	2.1	1.35												
M 1.8	0.35	40	8	2.5	2.1	1.45												
M 2	0.4	45	8	2.8	2.1	1.6												
M 2.2	0.45	45	8	2.8	2.1	1.75												
M 2.3	0.4	45	8	2.8	2.1	1.9												
M 2.5	0.45	50	9	2.8	2.1	2.05												
M 2.6	0.45	50	9	2.8	2.1	2.15												
M 3	0.5	56	11	3.5	2.7	2.5	■											
M 3.5	0.6	56	12	4	3	2.9												
M 4	0.7	63	13	4.5	3.4	3.3	■											
M 5	0.8	70	15	6	4.9	4.2	■											
M 6	1	80	17	6	4.9	5.0	■											
M 7	1	80	17	7	5.5	6.0												
M 8	1.25	90	20	8	6.2	6.8	■											
M 9	1.25	90	20	9	7	7.8												
M 10	1.5	100	22	10	8	8.5	■											

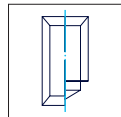
Machine Taps White Ring

DIN 371 HSS-E

straight flutes  
for cast iron

Group 3030  
for blind and through holes

CAST  
IRON



2x d<sub>1</sub>

Cutting Data



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher

Art.-No.

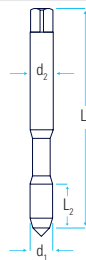
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



30300/01

High Volume   
White Ring

nitrided

6HX

30300/25

High Volume   
White Ring  
C / 2-3 x P

TiN

6HX

30300/2540

internal coolant  
White Ring

TiN

6HX

K1 grey cast iron N7 duroplastics

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⌘				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■		■	
M 5	0.8	70	15	6	4.9	4.2	■		■	
M 6	1	80	17	6	4.9	5.0	■		■	■
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■		■	■
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■		■	■

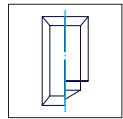
Machine Taps White Ring

DIN 376 HSS-E

straight flutes  
for cast iron

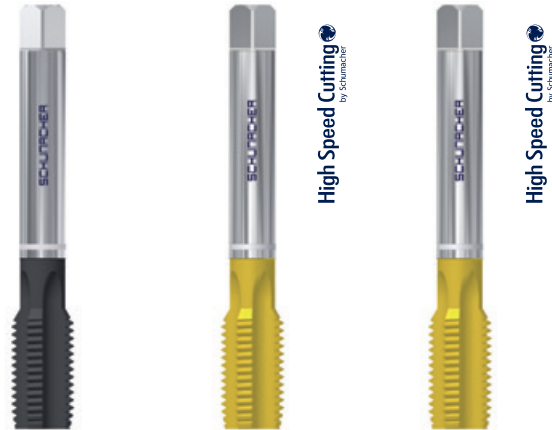
Group 4030  
for blind and through holes

CAST  
IRON

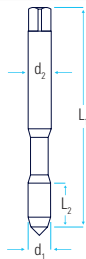


2x d<sub>1</sub>

Cutting Data



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



40300/01 <b>High Volume</b> White Ring	40300/25 <b>High Volume</b> White Ring C / 2-3 x P	40300/2540 internal coolant White Ring
nitrided	TiN	TiN
6HX	6HX	6HX
K1 grey cast iron N7 duroplastics		

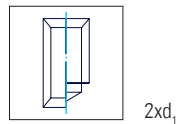
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⌘				
M 6	1	80	17	4.5	3.4	5.0				
M 7	1	80	17	5.5	4.3	6.0				
M 8	1.25	90	20	6	4.9	6.8				
M 9	1.25	90	20	7	5.5	7.8				
M 10	1.5	100	22	7	5.5	8.5				
M 12	1.75	110	24	9	7	10.2	■		■	■
M 14	2	110	26	11	9	12.0	■			
M 16	2	110	27	12	9	14.0	■		■	■
M 18	2.5	125	30	14	11	15.5	■			
M 20	2.5	140	32	16	12	17.5	■		■	■
M 22	2.5	140	32	18	14.5	19.5	■			
M 24	3	160	34	18	14.5	21.0	■			
M 27	3	160	36	20	16	24.0	■			
M 30	3.5	180	40	22	18	26.5	■			
M 33	3.5	180	40	25	20	29.5				
M 36	4	200	50	28	22	32.0				

Machine Taps Red Ring

DIN 371 HSS-E PM

straight flutes  
for hard materials

Group 3080  
for blind and through holes



Art.-No.

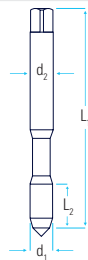
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



30800/54

**PM-Line**  
**Hard Steel**

A / 6-8 x P

TiAlN

ISO2 (6H)

H1 hard materials

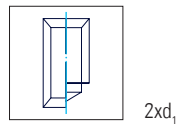
$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$	$\text{flute}$												
M 1.7	0.35	40	8	2.5	2.1	1.35												
M 1.8	0.35	40	8	2.5	2.1	1.45												
M 2	0.4	45	8	2.8	2.1	1.6												
M 2.2	0.45	45	8	2.8	2.1	1.75												
M 2.3	0.4	45	8	2.8	2.1	1.9												
M 2.5	0.45	50	9	2.8	2.1	2.05												
M 2.6	0.45	50	9	2.8	2.1	2.15												
M 3	0.5	56	11	3.5	2.7	2.5												
M 3.5	0.6	56	12	4	3	2.9												
M 4	0.7	63	13	4.5	3.4	3.3												
M 5	0.8	70	15	6	4.9	4.2												
M 6	1	80	17	6	4.9	5.0												
M 7	1	80	17	7	5.5	6.0												
M 8	1.25	90	20	8	6.2	6.8												
M 9	1.25	90	20	9	7	7.8												
M 10	1.5	100	22	10	8	8.5												

Machine Taps Red Ring

DIN 376 HSS-E PM

straight flutes  
for hard materials

Group 4080  
for blind and through holes



Art.-No.

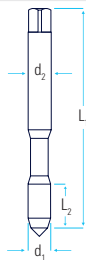
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



40800/54

**PM-Line**  
**Hard Steel**

A / 6-8 x P

TiAlN

ISO2 (6H)

H1 hard materials

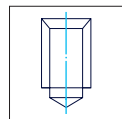
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨															
M 6	1	80	17	4.5	3.4	5.0															
M 7	1	80	17	5.5	4.3	6.0															
M 8	1.25	90	20	6	4.9	6.8															
M 9	1.25	90	20	7	5.5	7.8															
M 10	1.5	100	22	7	5.5	8.5															
M 12	1.75	110	24	9	7	10.2	■														
M 14	2	110	26	11	9	12.0															
M 16	2	110	27	12	9	14.0	■														
M 18	2.5	125	30	14	11	15.5															
M 20	2.5	140	32	16	12	17.5	■														
M 22	2.5	140	32	18	14.5	19.5															
M 24	3	160	34	18	14.5	21.0															
M 27	3	160	36	20	16	24.0															
M 30	3.5	180	40	22	18	26.5															
M 33	3.5	180	40	25	20	29.5															
M 36	4	200	50	28	22	32.0															

Machine Taps

DIN 371 HSS-E PM

straight flutes  
for magnesium alloys

Group 3090  
for blind holes



2x d<sub>1</sub>

Cutting Data



Art.-No.

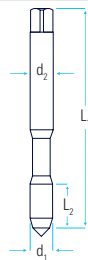
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



30900/4060

**PM-Line**

internal coolant

C / 2-3 x P

SG 4

ISO2 (6H)

N8 magnesium alloys

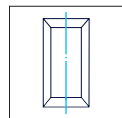
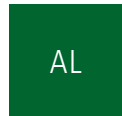
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 1.7	0.35	40	8	2.5	2.1	1.35
M 1.8	0.35	40	8	2.5	2.1	1.45
M 2	0.4	45	8	2.8	2.1	1.6
M 2.2	0.45	45	8	2.8	2.1	1.75
M 2.3	0.4	45	8	2.8	2.1	1.9
M 2.5	0.45	50	9	2.8	2.1	2.05
M 2.6	0.45	50	9	2.8	2.1	2.15
M 3	0.5	56	11	3.5	2.7	2.5
M 3.5	0.6	56	12	4	3	2.9
M 4	0.7	63	13	4.5	3.4	3.3
M 5	0.8	70	15	6	4.9	4.2
M 6	1	80	17	6	4.9	5.0
M 7	1	80	17	7	5.5	6.0
M 8	1.25	90	20	8	6.2	6.8
M 9	1.25	90	20	9	7	7.8
M 10	1.5	100	22	10	8	8.5

### Machine Taps - MISTRAL

#### DIN 371 HSS-E PM

spiral point  
for aluminium and bronze alloys

Group 3100  
for through holes



2xd<sub>1</sub>

#### Art.-No.

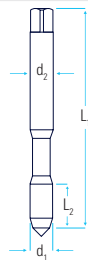
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher

Cutting Data



#### DLC

Diamond like Carbon

Innovative surface coating technologies with high hardness and low frictional coefficient

31000/02	31000/24
PM-Line	PM-Line
B / 3.5-5 x P	
CrN	DLC
ISO2 (6H)	ISO2 (6H)
N1 aluminium alloys	N6 thermoplastics

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■		■	
M 5	0.8	70	15	6	4.9	4.2	■		■	
M 6	1	80	17	6	4.9	5.0	■		■	
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■		■	
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■		■	

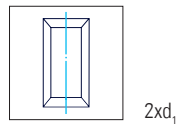
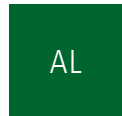


Machine Taps - MISTRAL

DIN 376 HSS-E PM

spiral point  
for aluminium and bronze alloys

Group 4100  
for through holes



Cutting Data



**DLC**  
Diamond like Carbon

Innovative surface coating technologies with high hardness and low frictional coefficient



Art.-No.

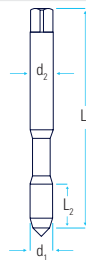
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



41000/02

**PM-Line**

41000/24

**PM-Line**

B / 3.5-5 x P

CrN

DLC

ISO2 (6H)

ISO2 (6H)

N1 aluminium alloys N6 thermoplastics

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 6	1	80	17	4.5	3.4	5.0												
M 7	1	80	17	5.5	4.3	6.0												
M 8	1.25	90	20	6	4.9	6.8												
M 9	1.25	90	20	7	5.5	7.8												
M 10	1.5	100	22	7	5.5	8.5												
M 12	1.75	110	24	9	7	10.2	■			■								
M 14	2	110	26	11	9	12.0												
M 16	2	110	27	12	9	14.0	■			■								
M 18	2.5	125	30	14	11	15.5												
M 20	2.5	140	32	16	12	17.5												
M 22	2.5	140	32	18	14.5	19.5												
M 24	3	160	34	18	14.5	21.0												
M 27	3	160	36	20	16	24.0												
M 30	3.5	180	40	22	18	26.5												
M 33	3.5	180	40	25	20	29.5												
M 36	4	200	50	28	22	32.0												

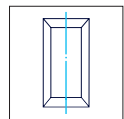
Machine Taps

DIN 371 HSS-E

spiral point  
for general construction steel

Group 3110  
for through holes

STEEL



2x d<sub>1</sub>

Art.-No.

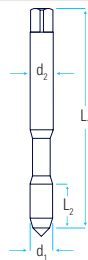
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



Cutting Data



31100	31100 B	31100 E
<b>High Volume</b>		
	B / 3.5-5 x P	
bright	bright	bright
ISO2 (6H)   ISO1 (4H)	ISO3 (6G)	7G
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1	0.25	40	5.5	2.5	2.1	0.75	■			
M 1.2	0.25	40	5.5	2.5	2.1	0.95	■			
M 1.4	0.3	40	7	2.5	2.1	1.1	■			
M 1.6	0.35	40	8	2.5	2.1	1.25	■			
M 1.7	0.35	40	8	2.5	2.1	1.35	■			
M 1.8	0.35	40	8	2.5	2.1	1.45	■			
M 2	0.4	45	8	2.8	2.1	1.6	■		■	
M 2.2	0.45	45	8	2.8	2.1	1.75	■			
M 2.3	0.4	45	8	2.8	2.1	1.9	■			
M 2.5	0.45	50	9	2.8	2.1	2.05	■		■	
M 2.6	0.45	50	9	2.8	2.1	2.15	■			

Continuation »

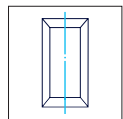
Machine Taps

DIN 371 HSS-E

spiral point  
for general construction steel

Group 3110  
for through holes

STEEL



2xd<sub>1</sub>

Cutting Data



Art.-No.

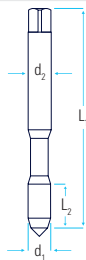
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



31100  
High Volume

31100 B

31100 E

B / 3.5-5 x P

bright

bright

bright

ISO2 (6H)

ISO3 (6G)

7G

P1 general construction steel K2+K3 spheroidal and malleable cast iron

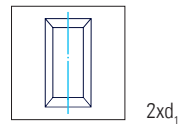
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 3	0.5	56	11	3.5	2.7	2.5	■		■	■
M 3.5	0.6	56	12	4	3	2.9	■			
M 4	0.7	63	13	4.5	3.4	3.3	■		■	■
M 5	0.8	70	15	6	4.9	4.2	■		■	■
M 6	1	80	17	6	4.9	5.0	■		■	■
M 7	1	80	17	7	5.5	6.0	■			
M 8	1.25	90	20	8	6.2	6.8	■		■	■
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■		■	■
M 12	1.75	110	24	12	9	10.2				

Machine Taps

DIN 371 HSS-E

spiral point  
for general construction steel

Group 3110  
for through holes



Cutting Data



Art.-No.

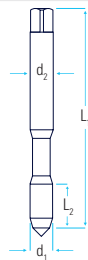
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



31105	31100/25	31100/42
LH	<b>High Volume</b>	2 x L1
bright	B / 3.5-5 x P	bright
ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5	■		■	■
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■		■	■
M 5	0.8	70	15	6	4.9	4.2	■		■	■
M 6	1	80	17	6	4.9	5.0	■		■	■
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■		■	■
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■		■	■

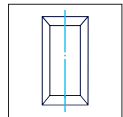
Machine Taps - NUMERIC

DIN 371 HSS-E PM

spiral point  
for steel, heat treatable steel and chemical resistant steel

Group 3113  
for through holes

STEEL



2xd<sub>1</sub>



High Speed Cutting  
by Schumacher

Cutting Data



**NUMERIC**  
Supporting Digital Production

For use on CNC machines  
with synchronized machining

Art.-No.

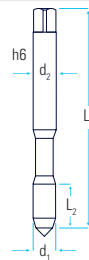
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



31130/48

PM-Line

B / 3.5-5 x P

TiCN

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨														
M 3	0.5	56	5	3.5	2.7	2.5														
M 4	0.7	63	6	4.5	3.4	3.3														
M 5	0.8	70	7	6	4.9	4.2														
M 6	1	80	8	6	4.9	5.0														
M 7	1	80	8	7	5.5	6.0														
M 8	1.25	90	10	8	6.2	6.8														
M 9	1.25	90	10	9	7	7.8														
M 10	1.5	100	12	10	8	8.5														
M 12	1.75	110	14	12	9	10.2														

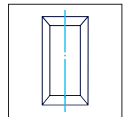
Machine Taps

DIN 376 HSS-E

spiral point  
for general construction steel

Group 4110  
for through holes

STEEL



2xd<sub>1</sub>

Cutting Data



Art.-No.

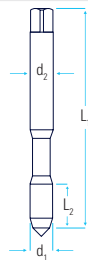
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



41100  
**High Volume**

41100 B

41105

LH

B / 3.5-5 x P

bright

bright

bright

ISO2 (6H)

ISO3 (6G)

ISO2 (6H)

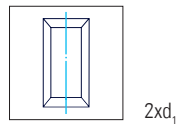
P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	🌀				
M 6	1	80	17	4.5	3.4	5.0	■			
M 7	1	80	17	5.5	4.3	6.0				
M 8	1.25	90	20	6	4.9	6.8	■			
M 9	1.25	90	20	7	5.5	7.8				
M 10	1.5	100	22	7	5.5	8.5	■			
M 12	1.75	110	24	9	7	10.2	■			
M 14	2	110	26	11	9	12.0	■			
M 16	2	110	27	12	9	14.0	■	■		■
M 18	2.5	125	30	14	11	15.5	■	■		
M 20	2.5	140	32	16	12	17.5	■	■		■
M 22	2.5	140	32	18	14.5	19.5	■			
M 24	3	160	34	18	14.5	21.0	■	■		■
M 27	3	160	36	20	16	24.0	■			
M 30	3.5	180	40	22	18	26.5	■	■		
M 33	3.5	180	40	25	20	29.5	■			
M 36	4	200	50	28	22	32.0	■			

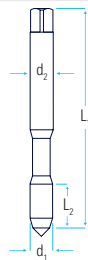
Machine Taps

DIN 376 HSS-E  
 spiral point  
 for general construction steel

Group 4110  
 for through holes



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



41100/25	41100/42
<b>High Volume</b>	
	2 x L1
	B / 3.5-5 x P
TiN	bright
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨					
M 6	1	80	17	4.5	3.4	5.0					
M 7	1	80	17	5.5	4.3	6.0					
M 8	1.25	90	20	6	4.9	6.8					
M 9	1.25	90	20	7	5.5	7.8					
M 10	1.5	100	22	7	5.5	8.5					
M 12	1.75	110	24	9	7	10.2	■		■		
M 14	2	110	26	11	9	12.0	■		■		
M 16	2	110	27	12	9	14.0	■		■		
M 18	2.5	125	30	14	11	15.5					
M 20	2.5	140	32	16	12	17.5	■		■		
M 22	2.5	140	32	18	14.5	19.5					
M 24	3	160	34	18	14.5	21.0	■				
M 27	3	160	36	20	16	24.0					
M 30	3.5	180	40	22	18	26.5	■				
M 33	3.5	180	40	25	20	29.5					
M 36	4	200	50	28	22	32.0					

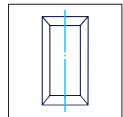
Machine Taps - NUMERIC

DIN 376 HSS-E PM

spiral point  
for steel, heat treatable steel and chemical resistant steel

Group 4113  
for through holes

STEEL



2xd<sub>1</sub>



Cutting Data



**NUMERIC**  
Supporting Digital Production

For use on CNC machines  
with synchronized machining

Art.-No.

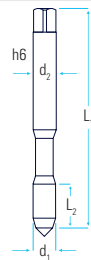
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



41130/48

**PM-Line**

B / 3.5-5 x P

TiCN

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

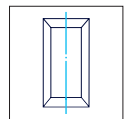
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 6	1	80	10	4.5	3.4	5.0
M 7	1	80	10	5.5	4.3	6.0
M 8	1.25	90	14	6	4.9	6.8
M 9	1.25	90	14	7	5.5	7.8
M 10	1.5	100	16	7	5.5	8.5
M 12	1.75	110	18	9	7	10.2
M 14	2	110	20	11	9	12.0
M 16	2	110	20	12	9	14.0
M 18	2.5	125	25	14	11	15.5
M 20	2.5	140	25	16	12	17.5
M 22	2.5	140	25	18	14.5	19.5
M 24	3	160	30	18	14.5	21.0
M 27	3	160	30	20	16	24.0
M 30	3.5	180	35	22	18	26.5
M 33	3.5	180	35	25	20	29.5
M 36	4	200	40	28	22	32.0



Machine Taps Blue Ring

DIN 371 HSS-E  
 spiral point  
 for chemical resistant steel

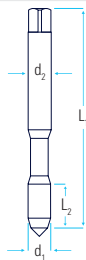
Group 3120  
 for through holes



2xd<sub>1</sub>



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



31200/26	31200/25
<b>High Volume</b>	<b>High Volume</b>
Blue Ring	Blue Ring
B / 3.5-5 x P	
VAP	TiN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	M1 chemical resistant steel S1 titanium alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6	■			
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05	■			
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■		■	
M 5	0.8	70	15	6	4.9	4.2	■		■	
M 6	1	80	17	6	4.9	5.0	■		■	
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■		■	
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■		■	

Machine Taps Blue Ring - POLAR

DIN 371 HSS-E PM

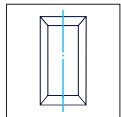
spiral point  
for chemical resistant steel

Group 3121  
for through holes

Cutting Data



INOX  
Stainless



2x d<sub>1</sub>



Art.-No.

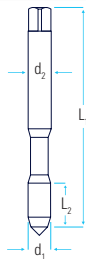
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



31210/48

**PM-Line**

Blue Ring

B / 3.5-5 x P

TiCN

6HX

P2 high strength steel M1+M2 chemical resistant steel S1 titanium alloys

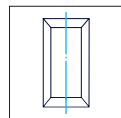
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5	■			
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■			
M 5	0.8	70	15	6	4.9	4.2	■			
M 6	1	80	17	6	4.9	5.0	■			
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■			
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■			

Machine Taps Blue Ring

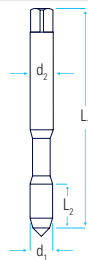
DIN 376 HSS-E

spiral point  
for chemical resistant steel

Group 4120  
for through holes



2xd<sub>1</sub>



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

41200/26	41200/25
Blue Ring	Blue Ring
B / 3.5-5 x P	
VAP	TiN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	M1 chemical resistant steel S1 titanium alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨											
M 6	1	80	17	4.5	3.4	5.0											
M 7	1	80	17	5.5	4.3	6.0											
M 8	1.25	90	20	6	4.9	6.8											
M 9	1.25	90	20	7	5.5	7.8											
M 10	1.5	100	22	7	5.5	8.5											
M 12	1.75	110	24	9	7	10.2	■			■							
M 14	2	110	26	11	9	12.0	■			■							
M 16	2	110	27	12	9	14.0	■			■							
M 18	2.5	125	30	14	11	15.5	■										
M 20	2.5	140	32	16	12	17.5	■			■							
M 22	2.5	140	32	18	14.5	19.5	■										
M 24	3	160	34	18	14.5	21.0	■			■							
M 27	3	160	36	20	16	24.0	■										
M 30	3.5	180	40	22	18	26.5	■			■							
M 33	3.5	180	40	25	20	29.5											
M 36	4	200	50	28	22	32.0											

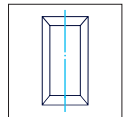
Machine Taps Blue Ring - POLAR

DIN 376 HSS-E PM

spiral point  
for chemical resistant steel

Group 4121  
for through holes

INOX  
Stainless



2x d<sub>1</sub>



Cutting Data



Art.-No.

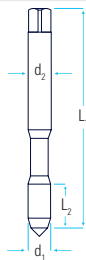
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



41210/48

**PM-Line**

Blue Ring

B / 3.5-5 x P

TiCN

6HX

P2 high strength steel M1+M2 chemical resistant steel S1 titanium alloys

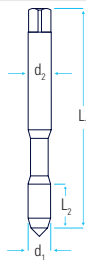
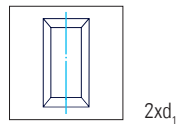
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 6	1	80	17	4.5	3.4	5.0												
M 7	1	80	17	5.5	4.3	6.0												
M 8	1.25	90	20	6	4.9	6.8												
M 9	1.25	90	20	7	5.5	7.8												
M 10	1.5	100	22	7	5.5	8.5												
M 12	1.75	110	24	9	7	10.2	■											
M 14	2	110	26	11	9	12.0												
M 16	2	110	27	12	9	14.0	■											
M 18	2.5	125	30	14	11	15.5												
M 20	2.5	140	32	16	12	17.5	■											
M 22	2.5	140	32	18	14.5	19.5												
M 24	3	160	34	18	14.5	21.0												
M 27	3	160	36	20	16	24.0												
M 30	3.5	180	40	22	18	26.5												
M 33	3.5	180	40	25	20	29.5												
M 36	4	200	50	28	22	32.0												

Machine Taps Red Ring - TYPHOON B

DIN 371 HSS-E PM

spiral point  
for high strength steel

Group 3130  
for through holes



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

31300/48

**PM-Line**

Red Ring

B / 3.5-5 x P

TiCN

ISO2 (6H)

P2 high strength steel M1 chemical resistant steel N1 aluminium alloys

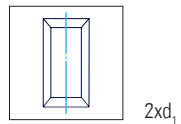
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 1.7	0.35	40	8	2.5	2.1	1.35												
M 1.8	0.35	40	8	2.5	2.1	1.45												
M 2	0.4	45	8	2.8	2.1	1.6												
M 2.2	0.45	45	8	2.8	2.1	1.75												
M 2.3	0.4	45	8	2.8	2.1	1.9												
M 2.5	0.45	50	9	2.8	2.1	2.05												
M 2.6	0.45	50	9	2.8	2.1	2.15												
M 3	0.5	56	11	3.5	2.7	2.5	■											
M 3.5	0.6	56	12	4	3	2.9												
M 4	0.7	63	13	4.5	3.4	3.3	■											
M 5	0.8	70	15	6	4.9	4.2	■											
M 6	1	80	17	6	4.9	5.0	■											
M 7	1	80	17	7	5.5	6.0												
M 8	1.25	90	20	8	6.2	6.8	■											
M 9	1.25	90	20	9	7	7.8												
M 10	1.5	100	22	10	8	8.5	■											

Machine Taps Red Ring - TYPHOON B

DIN 376 HSS-E PM

spiral point  
for high strength steel

Group 4130  
for through holes



Art.-No.

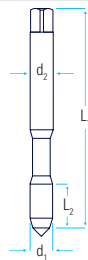
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



41300/48

**PM-Line**

Red Ring

B / 3.5-5 x P

TiCN

ISO2 (6H)

P2 high strength steel M1 chemical resistant steel N1 aluminium alloys

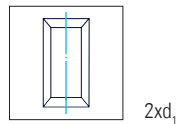
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 6	1	80	17	4.5	3.4	5.0
M 7	1	80	17	5.5	4.3	6.0
M 8	1.25	90	20	6	4.9	6.8
M 9	1.25	90	20	7	5.5	7.8
M 10	1.5	100	22	7	5.5	8.5
M 12	1.75	110	24	9	7	10.2
M 14	2	110	26	11	9	12.0
M 16	2	110	27	12	9	14.0
M 18	2.5	125	30	14	11	15.5
M 20	2.5	140	32	16	12	17.5
M 22	2.5	140	32	18	14.5	19.5
M 24	3	160	34	18	14.5	21.0
M 27	3	160	36	20	16	24.0
M 30	3.5	180	40	22	18	26.5
M 33	3.5	180	40	25	20	29.5
M 36	4	200	50	28	22	32.0

Machine Taps Red Ring

DIN 371 HSS-E PM

spiral point  
for nickel alloys

Group 3140  
for through holes



Art.-No.

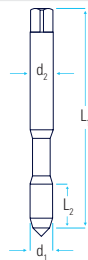
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



31400

**PM-Line**

Red Ring

B / 3.5-5 x P

bright

ISO2 (6H)

P2 high strength steel S1 titanium alloys S2 nickel alloys

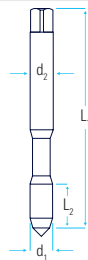
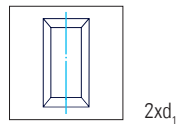
$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$	$\text{H}$												
M 1.7	0.35	40	8	2.5	2.1	1.35												
M 1.8	0.35	40	8	2.5	2.1	1.45												
M 2	0.4	45	8	2.8	2.1	1.6												
M 2.2	0.45	45	8	2.8	2.1	1.75												
M 2.3	0.4	45	8	2.8	2.1	1.9												
M 2.5	0.45	50	9	2.8	2.1	2.05												
M 2.6	0.45	50	9	2.8	2.1	2.15												
M 3	0.5	56	11	3.5	2.7	2.5	■											
M 3.5	0.6	56	12	4	3	2.9												
M 4	0.7	63	13	4.5	3.4	3.3	■											
M 5	0.8	70	15	6	4.9	4.2	■											
M 6	1	80	17	6	4.9	5.0	■											
M 7	1	80	17	7	5.5	6.0												
M 8	1.25	90	20	8	6.2	6.8	■											
M 9	1.25	90	20	9	7	7.8												
M 10	1.5	100	22	10	8	8.5	■											

Machine Taps Red Ring

DIN 376 HSS-E PM

spiral point  
for nickel alloys

Group 4140  
for through holes



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

41400

**PM-Line**

Red Ring

B / 3.5-5 x P

bright

ISO2 (6H)

P2 high strength steel S1 titanium alloys S2 nickel alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 6	1	80	17	4.5	3.4	5.0
M 7	1	80	17	5.5	4.3	6.0
M 8	1.25	90	20	6	4.9	6.8
M 9	1.25	90	20	7	5.5	7.8
M 10	1.5	100	22	7	5.5	8.5
M 12	1.75	110	24	9	7	10.2
M 14	2	110	26	11	9	12.0
M 16	2	110	27	12	9	14.0
M 18	2.5	125	30	14	11	15.5
M 20	2.5	140	32	16	12	17.5
M 22	2.5	140	32	18	14.5	19.5
M 24	3	160	34	18	14.5	21.0
M 27	3	160	36	20	16	24.0
M 30	3.5	180	40	22	18	26.5
M 33	3.5	180	40	25	20	29.5
M 36	4	200	50	28	22	32.0



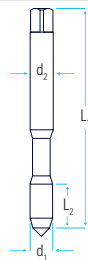
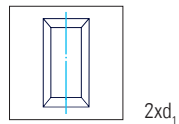
Machine Taps

DIN 371 HSS-E

spiral point and interrupted thread  
for general construction steel

Group 3160  
for through holes

STEEL



Art.-No.

Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5

31600

**High Volume**

interrupted thread

B / 3.5-5 x P

bright

ISO2 (6H)

P1 general construction steel

$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$	$\text{H}$														
M 1.7	0.35	40	8	2.5	2.1	1.35														
M 1.8	0.35	40	8	2.5	2.1	1.45														
M 2	0.4	45	8	2.8	2.1	1.6														
M 2.2	0.45	45	8	2.8	2.1	1.75														
M 2.3	0.4	45	8	2.8	2.1	1.9														
M 2.5	0.45	50	9	2.8	2.1	2.05														
M 2.6	0.45	50	9	2.8	2.1	2.15														
M 3	0.5	56	11	3.5	2.7	2.5		■												
M 3.5	0.6	56	12	4	3	2.9		■												
M 4	0.7	63	13	4.5	3.4	3.3		■												
M 5	0.8	70	15	6	4.9	4.2		■												
M 6	1	80	17	6	4.9	5.0		■												
M 7	1	80	17	7	5.5	6.0														
M 8	1.25	90	20	8	6.2	6.8		■												
M 9	1.25	90	20	9	7	7.8														
M 10	1.5	100	22	10	8	8.5		■												

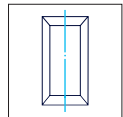
Machine Taps

DIN 376 HSS-E

spiral point and interrupted thread  
for general construction steel

Group 4160  
for through holes

STEEL



2x d<sub>1</sub>



Cutting Data



Art.-No.

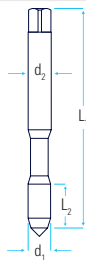
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



41600

**High Volume**

interrupted thread

B / 3.5-5 x P

bright

ISO2 (6H)

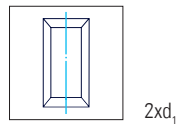
P1 general construction steel

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨														
M 6	1	80	17	4.5	3.4	5.0														
M 7	1	80	17	5.5	4.3	6.0														
M 8	1.25	90	20	6	4.9	6.8														
M 9	1.25	90	20	7	5.5	7.8														
M 10	1.5	100	22	7	5.5	8.5														
M 12	1.75	110	24	9	7	10.2	■													
M 14	2	110	26	11	9	12.0	■													
M 16	2	110	27	12	9	14.0	■													
M 18	2.5	125	30	14	11	15.5														
M 20	2.5	140	32	16	12	17.5	■													
M 22	2.5	140	32	18	14.5	19.5														
M 24	3	160	34	18	14.5	21.0	■													
M 27	3	160	36	20	16	24.0														
M 30	3.5	180	40	22	18	26.5														
M 33	3.5	180	40	25	20	29.5														
M 36	4	200	50	28	22	32.0														

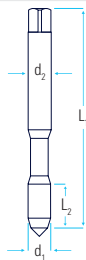
Machine Taps Red Ring

DIN 371 HSS-E  
 spiral point  
 for high strength steel

Group 3170  
 for through holes



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



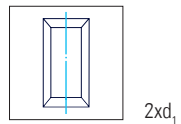
31700	31700/48
<b>High Volume</b>	<b>High Volume</b>
Red Ring	Red Ring
B / 3.5-5 x P	
bright	TiCN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⌀				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■		■	
M 5	0.8	70	15	6	4.9	4.2	■		■	
M 6	1	80	17	6	4.9	5.0	■		■	
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■		■	
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■		■	

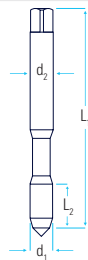
Machine Taps Red Ring

DIN 376 HSS-E  
 spiral point  
 for high strength steel

Group 4170  
 for through holes



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



41700	41700/48
<b>High Volume</b>	<b>High Volume</b>
Red Ring	Red Ring
B / 3.5-5 x P	
bright	TiCN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	

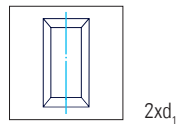
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⌘					
M 6	1	80	17	4.5	3.4	5.0					
M 7	1	80	17	5.5	4.3	6.0					
M 8	1.25	90	20	6	4.9	6.8					
M 9	1.25	90	20	7	5.5	7.8					
M 10	1.5	100	22	7	5.5	8.5					
M 12	1.75	110	24	9	7	10.2	■		■		
M 14	2	110	26	11	9	12.0	■		■		
M 16	2	110	27	12	9	14.0	■		■		
M 18	2.5	125	30	14	11	15.5					
M 20	2.5	140	32	16	12	17.5	■		■		
M 22	2.5	140	32	18	14.5	19.5					
M 24	3	160	34	18	14.5	21.0	■		■		
M 27	3	160	36	20	16	24.0					
M 30	3.5	180	40	22	18	26.5	■		■		
M 33	3.5	180	40	25	20	29.5					
M 36	4	200	50	28	22	32.0					

Machine Taps Yellow Ring

DIN 371 HSS-E PM

spiral point  
for titanium alloys

Group 3180  
for through holes



Art.-No.

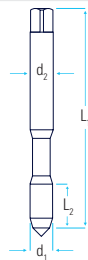
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



31800

**PM-Line**

Yellow Ring

B / 3.5-5 x P

bright

ISO2 (6H)

P1 high strength steel S1 titanium alloys

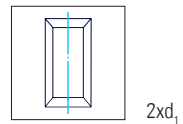
$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$	$\text{mm}$				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5				
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3		■		
M 5	0.8	70	15	6	4.9	4.2		■		
M 6	1	80	17	6	4.9	5.0		■		
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8		■		
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5		■		

Machine Taps Yellow Ring

DIN 376 HSS-E PM

spiral point  
for titanium alloys

Group 4180  
for through holes



Art.-No.

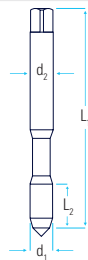
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



41800

**PM-Line**

Yellow Ring

B / 3.5-5 x P

bright

ISO2 (6H)

P2 high strength steel S1 titanium alloys

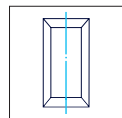
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨													
M 6	1	80	17	4.5	3.4	5.0													
M 7	1	80	17	5.5	4.3	6.0													
M 8	1.25	90	20	6	4.9	6.8													
M 9	1.25	90	20	7	5.5	7.8													
M 10	1.5	100	22	7	5.5	8.5													
M 12	1.75	110	24	9	7	10.2	■												
M 14	2	110	26	11	9	12.0													
M 16	2	110	27	12	9	14.0	■												
M 18	2.5	125	30	14	11	15.5													
M 20	2.5	140	32	16	12	17.5	■												
M 22	2.5	140	32	18	14.5	19.5													
M 24	3	160	34	18	14.5	21.0													
M 27	3	160	36	20	16	24.0													
M 30	3.5	180	40	22	18	26.5													
M 33	3.5	180	40	25	20	29.5													
M 36	4	200	50	28	22	32.0													

Machine Taps Black Ring - BLACK POWER

DIN 371 HSS-E

spiral point  
for universal use

Group 3190  
for through holes



2xd<sub>1</sub>

Art.-No.

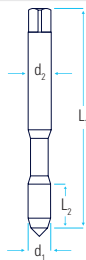
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



Cutting Data



31900/26	31900/25
<b>High Volume</b>	<b>High Volume</b>
Black Ring	Black Ring
B / 3.5-5 x P	
VAP	TiN
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	M1 chemical resistant steel N1 aluminium alloys N3 copper alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■		■	
M 5	0.8	70	15	6	4.9	4.2	■		■	
M 6	1	80	17	6	4.9	5.0	■		■	
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■		■	
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■		■	

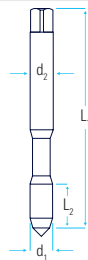
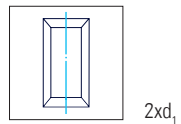
Machine Taps Black Ring - BLACK POWER



DIN 376 HSS-E

spiral point  
for universal use

Group 4190  
for through holes



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

41900/26	41900/25
<b>High Volume</b>	<b>High Volume</b>
Black Ring	Black Ring
B / 3.5-5 x P	
VAP	TiN
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	M1 chemical resistant steel
N1 aluminium alloys	N3 copper alloys

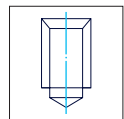
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 6	1	80	17	4.5	3.4	5.0				
M 7	1	80	17	5.5	4.3	6.0				
M 8	1.25	90	20	6	4.9	6.8				
M 9	1.25	90	20	7	5.5	7.8				
M 10	1.5	100	22	7	5.5	8.5				
M 12	1.75	110	24	9	7	10.2	■		■	
M 14	2	110	26	11	9	12.0				
M 16	2	110	27	12	9	14.0	■		■	
M 18	2.5	125	30	14	11	15.5				
M 20	2.5	140	32	16	12	17.5	■		■	
M 22	2.5	140	32	18	14.5	19.5				
M 24	3	160	34	18	14.5	21.0				
M 27	3	160	36	20	16	24.0				
M 30	3.5	180	40	22	18	26.5				
M 33	3.5	180	40	25	20	29.5				
M 36	4	200	50	28	22	32.0				



Machine Taps

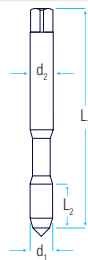
DIN 371 HSS-E  
RH spiral flutes 15°  
for general construction steel

Group 3200  
for blind holes



2xd<sub>1</sub>

- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



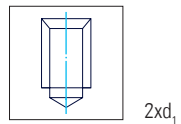
32000	32000/40	32000/2540
<b>High Volume</b>		
	internal coolant	internal coolant
	C / 2-3 x P	
bright	bright	TiN
ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron	

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⚙				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	6	3.5	2.7	2.5	■			
M 3.5	0.6	56	7	4	3	2.9				
M 4	0.7	63	7	4.5	3.4	3.3	■			
M 5	0.8	70	8	6	4.9	4.2	■			
M 6	1	80	10	6	4.9	5.0	■	■		■
M 7	1	80	10	7	5.5	6.0				
M 8	1.25	90	13	8	6.2	6.8	■	■		■
M 9	1.25	90	13	9	7	7.8				
M 10	1.5	100	15	10	8	8.5	■	■		■

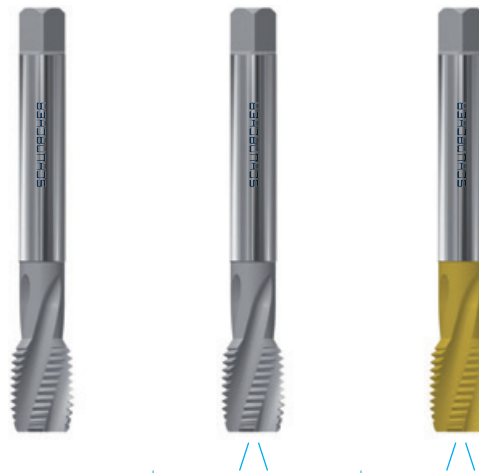
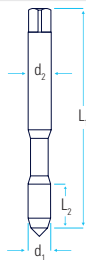
Machine Taps

DIN 376 HSS-E  
RH spiral flutes 15°  
for general construction steel

Group 4200  
for blind holes



- Art.-No.
- Technology [i](#) Page 8.1
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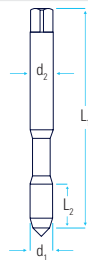
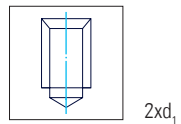
42000	42000/40	42000/2540
<b>High Volume</b>		
	internal coolant	internal coolant
	C / 2-3 x P	
bright	bright	TiN
ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron	

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⌘				
M 6	1	80	10	4.5	3.4	5.0				
M 7	1	80	10	5.5	4.3	6.0				
M 8	1.25	90	14	6	4.9	6.8				
M 9	1.25	90	14	7	5.5	7.8				
M 10	1.5	100	16	7	5.5	8.5				
M 12	1.75	110	18	9	7	10.2	■		■	■
M 14	2	110	20	11	9	12.0	■		■	■
M 16	2	110	20	12	9	14.0	■		■	■
M 18	2.5	125	25	14	11	15.5				
M 20	2.5	140	25	16	12	17.5	■		■	■
M 22	2.5	140	25	18	14.5	19.5				
M 24	3	160	30	18	14.5	21.0	■			
M 27	3	160	30	20	16	24.0				
M 30	3.5	180	35	22	18	26.5	■			
M 33	3.5	180	35	25	20	29.5				
M 36	4	200	40	28	22	32.0	■			

Machine Taps Red Ring

DIN 371 HSS-E  
RH spiral flutes 20°  
for high strength steel

Group 3240  
for blind holes



Art.-No.	
Technology	<b>i</b> Page 8.1
Chamfer Length	<b>i</b> Page 8.2
Surface	<b>i</b> Page 8.3
Tolerance	<b>i</b> Page 8.4
Cutting Data	<b>i</b> Page 8.5

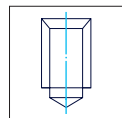
32400	32400/48
Red Ring	Red Ring
3-4 x P	
bright	TiCN
ISO2 (6H)	ISO2 (6H)
P1 high strength steel	

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	6	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	7	4	3	2.9				
M 4	0.7	63	7	4.5	3.4	3.3	■		■	
M 5	0.8	70	8	6	4.9	4.2	■		■	
M 6	1	80	10	6	4.9	5.0	■		■	
M 7	1	80	10	7	5.5	6.0				
M 8	1.25	90	13	8	6.2	6.8	■		■	
M 9	1.25	90	13	9	7	7.8				
M 10	1.5	100	15	10	8	8.5	■		■	

Machine Taps Red Ring

DIN 376 HSS-E  
RH spiral flutes 20°  
for high strength steel

Group 4240  
for blind holes



2xd<sub>1</sub>



Art.-No.

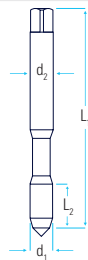
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42400	42400/48
Red Ring	Red Ring
3-4 x P	
bright	TiCN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	

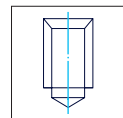
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨											
M 6	1	80	10	4.5	3.4	5.0											
M 7	1	80	10	5.5	4.3	6.0											
M 8	1.25	90	14	6	4.9	6.8											
M 9	1.25	90	14	7	5.5	7.8											
M 10	1.5	100	16	7	5.5	8.5											
M 12	1.75	110	18	9	7	10.2	■				■						
M 14	2	110	20	11	9	12.0	■				■						
M 16	2	110	20	12	9	14.0	■				■						
M 18	2.5	125	25	14	11	15.5											
M 20	2.5	140	25	16	12	17.5	■				■						
M 22	2.5	140	25	18	14.5	19.5											
M 24	3	160	30	18	14.5	21.0	■				■						
M 27	3	160	30	20	16	24.0											
M 30	3.5	180	35	22	18	26.5	■				■						
M 33	3.5	180	35	25	20	29.5											
M 36	4	200	40	28	22	32.0											

Machine Taps Red Ring

internal standard HSS-E

RH spiral flutes 20°  
for high strength steel

Group 4241  
for deep blind holes  $\leq 3x d_1$



$3x d_1$

Cutting Data



Art.-No.

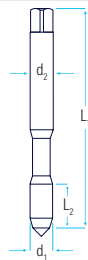
Technology Page 8.1

Chamfer Length Page 8.2

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42410/4048

Red Ring, internal coolant

C / 2-3 x P

TiCN

6HX

P2+P3 high strength steel

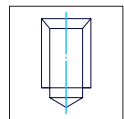
$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$						
M 20	2.5	140	25	16	12	17.5	■			
M 22	2.5	140	25	18	14.5	19.5	■			
M 24	3	160	30	18	14.5	21.0	■			
M 27	3	160	30	20	16	24.0	■			
M 30	3.5	180	35	22	18	26.5	■			
M 33	3.5	180	35	25	20	29.5	■			
M 36	4	220	40	28	22	32.0	■			
M 39	4	240	40	32	24	35	■			
M42	4.5	240	45	32	24	37.5	■			
M45	4.5	270	45	36	29	40.5	■			
M48	5	270	50	36	29	43	■			

Machine Taps Red Ring

DIN 371 HSS-E PM

RH spiral flutes 20°  
for nickel alloys

Group 3260  
for blind holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

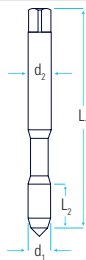
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

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32600

**PM-Line**

Red Ring

3-4 x P

bright

ISO2 (6H)

P2 high strength steel S1 titanium alloys S2 Nickellegierungen

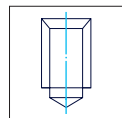
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5				
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■			
M 5	0.8	70	15	6	4.9	4.2	■			
M 6	1	80	17	6	4.9	5.0	■			
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■			
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■			

Machine Taps Red Ring

DIN 376 HSS-E PM

RH spiral flutes 20°  
for nickel alloys

Group 4260  
for blind holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

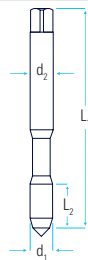
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42600

**PM-Line**

Red Ring

3-4 x P

bright

ISO2 (6H)

P2 high strength steel S1 titanium alloys S2 nickel alloys

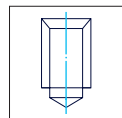
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 6	1	80	17	4.5	3.4	5.0												
M 7	1	80	17	5.5	4.3	6.0												
M 8	1.25	90	20	6	4.9	6.8												
M 9	1.25	90	20	7	5.5	7.8												
M 10	1.5	100	22	7	5.5	8.5												
M 12	1.75	110	24	9	7	10.2	■											
M 14	2	110	26	11	9	12.0												
M 16	2	110	27	12	9	14.0	■											
M 18	2.5	125	30	14	11	15.5												
M 20	2.5	140	32	16	12	17.5	■											
M 22	2.5	140	32	18	14.5	19.5												
M 24	3	160	34	18	14.5	21.0												
M 27	3	160	36	20	16	24.0												
M 30	3.5	180	40	22	18	26.5												
M 33	3.5	180	40	25	20	29.5												
M 36	4	200	50	28	22	32.0												

Machine Taps Yellow Ring

DIN 371 HSS-E PM

RH spiral flutes 20°  
for titanium alloys

Group 3280  
for blind holes



2x d<sub>1</sub>



Cutting Data



Art.-No.

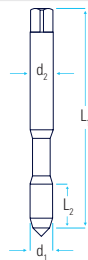
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Surface [i](#) Page 8.3

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Cutting Data [i](#) Page 8.5



32800

**PM-Line**

Yellow Ring

3-4 x P

bright

ISO2 (6H)

P1 high strength steel S1 titanium alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	11	3.5	2.7	2.5				
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■			
M 5	0.8	70	15	6	4.9	4.2	■			
M 6	1	80	17	6	4.9	5.0	■			
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8	■			
M 9	1.25	90	20	9	7	7.8				
M 10	1.5	100	22	10	8	8.5	■			

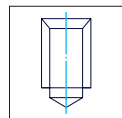


Machine Taps Yellow Ring

DIN 376 HSS-E PM

RH spiral flutes 20°  
for titanium alloys

Group 4280  
for blind holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

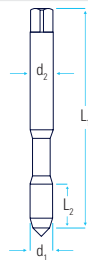
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42800

**PM-Line**

Yellow Ring

3-4 x P

bright

ISO2 (6H)

P1 high strength steel S1 titanium alloys

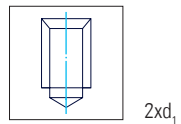
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 6	1	80	17	4.5	3.4	5.0
M 7	1	80	17	5.5	4.3	6.0
M 8	1.25	90	20	6	4.9	6.8
M 9	1.25	90	20	7	5.5	7.8
M 10	1.5	100	22	7	5.5	8.5
M 12	1.75	110	24	9	7	10.2
M 14	2	110	26	11	9	12.0
M 16	2	110	27	12	9	14.0
M 18	2.5	125	30	14	11	15.5
M 20	2.5	140	32	16	12	17.5
M 22	2.5	140	32	18	14.5	19.5
M 24	3	160	34	18	14.5	21.0
M 27	3	160	36	20	16	24.0
M 30	3.5	180	40	22	18	26.5
M 33	3.5	180	40	25	20	29.5
M 36	4	200	50	28	22	32.0

Machine Taps

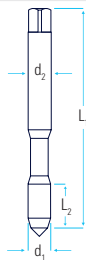
DIN 371 HSS-E  
RH spiral flutes 40°  
for general construction steel

Group 3300  
for blind holes

STEEL



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
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33000	33000 B	33000 E
<b>High Volume</b>		
	C / 2-3 x P	
bright	bright	bright
ISO2 (6H)   ISO1 (4H)	ISO3 (6G)	7G
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▧				
M 1	0.25	40	5.5	2.5	2.1	0.75	■			
M 1.2	0.25	40	5.5	2.5	2.1	0.95	■			
M 1.4	0.3	40	7	2.5	2.1	1.1	■			
M 1.6	0.35	40	8	2.5	2.1	1.25	■			
M 1.7	0.35	40	8	2.5	2.1	1.35	■			
M 1.8	0.35	40	8	2.5	2.1	1.45	■			
M 2	0.4	45	8	2.8	2.1	1.6	■	■		
M 2.2	0.45	45	8	2.8	2.1	1.75	■			
M 2.3	0.4	45	8	2.8	2.1	1.9	■			
M 2.5	0.45	50	9	2.8	2.1	2.05	■	■		
M 2.6	0.45	50	9	2.8	2.1	2.15	■			

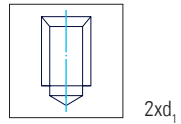
Continuation »

Machine Taps

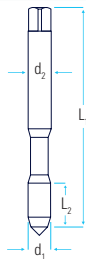
DIN 371 HSS-E  
RH spiral flutes 40°  
for general construction steel

Group 3300  
for blind holes

STEEL



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
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33000	33000 B	33000 E
<b>High Volume</b>		
	C / 2-3 x P	
bright	bright	bright
ISO2 (6H)	ISO3 (6G)	7G
P1 general construction steel	K2+K3 spheroidal and malleable cast iron	

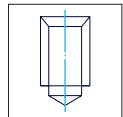
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨			
M 3	0.5	56	6	3.5	2.7	2.5	■		■
M 3.5	0.6	56	7	4	3	2.9	■		
M 4	0.7	63	7	4.5	3.4	3.3	■		■
M 5	0.8	70	8	6	4.9	4.2	■		■
M 6	1	80	10	6	4.9	5.0	■		■
M 7	1	80	10	7	5.5	6.0	■		
M 8	1.25	90	13	8	6.2	6.8	■		■
M 9	1.25	90	13	9	7	7.8			
M 10	1.5	100	15	10	8	8.5	■		■
M 12	1.75	110	18	12	9	10.2			

Machine Taps

DIN 371 HSS-E  
RH spiral flutes 40°  
for general construction steel

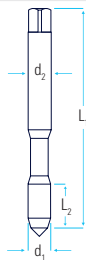
Group 3300  
for blind holes

STEEL



2xd<sub>1</sub>

- Art.-No.
- Technology [i](#) Page 8.1
- Chamfer Length [i](#) Page 8.2
- Surface [i](#) Page 8.3
- Tolerance [i](#) Page 8.4
- Cutting Data [i](#) Page 8.5



33005	33000/25	33000/42
<b>High Volume</b>		
LH		2 x L1
	C / 2-3 x P	
bright	TiN	bright
ISO2 (6H)	ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron	

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	6	3.5	2.7	2.5	■		■	■
M 3.5	0.6	56	7	4	3	2.9				
M 4	0.7	63	7	4.5	3.4	3.3	■		■	■
M 5	0.8	70	8	6	4.9	4.2	■		■	■
M 6	1	80	10	6	4.9	5.0	■		■	■
M 7	1	80	10	7	5.5	6.0				
M 8	1.25	90	13	8	6.2	6.8	■		■	■
M 9	1.25	90	13	9	7	7.8				
M 10	1.5	100	15	10	8	8.5	■		■	■

Machine Taps - NUMERIC

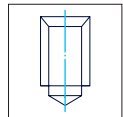
DIN 371 HSS-E PM

RH spiral flutes 45°

for steel, heat treatable steel and chemical resistant steel

Group 3303  
for blind holes

STEEL



2xd<sub>1</sub>

Art.-No.

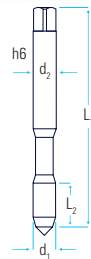
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

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Cutting Data [i](#) Page 8.5



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher

DIN 1835-B

Cutting Data



NUMERIC  
Supporting Digital Production

For use on CNC machines  
with synchronized machining

33030/48

PM-Line

33030/4048

PM-Line

internal coolant

C / 2-3 x P

TiCN

TiCN

6HX

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

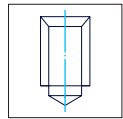
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 3	0.5	56	5	3.5	2.7	2.5	■			
M 4	0.7	63	6	4.5	3.4	3.3	■			
M 5	0.8	70	7	6	4.9	4.2	■			
M 6	1	80	8	6	4.9	5.0	■	■		
M 7	1	80	8	7	5.5	6.0				
M 8	1.25	90	10	8	6.2	6.8	■	■		
M 9	1.25	90	10	9	7	7.8				
M 10	1.5	100	12	10	8	8.5	■	■		
M 12	1.75	110	14	12	9	10.2				

Machine Taps

DIN 376 HSS-E  
RH spiral flutes 40°  
for general construction steel

Group 4300  
for blind holes

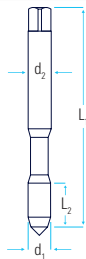
STEEL



2xd<sub>1</sub>



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



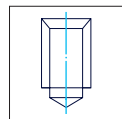
43000	43000 B	43005
<b>High Volume</b>		
		LH
	C / 2-3 x P	
bright	bright	bright
ISO2 (6H)	ISO3 (6G)	ISO2 (6H)
P1 general construction steel		K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⚙				
M 6	1	80	10	4.5	3.4	5.0	■			
M 7	1	80	10	5.5	4.3	6.0				
M 8	1.25	90	14	6	4.9	6.8	■			
M 9	1.25	90	14	7	5.5	7.8				
M 10	1.5	100	16	7	5.5	8.5	■			
M 12	1.75	110	18	9	7	10.2	■	■		■
M 14	2	110	20	11	9	12.0	■	■		■
M 16	2	110	20	12	9	14.0	■	■		■
M 18	2.5	125	25	14	11	15.5	■			
M 20	2.5	140	25	16	12	17.5	■	■		■
M 22	2.5	140	25	18	14.5	19.5	■			
M 24	3	160	30	18	14.5	21.0	■	■		
M 27	3	160	30	20	16	24.0	■			
M 30	3.5	180	35	22	18	26.5	■			
M 33	3.5	180	35	25	20	29.5				
M 36	4	200	40	28	22	32.0	■			

Machine Taps

DIN 376 HSS-E  
RH spiral flutes 40°  
for general construction steel

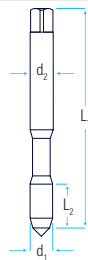
Group 4300  
for blind holes



2xd<sub>1</sub>



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- Technology [i](#) Page 8.1
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- Surface [i](#) Page 8.3
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43000/25	43000/42
<b>High Volume</b>	
	2 x L1
	C / 2-3 x P
TiN	bright
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 6	1	80	10	4.5	3.4	5.0				
M 7	1	80	10	5.5	4.3	6.0				
M 8	1.25	90	14	6	4.9	6.8				
M 9	1.25	90	14	7	5.5	7.8				
M 10	1.5	100	16	7	5.5	8.5				
M 12	1.75	110	18	9	7	10.2	■		■	
M 14	2	110	20	11	9	12.0	■		■	
M 16	2	110	20	12	9	14.0	■		■	
M 18	2.5	125	25	14	11	15.5				
M 20	2.5	140	25	16	12	17.5	■		■	
M 22	2.5	140	25	18	14.5	19.5				
M 24	3	160	30	18	14.5	21.0	■			
M 27	3	160	30	20	16	24.0				
M 30	3.5	180	35	22	18	26.5	■			
M 33	3.5	180	35	25	20	29.5				
M 36	4	200	40	28	22	32.0				

Machine Taps - NUMERIC

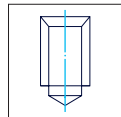
DIN 376 HSS-E PM

RH spiral flutes 45°

for steel, heat treatable steel and chemical resistant steel

Group 4303  
for blind holes

STEEL



2xd<sub>1</sub>



High Speed Cutting  
by Schumacher

Cutting Data



**NUMERIC**  
Supporting Digital Production

For use on CNC machines  
with synchronized machining

Art.-No.

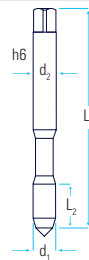
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



43030/48

**PM-Line**

C / 2-3 x P

TiCN

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 6	1	80	10	4.5	3.4	5.0
M 7	1	80	10	5.5	4.3	6.0
M 8	1.25	90	14	6	4.9	6.8
M 9	1.25	90	14	7	5.5	7.8
M 10	1.5	100	16	7	5.5	8.5
M 12	1.75	110	18	9	7	10.2
M 14	2	110	20	11	9	12.0
M 16	2	110	20	12	9	14.0
M 18	2.5	125	25	14	11	15.5
M 20	2.5	140	25	16	12	17.5
M 22	2.5	140	25	18	14.5	19.5
M 24	3	160	30	18	14.5	21.0
M 27	3	160	30	20	16	24.0
M 30	3.5	180	35	22	18	26.5
M 33	3.5	180	35	25	20	29.5
M 36	4	200	40	28	22	32.0

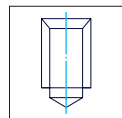


Machine Taps

DIN 371 HSS-E

RH spiral flutes 40°  
for general construction steel

Group 3310  
for deep blind holes  $\leq 3 \times D$



3xd<sub>1</sub>



Cutting Data



Art.-No.

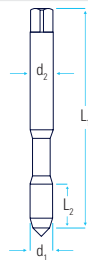
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



33100

C / 2-3 x P

bright

ISO2 (6H)

P1 general construction steel K2+K3 spheroidal and malleable cast iron

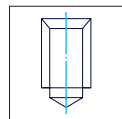
$\varnothing d_1$	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨											
M 1.7	0.35	40	8	2.5	2.1	1.35											
M 1.8	0.35	40	8	2.5	2.1	1.45											
M 2	0.4	45	8	2.8	2.1	1.6											
M 2.2	0.45	45	8	2.8	2.1	1.75											
M 2.3	0.4	45	8	2.8	2.1	1.9											
M 2.5	0.45	50	9	2.8	2.1	2.05											
M 2.6	0.45	50	9	2.8	2.1	2.15											
M 3	0.5	56	6	3.5	2.7	2.5	■										
M 3.5	0.6	56	7	4	3	2.9											
M 4	0.7	63	7	4.5	3.4	3.3	■										
M 5	0.8	70	8	6	4.9	4.2	■										
M 6	1	80	10	6	4.9	5.0	■										
M 7	1	80	10	7	5.5	6.0											
M 8	1.25	90	13	8	6.2	6.8	■										
M 9	1.25	90	13	9	7	7.8											
M 10	1.5	100	15	10	8	8.5	■										

Machine Taps

DIN 376 HSS-E

RH spiral flutes 40°  
for general construction steel

Group 4310  
for deep blind holes  $\leq 3 \times D$



3xD<sub>1</sub>



Cutting Data



Art.-No.

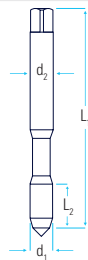
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



43100

C / 2-3 x P

bright

ISO2 (6H)

P1 general construction steel K2+K3 spheroidal and malleable cast iron

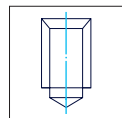
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨													
M 6	1	80	10	4.5	3.4	5.0													
M 7	1	80	10	5.5	4.3	6.0													
M 8	1.25	90	14	6	4.9	6.8													
M 9	1.25	90	14	7	5.5	7.8													
M 10	1.5	100	16	7	5.5	8.5													
M 12	1.75	110	18	9	7	10.2	■												
M 14	2	110	20	11	9	12.0	■												
M 16	2	110	20	12	9	14.0	■												
M 18	2.5	125	25	14	11	15.5													
M 20	2.5	140	25	16	12	17.5	■												
M 22	2.5	140	25	18	14.5	19.5													
M 24	3	160	30	18	14.5	21.0	■												
M 27	3	160	30	20	16	24.0													
M 30	3.5	180	35	22	18	26.5	■												
M 33	3.5	180	35	25	20	29.5													
M 36	4	200	40	28	22	32.0													

Machine Taps Black Ring - BLACK POWER

DIN 371 HSS-E

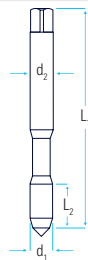
RH spiral flutes 40°  
for universal use

Group 3330  
for blind holes



2xd<sub>1</sub>

Cutting Data



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

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33300/26	33300/25
<b>High Volume</b>	<b>High Volume</b>
Black Ring	Black Ring
C / 2-3 x P	
VAP	TiN
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	M1 chemical resistant steel
N1 aluminium alloys	N3 copper alloys

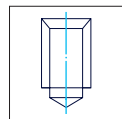
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	6	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	7	4	3	2.9				
M 4	0.7	63	7	4.5	3.4	3.3	■		■	
M 5	0.8	70	8	6	4.9	4.2	■		■	
M 6	1	80	10	6	4.9	5.0	■		■	
M 7	1	80	10	7	5.5	6.0				
M 8	1.25	90	13	8	6.2	6.8	■		■	
M 9	1.25	90	13	9	7	7.8				
M 10	1.5	100	15	10	8	8.5	■		■	

Machine Taps Black Ring - BLACK POWER

DIN 376 HSS-E

RH spiral flutes 40°  
for universal use

Group 4330  
for blind holes



2xd<sub>1</sub>

Cutting Data



Art.-No.

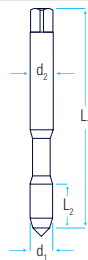
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



43300/26

**High Volume**

Black Ring

43300/25

**High Volume**

Black Ring

C / 2-3 x P

VAP

TiN

ISO2 (6H)

ISO2 (6H)

P1 general construction steel M1 chemical resistant steel N1 aluminium alloys N3 copper alloys

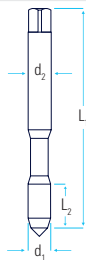
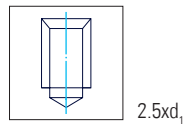
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 6	1	80	10	4.5	3.4	5.0												
M 7	1	80	10	5.5	4.3	6.0												
M 8	1.25	90	14	6	4.9	6.8												
M 9	1.25	90	14	7	5.5	7.8												
M 10	1.5	100	16	7	5.5	8.5												
M 12	1.75	110	18	9	7	10.2	■			■								
M 14	2	110	20	11	9	12.0												
M 16	2	110	20	12	9	14.0	■			■								
M 18	2.5	125	25	14	11	15.5												
M 20	2.5	140	25	16	12	17.5	■			■								
M 22	2.5	140	25	18	14.5	19.5												
M 24	3	160	30	18	14.5	21.0												
M 27	3	160	30	20	16	24.0												
M 30	3.5	180	35	22	18	26.5												
M 33	3.5	180	35	25	20	29.5												
M 36	4	200	40	28	22	32.0												

Machine Taps Red Ring - TYPHOON

DIN 371 HSS-E PM

RH spiral flutes 45°  
for high strength steel

Group 3340  
for deep blind holes  $\leq 2.5 \times D$



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

33400/48

**PM-Line**

Red Ring

C / 2-3 x P

TiCN

ISO2 (6H)

P2 high strength steel M1 chemical resistant steel N1 aluminium alloys

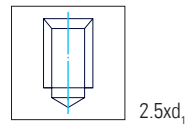
$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$	$\text{flute}$												
M 1.7	0.35	40	8	2.5	2.1	1.35												
M 1.8	0.35	40	8	2.5	2.1	1.45												
M 2	0.4	45	8	2.8	2.1	1.6												
M 2.2	0.45	45	8	2.8	2.1	1.75												
M 2.3	0.4	45	8	2.8	2.1	1.9												
M 2.5	0.45	50	9	2.8	2.1	2.05												
M 2.6	0.45	50	9	2.8	2.1	2.15												
M 3	0.5	56	6	3.5	2.7	2.5	■											
M 3.5	0.6	56	7	4	3	2.9												
M 4	0.7	63	7	4.5	3.4	3.3	■											
M 5	0.8	70	8	6	4.9	4.2	■											
M 6	1	80	10	6	4.9	5.0	■											
M 7	1	80	10	7	5.5	6.0												
M 8	1.25	90	13	8	6.2	6.8	■											
M 9	1.25	90	13	9	7	7.8												
M 10	1.5	100	15	10	8	8.5	■											

Machine Taps Red Ring - TYPHOON

DIN 376 HSS-E PM

RH spiral flutes 45°  
for high strength steel

Group 4340  
for deep blind holes  $\leq 2.5 \times D$



Art.-No.

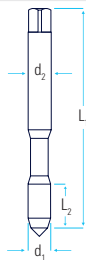
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



43400/48

**PM-Line**

Red Ring

C / 2-3 x P

TiCN

ISO2 (6H)

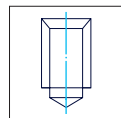
P2 high strength steel M1 chemical resistant steel N1 aluminium alloys

$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$	$\text{H}$
M 6	1	80	10	4.5	3.4	5.0
M 7	1	80	10	5.5	4.3	6.0
M 8	1.25	90	14	6	4.9	6.8
M 9	1.25	90	14	7	5.5	7.8
M 10	1.5	100	16	7	5.5	8.5
M 12	1.75	110	18	9	7	10.2
M 14	2	110	20	11	9	12.0
M 16	2	110	20	12	9	14.0
M 18	2.5	125	25	14	11	15.5
M 20	2.5	140	25	16	12	17.5
M 22	2.5	140	25	18	14.5	19.5
M 24	3	160	30	18	14.5	21.0
M 27	3	160	30	20	16	24.0
M 30	3.5	180	35	22	18	26.5
M 33	3.5	180	35	25	20	29.5
M 36	4	200	40	28	22	32.0

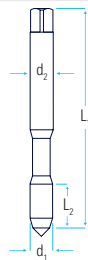
Machine Taps Blue Ring

DIN 371 HSS-E  
RH spiral flutes 40°  
for chemical resistant steel

Group 3350  
for blind holes



2xd<sub>1</sub>



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

33500/26	33500/25
<b>High Volume</b>	<b>High Volume</b>
Blue Ring	Blue Ring
C / 2-3 x P	
VAP	TiN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	M1 chemical resistant steel S1 titanium alloys

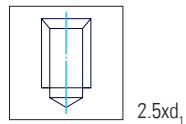
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	⌀				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6	■			
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05	■			
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	6	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	7	4	3	2.9				
M 4	0.7	63	7	4.5	3.4	3.3	■		■	
M 5	0.8	70	8	6	4.9	4.2	■		■	
M 6	1	80	10	6	4.9	5.0	■		■	
M 7	1	80	10	7	5.5	6.0				
M 8	1.25	90	13	8	6.2	6.8	■		■	
M 9	1.25	90	13	9	7	7.8				
M 10	1.5	100	15	10	8	8.5	■		■	

Machine Taps Blue Ring - POLAR

DIN 371 HSS-E PM

RH spiral flutes 45°  
for chemical resistant steel

Group 3351  
for deep blind holes  $\leq 2.5x d_1$



Art.-No.

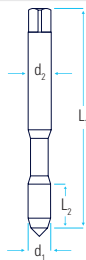
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



33510/48

**PM-Line**

Blue Ring

C / 2-3 x P

TiCN

6HX

P2 high strength steel M1+M2 chemical resistant steel S1 titanium alloys

$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$	$\text{flute}$												
M 1.7	0.35	40	8	2.5	2.1	1.35												
M 1.8	0.35	40	8	2.5	2.1	1.45												
M 2	0.4	45	8	2.8	2.1	1.6												
M 2.2	0.45	45	8	2.8	2.1	1.75												
M 2.3	0.4	45	8	2.8	2.1	1.9												
M 2.5	0.45	50	9	2.8	2.1	2.05												
M 2.6	0.45	50	9	2.8	2.1	2.15												
M 3	0.5	56	6	3.5	2.7	2.5	■											
M 3.5	0.6	56	7	4	3	2.9												
M 4	0.7	63	7	4.5	3.4	3.3	■											
M 5	0.8	70	8	6	4.9	4.2	■											
M 6	1	80	10	6	4.9	5.0	■											
M 7	1	80	10	7	5.5	6.0												
M 8	1.25	90	13	8	6.2	6.8	■											
M 9	1.25	90	13	9	7	7.8												
M 10	1.5	100	15	10	8	8.5	■											

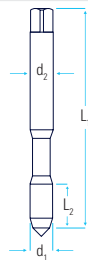
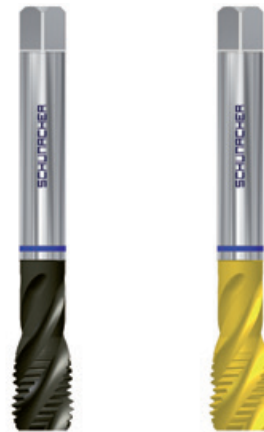
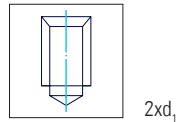


Machine Taps Blue Ring

DIN 376 HSS-E  
RH spiral flutes 40°  
for chemical resistant steel

Group 4350  
for blind holes

INOX  
Stainless



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

43500/26	43500/25
<b>High Volume</b>	<b>High Volume</b>
Blue Ring	Blue Ring
C / 2-3 x P	
VAP	TiN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	M1 chemical resistant steel S1 titanium alloys

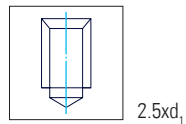
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨					
M 6	1	80	10	4.5	3.4	5.0					
M 7	1	80	10	5.5	4.3	6.0					
M 8	1.25	90	14	6	4.9	6.8					
M 9	1.25	90	14	7	5.5	7.8					
M 10	1.5	100	16	7	5.5	8.5					
M 12	1.75	110	18	9	7	10.2	■		■		
M 14	2	110	20	11	9	12.0	■		■		
M 16	2	110	20	12	9	14.0	■		■		
M 18	2.5	125	25	14	11	15.5	■				
M 20	2.5	140	25	16	12	17.5	■		■		
M 22	2.5	140	25	18	14.5	19.5	■				
M 24	3	160	30	18	14.5	21.0	■		■		
M 27	3	160	30	20	16	24.0	■				
M 30	3.5	180	35	22	18	26.5	■		■		
M 33	3.5	180	35	25	20	29.5					
M 36	4	200	40	28	22	32.0					

Machine Taps Blue Ring - POLAR

DIN 376 HSS-E PM

RH spiral flutes 45°  
for chemical resistant steel

Group 4351  
for deep blind holes  $\leq 2.5x d_1$



Art.-No.

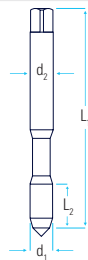
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



43510/48

**PM-Line**

Blue Ring

C / 2-3 x P

TiCN

6HX

P2 high strength steel M1+M2 chemical resistant steel S1 titanium alloys

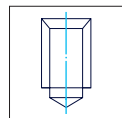
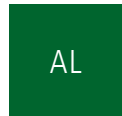
$\varnothing d_1$	$P_{mm}$	$L_1$	$L_2$	$d_2$	$\square$													
M 6	1	80	10	4.5	3.4	5.0												
M 7	1	80	10	5.5	4.3	6.0												
M 8	1.25	90	14	6	4.9	6.8												
M 9	1.25	90	14	7	5.5	7.8												
M 10	1.5	100	16	7	5.5	8.5												
M 12	1.75	110	18	9	7	10.2	■											
M 14	2	110	20	11	9	12.0												
M 16	2	110	20	12	9	14.0	■											
M 18	2.5	125	25	14	11	15.5												
M 20	2.5	140	25	16	12	17.5	■											
M 22	2.5	140	25	18	14.5	19.5												
M 24	3	160	30	18	14.5	21.0												
M 27	3	160	30	20	16	24.0												
M 30	3.5	180	35	22	18	26.5												
M 33	3.5	180	35	25	20	29.5												
M 36	4	200	40	28	22	32.0												

Machine Taps - MISTRAL

DIN 371 HSS-E PM

RH spiral flutes 45°  
for aluminium and bronze alloys

Group 3360  
for blind holes



2xd<sub>1</sub>

Cutting Data



**DLC**  
Diamond like Carbon

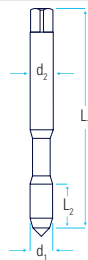
Innovative surface coating technologies with high hardness and low frictional coefficient



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

33600/02  
**PM-Line**

33600/24  
**PM-Line**

C / 2-3 x P

CrN

DLC

ISO2 (6H)

ISO2 (6H)

N1 aluminium alloys N6 thermoplastics

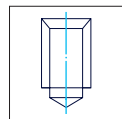
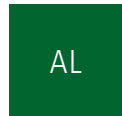
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	6	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	7	4	3	2.9				
M 4	0.7	63	7	4.5	3.4	3.3	■		■	
M 5	0.8	70	8	6	4.9	4.2	■		■	
M 6	1	80	10	6	4.9	5.0	■		■	
M 7	1	80	10	7	5.5	6.0				
M 8	1.25	90	13	8	6.2	6.8	■		■	
M 9	1.25	90	13	9	7	7.8				
M 10	1.5	100	15	10	8	8.5	■		■	

Machine Taps - MISTRAL

DIN 376 HSS-E PM

RH spiral flutes 45°  
for aluminium and bronze alloys

Group 4360  
for blind holes



2xd<sub>1</sub>

Cutting Data



**DLC**  
Diamond like Carbon

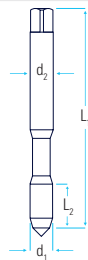
Innovative surface coating technologies with high hardness and low frictional coefficient



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

43600/02

PM-Line

43600/24

PM-Line

C / 2-3 x P

CrN

DLC

ISO2 (6H)

ISO2 (6H)

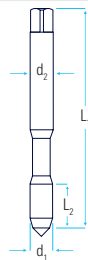
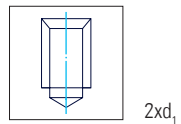
N1 aluminium alloys N6 thermoplastics

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨								
M 6	1	80	10	4.5	3.4	5.0								
M 7	1	80	10	5.5	4.3	6.0								
M 8	1.25	90	14	6	4.9	6.8								
M 9	1.25	90	14	7	5.5	7.8								
M 10	1.5	100	16	7	5.5	8.5								
M 12	1.75	110	18	9	7	10.2	■			■				
M 14	2	110	20	11	9	12.0								
M 16	2	110	20	12	9	14.0	■			■				
M 18	2.5	125	25	14	11	15.5								
M 20	2.5	140	25	16	12	17.5								
M 22	2.5	140	25	18	14.5	19.5								
M 24	3	160	30	18	14.5	21.0								
M 27	3	160	30	20	16	24.0								
M 30	3.5	180	35	22	18	26.5								
M 33	3.5	180	35	25	20	29.5								
M 36	4	200	40	28	22	32.0								

Machine Taps Red Ring

DIN 371 HSS-E  
RH spiral flutes 40°  
for high strength steel

Group 3380  
for blind holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

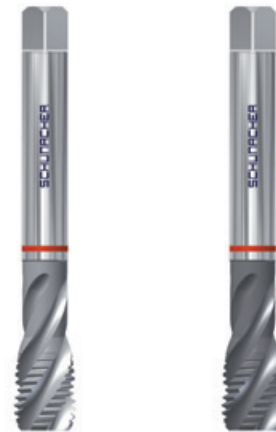
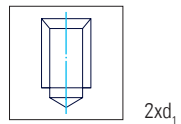
33800	33800/48
<b>High Volume</b>	<b>High Volume</b>
Red Ring	Red Ring
C / 2-3 x P	
bright	TiCN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.35				
M 1.8	0.35	40	8	2.5	2.1	1.45				
M 2	0.4	45	8	2.8	2.1	1.6				
M 2.2	0.45	45	8	2.8	2.1	1.75				
M 2.3	0.4	45	8	2.8	2.1	1.9				
M 2.5	0.45	50	9	2.8	2.1	2.05				
M 2.6	0.45	50	9	2.8	2.1	2.15				
M 3	0.5	56	6	3.5	2.7	2.5	■		■	
M 3.5	0.6	56	7	4	3	2.9				
M 4	0.7	63	7	4.5	3.4	3.3	■		■	
M 5	0.8	70	8	6	4.9	4.2	■		■	
M 6	1	80	10	6	4.9	5.0	■		■	
M 7	1	80	10	7	5.5	6.0				
M 8	1.25	90	13	8	6.2	6.8	■		■	
M 9	1.25	90	13	9	7	7.8				
M 10	1.5	100	15	10	8	8.5	■		■	

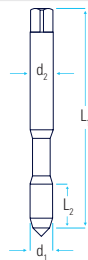
Machine Taps Red Ring

DIN 376 HSS-E  
RH spiral flutes 40°  
for high strength steel

Group 4380  
for blind holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



43800	43800/48
<b>High Volume</b>	<b>High Volume</b>
Red Ring	Red Ring
C / 2-3 x P	
bright	TiCN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	

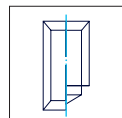
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 6	1	80	10	4.5	3.4	5.0				
M 7	1	80	10	5.5	4.3	6.0				
M 8	1.25	90	14	6	4.9	6.8				
M 9	1.25	90	14	7	5.5	7.8				
M 10	1.5	100	16	7	5.5	8.5				
M 12	1.75	110	18	9	7	10.2	■		■	
M 14	2	110	20	11	9	12.0	■		■	
M 16	2	110	20	12	9	14.0	■		■	
M 18	2.5	125	25	14	11	15.5				
M 20	2.5	140	25	16	12	17.5	■		■	
M 22	2.5	140	25	18	14.5	19.5				
M 24	3	160	30	18	14.5	21.0	■		■	
M 27	3	160	30	20	16	24.0				
M 30	3.5	180	35	22	18	26.5	■		■	
M 33	3.5	180	35	25	20	29.5				
M 36	4	200	40	28	22	32.0				

Forming Taps Black Ring - TORNADO

DIN 371 HSS-E PM

straight oil grooves for steel, heat treatable steel and chemical resistant steel

Group 3050 for blind and through holes



2x d<sub>1</sub>



Cutting Data



Art.-No.

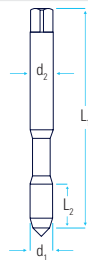
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



30500/4853

**PM-Line**

Black Ring

C / 2-3 x P

TiCN

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

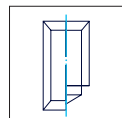
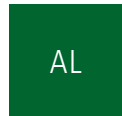
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨					
M 1.7	0.35	40	8	2.5	2.1	1.55					
M 1.8	0.35	40	8	2.5	2.1	1.65					
M 2	0.4	45	8	2.8	2.1	1.85					
M 2.2	0.45	45	8	2.8	2.1	2.0					
M 2.3	0.4	45	8	2.8	2.1	2.1					
M 2.5	0.45	50	9	2.8	2.1	2.3					
M 2.6	0.45	50	9	2.8	2.1	2.4					
M 3	0.5	56	11	3.5	2.7	2.8	■				
M 3.5	0.6	56	12	4	3	3.25					
M 4	0.7	63	13	4.5	3.4	3.7	■				
M 5	0.8	70	15	6	4.9	4.65	■				
M 6	1	80	17	6	4.9	5.55	■				
M 7	1	80	17	7	5.5	6.55					
M 8	1.25	90	20	8	6.2	7.4	■				
M 9	1.25	90	20	9	7	8.4					
M 10	1.5	100	22	10	8	9.3	■				

Forming Taps - MISTRAL

DIN 371 HSS-E PM

straight oil grooves for aluminium and bronze alloys

Group 3051  
for blind and through holes



2x d<sub>1</sub>

Cutting Data



DLC

Diamond like Carbon

Innovative surface coating technologies with high hardness and low frictional coefficient



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher

Art.-No.

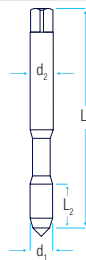
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



30510/0253

PM-Line

30510/2453

PM-Line

C / 2-3 x P

CrN

DLC

6HX

6HX

N1 aluminium alloys N5 bronze alloys N6 thermoplastics

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 1.7	0.35	40	8	2.5	2.1	1.55				
M 1.8	0.35	40	8	2.5	2.1	1.65				
M 2	0.4	45	8	2.8	2.1	1.85				
M 2.2	0.45	45	8	2.8	2.1	2.0				
M 2.3	0.4	45	8	2.8	2.1	2.1				
M 2.5	0.45	50	9	2.8	2.1	2.3				
M 2.6	0.45	50	9	2.8	2.1	2.4				
M 3	0.5	56	11	3.5	2.7	2.8	■			
M 3.5	0.6	56	12	4	3	3.25				
M 4	0.7	63	13	4.5	3.4	3.7	■			
M 5	0.8	70	15	6	4.9	4.65	■			
M 6	1	80	17	6	4.9	5.55	■			
M 7	1	80	17	7	5.5	6.55				
M 8	1.25	90	20	8	6.2	7.4	■			
M 9	1.25	90	20	9	7	8.4				
M 10	1.5	100	22	10	8	9.3	■			



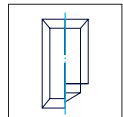
Forming Taps - NUMERIC

DIN 371 HSS-E PM

straight oil grooves for steel, heat treatable steel and chemical resistant steel

Group 3053 for blind and through holes

STEEL



2xd<sub>1</sub>



High Speed Cutting  
by Schumacher

Cutting Data



NUMERIC  
Supporting Digital Production

For use on CNC machines with synchronized machining

Art.-No.

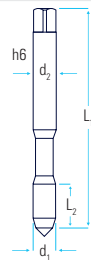
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



30530/4853

PM-Line

C / 2-3 x P

TiCN

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

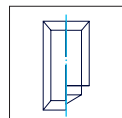
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 1.7	0.35	40	8	2.5	2.1	1.55												
M 1.8	0.35	40	8	2.5	2.1	1.65												
M 2	0.4	45	8	2.8	2.1	1.85												
M 2.2	0.45	45	8	2.8	2.1	2.0												
M 2.3	0.4	45	8	2.8	2.1	2.1												
M 2.5	0.45	50	9	2.8	2.1	2.3												
M 2.6	0.45	50	9	2.8	2.1	2.4												
M 3	0.5	56	6	3.5	2.7	2.8	■											
M 3.5	0.6	56	7	4	3	3.25												
M 4	0.7	63	7	4.5	3.4	3.7	■											
M 5	0.8	70	8	6	4.9	4.65	■											
M 6	1	80	10	6	4.9	5.55	■											
M 7	1	80	10	7	5.5	6.55												
M 8	1.25	90	13	8	6.2	7.4	■											
M 9	1.25	90	13	9	7	8.4												
M 10	1.5	100	15	10	8	9.3	■											

Forming Taps Black Ring - TORNADO

DIN 376 HSS-E PM

straight oil grooves for steel, heat treatable steel and chemical resistant steel

Group 4050  
for blind and through holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

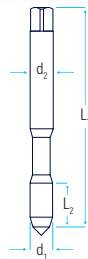
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



40500/4853

**PM-Line**

Black Ring

C / 2-3 x P

TiCN

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

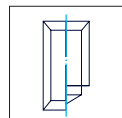
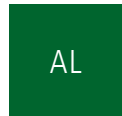
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨													
M 6	1	80	17	4.5	3.4	5.55													
M 7	1	80	17	5.5	4.3	6.55													
M 8	1.25	90	20	6	4.9	7.4													
M 9	1.25	90	20	7	5.5	8.4													
M 10	1.5	100	22	7	5.5	9.3													
M 12	1.75	110	24	9	7	11.2	■												
M 14	2	110	26	11	9	13.1													
M 16	2	110	27	12	9	15.1	■												
M 18	2.5	125	30	14	11	16.9													
M 20	2.5	140	32	16	12	18.9													
M 22	2.5	140	32	18	14.5	20.9													
M 24	3	160	34	18	14.5	22.65													
M 27	3	160	36	20	16	25.65													

Forming Taps - MISTRAL

DIN 376 HSS-E PM

straight oil grooves for aluminium and bronze alloys

Group 4051  
for blind and through holes



2xd<sub>1</sub>

Cutting Data



**DLC**  
Diamond like Carbon

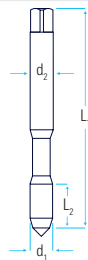
Innovative surface coating technologies with high hardness and low frictional coefficient



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher



Art.-No.

Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5

40510/0253

PM-Line

40510/2453

PM-Line

C / 2-3 x P

CrN

DLC

6HX

6HX

N1 aluminium alloys N5 bronze alloys N6 thermoplastics

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 6	1	80	17	4.5	3.4	5.55
M 7	1	80	17	5.5	4.3	6.55
M 8	1.25	90	20	6	4.9	7.4
M 9	1.25	90	20	7	5.5	8.4
M 10	1.5	100	22	7	5.5	9.3
M 12	1.75	110	24	9	7	11.2
M 14	2	110	26	11	9	13.1
M 16	2	110	27	12	9	15.1
M 18	2.5	125	30	14	11	16.9
M 20	2.5	140	32	16	12	18.9
M 22	2.5	140	32	18	14.5	20.9
M 24	3	160	34	18	14.5	22.65
M 27	3	160	36	20	16	25.65

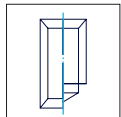
Forming Taps - NUMERIC

DIN 376 HSS-E PM

straight oil grooves for steel, heat treatable steel and chemical resistant steel

Group 4053  
for blind and through holes

STEEL



2xd<sub>1</sub>



High Speed Cutting  
by Schumacher

Cutting Data



NUMERIC  
Supporting Digital Production

For use on CNC machines  
with synchronized machining

Art.-No.

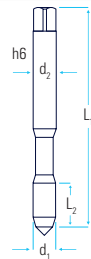
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



40530/4853

PM-Line

C / 2-3 x P

TiCN

6HX

P1 general construction steel P2 high strength steel M1 chemical resistant steel

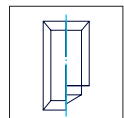
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 6	1	80	10	4.5	3.4	5.55
M 7	1	80	10	5.5	4.3	6.55
M 8	1.25	90	14	6	4.9	7.4
M 9	1.25	90	14	7	5.5	8.4
M 10	1.5	100	16	7	5.5	9.3
M 12	1.75	110	18	9	7	11.2
M 14	2	110	20	11	9	13.1
M 16	2	110	20	12	9	15.1
M 18	2.5	125	25	14	11	16.9
M 20	2.5	140	25	16	12	18.9
M 22	2.5	140	25	18	14.5	20.9
M 24	3	160	30	18	14.5	22.65
M 27	3	160	30	20	16	25.65

Forming Taps

DIN 371 HSS-E

straight oil grooves for steel, non-ferrous steel and heat treatable steel

Group 3060  
for blind and through holes



2xd<sub>1</sub>

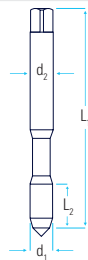
Cutting Data



High Speed Cutting  
by Schumacher



High Speed Cutting  
by Schumacher



Art.-No.

Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5

30600/53	30600/2553	30600 B/2553
High Volume	High Volume	
	C / 2-3 x P	
bright	TiN	TiN
6HX	6HX	6GX
P1 general construction steel	P2 high strength steel	N3 copper alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>						
M 1	0.25	40	5.5	2.5	2.1	0.9				
M 1.2	0.25	40	5.5	2.5	2.1	1.1				
M 1.4	0.3	40	7	2.5	2.1	1.25				
M 1.6	0.35	40	8	2.5	2.1	1.45				
M 1.7	0.35	40	8	2.5	2.1	1.55				
M 1.8	0.35	40	8	2.5	2.1	1.65				
M 2	0.4	45	8	2.8	2.1	1.85				
M 2.2	0.45	45	8	2.8	2.1	2.0				
M 2.3	0.4	45	8	2.8	2.1	2.1				
M 2.5	0.45	50	9	2.8	2.1	2.3				
M 2.6	0.45	50	9	2.8	2.1	2.4				

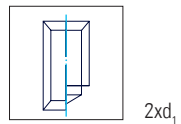
Continuation »

Forming Taps

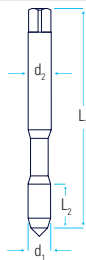
DIN 371 HSS-E

straight oil grooves for steel, non-ferrous steel and heat treatable steel

Group 3060  
for blind and through holes



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



30600/53	30600/2553	30600 B/2553
<b>High Volume</b>	<b>High Volume</b>	
	C / 2-3 x P	
bright	TiN	TiN
6HX	6HX	6GX
P1 general construction steel	P2 high strength steel	N3 copper alloys

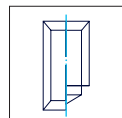
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨			
M 3	0.5	56	11	3.5	2.7	2.8	■		■
M 3.5	0.6	56	12	4	3	3.25			
M 4	0.7	63	13	4.5	3.4	3.7	■		■
M 5	0.8	70	15	6	4.9	4.65	■		■
M 6	1	80	17	6	4.9	5.55	■		■
M 7	1	80	17	7	5.5	6.55			
M 8	1.25	90	20	8	6.2	7.4	■		■
M 9	1.25	90	20	9	7	8.4			
M 10	1.5	100	22	10	8	9.3	■		■
M 12	1.75	110	24	12	9	11.2			

Forming Taps

DIN 376 HSS-E

straight oil grooves for steel, non-ferrous steel and heat treatable steel

Group 4060 for blind and through holes



2xd<sub>1</sub>

Cutting Data



High Speed Cutting  
by Schumacher

Art.-No.

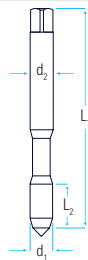
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



40600/53

High Volume

40600/2553

High Volume

C / 2-3 x P

bright

TiN

6HX

6HX

P1 general construction steel P2 high strength steel N3 copper alloys

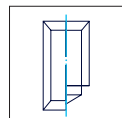
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 6	1	80	17	4.5	3.4	5.55				
M 7	1	80	17	5.5	4.3	6.55				
M 8	1.25	90	20	6	4.9	7.4				
M 9	1.25	90	20	7	5.5	8.4				
M 10	1.5	100	22	7	5.5	9.3				
M 12	1.75	110	24	9	7	11.2	■		■	
M 14	2	110	26	11	9	13.1				
M 16	2	110	27	12	9	15.1	■		■	
M 18	2.5	125	30	14	11	16.9				
M 20	2.5	140	32	16	12	18.9				
M 22	2.5	140	32	18	14.5	20.9				
M 24	3	160	34	18	14.5	22.65				
M 27	3	160	36	20	16	25.65				

Set of Taps

DIN 352 HSS

set of 3 pieces, straight flutes  
for general construction steel

Group 1000  
for blind and through holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

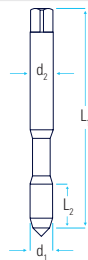
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



10100	10200	10300
<b>High Volume</b>	<b>High Volume</b>	<b>High Volume</b>
D / 3.5-5 x P	3-4 x P	C / 2-3 x P
bright	bright	bright
No. 1	No. 2	No. 3 = ISO2 (6H)
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>						
M 2	0.4	36	8	2.8	2.1	1.6		■		■
M 2.2	0.45	36	9	2.8	2.1	1.75		■		■
M 2.3	0.4	36	9	2.8	2.1	1.9		■		■
M 2.5	0.45	40	9	2.8	2.1	2.05		■		■
M 2.6	0.45	40	9	2.8	2.1	2.15		■		■
M 3	0.5	40	11	3.5	2.7	2.5		■		■
M 4	0.7	45.5	13	4.5	3.4	3.3		■		■
M 5	0.8	52	16	6	4.9	4.2		■		■
M 6	1	56	18	6	4.9	5.0		■		■

Continuation »

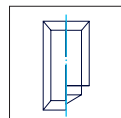


Set of Taps

DIN 352 HSS

set of 3 pieces, straight flutes  
for general construction steel

Group 1000  
for blind and through holes



2xd<sub>1</sub>

Cutting Data



Art.-No.

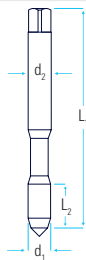
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



10100	10200	10300
<b>High Volume</b>	<b>High Volume</b>	<b>High Volume</b>
D / 3.5-5 x P	3-4 x P	C / 2-3 x P
bright	bright	bright
No. 1	No. 2	No. 3 = ISO2 (6H)
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

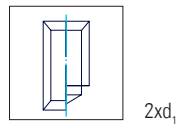
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>						
M 7	1	56	18	6	4.9	6.0		■		■
M 8	1.25	63	20	6	4.9	6.75		■		■
M 9	1.25	63	20	7	5.5	7.75		■		■
M 10	1.5	70	22	7	5.5	8.5		■		■
M 12	1.75	80	24	9	7	10.25		■		■
M 14	2	80	26	11	9	12.0		■		■
M 16	2	80	27	12	9	14.0		■		■
M 18	2.5	95	30	14	11	15.5		■		■
M 20	2.5	95	32	16	12	17.5		■		■

Set of Taps

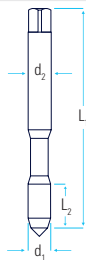
DIN 352 HSS

set of 3 pieces, straight flutes  
for general construction steel

Group 1000 LH  
for blind and through holes



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



10105	10205	10305
LH	LH	LH
D / 3.5-5 x P	3-4 x P	C / 2-3 x P
bright	bright	bright
No. 1	No. 2	No. 3 = ISO2 (6H)
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨	10105	10205	10305
M 2	0.4	36	8	2.8	2.1	1.6	■	■	■
M 2.2	0.45	36	9	2.8	2.1	1.75			
M 2.3	0.4	36	9	2.8	2.1	1.9			
M 2.5	0.45	40	9	2.8	2.1	2.05	■	■	■
M 2.6	0.45	40	9	2.8	2.1	2.15			
M 3	0.5	40	11	3.5	2.7	2.5	■	■	■
M 4	0.7	45.5	13	4.5	3.4	3.3	■	■	■
M 5	0.8	52	16	6	4.9	4.2	■	■	■
M 6	1	56	18	6	4.9	5.0	■	■	■

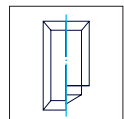
Continuation »

Set of Taps

DIN 352 HSS

set of 3 pieces, straight flutes  
for general construction steel

Group 1000 LH  
for blind and through holes



2xd<sub>1</sub>

Cutting Data



Art.-No.

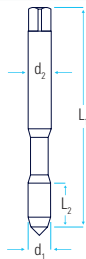
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



10105

10205

10305

LH

LH

LH

D / 3.5-5 x P

3-4 x P

C / 2-3 x P

bright

bright

bright

No. 1

No. 2

No. 3 = ISO2 (6H)

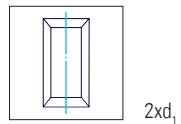
P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 7	1	56	18	6	4.9	6.0				
M 8	1.25	63	20	6	4.9	6.75	■		■	■
M 9	1.25	63	20	7	5.5	7.75				
M 10	1.5	70	22	7	5.5	8.5	■		■	■
M 12	1.75	80	24	9	7	10.25	■		■	■
M 14	2	80	26	11	9	12.0	■		■	■
M 16	2	80	27	12	9	14.0	■		■	■
M 18	2.5	95	30	14	11	15.5	■		■	■
M 20	2.5	95	32	16	12	17.5	■		■	■

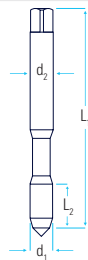
Set of Taps

DIN 352 HSS-E  
set of 3 pieces, straight flutes  
for high strength steel

Group 2000  
for through holes



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



20100	20200	20300
D / 3.5-5 x P	3-4 x P	C / 2-3 x P
bright	bright	bright
No. 1	No. 2	No. 3 = ISO2 (6H)
P2 high strength steel		

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 3	0.5	40	11	3.5	2.7	2.5	■		■	■
M 4	0.7	45	13	4.5	3.4	3.3	■		■	■
M 5	0.8	52	16	6	4.9	4.2	■		■	■
M 6	1	56	18	6	4.9	5.0	■		■	■
M 7	1	56	18	6	4.9	6.0				
M 8	1.25	63	20	6	4.9	6.75	■		■	■
M 9	1.25	63	20	7	5.5	7.75				
M 10	1.5	70	22	7	5.5	8.5	■		■	■
M 12	1.75	80	24	9	7	10.25	■		■	■
M 14	2	80	26	11	9	12.0				
M 16	2	80	27	12	9	14.0	■		■	■
M 18	2.5	95	30	14	11	15.5				
M 20	2.5	95	32	16	12	17.5	■		■	■

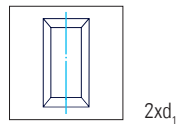
Carbide Machine Taps

DIN 371/376 Solid Carbide

straight flutes  
for hard materials

Group G010  
for through holes

HARD



Cutting Data



Art.-No.

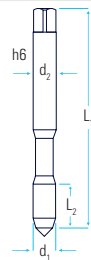
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



G0100/41

**VHMtec**

radial internal coolant

5-6 x P

bright

6HX

K1 grey cast iron N3 copper alloys H1 hard materials

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 3	0.5	56	11	3.5	2.7	2.5
M 3.5	0.6	56	12	4	3	2.9
M 4	0.7	63	13	4.5	3.4	3.3
M 5	0.8	70	15	6	4.9	4.2
M 6	1	80	17	6	4.9	5.0
M 7	1	80	17	7	5.5	6.0
M 8	1.25	90	20	8	6.2	6.8
M 9	1.25	90	20	9	7	7.8
M 10	1.5	100	22	10	8	8.5
M 12	1.75	110	24	9	7	10.2
M 16	2	110	27	12	9	14.0

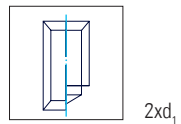
Carbide Machine Taps

DIN 371/376 Solid Carbide

straight flutes  
for hard materials

Group G080  
for blind and through holes

HARD



Art.-No.

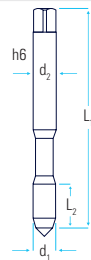
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



G0800	G0800/40
<b>VHMtec</b>	<b>VHMtec</b>
	internal coolant
	3-4 x P
bright	bright
6HX	6HX
K1 grey cast iron	N3 copper alloys H1 hard materials

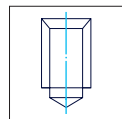
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 3	0.5	56	11	3.5	2.7	2.5	■			
M 3.5	0.6	56	12	4	3	2.9				
M 4	0.7	63	13	4.5	3.4	3.3	■			
M 5	0.8	70	15	6	4.9	4.2	■			
M 6	1	80	17	6	4.9	5.0			■	
M 7	1	80	17	7	5.5	6.0				
M 8	1.25	90	20	8	6.2	6.8			■	
M 9	1.25	90	20	9	7	7.8			■	
M 10	1.5	100	22	10	8	8.5			■	
M 12	1.75	110	24	9	7	10.2			■	
M 16	2	110	27	12	9	14.0			■	

Carbide Machine Taps

DIN 371/376 Solid Carbide

RH spiral flutes 20°  
for universal use

Group G260  
for blind holes



2xd<sub>1</sub>

Cutting Data



Art.-No.

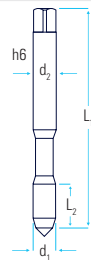
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



G2600/40

**VHMtec**

internal coolant

3-4 x P

bright

6HX

P1 general construction steel M1 chemical resistant steel N1 aluminium alloys N3 copper alloys

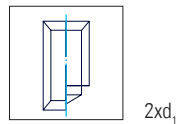
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨
M 3	0.5	56	11	3.5	2.7	2.5
M 3.5	0.6	56	12	4	3	2.9
M 4	0.7	63	13	4.5	3.4	3.3
M 5	0.8	70	15	6	4.9	4.2
M 6	1	80	17	6	4.9	5.0
M 7	1	80	17	7	5.5	6.0
M 8	1.25	90	20	8	6.2	6.8
M 9	1.25	90	20	9	7	7.8
M 10	1.5	100	22	10	8	8.5
M 12	1.75	110	24	9	7	10.2
M 16	2	110	27	12	9	14.0

Carbide Forming Taps

DIN 371/376 Solid Carbide

straight oil grooves  
for high strength steel

Group G060/G070  
for blind and through holes



Art.-No.

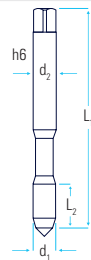
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



G0600/5360



G0700/5360



internal coolant

C / 2-3 x P

SG4

SG4

6HX

6HX

P1 general construction steel P2 high strength steel N1 aluminium alloys

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 3	0.5	56	11	6	4.9	2.8	■			
M 3.5	0.6	56	12	6	4.9	3.25				
M 4	0.7	63	13	6	4.9	3.7	■			
M 5	0.8	70	15	6	4.9	4.65	■			
M 6	1	80	17	6	4.9	5.55		■		
M 7	1	80	17	8	6.2	6.55				
M 8	1.25	90	20	8	6.2	7.4		■		
M 9	1.25	90	20	10	8	8.4				
M 10	1.5	100	22	10	8	9.3		■		
M 12	1.75	110	24	12	9	11.2		■		
M 16	2	110	27	12	9	15.1				

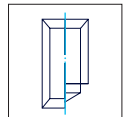


## Machine Taps

**DIN 374 HSS-E**  
straight flutes  
for general construction steel

Group 5000  
for blind and through holes

STEEL



2x d<sub>1</sub>



Cutting Data



Art.-No.

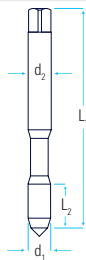
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



50000

C / 2-3 x P

bright

ISO2 (6H)

P1 general construction steel

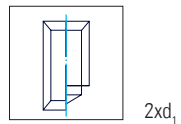
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨															
M 4	0.5	63	10	2.8	2.1	3.5														■	
M 5	0.5	70	11	3.5	2.7	4.5															■
M 6	0.5	80	13	4.5	3.4	5.5															■
M 6	0.75	80	13	4.5	3.4	5.3															■
M 8	0.75	80	14	6	4.9	7.3															■
M 10	0.75	90	18	7	5.5	9.3															■
M 8	1	90	17	6	4.9	7.0															■
M 10	1	90	18	7	5.5	9.0															■
M 12	1	100	18	9	7	11.0															■
M 14	1	100	18	11	9	13.0															■
M 16	1	100	18	12	9	15.0															■
M 18	1	110	20	14	11	17.0															■
M 20	1	125	20	16	12	19.0															■

Continuation »

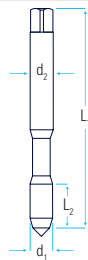
Machine Taps

DIN 374 HSS-E  
straight flutes  
for general construction steel

Group 5000  
for blind and through holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



50000
C / 2-3 x P
bright
ISO2 (6H)
P1 general construction steel

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨					
M 22	1	125	20	18	14.5	21.0	■				
M 24	1	140	20	18	14.5	23.0	■				
M 10	1.25	100	22	7	5.5	8.8	■				
M 12	1.25	100	22	9	7	10.8	■				
M 14	1.25	100	22	11	9	12.8	■				
M 12	1.5	100	22	9	7	10.5	■				
M 14	1.5	100	22	11	9	12.5	■				
M 16	1.5	100	22	12	9	14.5	■				
M 18	1.5	110	25	14	11	16.5	■				
M 20	1.5	125	25	16	12	18.5	■				
M 22	1.5	125	25	18	14.5	20.5	■				
M 24	1.5	140	27	18	14.5	22.5	■				
M 26	1.5	140	28	18	14.5	24.5	■				

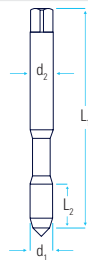
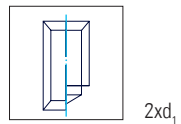
Continuation »

Machine Taps

DIN 374 HSS-E  
straight flutes  
for general construction steel

Group 5000  
for blind and through holes

STEEL



- Art.-No.
- Technology [i](#) Page 8.1
- Chamfer Length [i](#) Page 8.2
- Surface [i](#) Page 8.3
- Tolerance [i](#) Page 8.4
- Cutting Data [i](#) Page 8.5

50000

C / 2-3 x P

bright

ISO2 (6H)

P1 general construction steel

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
M 28	1.5	140	28	20	16	26.5	■											
M 30	1.5	150	30	22	18	28.5	■											
M 32	1.5	150	30	22	18	30.5	■											
M 34	1.5	170	33	28	22	32.5	■											
M 36	1.5	170	33	28	22	34.5	■											
M 38	1.5	170	33	28	22	36.5	■											
M 40	1.5	170	33	32	24	38.5	■											
M 42	1.5	170	33	32	24	40.5	■											
M 45	1.5	180	33	36	29	43.5	■											
M 48	1.5	190	36	36	29	46.5	■											
M 18	2	125	26	14	11	16.0	■											
M 20	2	140	27	16	12	18.0	■											
M 22	2	140	27	18	14.5	20.0	■											

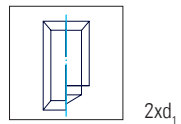
Continuation »

Machine Taps

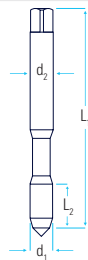
DIN 374 HSS-E  
straight flutes  
for general construction steel

Group 5000  
for blind and through holes

STEEL



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



50000
C / 2-3 x P
bright
ISO2 (6H)
P1 general construction steel

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 24	2	140	27	18	14.5	22.0	■			
M 27	2	140	28	20	16	25.0	■			
M 30	2	150	30	22	18	28.0	■			
M 33	2	160	32	25	20	31.0	■			
M 36	2	170	33	28	22	34.0	■			
M 39	2	170	33	32	24	37.0	■			
M 40	2	170	33	32	24	38.0	■			
M 42	2	180	33	32	24	40.0	■			
M 45	2	180	33	36	29	43.0	■			
M 36	3	200	45	28	22	33.0	■			
M 39	3	200	45	32	24	36.0	■			
M 42	3	200	45	32	24	39.0	■			
M 45	3	200	45	36	29	42.0	■			
M 48	3	225	50	36	29	45.0	■			

Machine Taps White Ring

DIN 374 HSS-E

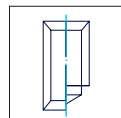
straight flutes  
for cast iron

Group 5030  
for blind and through holes

Cutting Data



CAST  
IRON



2xd<sub>1</sub>



Art.-No.

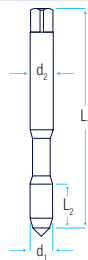
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



50300/01

White Ring

C / 2-3 x P

nitrided

6HX

K1 grey cast iron N7 duroplastics

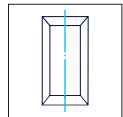
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨														
M 5	0.5	70	11	3.5	2.7	4.5														
M 6	0.5	80	13	4.5	3.4	5.5														
M 6	0.75	80	13	4.5	3.4	5.3														
M 8	1	90	17	6	4.9	7.0	■													
M 10	1	90	18	7	5.5	9.0	■													
M 12	1	100	18	9	7	11.0	■													
M 14	1	100	18	11	9	13.0	■													
M 10	1.25	100	22	7	5.5	8.8	■													
M 12	1.25	100	22	9	7	10.8	■													
M 12	1.5	100	22	9	7	10.5	■													
M 14	1.5	100	22	11	9	12.5	■													
M 16	1.5	100	22	12	9	14.5	■													
M 18	1.5	110	25	14	11	16.5	■													
M 20	1.5	125	25	16	12	18.5	■													
M 22	1.5	125	25	18	14.5	20.5	■													
M 24	1.5	140	27	18	14.5	22.5	■													

Machine Taps

DIN 374 HSS-E  
 spiral point  
 for general construction steel

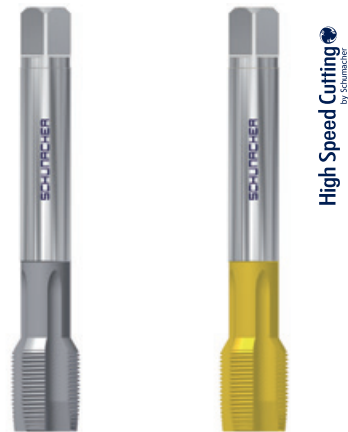
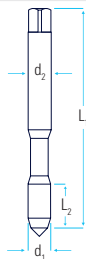
Group 5100  
 for through holes

STEEL



2x d<sub>1</sub>

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- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



51000	51000/25
<b>High Volume</b>	<b>High Volume</b>
B / 3.5-5 x P	
bright	TiN
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 4	0.5	63	10	2.8	2.1	3.5	■			
M 5	0.5	70	11	3.5	2.7	4.5	■			
M 6	0.5	80	13	4.5	3.4	5.5	■			
M 6	0.75	80	13	4.5	3.4	5.2	■			
M 8	0.75	80	14	6	4.9	7.3	■			
M 10	0.75	90	18	7	5.5	9.3	■			
M 8	1	90	17	6	4.9	7.0	■		■	
M 10	1	90	18	7	5.5	9.0	■		■	
M 12	1	100	18	9	7	11.0	■		■	
M 14	1	100	18	11	9	13.0	■		■	
M 16	1	100	18	12	9	15.0	■			
M 18	1	110	20	14	11	17.0	■			

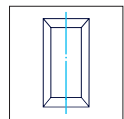
Continuation »

Machine Taps

DIN 374 HSS-E

spiral point  
for general construction steel

Group 5100  
for through holes



2x d<sub>1</sub>

Cutting Data



High Speed Cutting  
by Schumacher

Art.-No.

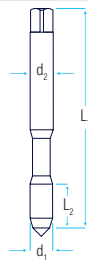
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51000	51000/25
High Volume	High Volume
B / 3.5-5 x P	
bright	TiN
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 20	1	125	20	16	12	19.0	■			
M 22	1	125	20	18	14.5	21.0	■			
M 24	1	140	20	18	14.5	23.0	■			
M 10	1.25	100	22	7	5.5	8.8	■		■	
M 12	1.25	100	22	9	7	10.8	■		■	
M 14	1.25	100	22	11	9	12.8	■			
M 12	1.5	100	22	9	7	10.5	■		■	
M 14	1.5	100	22	11	9	12.5	■		■	
M 16	1.5	100	22	12	9	14.5	■		■	
M 18	1.5	110	25	14	11	16.5	■		■	
M 20	1.5	125	25	16	12	18.5	■		■	
M 22	1.5	125	25	18	14.5	20.5	■		■	
M 24	1.5	140	25	18	14.5	22.5	■		■	

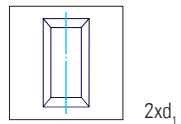
Continuation »

Machine Taps

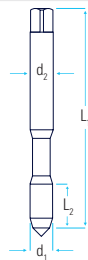
DIN 374 HSS-E  
 spiral point  
 for general construction steel

Group 5100  
 for through holes

STEEL



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



51000	51000/25
<b>High Volume</b>	<b>High Volume</b>
B / 3.5-5 x P	
bright	TiN
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 26	1.5	140	28	18	14.5	24.5	■			
M 28	1.5	140	28	20	16	26.5	■			
M 30	1.5	150	30	22	18	28.5	■			
M 32	1.5	150	30	22	18	30.5	■			
M 34	1.5	170	33	28	22	32.5	■			
M 36	1.5	170	33	28	22	34.5	■			
M 38	1.5	170	33	28	22	36.5	■			
M 40	1.5	170	33	32	24	38.5	■			
M 42	1.5	170	33	32	24	40.5	■			
M 45	1.5	180	33	36	29	43.5	■			
M 48	1.5	190	36	36	29	46.5	■			
M 18	2	125	26	14	11	16.0	■			
M 20	2	140	27	16	12	18.0	■			
M 22	2	140	27	18	14.5	20.0	■			

Continuation »

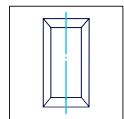


Machine Taps

DIN 374 HSS-E

spiral point  
for general construction steel

Group 5100  
for through holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

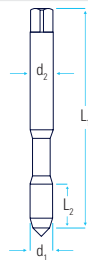
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

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Cutting Data **i** Page 8.5



51000

High Volume

B / 3.5-5 x P

bright

ISO2 (6H)

P1 general construction steel K2+K3 spheroidal and malleable cast iron

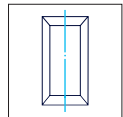
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨													
M 24	2	140	27	18	14.5	22.0		■											
M 27	2	140	28	20	16	25.0		■											
M 30	2	150	30	22	18	28.0		■											
M 33	2	160	32	25	20	31.0		■											
M 36	2	170	33	28	22	34.0		■											
M 39	2	170	33	32	24	37.0		■											
M 40	2	170	33	32	24	38.0		■											
M 42	2	180	33	32	24	40.0		■											
M 45	2	180	33	36	29	43.0		■											
M 36	3	200	45	28	22	33.0		■											
M 39	3	200	45	28	32	36.0		■											
M 42	3	200	45	32	24	39.0		■											
M 45	3	200	45	36	29	42.0		■											
M 48	3	225	50	36	29	45.0		■											

## Machine Taps Blue Ring

### DIN 374 HSS-E

spiral point  
for chemical resistant steel

Group 5120  
for through holes



2xd<sub>1</sub>



Cutting Data



#### Art.-No.

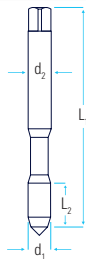
Technology Page 8.1

Chamfer Length Page 8.2

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Cutting Data Page 8.5



51200	51200/25
Blue Ring	Blue Ring
B / 3.5-5 x P	
bright	TiN
ISO2 (6H)	ISO2 (6H)
P2 high strength steel	M1 chemical resistant steel S1 titanium alloys

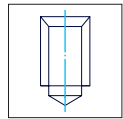
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 5	0.5	70	11	3.5	2.7	4.5	■			
M 6	0.5	80	13	4.5	3.4	5.5	■			
M 6	0.75	80	13	4.5	3.4	5.3	■			
M 8	1	90	17	6	4.9	7.0	■		■	
M 10	1	90	18	7	5.5	9.0	■		■	
M 12	1	100	18	9	7	11.0	■		■	
M 14	1	100	18	11	9	13.0	■		■	
M 10	1.25	100	22	7	5.5	8.8	■		■	
M 12	1.25	100	22	9	7	10.8	■		■	
M 12	1.5	100	22	9	7	10.5	■		■	
M 14	1.5	100	22	11	9	12.5	■		■	
M 16	1.5	100	22	12	9	14.5	■		■	
M 18	1.5	110	25	14	11	16.5	■		■	
M 20	1.5	125	25	16	12	18.5	■		■	
M 22	1.5	125	25	18	14.5	20.5	■		■	
M 24	1.5	140	27	18	14.5	22.5	■		■	

#### Machine Taps

#### DIN 374 HSS-E

RH spiral flutes 15°  
for general construction steel

Group 5200  
for blind holes



2xd<sub>1</sub>



Cutting Data



**Art.-No.**

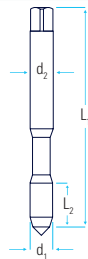
Technology Page 8.1

Chamfer Length Page 8.2

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Cutting Data Page 8.5



52000

C / 2-3 x P

bright

ISO2 (6H)

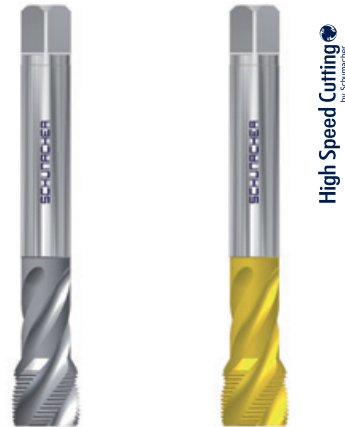
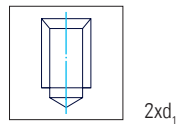
P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨														
M 6	0.75	80	13	4.5	3.4	5.3														
M 8	1	90	17	6	4.9	7.0	■													
M 10	1	90	18	7	5.5	9.0	■													
M 12	1	100	18	9	7	11.0	■													
M 14	1	100	18	11	9	13.0	■													
M 10	1.25	100	22	7	5.5	8.8	■													
M 12	1.25	100	22	9	7	10.8	■													
M 12	1.5	100	22	9	7	10.5	■													
M 14	1.5	100	22	11	9	12.5	■													
M 16	1.5	100	22	12	9	14.5	■													
M 18	1.5	110	25	14	11	16.5	■													
M 20	1.5	125	25	16	12	18.5	■													
M 22	1.5	125	25	18	14.5	20.5	■													
M 24	1.5	140	27	18	14.5	22.5	■													
M 26	1.5	140	28	18	14.5	24.5	■													
M 30	1.5	150	30	22	18	28.5	■													

Machine Taps

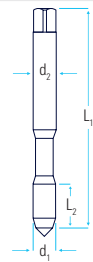
DIN 374 HSS-E  
RH spiral flutes 40°  
for general construction steel

Group 5300  
for blind holes



High Speed Cutting  
by Schumacher

Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
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53000	53000/25
<b>High Volume</b>	<b>High Volume</b>
C / 2-3 x P	
bright	TiN
ISO2 (6H)	ISO2 (6H)
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

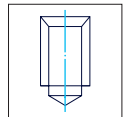
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 6	0.75	80	8	4.5	3.4	5.3				
M 8	1	90	10	6	4.9	7.0	■		■	
M 10	1	90	10	7	5.5	9.0	■		■	
M 12	1	100	11	9	7	11.0	■		■	
M 14	1	100	11	11	9	13.0	■		■	
M 10	1.25	100	16	7	5.5	8.8	■		■	
M 12	1.25	100	15	9	7	10.8	■		■	
M 12	1.5	100	15	9	7	10.5	■		■	
M 14	1.5	100	15	11	9	12.5	■		■	
M 16	1.5	100	15	12	9	14.5	■		■	
M 18	1.5	110	17	14	11	16.5	■		■	
M 20	1.5	125	17	16	12	18.5	■		■	
M 22	1.5	125	17	18	14.5	20.5	■		■	
M 24	1.5	140	20	18	14.5	22.5	■		■	
M 26	1.5	140	20	18	14.5	24.5	■			
M 30	1.5	150	22	22	18	28.5	■			

## Machine Taps Blue Ring

DIN 374 HSS-E  
RH spiral flutes 40°  
for chemical resistant steel

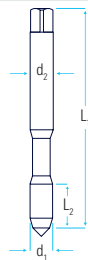
Group 5350  
for blind holes

**INOX**  
Stainless



2xd<sub>1</sub>

Cutting Data



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

53500

53500/25

Blue Ring

Blue Ring

C / 2-3 x P

bright

TiN

ISO2 (6H)

ISO2 (6H)

P2 high strength steel M1 chemical resistant steel S1 titanium alloys

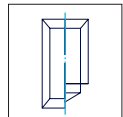
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨											
M 5	0.5	70	5	3.5	2.7	4.5											
M 6	0.5	80	5	4.5	3.4	5.5											
M 6	0.75	80	8	4.5	3.4	5.2											
M 8	1	90	10	6	4.9	7.0	■				■						
M 10	1	90	10	7	5.5	9.0	■				■						
M 12	1	100	11	9	7	11.0	■				■						
M 14	1	100	11	11	9	13.0	■				■						
M 10	1.25	100	16	7	5.5	8.8	■				■						
M 12	1.25	100	15	9	7	10.8	■				■						
M 12	1.5	100	15	9	7	10.5	■				■						
M 14	1.5	100	15	11	9	12.5	■				■						
M 16	1.5	100	15	12	9	14.5	■				■						
M 18	1.5	110	17	14	11	16.5	■				■						
M 20	1.5	125	17	16	12	18.5	■				■						
M 22	1.5	125	17	18	14.5	20.5	■				■						
M 24	1.5	140	20	18	14.5	22.5	■				■						

#### Set of Taps

#### DIN 2181 HSS-E

set of 2 pieces, straight flutes  
for general construction steel

Group 1200  
for blind and through holes



2xd<sub>1</sub>



Cutting Data



**Art.-No.**

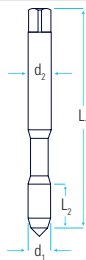
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Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



12100

12200

D / 3.5-5 x P

C / 2-3 x P

bright

bright

No. 1

No. 2 = ISO2 (6H)

P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 6	0.5	56	13	6	4.9	5.5	■		■	
M 6	0.75	56	14	6	4.9	5.3	■		■	
M 8	0.75	63	14	6	4.9	7.3	■		■	
M 10	0.75	63	18	7	5.5	9.3	■		■	
M 8	1	63	17	6	4.9	7.0	■		■	
M 10	1	63	18	7	5.5	9.0	■		■	
M 12	1	70	18	9	7	11.0	■		■	
M 14	1	70	18	11	9	13.0	■		■	
M 16	1	70	20	12	9	15.0	■		■	
M 18	1	80	18	14	11	17.0	■		■	
M 20	1	80	18	16	12	19.0	■		■	
M 10	1.25	70	22	7	5.5	8.8	■		■	
M 12	1.25	70	20	9	7	10.8	■		■	
M 14	1.25	70	20	11	9	12.8	■		■	

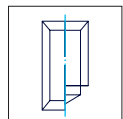
Continuation »

#### Set of Taps

#### DIN 2181 HSS-E

set of 2 pieces, straight flutes  
for general construction steel

Group 1200  
for blind and through holes



2xd<sub>1</sub>



Cutting Data



#### Art.-No.

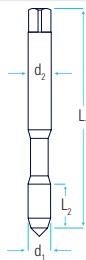
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



12100

12200

D / 3.5-5 x P

C / 2-3 x P

bright

bright

No. 1

No. 2 = ISO2 (6H)

P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>				
M 12	1.5	70	20	9	7	10.5	■	■
M 14	1.5	70	20	11	9	12.5	■	■
M 16	1.5	70	20	12	9	14.5	■	■
M 18	1.5	80	22	14	11	16.5	■	■
M 20	1.5	80	22	16	12	18.5	■	■
M 22	1.5	80	22	18	14.5	20.5	■	■
M 24	1.5	90	22	18	14.5	22.5	■	■
M 25	1.5	90	22	18	14.5	23.5	■	■
M 26	1.5	90	22	18	14.5	24.5	■	■
M 27	1.5	90	22	20	16	25.5	■	■
M 28	1.5	90	22	20	16	26.5	■	■
M 30	1.5	90	22	22	18	28.5	■	■
M 32	1.5	90	25	22	18	30.5	■	■
M 33	1.5	100	25	25	20	31.5	■	■
M 34	1.5	100	25	28	22	32.5	■	■

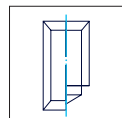
Continuation »

Set of Taps

DIN 2181 HSS-E

set of 2 pieces, straight flutes  
for general construction steel

Group 1200  
for blind and through holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

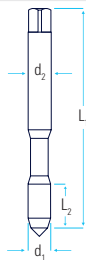
Technology Page 8.1

Chamfer Length Page 8.2

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12100

12200

D / 3.5-5 x P

C / 2-3 x P

bright

bright

No. 1

No. 2 = ISO2 (6H)

P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
M 35	1.5	100	25	28	22	33.5	■		■	
M 36	1.5	100	25	28	22	34.5	■		■	
M18	2	80	22	14	11	16.0	■		■	
M 20	2	80	22	16	12	18.0	■		■	
M 22	2	80	22	18	14.5	20.0	■		■	
M 24	2	90	22	18	14.5	22.0	■		■	
M 27	2	90	22	20	16	25.0	■		■	
M 30	2	90	22	22	18	28.0	■		■	
M 36	3	125	36	28	22	33.0	■		■	
M 39	3	125	36	32	24	36.0	■		■	
M 42	3	125	36	32	24	39.0	■		■	
M 45	3	125	36	36	29	42.0	■		■	
M 48	3	140	36	36	29	45.0	■		■	



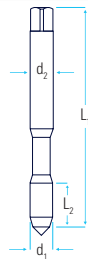
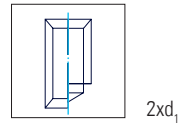


Machine Taps

DIN 5156 HSS-E  
straight flutes  
for general construction steel

Group 5500  
for blind and through holes

STEEL



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5

55000
C / 2-3 x P
bright
P1 general construction steel

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
G 1/8"	28	90	20	7	5.5	8.8	■			
G 1/4"	19	100	22	11	9	11.8	■			
G 3/8"	19	100	22	12	9	15.3	■			
G 1/2"	14	125	25	16	12	19.0	■			
G 5/8"	14	125	25	18	14.5	21.0	■			
G 3/4"	14	140	28	20	16	24.5	■			
G 7/8"	14	150	28	22	18	28.3	■			
G 1"	11	160	30	25	20	30.8	■			
G 1 1/4"	11	170	30	32	24	39.5	■			
G 1 1/2"	11	190	32	36	29	45.3	■			

Machine Taps White Ring

DIN 5156 HSS-E

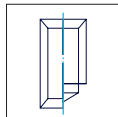
straight flutes  
für Grey cast iron

Group 5530  
for blind and through holes

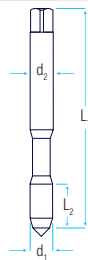
Cutting Data



CAST  
IRON



2x d<sub>1</sub>



Art.-No.

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Chamfer Length **i** Page 8.2

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Cutting Data **i** Page 8.5

55300/01

White Ring

C / 2-3 x P

nitrided

K1 grey cast iron N7 duroplastics

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨														
G 1/8"	28	90	20	7	5.5	8.8	■													
G 1/4"	19	100	22	11	9	11.8	■													
G 3/8"	19	100	22	12	9	15.3	■													
G 1/2"	14	125	25	16	12	19.0	■													
G 5/8"	14	125	25	18	14.5	21.0														
G 3/4"	14	140	28	20	16	24.5	■													
G 7/8"	14	150	28	22	18	28.3	■													
G 1"	11	160	30	25	20	30.8	■													
G 1 1/4"	11	170	30	32	24	39.5	■													
G 1 1/2"	11	190	32	36	29	45.3	■													

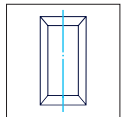
Machine Taps

DIN 5156 HSS-E

spiral point  
for general construction steel

Group 5600  
for through holes

STEEL



2x d<sub>1</sub>

Cutting Data



High Speed Cutting  
by Schumacher

Art.-No.

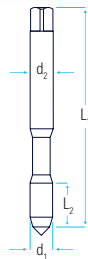
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



56000	56000/25
<b>High Volume</b>	<b>High Volume</b>
B / 3.5-5 x P	
bright	TiN
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

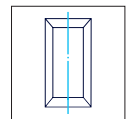
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
G 1/8"	28	90	20	7	5.5	8.8	■		■	
G 1/4"	19	100	22	11	9	11.8	■		■	
G 3/8"	19	100	22	12	9	15.3	■		■	
G 1/2"	14	125	25	16	12	19.0	■		■	
G 5/8"	14	125	25	18	14.5	21.0	■		■	
G 3/4"	14	140	28	20	16	24.5	■		■	
G 7/8"	14	150	28	22	18	28.3	■		■	
G 1"	11	160	30	25	20	30.8	■		■	
G 1 1/4"	11	170	30	32	24	39.5	■		■	
G 1 1/2"	11	190	32	36	29	45.3	■		■	

Machine Taps Blue Ring

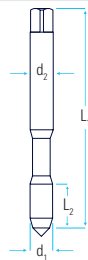
DIN 5156 HSS-E

spiral point  
for chemical resistant steel

Group 5620  
for through holes



2xd<sub>1</sub>



Art.-No.

Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5

56200	56200/25
Blue Ring	Blue Ring
B / 3.5-5 x P	
bright	TiN
P2 high strength steel	M1 chemical resistant steel
	S1 titanium alloys

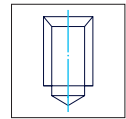
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
G 1/8"	28	90	20	7	5.5	8.8	■		■	
G 1/4"	19	100	22	11	9	11.8	■		■	
G 3/8"	19	100	22	12	9	15.3	■		■	
G 1/2"	14	125	25	16	12	19.0	■		■	
G 5/8"	14	125	25	18	14.5	21.0				
G 3/4"	14	140	28	20	16	24.5	■		■	
G 7/8"	14	150	28	22	18	28.3				
G 1"	11	160	30	25	20	30.8	■		■	
G 1 1/4"	11	170	30	32	24	39.5				
G 1 1/2"	11	190	32	36	29	45.3				

Machine Taps

DIN 5156 HSS-E

RH spiral flutes 15°  
for general construction steel

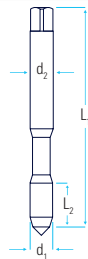
Group 5700  
for blind holes



2x d<sub>1</sub>



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Technology	<a href="#">i</a> Page 8.1
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57000
C / 2-3 x P
bright
P1 general construction steel K2+K3 spheroidal and malleable cast iron

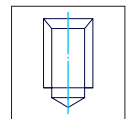
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
G 1/8"	28	90	20	7	5.5	8.8	■			
G 1/4"	19	100	22	11	9	11.8	■			
G 3/8"	19	100	22	12	9	15.3	■			
G 1/2"	14	125	25	16	12	19.0	■			
G 5/8"	14	125	25	18	14.5	21.0				
G 3/4"	14	140	28	20	16	24.5	■			
G 7/8"	14	150	28	22	18	28.3				
G 1"	11	160	30	25	20	30.8	■			
G 1 1/4"	11	170	30	32	24	39.5	■			
G 1 1/2"	11	190	32	36	29	45.3	■			

Machine Taps

DIN 5156 HSS-E

RH spiral flutes 40°  
for general construction steel

Group 5800  
for blind holes



2xd<sub>1</sub>

Cutting Data



High Speed Cutting  
by Schumacher

Art.-No.

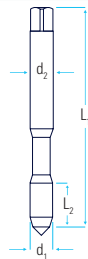
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

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58000

High Volume

58000/25

High Volume

C / 2-3 x P

bright

TiN

P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨			
G 1/8"	28	90	20	7	5.5	8.8	■		■
G 1/4"	19	100	22	11	9	11.8	■		■
G 3/8"	19	100	22	12	9	15.3	■		■
G 1/2"	14	125	25	16	12	19.0	■		■
G 5/8"	14	125	25	18	14.5	21.0	■		■
G 3/4"	14	140	28	20	16	24.5	■		■
G 7/8"	14	150	28	22	18	28.3	■		■
G 1"	11	160	30	25	20	30.8	■		■
G 1 1/4"	11	170	30	32	24	39.5	■		■
G 1 1/2"	11	190	32	36	29	45.3	■		■

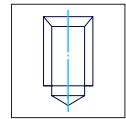
Machine Taps Blue Ring

DIN 5156 HSS-E

RH spiral flutes 40°  
for chemical resistant steel

Group 5850  
for blind holes

INOX  
Stainless

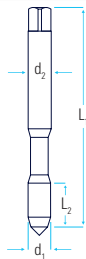


2x d<sub>1</sub>

Cutting Data



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Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



58500	58500/25
Blue Ring	Blue Ring
C / 2-3 x P	
bright	TiN
P2 high strength steel M1 chemical resistant steel S1 titanium alloys	

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
G 1/8"	28	90	20	7	5.5	8.8	■		■	
G 1/4"	19	100	22	11	9	11.8	■		■	
G 3/8"	19	100	22	12	9	15.3	■		■	
G 1/2"	14	125	25	16	12	19.0	■		■	
G 5/8"	14	125	25	18	14.5	21.0				
G 3/4"	14	140	28	20	16	24.5	■		■	
G 7/8"	14	150	28	22	18	28.3				
G 1"	11	160	30	25	20	30.8	■		■	
G 1 1/4"	11	170	30	32	24	39.5				
G 1 1/2"	11	190	32	36	29	45.3				

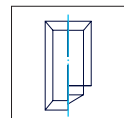


Short Machine Taps

DIN 5157 HSS-E

straight flutes  
for copper alloys

Group 1350  
for blind and through holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

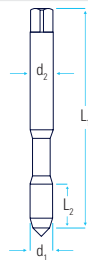
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

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13500

E / 1.5-2 x P

bright

N3 copper alloys

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
G 1/8"	28	63	22	7	5.5	8.8	■			
G 1/4"	19	70	22	11	9	11.8	■			
G 3/8"	19	70	22	12	9	15.3	■			
G 1/2"	14	80	22	16	12	19.0	■			
G 5/8"	14	80	22	18	14.5	21.0	■			
G 3/4"	14	90	22	20	16	24.5	■			
G 7/8"	14	90	22	22	18	28.3	■			
G 1"	11	100	25	25	20	30.8				
G 1 1/8"	11	125	40	28	22	35.5				
G 1 1/4"	11	125	40	32	24	39.5	■			
G 1 3/8"	11	125	40	36	29	41.75	■			
G 1 1/2"	11	140	40	36	29	45.3	■			
G 1 3/4"	11	140	40	40	32	51.0				
G 2"	11	160	40	45	35	57.0				

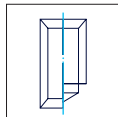
Short Machine Taps

DIN 5157 HSS-E

straight flutes  
for cast iron

Group 1360  
for blind and through holes

CAST  
IRON



2xd<sub>1</sub>



Cutting Data



Art.-No.

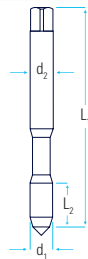
Technology **i** Page 8.1

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13600/01

C / 2-3 x P  
nitrided

K1 grey cast iron N7 duroplastics

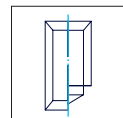
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
G 1/8"	28	63	22	7	5.5	8.8	■			
G 1/4"	19	70	22	11	9	11.8	■			
G 3/8"	19	70	22	12	9	15.3	■			
G 1/2"	14	80	22	16	12	19.0	■			
G 5/8"	14	80	22	18	14.5	21.0	■			
G 3/4"	14	90	22	20	16	24.5	■			
G 7/8"	14	90	22	22	18	28.3	■			
G 1"	11	100	25	25	20	30.8	■			
G 1 1/8"	11	125	40	28	22	35.5	■			
G 1 1/4"	11	125	40	32	24	39.5	■			
G 1 3/8"	11	125	40	36	29	41.75	■			
G 1 1/2"	11	140	40	36	29	45.3	■			
G 1 3/4"	11	140	40	40	32	51.0				
G 2"	11	160	40	45	35	57.0				

Set of Taps

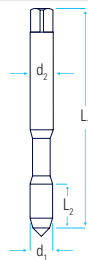
DIN 5157 HSS-E

set of 2 pieces, straight flutes  
for general construction steel

Group 1300  
for blind and through holes



2xd<sub>1</sub>



Art.-No.

Technology Page 8.1

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Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5

13100

13200

D / 3.5-5 x P

C / 2-3 x P

bright

bright

No. 1

No. 2

P1 general construction steel K2+K3 spheroidal and malleable cast iron

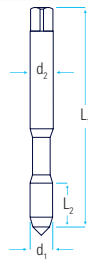
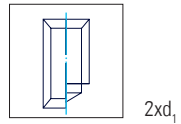
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>						
G 1/8"	28	63	22	7	5.5	8.8	■		■	
G 1/4"	19	70	22	11	9	11.8	■		■	
G 3/8"	19	70	22	12	9	15.3	■		■	
G 1/2"	14	80	22	16	12	19.0	■		■	
G 5/8"	14	80	22	18	14.5	21.0	■		■	
G 3/4"	14	90	22	20	16	24.5	■		■	
G 7/8"	14	90	22	22	18	28.3	■		■	
G 1"	11	100	25	25	20	30.8	■		■	
G 1 1/8"	11	125	40	28	22	35.5	■		■	
G 1 1/4"	11	125	40	32	24	39.5	■		■	
G 1 3/8"	11	125	40	36	29	41.75	■		■	
G 1 1/2"	11	140	40	36	29	45.3	■		■	
G 1 3/4"	11	140	40	40	32	51.0	■		■	
G 2"	11	160	40	45	35	57.0	■		■	

Machine Taps

DIN 371 HSS-E  
 straight flutes  
 for general construction steel

Group 3400  
 for blind and through holes

STEEL



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34000
C / 2-3 x P
bright
2 B
P1 general construction steel

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨			
No. 4	40	56	11	3.5	2.7	2.35	■		
No. 5	40	56	11	3.5	2.7	2.65	■		
No. 6	32	56	12	4	3	2.85	■		
No. 8	32	63	13	4.5	3.4	3.5	■		
No. 10	24	70	15	6	4.9	3.9	■		
No. 12	24	80	17	6	4.9	4.5	■		
1/4"	20	80	17	7	5.5	5.2	■		
5/16"	18	90	20	8	6.2	6.6	■		
3/8"	16	100	22	9	7	8.0	■		

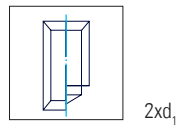
UNC / UNF

Machine Taps

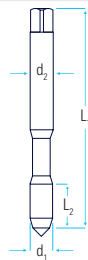
DIN 376 HSS-E  
straight flutes  
for general construction steel

Group 4400  
for blind and through holes

STEEL



- Art.-No.
- Technology i Page 8.1
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44000
C / 2-3 x P
bright
2 B
P1 general construction steel

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨	
7/16"	14	100	22	8	6.2	9.4	■
1/2"	13	110	25	9	7	10.8	■
9/16"	12	110	26	11	9	12.2	■
5/8"	11	110	27	12	9	13.6	■
3/4"	10	125	30	14	11	16.5	■
7/8"	9	140	32	18	14.5	19.5	■
1"	8	160	36	20	16	22.3	■

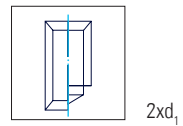
Machine Taps White Ring

DIN 371 HSS-E

straight flutes  
for cast iron

Group 3430  
for blind and through holes

CAST  
IRON



Cutting Data



Art.-No.

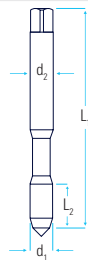
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



34300/01

White Ring

C / 2-3 x P

nitrided

2 B

K1 grey cast iron N7 duroplastics

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨															
No. 4	40	56	11	3.5	2.7	2.35															
No. 5	40	56	11	3.5	2.7	2.65		■													
No. 6	32	56	12	4	3	2.85		■													
No. 8	32	63	13	4.5	3.4	3.5		■													
No. 10	24	70	15	6	4.9	3.9		■													
No. 12	24	80	17	6	4.9	4.5															
1/4"	20	80	17	7	5.5	5.2		■													
5/16"	18	90	20	8	6.2	6.6		■													
3/8"	16	100	22	9	7	8.0		■													

Machine Taps White Ring

DIN 376 HSS-E

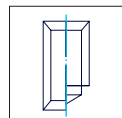
straight flutes  
for cast iron

Group 4430  
for blind and through holes

Cutting Data



CAST  
IRON



2xd<sub>1</sub>



Art.-No.

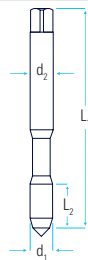
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



44300/01

White Ring

C / 2-3 x P

nitrided

2 B

K1 grey cast iron N7 duroplastics

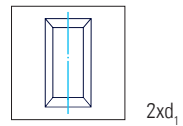
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▧													
7/16"	14	100	22	8	6.2	9.4													
1/2"	13	110	25	9	7	10.8	■												
9/16"	12	110	26	11	9	12.2													
5/8"	11	110	27	12	9	13.6	■												
3/4"	10	125	30	14	11	16.5	■												
7/8"	9	140	32	18	14.5	19.5	■												
1"	8	160	36	20	16	22.3	■												

Machine Taps

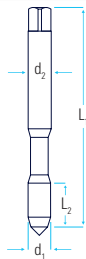
DIN 371 HSS-E  
spiral point  
for general construction steel

Group 3450  
for through holes

STEEL



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



34500	34500/25
<b>High Volume</b>	<b>High Volume</b>
B / 3.5-5 x P	
bright	TiN
2 B	2 B
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

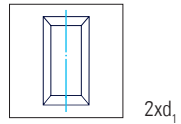
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
No. 4	40	56	11	3.5	2.7	2.35	■			
No. 5	40	56	11	3.5	2.7	2.65	■		■	
No. 6	32	56	12	4	3	2.85	■		■	
No. 8	32	63	13	4.5	3.4	3.5	■		■	
No. 10	24	70	15	6	4.9	3.9	■		■	
No. 12	24	80	17	6	4.9	4.5	■			
1/4"	20	80	17	7	5.5	5.2	■		■	
5/16"	18	90	20	8	6.2	6.6	■		■	
3/8"	16	100	22	9	7	8.0	■		■	



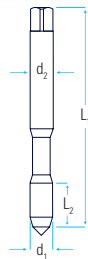
Machine Taps

DIN 376 HSS-E  
 spiral point  
 for general construction steel

Group 4450  
 for through holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



44500	44500/25
<b>High Volume</b>	<b>High Volume</b>
B / 3.5-5 x P	
bright	TiN
2 B	2 B
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

$\varnothing d_1$	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	$\square$					
7/16"	14	100	22	8	6.2	9.4	■			
1/2"	13	110	25	9	7	10.8	■		■	
9/16"	12	110	26	11	9	12.2	■			
5/8"	11	110	27	12	9	13.6	■		■	
3/4"	10	125	30	14	11	16.5	■		■	
7/8"	9	140	32	18	14.5	19.5	■		■	
1"	8	160	36	20	16	22.3	■		■	

■ available – intermediate size on request





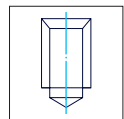


Machine Taps Red Ring

DIN 371 HSS-E PM

RH spiral flutes 20°  
for nickel alloys

Group 3480  
for blind holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

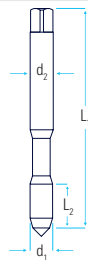
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



34800

**PM-Line**

Red Ring

3-4 x P

bright

2 B

P2 high strength steel S1 titanium alloys S2 nickel alloys

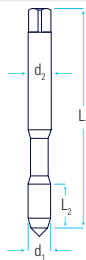
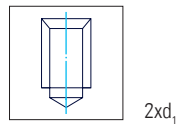
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨															
No. 4	40	56	11	3.5	2.7	2.35															
No. 5	40	56	11	3.5	2.7	2.65															
No. 6	32	56	12	4	3	2.85															
No. 8	32	63	13	4.5	3.4	3.5					■										
No. 10	24	70	15	6	4.9	3.9					■										
No. 12	24	80	17	6	4.9	4.5															
1/4"	20	80	17	7	5.5	5.2					■										
5/16"	18	90	20	8	6.2	6.6					■										
3/8"	16	100	22	9	7	8.0					■										



Machine Taps

DIN 371 HSS-E  
RH spiral flutes 40°  
for general construction steel

Group 3520  
for blind holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

35200	35200/25
<b>High Volume</b>	<b>High Volume</b>
C / 2-3 x P	
bright	TiN
2 B	2 B
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
No. 4	40	56	6	3.5	2.7	2.35	■			
No. 5	40	56	7	3.5	2.7	2.65	■		■	
No. 6	32	56	7	4	3	2.85	■		■	
No. 8	32	63	8	4.5	3.4	3.5	■		■	
No. 10	24	70	10	6	4.9	3.9	■		■	
No. 12	24	80	10	6	4.9	4.5	■			
1/4"	20	80	13	7	5.5	5.2	■		■	
5/16"	18	90	14	8	6.2	6.6	■		■	
3/8"	16	100	16	9	7	8.0	■		■	

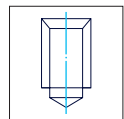




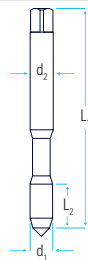
Machine Taps Blue Ring

DIN 371 HSS-E  
RH spiral flutes 40°  
for chemical resistant steel

Group 3530  
for blind holes



2xd<sub>1</sub>



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

35300/26	35300/25	
Blue Ring	Blue Ring	
C / 2-3 x P		
VAP	TiN	
2 B	2 B	
P2 high strength steel	M1 chemical resistant steel	S1 titanium alloys

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
No. 4	40	56	6	3.5	2.7	2.35				
No. 5	40	56	7	3.5	2.7	2.65	■		■	
No. 6	32	56	7	4	3	2.85	■		■	
No. 8	32	63	8	4.5	3.4	3.5	■		■	
No. 10	24	70	10	6	4.9	3.9	■		■	
No. 12	24	80	10	6	4.9	4.5				
1/4"	20	80	13	7	5.5	5.2	■		■	
5/16"	18	90	14	8	6.2	6.6	■		■	
3/8"	16	100	16	9	7	8.0	■		■	

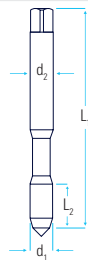
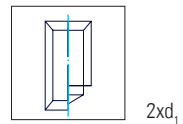


Forming Taps

DIN 371 HSS-E

straight oil grooves for steel, non-ferrous steel and heat treatable steel

Group 3560  
for blind and through holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

35600/53	35600/2553
<b>High Volume</b>	<b>High Volume</b>
C / 2-3 x P	
bright	TiN
2 BX	2 BX
P1 general construction steel	P2 high strength steel N3 copper alloys

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨			
No. 4	40	56	11	3.5	2.7	2.55	■		■
No. 5	40	56	11	3.5	2.7	2.9	■		■
No. 6	32	56	12	4	3	3.15	■		■
No. 8	32	63	13	4.5	3.4	3.8	■		■
No. 10	24	70	15	6	4.9	4.35	■		■
No. 12	24	80	17	6	4.9	4.95			
1/4"	20	80	17	7	5.5	5.8	■		■
5/16"	18	90	20	8	6.2	7.3	■		■
3/8"	16	100	22	9	7	8.8	■		■

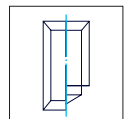
Set of Taps

DIN 351 HSS-E

set of 3 pieces, straight flutes  
for general construction steel

Group 1500  
for blind and through holes

STEEL



2xd<sub>1</sub>

Art.-No.

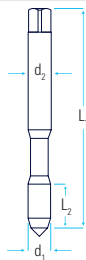
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



Cutting Data



	15100	15200	15300
D / 3.5-5 x P		3-4 x P	C / 2-3 x P
bright		bright	bright
No. 1		No. 2	No. 3 = 2 B
P1 general construction steel K2+K3 spheroidal and malleable cast iron			

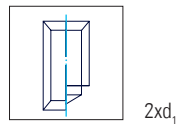
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
No. 4	40	40	12	3.5	2.7	2.3	■		■	■
No. 5	40	40	12	3.5	2.7	2.6	■		■	■
No. 6	32	45	14	4	3	2.8	■		■	■
No. 8	32	45	14	4.5	3.4	3.5	■		■	■
No. 10	24	50	16	6	4.9	3.9	■		■	■
No. 12	24	50	16	6	4.9	4.5	■		■	■
1/4"	20	50	18	6	4.9	5.2	■		■	■
5/16"	18	56	18	6	4.9	6.6	■		■	■
3/8"	16	70	23	7	5.5	8.0	■		■	■
7/16"	14	70	25	8	6.2	9.4	■		■	■
1/2"	13	75	28	9	7	10.8	■		■	■
9/16"	12	80	30	11	9	12.2	■		■	■
5/8"	11	80	30	12	9	13.6	■		■	■
3/4"	10	95	35	14	11	16.5	■		■	■
7/8"	9	110	38	18	14.5	19.5	■		■	■
1"	8	110	38	20	16	22.3	■		■	■

Machine Taps

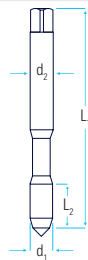
DIN 371 HSS-E  
 straight flutes  
 for general construction steel

Group 3600  
 for blind and through holes

STEEL



- Art.-No.
- Technology i Page 8.1
- Chamfer Length i Page 8.2
- Surface i Page 8.3
- Tolerance i Page 8.4
- Cutting Data i Page 8.5



36000
C / 2-3 x P
bright
2 B
P1 general construction steel

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨	
No. 5	44	56	11	3.5	2.7	2.7	■
No. 6	40	56	12	4	3	3.0	■
No. 8	36	63	13	4.5	3.4	3.5	■
No. 10	32	70	15	6	4.9	4.1	■
No. 12	28	80	17	6	4.9	4.7	■
1/4"	28	80	17	7	5.5	5.5	■
5/16"	24	90	18	8	6.2	6.9	■
3/8"	24	100	18	9	7	8.5	■



Machine Taps White Ring

DIN 371 HSS-E

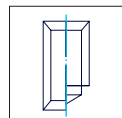
straight flutes  
for cast iron

Group 3630  
for blind and through holes

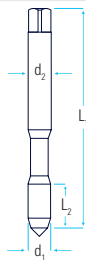
Cutting Data



CAST  
IRON



2xd<sub>1</sub>



Art.-No.

Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5

36300/01

White Ring

C / 2-3 x P

nitrided

2 B

K1 grey cast iron N7 duroplastics

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨												
No. 5	44	56	11	3.5	2.7	2.7												
No. 6	40	56	12	4	3	3.0												
No. 8	36	63	13	4.5	3.4	3.5												
No. 10	32	70	15	6	4.9	4.1		■										
No. 12	28	80	17	6	4.9	4.7												
1/4"	28	80	17	7	5.5	5.5		■										
5/16"	24	90	18	8	6.2	6.9		■										
3/8"	24	100	18	9	7	8.5		■										

Machine Taps White Ring

DIN 374 HSS-E

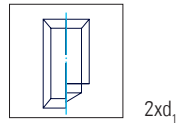
straight flutes  
for cast iron

Group 4630  
for blind and through holes

Cutting Data



CAST  
IRON



Art.-No.

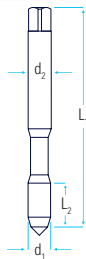
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



46300/01
White Ring
C / 2-3 x P
nitrided
2 B
K1 grey cast iron N7 duroplastics

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨													
7/16"	20	100	22	8	6.2	9.9													
1/2"	20	100	22	9	7	11.5	■												
9/16"	18	100	22	11	9	12.9													
5/8"	18	100	22	12	9	14.5	■												
3/4"	16	110	25	14	11	17.5	■												
7/8"	14	125	26	18	14.5	20.4	■												
1"	12	140	28	18	14.5	23.3	■												

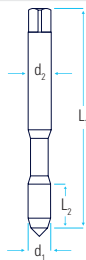
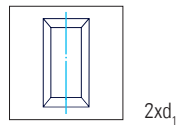
■ available – intermediate size on request



Machine Taps

DIN 371 HSS-E  
 spiral point  
 for general construction steel

Group 3650  
 for through holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

36500	36500/25
B / 3.5-5 x P	
bright	TiN
2 B	2 B
P1 general construction steel	K2+K3 spheroidal and malleable cast iron

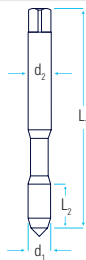
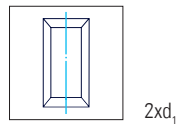
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨		
No. 5	44	56	11	3.5	2.7	2.7	■	■
No. 6	40	56	12	4	3	3.0	■	■
No. 8	36	63	13	4.5	3.4	3.5	■	■
No. 10	32	70	15	6	4.9	4.1	■	■
No. 12	28	80	17	6	4.9	4.7	■	
1/4"	28	80	17	7	5.5	5.5	■	■
5/16"	24	90	18	8	6.2	6.9	■	■
3/8"	24	100	18	9	7	8.5	■	■



Machine Taps Blue Ring

DIN 371 HSS-E  
 spiral point  
 for chemical resistant steel

Group 3660  
 for through holes



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5

36600	36600/25
Blue Ring	Blue Ring
B / 3.5-5 x P	
bright	TiN
2 B	2 B
P2 high strength steel	M1 chemical resistant steel S1 titanium alloys

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨		
No. 5	44	56	11	3.5	2.7	2.7	■	■
No. 6	40	56	12	4	3	3.0	■	■
No. 8	36	63	13	4.5	3.4	3.5	■	■
No. 10	32	70	15	6	4.9	4.1	■	■
No. 12	28	80	17	6	4.9	4.7	■	■
1/4"	28	80	17	7	5.5	5.5	■	■
5/16"	24	90	18	8	6.2	6.9	■	■
3/8"	24	100	18	9	7	8.5	■	■

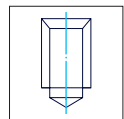


Machine Taps Red Ring

DIN 371 HSS-E PM

RH spiral flutes 20°  
for nickel alloys

Group 3680  
for blind holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

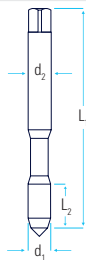
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



36800

**PM-Line**

Red Ring

3-4 x P

bright

2 B

P2 high strength steel S1 titanium alloys S2 nickel alloys

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨															
No. 5	44	56	11	3.5	2.7	2.7															
No. 6	40	56	12	4	3	3.0															
No. 8	36	63	13	4.5	3.4	3.5					■										
No. 10	32	70	15	6	4.9	4.1					■										
No. 12	28	80	17	6	4.9	4.7															
1/4"	28	80	17	7	5.5	5.5					■										
5/16"	24	90	18	8	6.2	6.9					■										
3/8"	24	100	18	9	7	8.5					■										







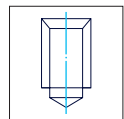


Machine Taps Blue Ring

DIN 374 HSS-E  
RH spiral flutes 40°  
for chemical resistant steel

Group 4730  
for blind holes

**INOX**  
Stainless



2xd<sub>1</sub>



Art.-No.

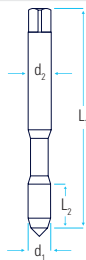
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



47300

47300/25

Blue.Ring

Blue Ring

C / 2-3 x P

bright

TiN

2 B

2 B

P2 high strength steel M1 chemical resistant steel S1 titanium alloys

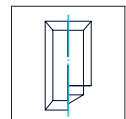
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
7/16"	20	100	13	8	6.2	9.9				
1/2"	20	100	13	9	7	11.5	■		■	
9/16"	18	100	15	11	9	12.9				
5/8"	18	100	15	12	9	14.5	■		■	
3/4"	16	110	17	14	11	17.5	■		■	
7/8"	14	125	17	18	14.5	20.4	■		■	
1"	12	140	20	18	14.5	23.3	■		■	

Set of Taps

DIN 2181 HSS-E

set of 2 pieces, straight flutes  
for general construction steel

Group 1600  
for blind and through holes



2xd<sub>1</sub>



Cutting Data



Art.-No.

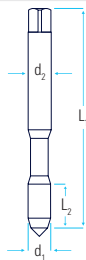
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



	16100	16200
D / 3.5-5 x P		C / 2-3 x P
Surface	bright	bright
Tolerance	No.1	No. 2 = 2 B
Material	P1 general construction steel	K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨		
No. 8	36	45	10	4.5	3.4	3.5	■	■
No. 10	32	56	14	6	4.9	4.1	■	■
No. 12	28	56	14	6	4.9	4.7	■	■
1/4"	28	56	17	6	4.9	5.5	■	■
3/8"	24	63	18	7	5.5	8.5	■	■
7/16"	20	63	18	8	6.2	9.9	■	■
1/2"	20	70	20	9	7	11.5	■	■
3/4"	16	80	22	14	11	17.5	■	■
1"	12	90	22	18	14.5	23.3	■	■

Machine Taps

internal standard HSS-E

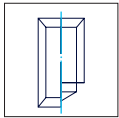
straight flutes  
for general construction steel

Group 1730  
for blind and through holes

Cutting Data



STEEL



2x d<sub>1</sub>



Art.-No.

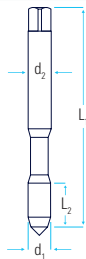
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



17300

C / 2-3 x P

bright

P1 general construction steel

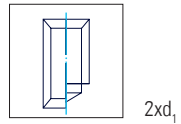
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
1/8"	27	90	12	7	5.5	8.5	■			
1/4"	18	100	20	11	9	11	■			
3/8"	18	100	22	12	9	14.5	■			
1/2"	14	125	26	16	12	17.85	■			
3/4"	14	140	26	20	16	23.2	■			
1"	11.5	160	36	25	20	29.0	■			
1 1/4"	11.5	170	30	32	24	37.8	■			
1 1/2"	11.5	190	36	36	29	44.0	■			
2"	11.5	220	36	45	35	56.0	■			

Machine Taps Red Ring

internal standard HSS-E PM

RH spiral flutes 15°  
for high strength steel

Group 1750  
for blind and through holes



Art.-No.

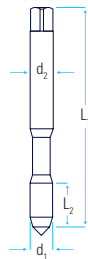
Technology **i** Page 8.1

Chamfer Length **i** Page 8.2

Surface **i** Page 8.3

Tolerance **i** Page 8.4

Cutting Data **i** Page 8.5



17500

**PM-Line**

Red Ring

C / 2-3 x P

bright

P2 high strength steel M1 chemical resistant steel

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨														
1/8"	27	90	12	7	5.5	8.5	■													
1/4"	18	100	20	11	9	11	■													
3/8"	18	100	22	12	9	14.5	■													
1/2"	14	125	26	16	12	17.85	■													
3/4"	14	140	26	20	16	23.2	■													
1"	11.5	160	36	25	20	29.0	■													
1 1/4"	11.5	170	30	32	24	37.8														
1 1/2"	11.5	190	36	36	29	44.0														
2"	11.5	220	36	45	35	56.0														

■ available – intermediate size on request

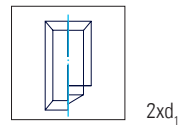


Machine Taps

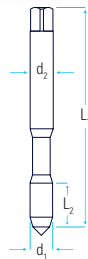
DIN 40433 HSS-E  
straight flutes  
for general construction steel

Group 1830  
for blind and through holes

STEEL



Art.-No.	
Technology	<a href="#">i</a> Page 8.1
Chamfer Length	<a href="#">i</a> Page 8.2
Surface	<a href="#">i</a> Page 8.3
Tolerance	<a href="#">i</a> Page 8.4
Cutting Data	<a href="#">i</a> Page 8.5



18300
C / 2-3 x P
bright
P1 general construction steel K2+K3 spheroidal and malleable cast iron

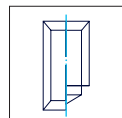
Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
Pg 7	20	100	22	9	7	11.4	■			
Pg 9	18	100	22	12	9	14	■			
Pg 11	18	110	25	14	11	17.4	■			
Pg 13.5	18	125	25	16	12	19.2	■			
Pg 16	18	125	25	18	14,5	21.3	■			
Pg 21	16	150	28	22	18	27.0	■			
Pg 29	16	170	30	28	22	35.6	■			
Pg 36	16	190	32	36	29	45.6	■			
Pg 42	16	190	32	40	32	52.6	■			
Pg 48	16	220	40	45	35	57.9	■			

Set of Taps

DIN 40432 HSS-E

set of 2 pieces, straight flutes  
for general construction steel

Group 1800  
for blind and through holes



2xd<sub>1</sub>

Cutting Data



Art.-No.

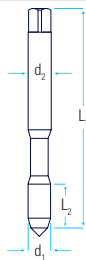
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



18100

18200

D / 3.5-5 x P

C / 2-3 x P

bright

bright

No.1

No.2

P1 general construction steel K2+K3 spheroidal and malleable cast iron

Ø d <sub>1</sub>	P	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
Pg 7	20	70	20	9	7	11.4	■		■	
Pg 9	18	70	20	12	9	14.0	■		■	
Pg 11	18	80	22	14	11	17.4	■		■	
Pg 13.5	18	80	22	16	12	19.2	■		■	
Pg 16	18	80	22	18	14,5	21.3	■		■	
Pg 21	16	90	22	22	18	27.0	■		■	
Pg 29	16	100	25	28	22	35.6	■		■	
Pg 36	16	140	25	36	29	45.6	■		■	

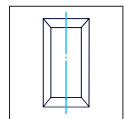
Single Finishing Machine Taps

internal standard HSS-E

2-step design, RH thread - LH spiral flutes 6°

LH thread - RH spiral flutes 6°, for general construction steel

Group 6850  
for through holes



Art.-No.

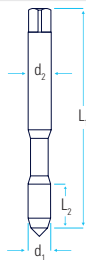
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



Cutting Data



68500	68505
	LH
bright	bright
7H	7H
P1 general construction steel K2+K3 spheroidal and malleable cast iron	

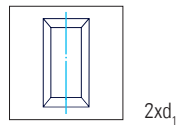
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨				
Tr 10	2	110	65	7	5,5	8.2	■		■	
Tr 12	3	160	110	8	6,2	9.25	■		■	
Tr 14	3	160	110	10	8	11.25	■		■	
Tr 16	4	200	130	11	9	12.3	■		■	
Tr 18	4	200	130	12	9	14.3	■		■	
Tr 20	4	200	130	15	12	16.3	■		■	
Tr 22	5	240	155	16	12	17.3	■		■	
Tr 24	5	240	155	18	14,5	19.3	■		■	
Tr 26	5	260	165	20	16	21.3	■		■	
Tr 28	5	270	170	22	18	23.3	■		■	
Tr 30	6	290	190	22	18	24.3	■		■	
Tr 32	6	300	190	25	20	26.3	■		■	
Tr 36	6	320	200	28	22	30.3	■		■	
Tr 40	7	390	250	32	24	33.5	■		■	



Set of Taps

internal standard HSS-E  
set of 3 pieces, LH spiral flutes 6°  
for general construction steel

Group 6800  
for through holes



Art.-No.

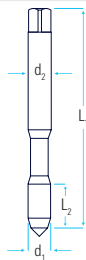
Technology [i](#) Page 8.1

Chamfer Length [i](#) Page 8.2

Surface [i](#) Page 8.3

Tolerance [i](#) Page 8.4

Cutting Data [i](#) Page 8.5



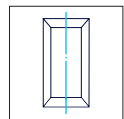
68100	68200	68300
bright	bright	bright
No. 1	No. 2	No. 3 = 7H
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨					
Tr 10	2	90	35	7	5,5	8.2	■		■		■
Tr 12	3	110	45	8	6,2	9.25	■		■		■
Tr 14	3	130	45	10	8	11.25	■		■		■
Tr 16	4	140	55	11	9	12.3	■		■		■
Tr 18	4	150	55	12	9	14.3	■		■		■
Tr 20	4	160	55	15	12	16.3	■		■		■
Tr 22	5	180	70	16	12	17.3	■		■		■
Tr 24	5	190	70	18	14,5	19.3	■		■		■
Tr 26	5	210	70	20	16	21.3	■		■		■
Tr 28	5	220	70	22	18	23.3	■		■		■
Tr 30	6	240	85	22	18	24.3	■		■		■
Tr 32	6	255	85	25	20	26.3	■		■		■
Tr 36	6	280	85	28	22	30.3	■		■		■
Tr 40	7	310	100	32	24	33.5	■		■		■

Set of Taps

internal standard HSS-E  
set of 3 pieces, RH spiral flutes 6°  
for general construction steel

Group 6800 LH  
for through holes



2xd<sub>1</sub>

Art.-No.

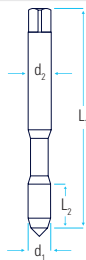
Technology Page 8.1

Chamfer Length Page 8.2

Surface Page 8.3

Tolerance Page 8.4

Cutting Data Page 8.5



Cutting Data



68105	68205	68305
LH	LH	LH
bright	bright	bright
No. 1	No. 2	No. 3 = 7H
P1 general construction steel K2+K3 spheroidal and malleable cast iron		

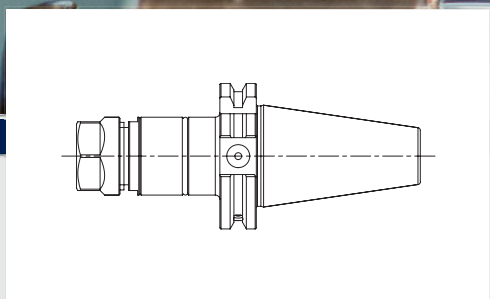
Ø d <sub>1</sub>	P <sub>mm</sub>	L <sub>1</sub>	L <sub>2</sub>	d <sub>2</sub>	□	▨			
Tr 10	2	90	35	7	5.5	8.2	■		■
Tr 12	3	110	45	8	6.2	9.25	■		■
Tr 14	3	130	45	10	8	11.25	■		■
Tr 16	4	140	55	11	9	12.3	■		■
Tr 18	4	150	55	12	9	14.3	■		■
Tr 20	4	160	55	15	12	16.3	■		■
Tr 22	5	180	70	16	12	17.3	■		■
Tr 24	5	190	70	18	14.5	19.3	■		■
Tr 26	5	210	70	20	16	21.3	■		■
Tr 28	5	220	70	22	18	23.3	■		■
Tr 30	6	240	85	22	18	24.3	■		■
Tr 32	6	255	85	25	20	26.3	■		■
Tr 36	6	280	85	28	22	30.3	■		■
Tr 40	7	310	100	32	24	33.5	■		■

**SCHUMACHER**  
PRECISION TOOLS SINCE 1918

Developed by:

**ToolDesign**   
by Schumacher

CATALOGUE NO. 124 S - THREADING TECHNOLOGY



Edition  
**Tap Holder**  
New product development

Tap Holder - NUMERIC

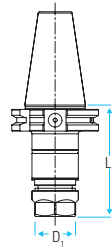
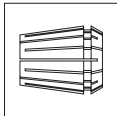
DIN 69871 AD/B

with coolant feed

Group S2000  
for machines with synchronous spindle

minimum length compensation

NUMERIC  
Supporting Digital Production



Art-No.

Technology

Tool Adaptation

Shank Types

Cooling & Lubrication

S2000

NUMERIC

ER (GB) collet

ISO taper shanks

internal coolant - lubricant supply

SK-Size	Taps	Ø Range	Ø D <sub>1</sub>	L <sub>1</sub>	C	Size	Dimension	Availability
40	M 3 - M 12	3.5 - 10	28	79	0.4 0.2	ER16	79/28	■
	M 3 - M 16	3.5 - 10	34	85	0.4 0.2	ER20	85/34	■
	M 3 - M 20	3.5 - 16	42	90	0.4 0.2	ER25	90/42	■
	M 4 - M 27	3.5 - 16	50	100	0.4 0.2	ER32	100/50	■
	M 4 - M 33	7 - 16	63	105	0.4 0.2	ER40	105/63	■
50	M 3 - M 12	3.5 - 10	28	79	0.4 0.2	ER16	79/28	■
	M 3 - M 16	3.5 - 10	34	85	0.4 0.2	ER20	85/34	■
	M 3 - M 20	3.5 - 16	42	90	0.4 0.2	ER25	90/42	■
	M 4 - M 27	3.5 - 16	50	100	0.4 0.2	ER32	100/50	■
	M 4 - M 33	7 - 16	63	105	0.4 0.2	ER40	105/63	■







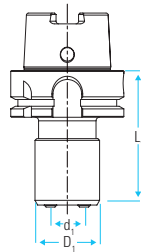
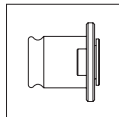
Tap Holder - NUMERIC

DIN 69893 HSK-A

Group S4200  
for machines with synchronous spindle

minimum length compensation

NUMERIC  
Supporting Digital Production



Art-No.  
Technology  
Tool Adaptation  
Shank Types  
Cooling & Lubrication

S4200  
NUMERIC  
Quick Change Adapter  
Hollow taper shanks

HSK-Size	Taps	$\emptyset d_1$	$\emptyset D_1$	$L_1$	$C_{\text{min}}/C_{\text{max}}$	Size	Dimension	Availability
32	M 3 - M 12	19	36	75	0.4 0.2	1	75/36	■
50	M 3 - M 12	19	36	72	0.4 0.2	1	72/36	■
	M 8 - M 20	31	53	91	0.4 0.2	2	91/53	■
63	M 3 - M 12	19	36	75	0.4 0.2	1	75/36	■
	M 3 - M 12	19	36	80	0.4 0.2	1	80/36	■
	M 3 - M 12	19	36	120	0.4 0.2	1	120/36	■
	M 3 - M 12	19	36	152	0.4 0.2	1	152/36	■
	M 3 - M 12	19	36	180	0.4 0.2	1	180/36	■
	M 8 - M 20	31	53	89	0.4 0.2	2	89/53	■
	M 14 - M 33	48	78	121	0.4 0.2	3	121/78	■
100	M 3 - M 12	19	36	75	0.4 0.2	1	75/36	■
	M 3 - M 12	19	36	160	0.4 0.2	1	160/36	■
	M 8 - M 20	31	53	94	0.4 0.2	2	94/53	■
	M 8 - M 20	31	53	160	0.4 0.2	2	160/53	■
	M 14 - M 33	48	78	127	0.4 0.2	3	127/78	■
	M 14 - M 33	48	78	160	0.4 0.2	3	160/78	■











## Color Ring Series

The color ring line comprises machine taps from five different product groups which meet the requirements of highly sophisticated industries such as automotive, aerospace or chemicals. By their color marking, the appropriate use of these taps is facilitated. Selected hard material coatings increase the range of employment.



### White Ring

Product line for grey cast iron



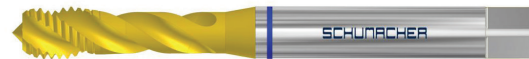
### Red Ring

Product line for high strength heat treatable steel and nickel alloys



### Blue Ring

Product line for use in INOX/stainless steel



### Black Ring

Product line for general purpose »Black Power«


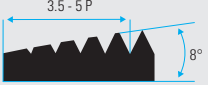
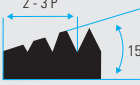
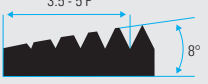
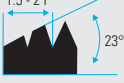



### Yellow Ring

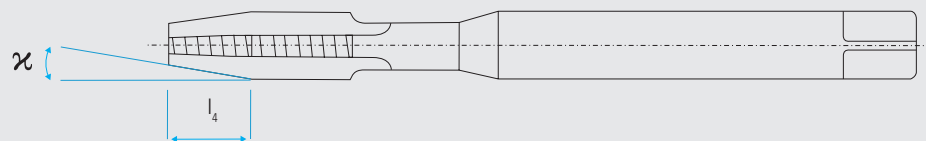
Product line for use in titanium alloys



## Chamfer Types

Form	Chamfer length $l_4$ <sup>1)</sup> [x pitch]	Chamfer angle $\alpha$ [°]	Main field of application:	
<b>A</b>	6 to 8	5°	short through holes	
<b>B</b>	3.5 to 5	8°	through holes in mid and long chipping materials	
<b>C</b>	2 to 3	15°	blind holes and through holes in short chipping materials	
<b>D</b>	3.5 to 5	8°	blind holes with long thread run-out and through holes	
<b>E</b>	1.5 to 2	23°	blind holes with very short thread run-out	
<b>F</b>	1 to 1.5	> 28°	blind holes with very short thread run-out	

<sup>1)</sup> The number of pitches is a simple, practice-oriented criterion for defining the chamfer length of taps



## Coatings

Technologies for hard material coatings of HSS and solid carbide tools are increasingly important since they bring about advantages such as:

- › an increase in tool life
- › a reduction of set-up times

and a substantial

- › increase of working speeds

These factors justify the extra expenditures compared to tools without hard material coatings.

### TiN Coating

Allround coating designed to improve tool life and optimize cutting speed. With a surface hardness of 2600 HV 0.05 and a frictional coefficient of 0.40 this coating can be applied in working temperatures of up to 450°C. The thickness of the layer ranges between 2 - 4 µm. TiN coatings have a internal compressive stress of approx. 3.1 GPa.



### TiCN Coating

Improved tribological characteristics compared to TiN. Micro hardness at 3000 HV 0.05; frictional coefficient reduced to 0.35 compared to steel. Temperature stability of TiCN layers (thickness of 2 - 4 µm) extends up to 350°C. Internal compressive stress is at 3.5 GPa.



### TiAlN Coating

Optimized PVD layer system, for hard materials of up to 50 HRC. Enhanced range of employment due to temperature stability up to 800°C and micro hardness of 3000 HV 0,05. This layer system features an oxidizing protection layer which provides the tool with a 'renewal effect.' Internal compressive stress of 1.9 GPa. The coating system is applied with a layer thickness of 2-4 µm.



### SG4 Coating

Special coating made of super hard coating layer and solid state lubrication layer. Sectors of use comprise dry cutting and minimum lubrication. Wide range of applications due to optimum friction results and reduced tendency of adhesion.



### CrN Coating

PVD layer system for non-ferrous materials and thermoplastics. It can be applied in working temperatures up to 600°C and has a low frictional coefficient of 0.3 compared to steel. The layer system has a thickness of 6 µm and a micro hardness of 1750 HV 0.05.



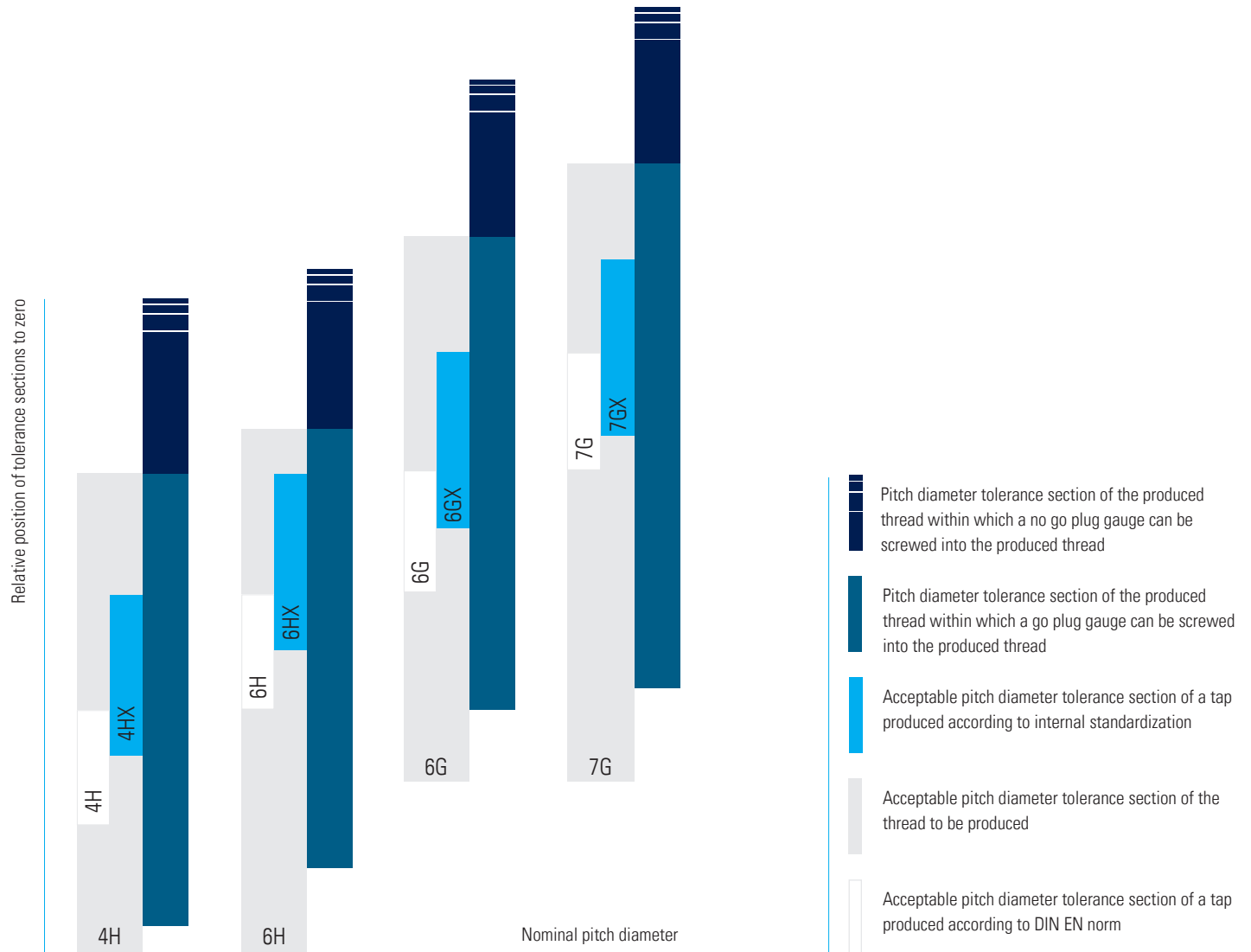
### DLC Coating

The diamond like carbon layer ist the best solution for non-ferrous materials. The high surface hardness of 5000 HV 0,05 is combined with a very low friction coefficient of 0.1 compared to steel. The characteristics are completed by the reduced layer thickness of 0.8-1.2 µm and a high temperature stability up to 500°C. Because of this the material adhesion is significantly reduced.



### Tolerance Levels

Schematic description of production tolerances applicable for metric internal thread – in addition please also find below the specific tolerance fields for tap production.





## Cutting Data

Definition of rotation and cutting speeds for threading tools.

The table below contains the calculated values of rotation and cutting speeds for threading tools between M 3 and M 42. In most cases these calculations will serve for workshop use in practice. If interim values should be required, these can be calculated by drawing upon the formulas listed below.

nominal/diameter	round per minute [1/min]												
M3	425	530	635	850	1060	1270	1590	2120	2330	2650	2965	3180	3390
M4	319	398	480	635	795	955	1190	1590	1750	1990	2230	2390	2550
M5	255	318	382	510	635	765	955	1270	1400	1590	1785	1910	2040
M6	212	265	318	425	530	635	795	1060	1170	1325	1485	1590	1700
M8	159	198	238	318	398	478	598	795	875	995	1115	1195	1275
M10	127	159	191	255	318	382	478	636	700	795	892	955	1020
M12	106	133	159	212	265	318	398	531	584	664	744	795	850
M14	91	114	136	182	228	273	342	455	500	568	636	682	728
M16	80	100	119	159	199	239	299	398	438	497	557	597	637
M18	71	88	106	142	177	212	265	354	388	442	495	530	565
M20	64	80	95	127	159	192	239	318	350	398	446	478	510
M22	58	72	87	116	145	174	217	290	318	362	405	435	463
M24	53	66	80	106	133	159	200	266	292	332	372	398	425
M27	47	59	71	95	118	142	177	236	260	295	330	355	378
M30	42	53	64	85	106	127	159	212	234	265	297	318	340
M33	39	48	58	77	96	116	145	193	212	242	270	290	309
M36	35	44	53	71	88	106	133	177	195	221	248	265	283
M39	33	41	49	65	82	98	122	163	180	205	228	245	262
M42	30	38	45	61	76	91	114	152	167	190	212	228	243
	4	5	6	8	10	12	15	20	22	25	28	30	32
	Cutting speed v [m/min]												

legend:

v = Cutting speed [m/min]  
d = Nominal tap diameter [m]  
n = Tool spindle rotation [1/min]  
 $\pi = 3.14$

$$v = d \times \pi \times n$$

$$n = \frac{v}{d \times \pi}$$

## Work Piece Material Groups/Cutting Data

Material Groups		Description	DIN Description	DIN 17 007 Material-No.	Strength [N/mm <sup>2</sup> ]	Cutting Speed $v_c$ [m/min]	
						$v_c$ forming taps = $v_c + 30-50\%$ HSS-E / VHM	
DIN ISO 513	Schumacher					bright	coated
<b>P</b>	P1	Carbon steels	St 33	1.0035	290	10 - 15	15 - 25
	P1	Carbon steels	St 37	1.0120	340 - 370	10 - 15	15 - 25
	P1	Carbon steels	St 50	1.0531	470 - 610	10 - 15	15 - 25
	P1	Carbon steels	St 60 - 2	1.0060	570 - 710	10 - 15	15 - 25
	P1	Carbon steels	St 70 - 2	1.0070	670 - 830	10 - 15	15 - 25
	P1	Heat-treatable steels	C 45	1.0503	650 - 800	10 - 15	15 - 25
	P1	Tool steels	21 MnCr 5	1.2162	720	8 - 10	10 - 15
	P1	Free-cutting steels	9 S 20 K	1.0711	360	10 - 15	15 - 25
	P1	Free-cutting steels	9 SMnPb 28	1.0718	380	10 - 15	15 - 25
	P1	Free-cutting steels	35 SMn 20	1.0726	490 - 610	10 - 15	15 - 25
	P1	Hot-Work steels	X 10 CrSi 13	1.4722	690	3 - 5	5 - 8
	P1	Cast Steels	GS 45	1.0443	440	10 - 15	15 - 25
	P1	Cast Steels	GS 60	1.0553	590	10 - 15	15 - 25
	P1	Cast Steels	GS 70	1.0554	685	10 - 15	15 - 25
	P1	Case-hardened steels	C 15	1.0401	600 - 800	10 - 15	15 - 25
	P1	Case-hardened steels	Ck 15	1.1141	500 - 800	10 - 15	15 - 25
	P2	Case-hardened steels	20 MnCr 5	1.7147	1000 - 1300	10 - 15	15 - 25
	P2	Case-hardened steels	17 CrNiMo 6	1.6587	1050 - 1350	2 - 5	5 - 10
	P2	Heat-treatable steels	C 60	1.0601	800 - 850	10 - 15	15 - 25
	P2	Heat-treatable steels	46 Cr 2	1.7003	700 - 850	2 - 5	5 - 10
	P2	Heat-treatable steels	25 CrMo 4	1.7218	800 - 950	2 - 5	5 - 10
	P2	Tool steels	105 WCr 6	1.2419		8 - 10	10 - 15
	P2	Tool steels	X 45 NiCrMo 4	1.2767	850	8 - 10	10 - 15
	P2	Tool steels	55 Ni Cr Mo V 6	1.2713	810	8 - 10	10 - 15
	P2	Nitriding Steels	31 CrMo 12	1.8515	1000 - 1200	3 - 5	5 - 8
	P2	Nitriding Steels	34 CrAlMo 5	1.8505	800 - 950	3 - 5	5 - 8
	P2	Nitriding Steels	34 CrAlNi 7	1.8550	850 - 1050	3 - 5	5 - 8

## Work Piece Material Groups/Cutting Data

Material Groups		Description	DIN Description	DIN 17 007 Material-No.	Strength [N/mm <sup>2</sup> ]	Cutting Speed $v_c$ [m/min]	
						$v_c$ forming taps = $v_c + 30-50\%$ HSS-E / VHM	
DIN ISO 513	Schumacher					bright	coated
<b>M</b>	M1	Stainless steels ferritic	X 6 Cr 13	1.4000	400 - 600	3 - 5	5 - 8
	M1	Stainless steels ferritic	X 4 CrMoS 18	1.4105	450 - 650	3 - 5	5 - 8
	M1	Stainless steels martensitic	X 30Cr 13	1.4028	800 - 1000	3 - 5	5 - 8
	M1	Stainless steels martensitic	X 12 CrMoS 17	1.4104	600 - 840	3 - 5	5 - 8
	M1	Stainless steels austenitic	X 5 CrNi 18 10	1.4301	500 - 700	3 - 5	5 - 8
	M1	Stainless steels austenitic	X 6 CrNiMoTi 17 12 2	1.4571	500 - 730	3 - 5	5 - 8
	M1	Stainless steels austenitic	X 2 CrNiMo 18 14 3	1.4435	490 - 690	3 - 5	5 - 8
	M1	Cast Steels	G X 6 CrNiMo 18 10	1.4408	440 - 640	3 - 5	5 - 8
	M1	Cast Steels	G X 2 CrNiMoN 17 13 5	1.4439	490 - 690	3 - 5	5 - 8
	M2	Duplex steels	X 2 CrNiMoN22-5-3	1.4462	880	3 - 5	5 - 8
<b>K</b>	K1	Grey cast iron	EN-GJL-100 (GG 10)	0.6010	88	8 - 12   25 - 30	12 - 20
	K1	Grey cast iron	EN-GJL-200 (GG 20)	0.6020	195	8 - 12   25 - 30	12 - 20
	K1	Grey cast iron	EN-GJL-300 (GG 30)	0.6030	295	8 - 12   25 - 30	12 - 20
	K1	Grey cast iron	EN-GJL-400 (GG 40)	0.6040	390	8 - 12   25 - 30	12 - 20
	K2	Nodular cast iron	EN-GJS-400-15 (GGG 40)	0.7040	400	5 - 8	10 - 20
	K2	Nodular cast iron	EN-GJS-500-7 (GGG 50)	0.7045	500	5 - 8	10 - 20
	K2	Nodular cast iron	EN-GJS-600-3 (GGG 60)	0.7060	600	5 - 8	10 - 20
	K3	Malleable cast iron	EN-GJMW-400-5 (GTW-40)	0.8040	400	10 - 15	15 - 20
	K3	Malleable cast iron	EN-GJMW-450-7 (GTW-45)	0.8045	450	10 - 15	15 - 20
	K3	Malleable cast iron	EN-GJMW-550-4 (GTW-55)	0.8055	550	10 - 15	15 - 20
	K3	Malleable cast iron	EN-GJMB-350-10 (GTS-35)	0.8135	350	10 - 15	15 - 20
	K3	Malleable cast iron	EN-GJMB-450-6 (GTS-45)	0.8145	450	10 - 15	15 - 20
	K3	Malleable cast iron	EN-GJMB-550-4 (GTS-55)	0.8155	550	10 - 15	15 - 20
<b>N</b>	N1	Aluminium wrought alloys	AlMn 1	3.0515	150 - 200	20 - 25	25 - 35
	N1	Aluminium wrought alloys	AlMg 3	3.3535	200 - 300	20 - 25	25 - 35
	N1	Aluminium wrought alloys	AlMgSiPb	3.0615	200 - 270	20 - 25	25 - 35
	N1	Aluminium wrought alloys	AlZn 4.5 Mg 1	3.4335		20 - 25	25 - 35
	N2	Aluminium cast alloys	G-Al Mg 3	3.3541	140 - 200	20 - 30	30 - 40
	N2	Aluminium cast alloys	G-Al Cu 4	3.1841	280 - 400	20 - 30	30 - 40
	N2	Aluminium cast alloys	G-Al Si 10 Mg	3.2381	250 - 320	20 - 30	30 - 40
	N3	Copper alloys	E-Cu	2.0060	250	10 - 15	15 - 20
	N3	Copper alloys	SE-Cu	2.0070	300	10 - 15	15 - 20
	N3	Special copper alloys	Ampco 18		159 - 183	2 - 4	4 - 6
	N3	Special copper alloys	Ampco 21		285 - 311	2 - 4	4 - 6
N3	Special copper alloys	Ampco 25		356 - 394	2 - 4	4 - 6	

## Work Piece Material Groups/Cutting Data

Material Groups DIN ISO 513	Schumacher	Werkstoffart	DIN Beschreibung	DIN 17 007 Material-No.	Strength [N/mm <sup>2</sup> ]	Cutting Speed $v_c$ [m/min] $v_c$ forming taps = $v_c + 30-50\%$ HSS-E / VHM	
						bright	coated
<b>N</b>	N4	Brass long chipping	Cu Zn 30 (Ms 70)	2.0265		20 - 25   30 - 50	25 - 35
	N4	Brass short chipping	CuZn 39 Pb 2 (Ms 58)	2.0380		20 - 25   30 - 50	25 - 35
	N4	Brass short chipping	Cu Zn 40 Al 2	2.0550		20 - 25   30 - 50	25 - 35
	N5	Bronze short chipping	CuPb 5 Sn 5	2.1170	250	10 - 15	15 - 20
	N5	Bronze long chipping	Cu Sn 6	2.1030	400 - 550	10 - 15	15 - 20
	N5	Bronze	G-CuPb 10 Sn	2.1176	230	10 - 15	15 - 20
	N6	Thermoplastics long chipping	Hostalen			20 - 30	30 - 40
	N6	Thermoplastics long chipping	Makrolon			20 - 30	30 - 40
	N6	Thermoplastics long chipping	PS Polystyrol			20 - 30	30 - 40
	N6	Thermoplastics long chipping	POM Polymethylen			20 - 30	30 - 40
	N6	Thermoplastics long chipping	PVC Ployvinylchlorid			20 - 30	30 - 40
	N6	Thermoplastics long chipping	PA Polyamid			20 - 30	30 - 40
	N7	Duroplastics short chipping	Bakelit			3 - 5	5 - 8
	N7	Duroplastics short chipping	Pertinax			3 - 5	5 - 8
	N7	Duroplastics short chipping	Ferrozell			3 - 5	5 - 8
	N7	Duroplastics short chipping	Resopal			3 - 5	5 - 8
	N8	Magnesium alloys	AZ 91			-	15 - 20
<b>S</b>	S1	Pure titanium	Ti 99.5	3.7024.1	290 - 410	2 - 4	4 - 6
	S1	Pure titanium	Ti 99.4	3.7055	450 - 550	2 - 4	4 - 6
	S1	Titanium alloys	TiAl 5 Sn 2	3.7114	840 - 990	2 - 4	4 - 6
	S1	Titanium alloys	Ti Al 6V4	3.7165	910 - 1100	2 - 4	4 - 6
	S2	Pure nickel	Ni 99.6	2.4060	370 - 590	2 - 4	4 - 6
	S2	Pure nickel	Ni 99.2	2.4068	340 - 540	2 - 4	4 - 6
	S2	Nickel alloys	Monel 400	2.4360	800	2 - 4	4 - 6
	S2	Nickel alloys	Hastelloy C	2.4812	900	2 - 4	4 - 6
	S2	Nickel alloys	Inconel 600	2.4816	700	2 - 4	4 - 6
	S2	Nickel alloys	Nimonic 90	2.4632	1200	2 - 4	4 - 6
<b>H</b>	H1	Hardened steels	up to 50 HRC			6 - 8	2 - 4
	H2	Hardened steels	up to 55 HRC			1 - 3	1 - 3
	H2	Hardened steels	up to 60 HRC			1 - 3	-

## Schumacher Precision Tools GmbH

Postfach / P.O. Box 13 04 60  
42819 Remscheid  
Germany

Kueppelsteiner Strasse 18 - 20  
D-42857 Remscheid  
Germany

Phone: +49 (0) 21 91 / 97 04 - 0  
Fax: +49 (0) 21 91 / 97 04 - 30

[www.schumachertool.de](http://www.schumachertool.de)  
[info@schumachertool.de](mailto:info@schumachertool.de)

### Responsible

Schumacher Precision Tools GmbH

### Concept, Design und Production

.jpg | Joerg Preusser Gestaltung (Dipl. Des. FH), Cologne  
[www.jpg-grafik.de](http://www.jpg-grafik.de)

### Date

August 2016

**Schumacher** Precision Tools GmbH

Kueppelsteiner Strasse 18-20  
42857 Remscheid/Germany

[www.schumachertool.de](http://www.schumachertool.de)  
[info@schumachertool.de](mailto:info@schumachertool.de)  
Phone: +49 (0) 21 91 / 97 04-0