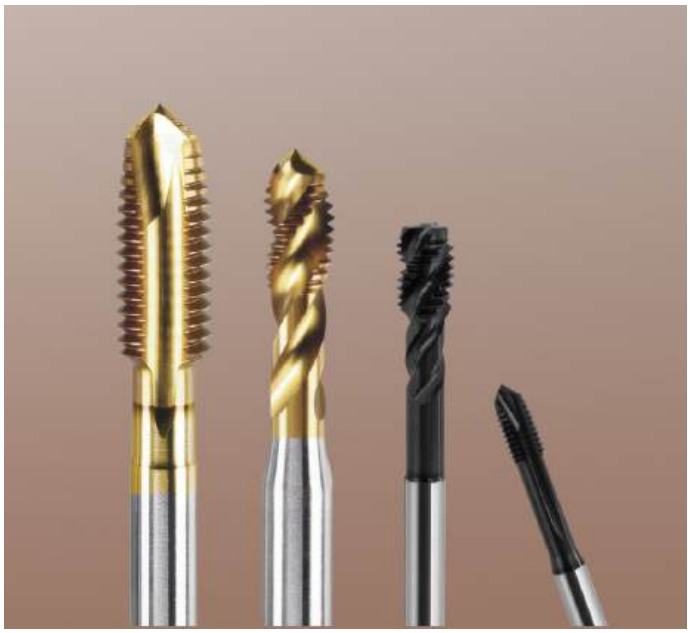
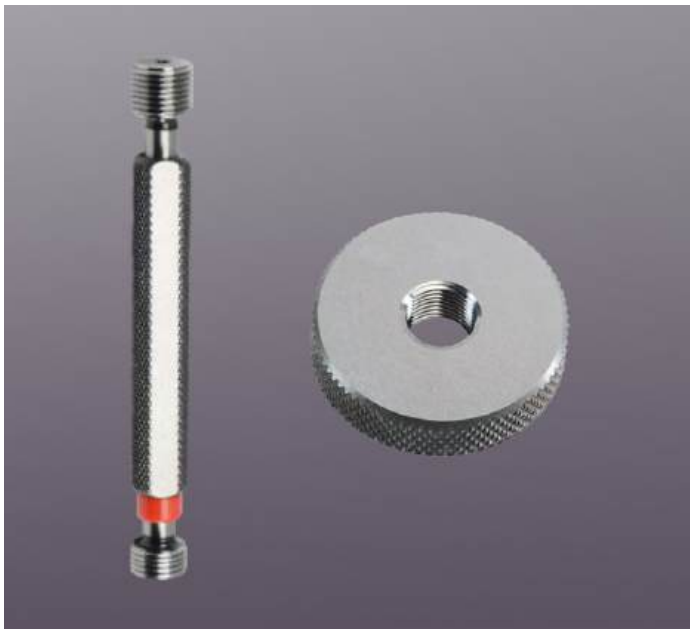
SmiCut™
STS

NEWS
2026

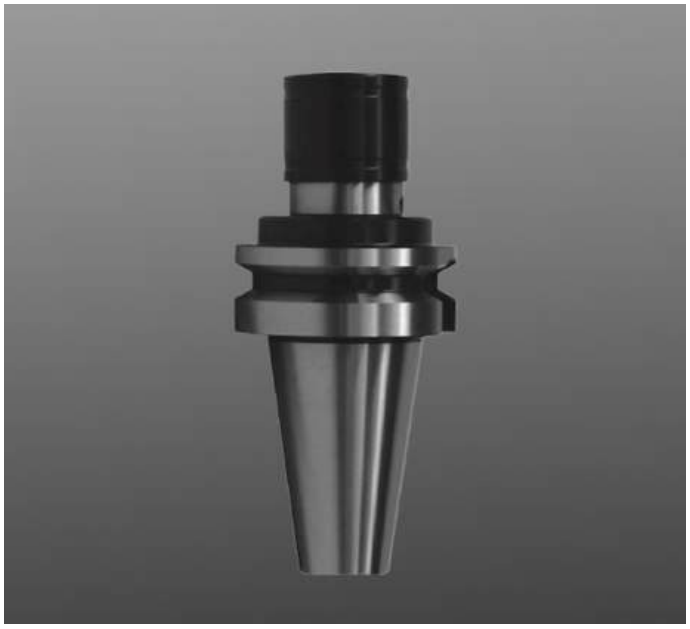
Universal Threading Taps



Precision Thread Gauges



Quick Change Tapping Chucks

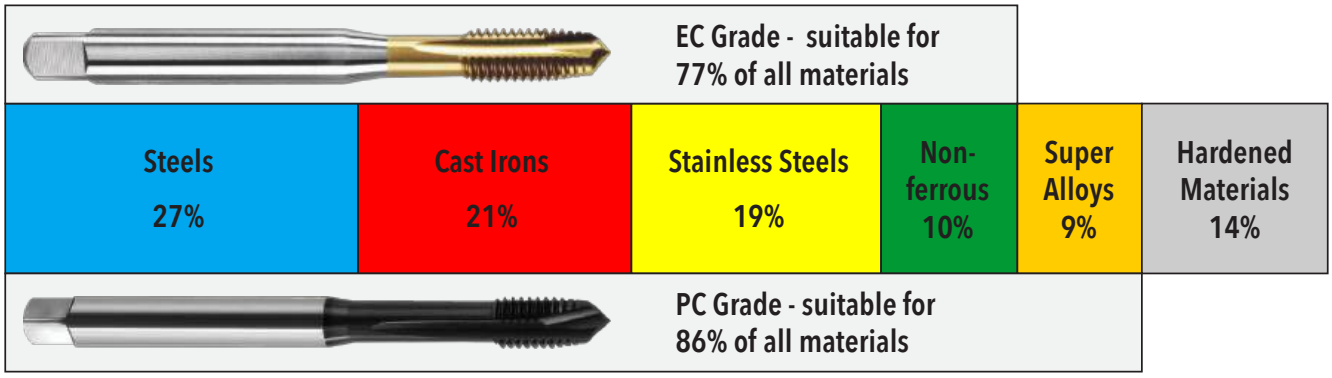


Grooving End Mills

Universal Threading Taps

Engineered to handle a wide range of materials with a single, reliable solution.

- *Longer Tool Life*
- *Shorter Machining Time*
- *Same Tap for Different Materials*
- *Trouble-Free Tapping*



Consumption of cutting tools depending on the material to be machined.
Source: Dedalus Consulting

CUTTING DATA

SmiCut STS

Cutting Speed (V_c)

MATERIAL		Hardness HB	Tensile Strenght N/mm²	Cutting Speed (V_c) m/min EC TT	EC TB	PC TT	PC TB
Steel	Low carbon, C < 0,25%	< 120	< 400	25 - 30	20 - 25	30 - 40	20 - 30
	Medium carbon, C < 0,55%	< 200	< 700	20 - 25	15 - 20	30 - 40	20 - 30
	High carbon, C < 0,85%	< 250	< 850	15 - 18	12 - 15	22 - 30	15 - 22
	Low alloy	< 250	< 850	13 - 16	10 - 13	19 - 27	12 - 19
	High alloy	< 350	< 1200	X	X	15 - 20	10 - 15
	Hardened, HRC < 45			X	X	X	X
	Hardened, HRC < 55			X	X	X	X
	Hardened, HRC < 65			X	X	X	X
Cast iron	Lamellar graphite	< 150	< 500	10 - 15	X	20 - 30	10 - 20
	Lamellar graphite	< 300	< 1000	15 - 20	10 - 15	20 - 30	10 - 20
	Nodular graphite, malleable	< 200	< 700	10 - 15	X	20 - 30	10 - 20
	Nodular graphite, malleable	< 300	< 1000	15 - 20	10 - 15	20 - 30	10 - 20
Stainless steel	Free machining	< 250	< 850	10 - 12	8 - 10	10 - 15	5 - 10
	Austenitic	< 250	< 850	9 - 11	7 - 9	10 - 15	5 - 10
	Ferritic and austenitic	< 300	< 1000	8 - 10	6 - 8	8 - 10	6 - 8
Titanium	Unalloyed	< 200	< 700	X	X	12 - 15	10 - 13
	Alloyed	< 270	< 900	X	X	5 - 8	2 - 5
	Alloyed	< 350	< 1250	X	X	X	X
Nickel	Unalloyed	< 150	< 500	X	X	5 - 8	2 - 5
	Alloyed	< 270	< 900	X	X	X	X
	Alloyed	< 350	< 1250	X	X	X	X
Copper	Unalloyed	< 100	< 350	20 - 25	15 - 20	20 - 30	10 - 20
	Brass, bronze	< 200	< 700	20 - 25	15 - 20	20 - 30	10 - 20
	High strength bronze	< 470	< 1500	20 - 25	15 - 20	20 - 30	10 - 20
Aluminium	Unalloyed	< 100	< 350	20 - 25	15 - 20	20 - 30	10 - 20
	Alloyed, Si < 0.5%	< 150	< 500	20 - 25	15 - 20	20 - 30	10 - 20
	Alloyed, Si < 10%	< 120	< 400	20 - 25	15 - 20	20 - 30	10 - 20
	Alloyed, Si > 10%	< 120	< 400	20 - 25	15 - 20	20 - 30	10 - 20
Inconel	718	< 370		X	X	X	X
Graphite				X	X	15 - 20	10 - 15

TT = Spiral Point Taps for Throught Holes TB = Spiral Flute Taps for Blind Holes

Carbide Grades

EC Grade
First Choice for General Tapping

For most applications, you can use our EC grade. You will find that the tool life is longer compared to bright and vaporized taps. So, even if the initial cost may be higher, your overall tooling cost will be lower. Threading is faster, and you can use the same tap for different materials.

This is a high-speed steel (HSS) tap with cobalt (E). The tap has a multilayer coating: the TiAlN base is very hard and heat-resistant, while the TiN top layer provides low friction.

PC Grade
Best Choice for Trouble-Free Tapping

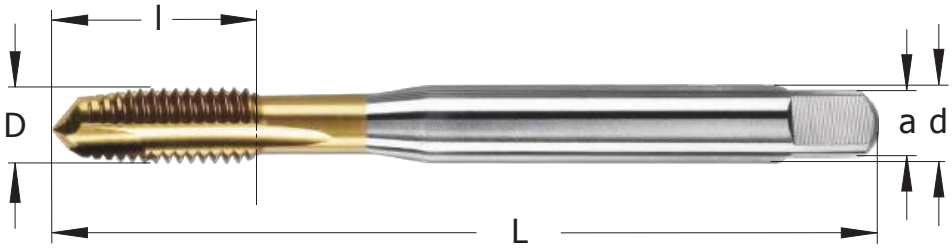
If your priority is trouble-free tapping, you should choose the PC Grade. It's never a bad choice, as tool life is even longer than with the EC Grade, and you can increase the cutting speed. These taps can even machine superalloys.

This is a powder metallurgical (PM) high-speed steel (HSS) tap with cobalt (E). The tap has a multilayer coating: the TiAlN base is very hard and heat-resistant, while the WC/C top layer (DLC) provides extremely low friction and excellent anti-stick properties.

UNIVERSAL THREADING TAPS

Spiral Point Taps for Through Holes, EC

EC
TiAlN + TiN coated, HSSE
Type
Spiral point, form B, 3xD
Tolerance
6H
Shank
DIN371, M2 - M10
DIN376, M12 - M24
Field of application
All types of steel up to 1100 N/mm2



M METRIC

Pitch mm	M coarse	INTERNAL Part Number	d mm	a mm	D mm	l mm	L mm
0,4	M2	TT028X021_M2_EC	2,8	2,1	2	10	45
0,45	M2,5	TT028X021_M2.5_EC	2,8	2,1	2,5	9	50
0,5	M3	TT035X027_M3_EC	3,5	2,7	3	11	56
0,7	M4	TT045X034_M4_EC	4,5	3,4	4	13	63
0,8	M5	TT06X049_M5_EC	6,0	4,9	5	14	70
1,0	M6	TT06X049_M6_EC	6,0	4,9	6	16	80
1,25	M8	TT08X062_M8_EC	8,0	6,2	8	18	90
1,5	M10	TT10X08_M10_EC	10,0	8,0	10	22	100
1,75	M12	TT09X07_M12_EC	9,0	7,0	12	27	110
2,0	M14	TT11X09_M14_EC	11,0	9,0	14	30	110
2,0	M16	TT12X09_M16_EC	12,0	9,0	16	30	110
2,5	M18	TT14X11_M18_EC	14,0	11,0	18	34	125
2,5	M20	TT16X12_M20_EC	16,0	12,0	20	34	140
3,0	M24	TT18X145_M24_EC	18,0	14,5	24	38	160

Spiral Point Taps for Through Holes, PC

PC
TiAlN+WC/C (DLC) coated, HSSE-PM
Type
Spiral point, form B, 3xD
Tolerance
6HX
Shank
DIN371, M3 - M10
DIN376, M12 - M20
Field of application
All types of steel up to 1400 N/mm2

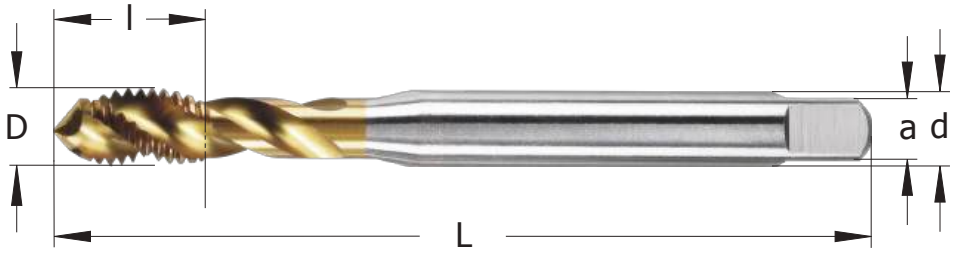
M METRIC

Pitch mm	M coarse	INTERNAL Part Number	d mm	a mm	D mm	l mm	L mm
0,5	M3	TT035X027_M3_PC	3,5	2,7	3	11	56
0,7	M4	TT045X034_M4_PC	4,5	3,4	4	13	63
0,8	M5	TT06X049_M5_PC	6,0	4,9	5	14	70
1,0	M6	TT06X049_M6_PC	6,0	4,9	6	16	80
1,25	M8	TT08X062_M8_PC	8,0	6,2	8	18	90
1,5	M10	TT10X08_M10_PC	10,0	8,0	10	22	100
1,75	M12	TT09X07_M12_PC	9,0	7,0	12	27	110
2,0	M16	TT12X09_M16_PC	12,0	9,0	16	30	110
2,5	M20	TT16X12_M20_PC	16,0	12,0	20	25	140

UNIVERSAL THREADING TAPS

Spiral Flute Taps for Blind Holes, EC

EC
TiAlN + TiN coated, HSSE
Flute
35° spiral flute, form C, 3xD
Tolerance
6H
Shank
DIN371, M2 - M10
DIN376, M12 - M24
Field of application
All types of steel up to 1100 N/mm2



M METRIC

Pitch mm	M coarse	INTERNAL Part Number	d mm	a mm	D mm	l mm	L mm
0,4	M2	TB028X021_M2_EC	2,8	2,1	2	5	45
0,45	M2,5	TB028X021_M2.5_EC	2,8	2,1	2,5	5	50
0,5	M3	TB035X027_M3_EC	3,5	2,7	3	5	56
0,7	M4	TB045X034_M4_EC	4,5	3,4	4	7	63
0,8	M5	TB06X049_M5_EC	6,0	4,9	5	8	70
1,0	M6	TB06X049_M6_EC	6,0	4,9	6	10	80
1,25	M8	TB08X062_M8_EC	8,0	6,2	8	13	90
1,5	M10	TB10X08_M10_EC	10,0	8,0	10	15	100
1,75	M12	TB09X07_M12_EC	9,0	7,0	12	18	110
2,0	M14	TB11X09_M14_EC	11,0	9,0	14	20	110
2,0	M16	TB12X09_M16_EC	12,0	9,0	16	20	110
2,5	M18	TB14X11_M18_EC	14,0	11,0	18	25	125
2,5	M20	TB16X12_M20_EC	16,0	12,0	20	25	140
3,0	M24	TB18X145_M24_EC	18,0	14,5	24	30	160

Spiral Flute Taps for Blind Holes, PC

PC
TiAlN+WC/C (DLC) coated, HSSE-PM
Flute
45° spiral flute, form C, 3xD
Tolerance
6HX
Shank
DIN371, M3 - M10
DIN376, M12 - M20
Field of application
All types of steel up to 1400 N/mm2

M METRIC

Pitch mm	M coarse	INTERNAL Part Number	d mm	a mm	D mm	l mm	L mm
0,5	M3	TB035X027_M3_PC	3,5	2,7	3	5	56
0,7	M4	TB045X034_M4_PC	4,5	3,4	4	7	63
0,8	M5	TB06X049_M5_PC	6,0	4,9	5	8	70
1,0	M6	TB06X049_M6_PC	6,0	4,9	6	10	80
1,25	M8	TB08X062_M8_PC	8,0	6,2	8	13	90
1,5	M10	TB10X08_M10_PC	10,0	8,0	10	15	100
1,75	M12	TB09X07_M12_PC	9,0	7,0	12	18	100
2,0	M16	TB12X09_M16_PC	12,0	9,0	16	20	110
2,5	M20	TB16X12_M20_PC	16,0	12,0	20	25	140

TAPPING CHUCKS

Quick Change Tapping Chucks

Floating Tapping Chuck BT - MAS 403

Size No.	Range	Part Number	BT Size
0	M1 - M8	BT30-THTC0-L72	30
		BT40-THTC0-L74	40
		BT50-THTC0-L81	50
1	M1 - M14	BT30-THTC1-L61	30
		BT40-THTC1-L67	40
		BT50-THTC1-L77	50
2	M8 - M24	BT40-THTC2-L94	40
		BT50-THTC2-L101	50
3	M14 - M36	BT40-THTC3-L164	40
		BT50-THTC3-L141	50
4	M22 - M48	BT50-THTC4-L161	50

Floating Tapping Chuck HSK-A - DIN 69893

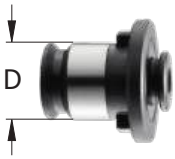
Size No.	Range	Part Number	HSK-A Size
1	M1 - M14	HSK50A-THTC1-L80	50
		HSK63A-THTC1-L80	63
		HSK100A-THTC1-L82	100
2	M8 - M24	HSK50A-THTC2-L120	50
		HSK63A-THTC2-L120	63
		HSK100A-THTC2-L112	100
3	M14 - M36	HSK63A-THTC3-L164	63
		HSK100A-THTC3-L162	100
4	M22 - M48	HSK100A-THTC4-L225	100

Floating Tapping Chuck TC - DIN 69871 A

Size No.	Range	Part Number	SK Size
0	M1 - M8	TC40-THTC0-L72	40
		TC50-THTC0-L72	50
1	M1 - M14	TC30-THTC1-L58	30
		TC40-THTC1-L59	40
		TC50-THTC1-L59	50
2	M8 - M24	TC40-THTC2-L98	40
		TC50-THTC2-L83	50
3	M14 - M36	TC40-THTC3-L149	40
		TC50-THTC3-L138	50
4	M22 - M48	TC50-THTC4-L175	50

Floating Tapping Chuck WS - DIN 1835 B+E

Size No.	Range	Part Number	WS mm
0	M1 - M8	WS16-THTC0-L37	16
		WS20-THTC0-L37	20
1	M1 - M14	WS20-THTC1-L39	20
		WS25-THTC1-L39	25
		WS32-THTC1-L39	32
		WS40-THTC1-L42	40
2	M8 - M24	WS25-THTC2-L63	25
		WS32-THTC2-L63	32
		WS40-THTC2-L63	40
3	M14 - M36	WS32-THTC3-L124	32
		WS40-THTC3-L118	40
4	M22 - M48	WS40-THTC4-L126	40
		WS50-THTC4-L126	50



Quick Change Tap Adapters - Positive Drive (No Clutch)

Size No.	Range	Part Number	D mm
0	M1 - M8	SE-0.....	13
1	M1 - M14	SE-1.....	19
2	M8 - M24	SE-2.....	31
3	M14 - M36	SE-3.....	48
4	M22 - M48	SE-4.....	60

Quick Change Tap Adapters - With Adjustable Torque Clutch

Size No.	Range	Part Number	D mm
0	M1 - M8	SES-0.....	13
1	M1 - M14	SES-1.....	19
2	M8 - M24	SES-2.....	31
3	M14 - M36	SES-3.....	48
4	M22 - M48	SES-4.....	60

Go to smicut.store to see all dimensions and the full range of tapping chucks, including synchro and rigid tap holders.

THREAD GAUGES

Precision Plug and Ring Gauges

Thread Tolerance
Plug Gauge: 6H
Ring Gauge: 6g

Gauge Dimensions
DIN ISO 1502

GO/NOGO
Thread Plug Gauge

GO
Thread Ring Gauge

NOGO
Thread Ring Gauge

M

Pitch mm	M coarse	GO/NOGO Plug Part Number	GO Ring Part Number	NOGO Ring Part Number
0,25	M1	PG_M1		
0,3	M1,4	PG_M1.4		
0,35	M1,6	PG_M1.6		
0,4	M2	PG_M2	RGG_M2	RGN_M2
0,45	M2,2	PG_M2.2	RGG_M2.2	RGN_M2.2
0,45	M2,5	PG_M2.5	RGG_M2.5	RGN_M2.5
0,5	M3	PG_M3	RGG_M3	RGN_M3
0,6	M3,5	PG_M3.5	RGG_M3.5	RGN_M3.5
0,7	M4	PG_M4	RGG_M4	RGN_M4
0,75	M4,5	PG_M4.5	RGG_M4.5	RGN_M4.5
0,8	M5	PG_M5	RGG_M5	RGN_M5
1,0	M6	PG_M6	RGG_M6	RGN_M6
1,0	M7	PG_M7	RGG_M7	RGN_M7
1,25	M8	PG_M8	RGG_M8	RGN_M8
1,25	M9	PG_M9	RGG_M9	RGN_M9
1,5	M10	PG_M10	RGG_M10	RGN_M10
1,5	M11	PG_M11	RGG_M11	RGN_M11
1,75	M12	PG_M12	RGG_M12	RGN_M12
2,0	M14	PG_M14	RGG_M14	RGN_M14
2,0	M16	PG_M16	RGG_M16	RGN_M16
2,5	M18	PG_M18	RGG_M18	RGN_M18
2,5	M20	PG_M20	RGG_M20	RGN_M20
2,5	M22	PG_M22	RGG_M22	RGN_M22
3,0	M24	PG_M24	RGG_M24	RGN_M24
3,0	M27	PG_M27	RGG_M27	RGN_M27
3,5	M30	PG_M30	RGG_M30	RGN_M30
3,5	M33	PG_M33	RGG_M33	RGN_M33
4,0	M36	PG_M36	RGG_M36	RGN_M36

M

THREAD GAUGE SETS WITH 7 PCS. IN A BOX

M coarse	GO/NOGO Plug Part Number	GO Ring Part Number	NOGO Ring Part Number
M3 - M4 - M5 - M6 M8 - M10 - M12	KIT_PG_M3-M12	KIT_RGG_M3-M12	KIT_RGN_M3-M12

- A complete program of thread gauges for different dimensions, thread profiles and tolerances are avilable. Go to smicut.store to find the thread gauges you need.
- DLC coated gauges for long tool life are also available.

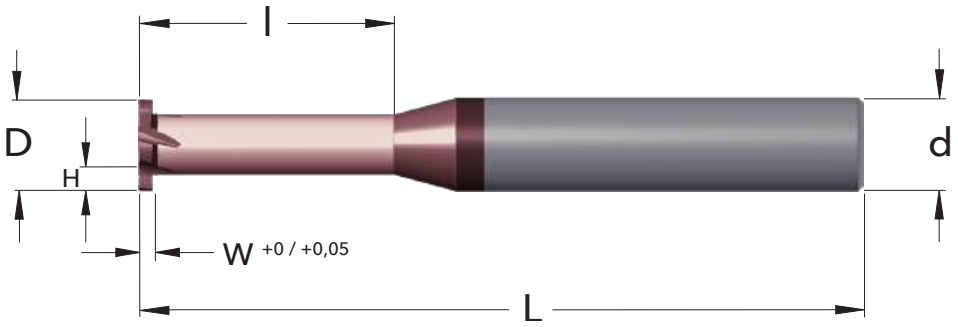
Calibration Service for Thread Gauges

Calibration certificates are issued on demand. Inspections are carried out in a testing laboratory in accordance with the specific requirements and standards (DIN, ISO, ANSI) relevant to each gauge being tested. The calibration process utilizes an IAC Thread Scanner.

GROOVING

Grooving End Mills

AC
TiAlCN coated
Micrograin Carbide
Tolerance
D 6,0 - 12,0 +0 / -0,030
Shank
Cylindrical h6, DIN6535 HA
Flute
15° right hand spiral
Field of application
Grooving in all types of steel



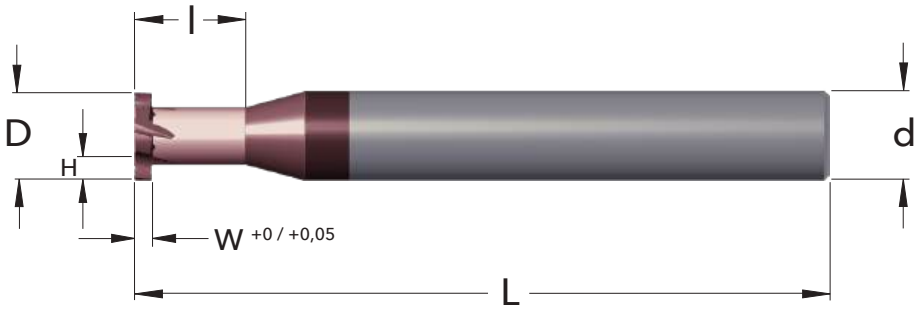
M

METRIC

W +0/+0,05	INTERNAL Part Number	d mm	D mm	H mm	No. of Flutes	l mm	L mm
1	G0808E22_1.0SQ_AC	8	8	1,5	5	22	63
1,5	G1010E30_1.5SQ_AC	10	10	2,0	5	30	76
2	G1212E30_2.0SQ_AC	12	12	2,5	5	30	83
3	G1212E30_3.0SQ_AC	12	12	2,5	5	30	83

Grooving End Mills, Circlip DIN 472

AC
TiAlCN coated
Micrograin Carbide
Tolerance
D 6,0 - 12,0 +0 / -0,030
Shank
Cylindrical h6, DIN6535 HA
Flute
15° right hand spiral
Field of application
Grooving in all types of steel



M

METRIC

W +0/+0,05	INTERNAL Part Number	d mm	D mm	H mm	No. of Flutes	l mm	L mm
1,1	G0606E10_1.1SQ_AC	6	6	1,0	5	10	63
1,3	G0808E10_1.3SQ_AC	8	8	1,5	5	10	63
1,6	G0808E10_1.6SQ_AC	8	8	1,5	5	10	63
1,85	G1010E10_1.85SQ_AC	10	10	2,0	5	10	76
2,15	G1212E10_2.15SQ_AC	12	12	2,5	5	10	83

Grooving End Mills

Engineered for precision slots and profiles, grooving end mills deliver smooth finishes, reliable performance, and long tool life. Ideal for steels, stainless, and alloys, they ensure accuracy and efficiency in every cut.

They are available in two categories: one with a short neck designed for circlip grooves, and another with a longer neck for machining a wide range of grooves.