



**Seco sustainable &  
versatile solutions made  
for your best performance**





## Discovering the future of our manufacturing industry

At Seco, we make tools, tech, and solutions for the most advanced manufacturing challenges on Earth. From our founding in Fagersta Sweden, to today's global company, our business has always been made to measure, and built on trust.

Combining cutting-edge, precision tools with lasting, personal partnerships, we're a true people company helping our partners discover the future of the manufacturing industry.

We're proud to make for makers, invent for inventors, and partner with pioneers. Driving the future forward with our focus on innovation. In short - if the right tool for the job exists, we'll deliver it. If it doesn't, we'll create it.

We're proud to put sustainability at the heart of everything we do, challenging perceptions of our industry, changing the process of manufacturing, and playing our own small part in shaping a brighter looking future.

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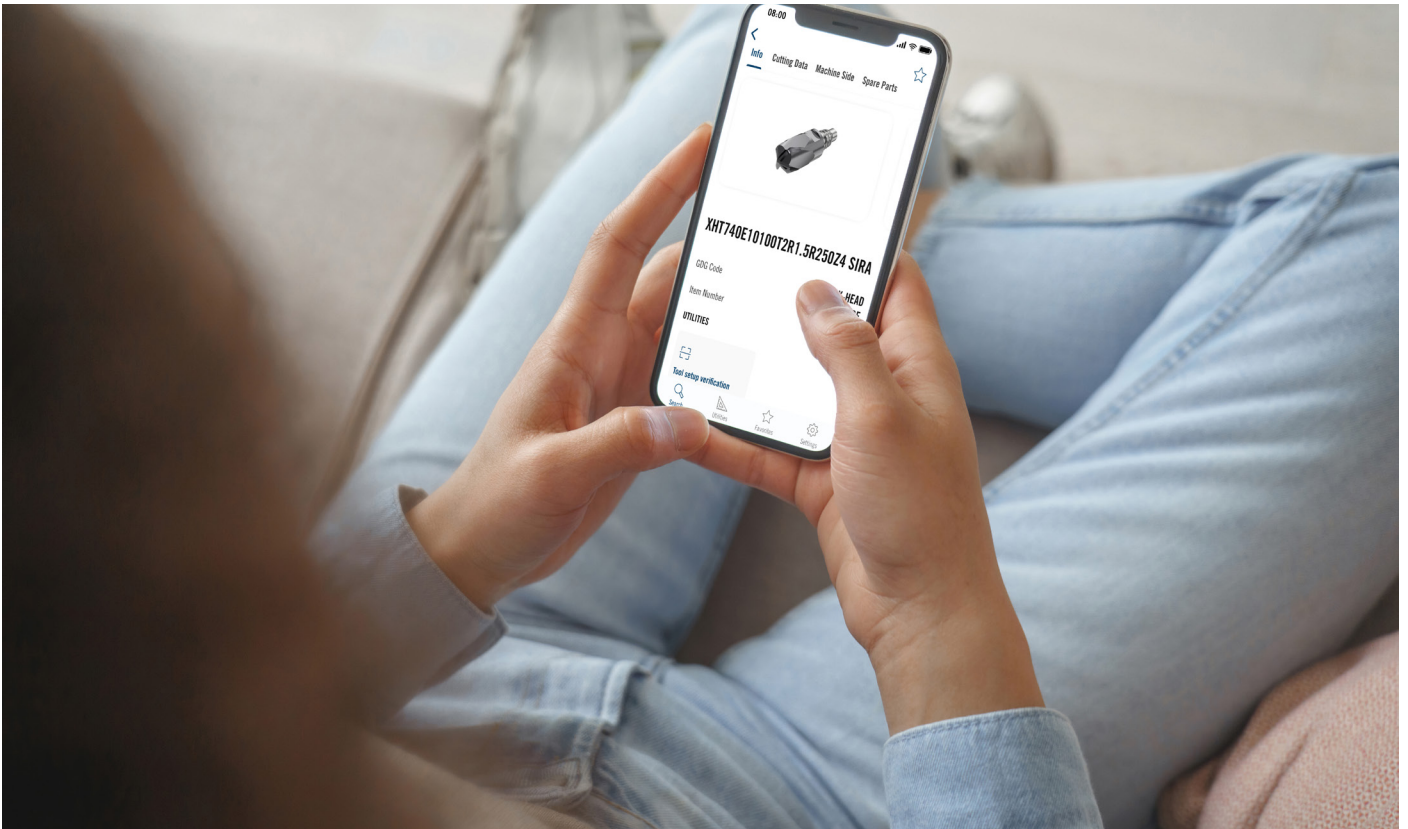
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Make your job easier & faster  
with Seco online services

## Seco Digital Services



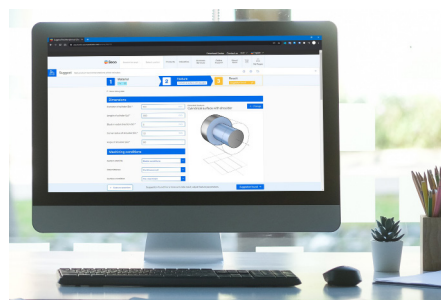
The Seco My Pages environment is a versatile online platform that offers various services, like quick quotations, effortless product searches or tool recommendation.

### Product search

Search on the Seco website Home page to find comprehensive results, from tooling, technical articles and videos to press releases, events, news and website pages. The Product Search portlet in your Seco account works similarly to provide you with tooling results. It gives you all the options that respond to your search terms.

### Suggest

When you know part material and application but aren't sure of the best tool choices, turn to Seco Suggest. It's ready and waiting to help you any time you need cutting tool advice.



### Seco Online Store

Featuring real-time inventory levels for approximately 30,000 products and net prices in local currencies, the Seco Web Store allows users to immediately order the tools they need to maintain efficient and fully optimized part-production operations.



Scan here to learn  
more about our  
digital services



Make your job easier & faster with Seco online services

# Seco Digital Services

## Favorite tools

You're already accustomed to using online "favorites" to identify things you like, from books and movies to apparel and shoes. The Favorite Tools portlet takes that familiar consumer "like" and applies it to Seco tooling.

## Orders

Take the tedium out of tool re-orders with the Orders portlet in your Seco account. Once you sign in, you can see every Seco order you've placed – and purchase any item again with a few clicks. You can also track your Seco orders from the moment you make a purchase until the package arrives at your shop.

## Material Library

The Seco Standard Material Groups (SMG) and shows you where the parts and tools for your next job fit in. It also helps you learn more about how to cut individual materials and when to use specific tools.

## Seco Assistant App

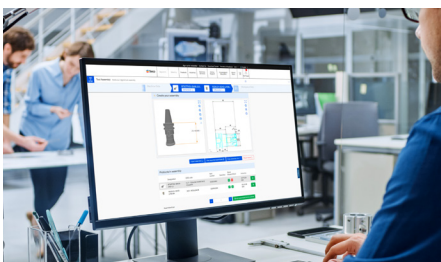
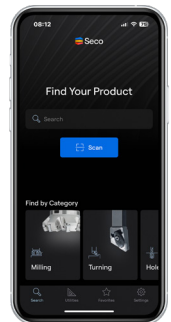
With our mobile Seco Assistant app, you can get feeds and speeds, cutting data, compare products, and more. Essential tooling and cutting data on the go. Machining calculations can be a hassle, especially if you have to look up information on a laptop or search through print catalogs. Seco Assistant, **an all-in-one machining app**, makes it easy to find the information you need without leaving the production floor. Most important features are: tool optimization, machining calculators, product comparison, product scan, Suggest, material categories and tools setup verification.



App Store



Android



## Digital Tool Assembly

Visualize tool assemblies accurately in seconds with Seco Digital Tool Assembly. This online machine tool assembler uses production data for instant accuracy. Shorten tool-selection time and find the right tooling fast. From product pages or from tool recommendations on Seco Suggest, quickly create precise machine tool assemblies. Download 2D and 3D drawings and data to perform accurate pre-machining simulations and tool collision checks in CAM systems. Eliminate time-consuming manual assemblies and guesswork for greater productivity.

## Discover more sustainable solutions & services

In addition to our online service, we provide much more: from inventory management system solutions, technical training, engineering services to carbide recycling.



Scan here to learn more about our digital services



Versatility and cost efficiency in milling

# Turbo range: Square shoulder milling cutters



---

## Your challenge

Rationalize your milling cutter stock.

## Our solution

Suitable for most roughing, semi-finishing and finishing operations, these highly versatile cutters offer long tool life and high precision via optimized properties that reduce heat generation and cutting forces.

## Your challenge

Optimize your milling operation efficiency.

## Our solution

Turbo cutters have precision milled pocket seats that improve run-out, stability and tool life by providing optimal contact between the tool body and insert. Integrated through-coolant channels support high productivity and promote excellent chip evacuation.

## Your challenge

Unstable cutting processes affect your productivity and component quality.

## Our solution

cutting tool with low cutting forces and smooth cutting action for excellent tool life and a stable, secure process at high material removal rates.

---

## Product designation

Milling cutters: R217/220.69

Inserts: XOEX/XOMX

## Product description

2 cutting-edges, single-sided Inserts

The Turbo family takes square shoulder milling to the max. Suitable for most roughing, semi-finishing and finishing operations, these highly versatile cutters offer long tool life and high precision via optimized properties that reduce heat generation and cutting forces.

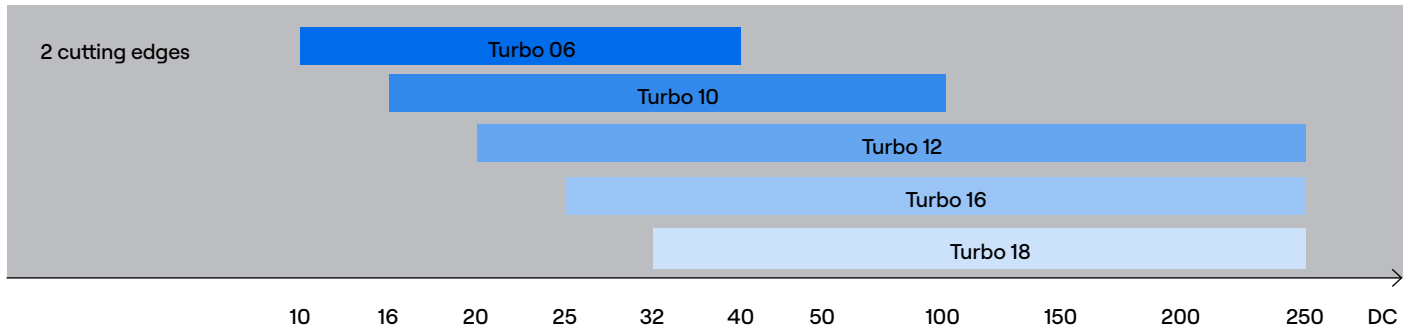


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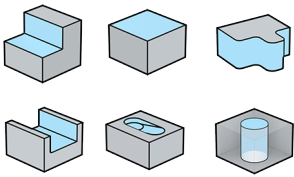


# Turbo range: Square shoulder milling cutters

## Range overview



## Possible applications



## Product features

recommended  $a_p$  / max  $a_p$ :  
 3 mm / 5 mm (XO.06),  
 6 mm / 9 mm (XO.10),  
 7 mm / 11 mm (XO.12),  
 9 mm / 15 mm (XO.16)  
 10 mm / 17 mm (XO.18)

## Mounting type

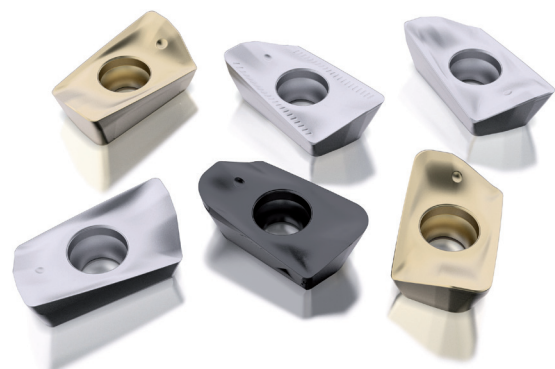
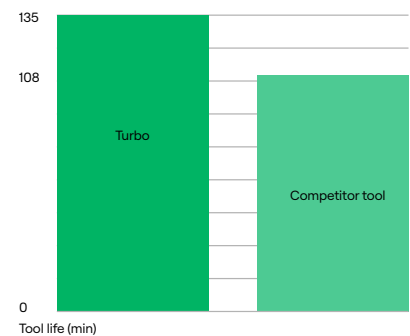
Cylindrical,  
 Weldon,  
 Seco-Weldon,  
 Combimaster,  
 Arbor

## Insert range overview (only main ones)

Grade	Purpose	Suitable materials
F40M (PVD)	Versatility	P M K S N
MP2501 (CVD)	Dry machining, unstable, versatility in P & M	P M K
T350M (CVD)	Versatility in material P & M	P M S H
MK2050 (PVD)	K material specific	P K H
H15 (Non revêtu)	N material specific	N
MS2500 (CVD)	M and S material specific	P M S
MS2050 (PVD)	M and S material specific and suitable for P	P M S
MP3000 (PVD)	Optimized and suitable for H material	P M K H
MPI501 (CVD)	Dry machining, stable, versatility in P & M	P M K

## Product case studies

Application	Contouring
Industry segment	General engineering
Material	40CMD8 - SMG P5
Coolant	No - dry machining
Tools	R220.69-0063-12-6AN XOMX120408TR-M12,MP2501
Customer target	Increase tool life
Cutting data	$V_c = 230$ m/min $f = 0,21$ mm/dent $A_p = 7,5$ mm $A_e = 9$ mm



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Economical and  
comprehensive solution  
for disc-milling operations

## 335.19 Disc milling cutter for small to medium width of cut



---

### Your challenge

Difficulty to find the right tool  
for your disc-milling application.

### Our solution

335.19 range is the broadest range  
in the disc-milling cutters system  
on the market. With any type of  
machine connection, cutter diameter  
and insert corner radius choice.

---

### Your challenge

Get a reliable and precise solution to  
avoid any production issue.

### Our solution

A proven solution for trouble  
free operations even in the most  
demanding ones. Get reliable chip  
formation and evacuation thanks to  
the unique and specific design  
of the tool.

---

### Your challenge

Optimize your production costs for  
disc-milling operations.

### Our solution

The range offers 4 cutting edges  
per insert and a very precise insert  
solution to avoid any extra finishing  
operation.

---

### Product designation

Milling cutters : R335.19  
Inserts : 335.19 & SNHQ

### Product description

The 335.19 disc milling cutter range is an economical, precise and free-cutting solution for small width of cut with 4 cutting edges per insert.

- Width of cut 4-12 mm
- Cutter range diameter 40-250 mm
- Insert corner radii range 0.2-6 mm



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information

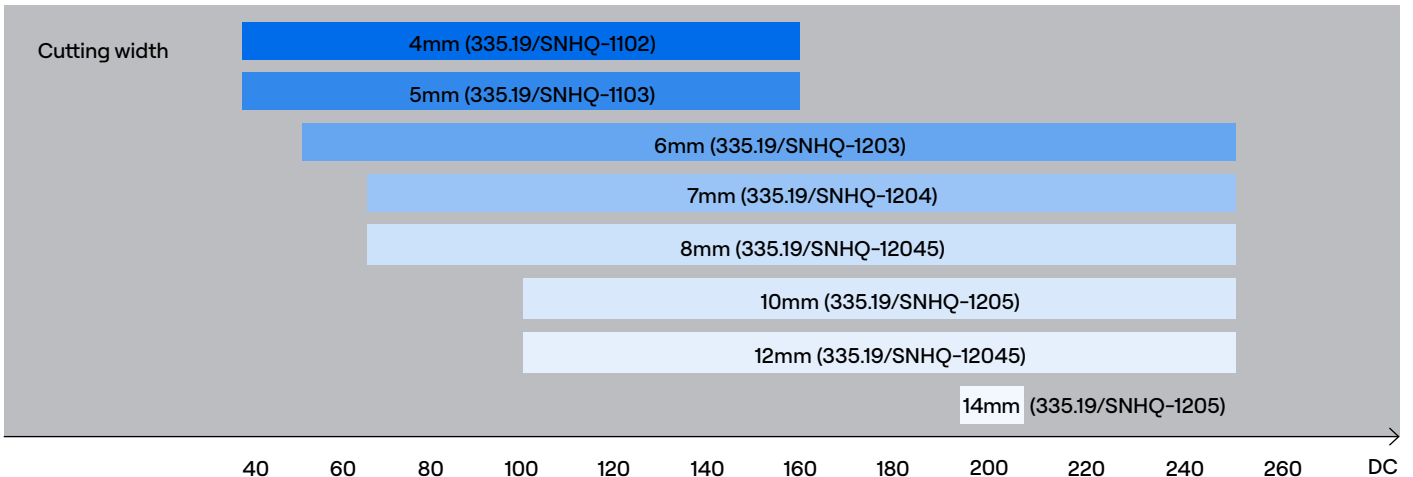




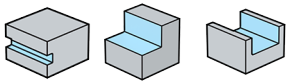
Economical and comprehensive solution for disc-milling operations

# 335.19 Disc milling cutter for small to medium width of cut

## Range overview



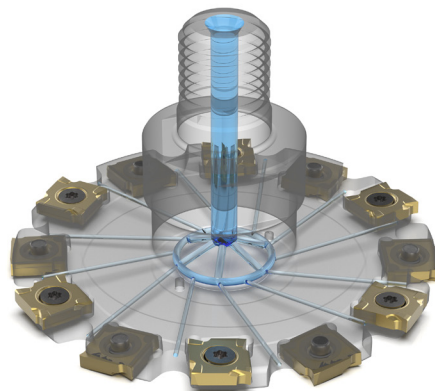
## Possible applications



**Mounting type**  
Cylindrical,  
Combimaster,  
Arbor

## Insert range overview (only main ones)

Grade	Purpose	Suitable materials
F40M (PVD)	Versatility	P M K S N
F30M (PVD)	Optimized and suitable for P and H material	P M K H
MS2050 (PVD)	M and S material specific and suitable for P	P M S
MP2501 (CVD)	Dry machining, unstable, versatility in P & M	P M K
MM4500 (CVD)	Optimized for M material	P M S
H25 (Non revêtu)	N material specific	N



## Product case studies

<b>Application</b>	Side milling and slotting	
<b>Industry segment</b>	General engineering	
<b>Material</b>	42 Cr Mo 4 - SMG <b>P5</b>	
	<b>Previous solution</b>	<b>Seco solution 335.19</b>
<b>Coolant</b>	External coolant	Internal coolant
<b>Tools</b>	2 different disc cutter : dia 100 for slotting & dia. 125 for side milling SN.12 style insert	Only one tool for both operations : R335.19-20125, RE-05.8A SNHQ110304TR/L4-M07 F40M
<b>Customer target</b>	Increase tool life	Increase productivity and reduce cycle time
<b>Cutting data</b>	Vc = 220 m/min fz = 0,047 mm/tooth	
<b>Machining time</b>	4min	2min



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Improve your surface finishing quality for face milling applications

## Quattromill – Face milling cutters



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### Your challenge

Ensure a constant and good quality surface finishing in face milling operations.

### Our solution

Due to their cutter geometries and positive cutting rake design the Quattromill face mills excel in surface finishing operations.

---

### Your challenge

Get an reliable, productive and with low energy consumption solution.

### Our solution

Quattromill cutters positive cutting rakes maximize a machine tool's capability and enables increased productivity in both stable and unstable conditions.

---

### Your challenge

Get the best from your machine and reduce cycle times.

### Our solution

The Quattromill face milling cutter is designed in a close-pitch version. A special patented center-locking insert screw design, the new face mill puts more teeth/inserts in the cut for higher feed rates, improved surface finishes and increased productivity.

---

### Product designation

Milling cutters : R217/220.53

Inserts : SEEX09/12/15

### Product description

QuattroMill™ is more than a general-purpose face mill.

It is a simple solution with more teeth per cutter that increases productivity, ease of use, reliability and precision for the full range of face milling applications and materials.

QuattroMill is available in a wide range of grades and geometries to cover all operations. It can be configured in three different pitches: coarse, normal and close, and is offered in diameters ranging from 63 to 200 mm.

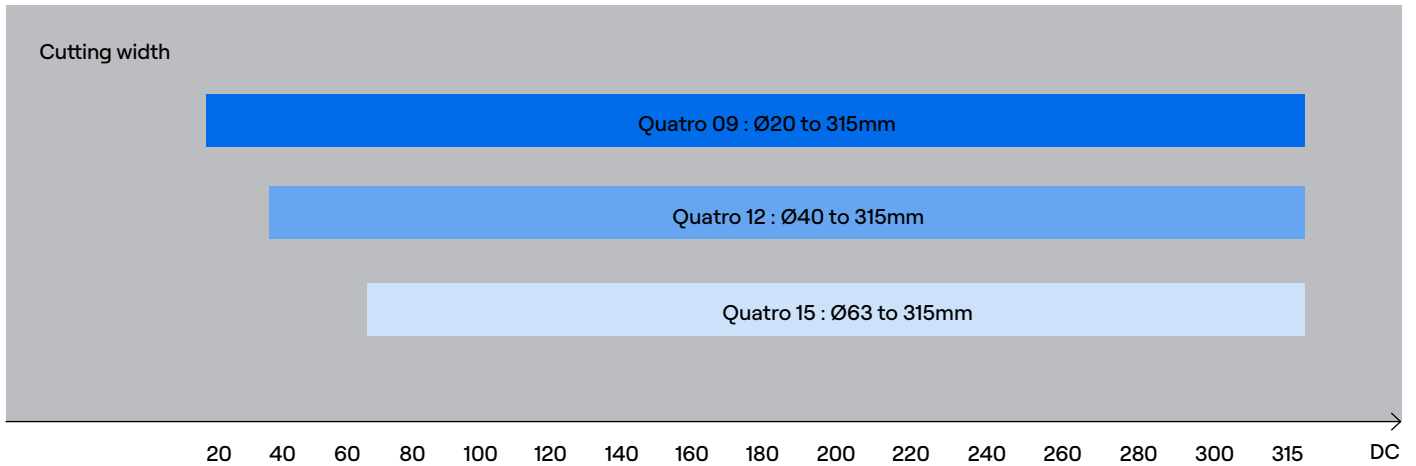


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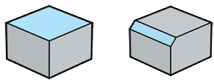


Improve your surface finishing quality for face milling applications

# Quattromill – Face milling cutters



## Possible applications



## Product features

recommended  $a_p$ :  
 3 mm (SEEX/SEM09),  
 4,5 mm (SEEX/SEM12) &  
 6 mm (SEEX/SEM15)

## Mounting type

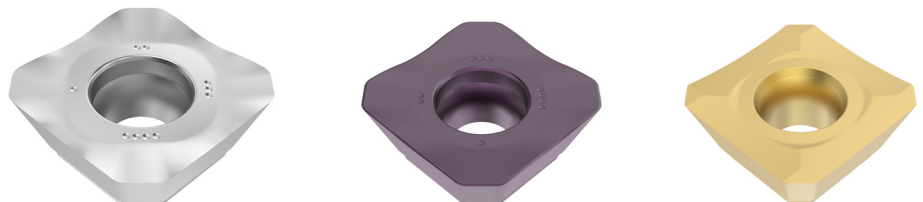
Seco Weldon,  
 Capto,  
 Arbor

## Insert range overview (only main ones)

Grade	Purpose	Suitable materials
H25 (Non revêtu)	N material specific	N
F40M (PVD)	Versatility	P M K S N
MP2050 (PVD)	Secured choice for unstable M and S material	P M S
MP3501 (CVD)	Dry machining, unstable, versatility in P & M	P M S
MP2501 (CVD)	Dry machining, unstable, versatility in P & M	P M K
MP1501 (CVD)	Dry machining, stable, versatility in P & M	P M K
MK1500 (CVD)	Optimized for K material	P K
MP3000 (PVD)	Optimized for stable machining	P M H

## Product case studies

Application	Face milling
Industry segment	General engineering
Material	CoCr28Mo6 - SMG S2
Coolant	Yes
Tools	R220.53-0063-12-5A SEEX1204AFN-M10, MS2050
Customer target	Better surface finish
Cutting data	$V_c = 49,5\text{m/min}$ $f_z = 0,0667\text{ mm/tooth}$ $a_p = 0,2\text{mm}$ $a_e = 50\text{mm}$
Tool life	30min



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Mill to the max with Seco  
High Feed range

# High Feed milling cutters



## Your challenge

Milling challenging materials like tough steels, stainless steels, superalloys and titanium cause buildup or notched edges and broken inserts that increase tooling costs and cause unexpected downtime.

## Our solution

The High Feed SP easily cuts ISO P, M and S materials to increase material removal rates and extend tool life.

## Your challenge

Reduce cycle times and increase your productivity.

## Our solution

The design of the insert allows to optimize the teeth number per cutter for the LP high feed range.

## Your challenge

Optimized milling performance requires switching among numerous tools to implement various machining strategies and part materials.

## Our solution

One High Feed SP tool handles a complete range of high feed milling operations and materials.

## Product designation

Milling cutters: R217/220.21...SP and R217/220.21 ... LP  
Inserts: SPKT10, 14 & 18 and LPKT/LPKW/LPHT/LPHW05, 06 & 09

## Product description

### SP range:

To make High Feed SP milling cutters the best-in-class four-sided milling solution, their fine-tuned approach to cutting optimizes performance in everything from free-cutting austenitic stainless steels to cobalt and nickel-based superalloys.

### LP range:

Using a single sided rectangular insert is the key of the HF2 outstanding performance.

The reduced width of the inserts allows very close pitch design resulting in high metal removal rate while offering high reliability even in deep cavities.

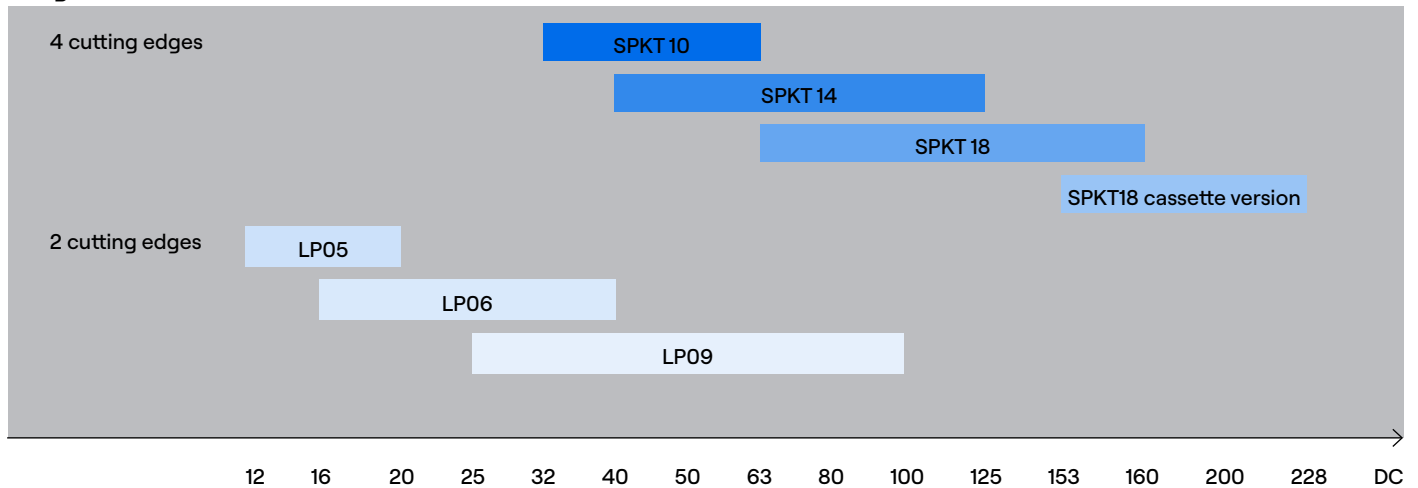


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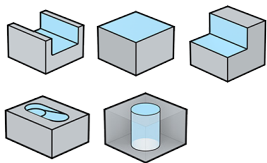


# High Feed milling cutters

## Range overview



## Possible applications



## Product features

max  $a_p$ :  
 SPKT 10: 1,1mm  
 SPKT 14: 1,8mm  
 SPKT 18: 2,5mm  
 SPKT 18 cassette version:  
 2,9 & 4,1mm  
 LP05: 0,65mm  
 LP06: 0,8mm  
 LP09: 1,8mm

Mounting type  
 Combimaster  
 Arbor

## Insert range overview (only main ones)

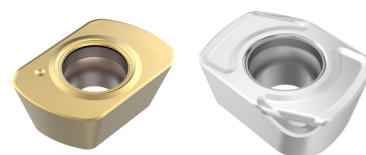
Grade	Purpose	Suitable materials
F40M (PVD)	Versatility	P M K S N
MP2050 (PVD)	Secured choice for unstable M and S material	P M S
MP3501 (CVD)	Dry machining, unstable, versatility in P & M	P M S
MP2501 (CVD)	Dry machining, unstable, versatility in P & M	P M K
MP1501 (CVD)	Dry machining, stable, versatility in P & M	P M K
MK2050 (PVD)	Optimized for K material	P K
MP3000 (PVD)	Optimized for stable machining	P M H
MS2500 (CVD)	M and S material specific and suitable for P in unstable conditions	P M S
MS2050 (PVD)	M and S material specific and suitable for P with stable conditions	P M S

## Product case studies

Application	Copy milling	
Material	Casted 10/18 stainless - SMG <b>M3</b>	
	Test tool Seco	Comparison tool Competitor
Holder/Taper	DIN50	DIN50
Cutter body	R220.21-0080-SP14.7A Zn=7	Dia 80 mm, spigot size 32 mm Zn=8
Insert	SPKT140523TN-M14, MS2050	Square insert with curved edge, 4 cutting edges
vc	160 m/min	160 m/min
n	630 rpm	630 rpm
fz	0.68 mm/teeth	0.6 mm/teeth
vf	3000 mm/min	3000 mm/min
ap	1.6 mm	1 mm
ae	48 / 25 / 70 mm	48 / 25 / 40 mm
Coolant	On	On
Q	230 / 120 / 336 cm <sup>3</sup> /min	144 / 75 / 120 cm <sup>3</sup> /min
T	23 min	33 min
QTY	1 pcs	0,33 pcs



SP inserts



LP inserts



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Maximize milling versatility  
with exchangeable end mills

# Seco X-Head Exchangeable End Mill System



---

## Your challenge

Need to purchase many different end mills and holders to machine different features on a workpiece which adds higher cost to a project.

## Our solution

Quick-change exchangeable milling head system adapts to various machining needs with a range of cutting profiles and materials without additional holders.

---

## Your challenge

Tool changes require time consuming remeasuring and resetting of tool heights.

## Our solution

Quick-change milling heads or modular end mills eliminate the need to remove, remeasure and reset tools.

---

## Your challenge

Deep part features require an inventory of various expensive longreach holders or tools.

## Our solution

Broad range of quick-change end mills that are adaptable to longreach shanks.

---

## Product designation

Milling shanks: XE10 / XE12 / XE16 / XE20 and XE25

## Product description

With the Seco exchangeable head milling system, quickly and easily change between various solid carbide milling head profiles and types to optimize all your milling operations while you reduce manufacturing costs and tooling inventories. X-Head end mills mount to a variety of available shank lengths for even greater versatility, with long-reach capability.

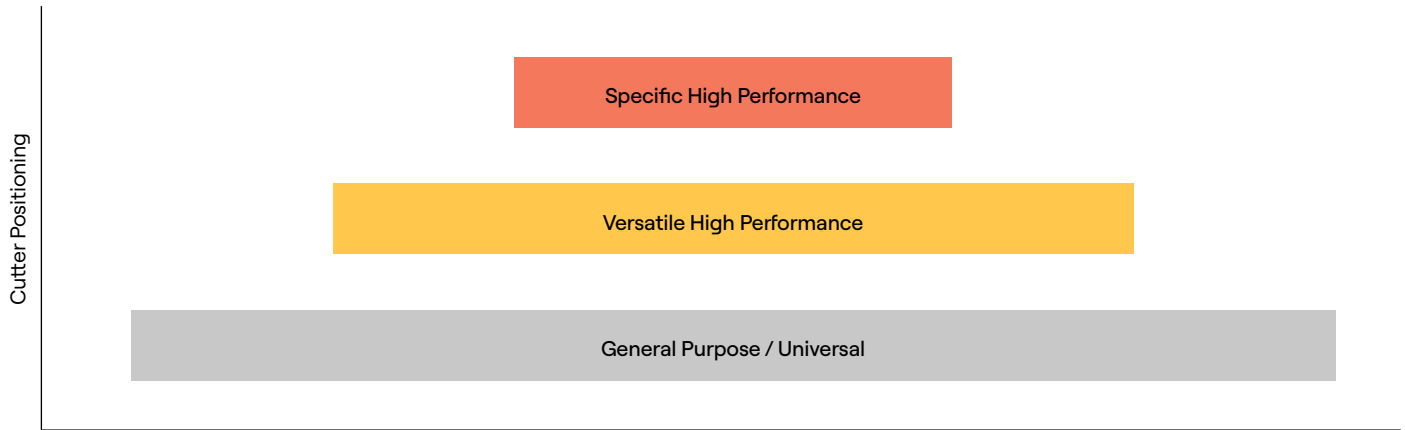


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Maximize milling versatility  
with exchangeable end mills

# Seco X-Head Exchangeable End Mill System

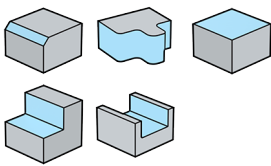


Seco High Performance	
XSE720 (HXT)	Performance multi-flute
XSB720 (HXT)	Performance ballnose multi-flute
XHF780 (HXT)	Performance HighFeed
XHF580 (HXT)	Performance HighFeed + ICC
XSE450 (AXT)	Performance Alu dedicated 3 flute
XHT740 (SIRA)	Barrel tools for finishing

Versatile High Performance	
XSE550 (SIRA)	Performance 3 Flute
XSE550 (SIRA)	Performance 4 flute
XSE550 (SIRA)	Performance 5 flute
XSB540 (SIRA)	Performance 4 flute ball with ICC

Seco Versatile	
XVC512	Chamfer SIG30
XVC506	Chamfer SIG60
XVC509	Chamfer SIG90
XVK310	Concave
XVE540	Basic 3 & 4 flute
XVE510	Basic 2 flute (spade)
XVB510	Basic Ball

## Possible applications



## Material range overview

Purpose	Suitable materials
Versatility	P M K N S H
Versatile high performance	P M K N S H
High performance (except XSE450 dedicated for N material)	P M K N S H

## Product case studies

Objective	Machining cycle improvement
Segment	General engineering
Material	XC45 - SMG P4
Operation	Advance roughing
Coolant	External emulsion
<b>New proposal</b>	
Tool	XSE720E16160D3R200Z6 HXT + XE16200G1-070-00.0S
Vc	250 m/min
fz	0,18 mm/tooth
DoC	22,5 mm
Ae	1,92 mm (12% of dia.)
Q	230 cm <sup>3</sup> /min
Tool life	210 min



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Milling stability with solid end mills built for reliable performance

## Seco JSE510 cost-effective series



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### Your challenge

High production costs caused by greater material and application diversity are impacting your profitability.

### Our solution

Achieve the lowest cost per meter in steels, stainless steels, cast iron, titanium and some aluminums with a single, well optimized family of solid end mills.

---

### Your challenge

Insufficient machine or process stability causes poor tool life and inconsistent workpiece quality.

### Our solution

Increase milling security and tool life with Seco JSE510 solid end mills' irregular tooth pitch, progressive helix and optimized flute configurations.

---

### Product designation

JSE512: 2 teeth

JSE513: 3 teeth

JSE514: 4 teeth

JSB512: Ball nose

### Product description

Designed to offer exceptional value with the lowest cost per meter machined in its class, these tools offer versatile, variable pitch geometries matched by a substrate and coating combination that offers good performance in all milling applications and across all steels, stainless steels, cast iron, titanium and some aluminums.



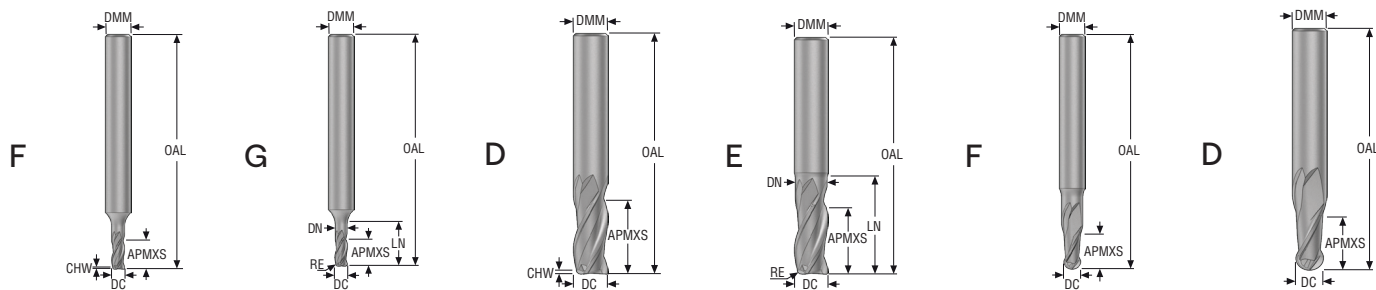
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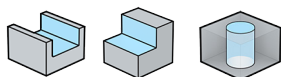
Milling stability with solid end mills built for reliable performance

## Seco JSE510 cost-effective series



Family name	Length index	Tool shape	DC (mm)	DMM (mm)	APMXS (mm)	LN (mm)	OAL (mm)	CHW (mm)	RE (mm)	PCEDC	Shank type	Number of items
JSE512	2	F, D	Ø2 - Ø12	Ø3 - Ø12	≈2,0xDC	-	50 - 83	0,01xDC	-	2	Cylindrical, Weldon	18
	2	F, G, D, E	Ø2 - Ø20	Ø3 - Ø20	≈2,0xDC	3,0xDC	50 - 104	0,01xDC	0,5 - 1,0	3	Cylindrical, Weldon	64
JSE513	3	F, D	Ø3 - Ø20	Ø6 - Ø20	≈3,5xDC	-	57 - 125	0,01xDC	-	3	Cylindrical, Weldon	18
	4	F, D	Ø3 - Ø20	Ø6 - Ø20	≈5,0xDC	-	57 - 170	0,01xDC	-	3	Cylindrical, Weldon	18
JSE514	2	F, G, D, E	Ø2 - Ø25	Ø3 - Ø25	≈2,0xDC	3,0xDC	50 - 125	0,01xDC	0,5 - 1,0	4	Cylindrical, Weldon	62
	3	F, D	Ø3 - Ø20	Ø6 - Ø20	≈3,5xDC	-	57 - 125	0,01xDC	-	4	Cylindrical, Weldon	18
	4	F, D	Ø3-Ø20	Ø6-Ø20	≈5,0xDC	-	57-170	0,01*DC	-	4	Cylindrical, Weldon	18
JSE514 Inch	2	D	Ø1/4"-Ø3/4"	Ø1/4"-Ø3/4"	≈1,25*DC	-	2"-3"	-	0.03"-0.06"	4	Cylindrical	13
	3	D	Ø1/8"-Ø3/4"	Ø1/8"-Ø3/4"	≈2,0*DC	-	1 1/2"-4"	-	0.015"-0.06"	4	Cylindrical	17
	4	D	Ø1/8"-Ø3/4"	Ø1/8"-Ø3/4"	≈3,3*DC	-	1 1/2"-5"	-	0.015"-0.06"	4	Cylindrical	17
JSB512	2	F, D	Ø2 - Ø12	Ø3 - Ø12	≈1,5xDC	-	40 - 83	-	0,5*DC	2	Cylindrical	8

### Possible applications



### Material range overview



### Product case studies

<b>Objective</b>	Outperform performance of existing solution
<b>Part name</b>	Roughing external slots
<b>Material</b>	20MnCr5 - SMG <b>P3</b>
<b>Operation</b>	Circumference slots machining
<b>Coolant</b>	Emulsion 40 Bar
<b>Pocket depth</b>	14 (max)
<b>Criteria for tool change</b>	Tool life end / chipping
<b>Machine type</b>	Multi machine (horizontal)
<b>Tool</b>	JSE514080D2C.0Z4-SIRA

#### Cutting data

Vc = 110m/min  
N = 4400 1/min  
fz = 0,025mm/tooth  
ap / ae = 14 / 3  
Tool life = 450 pcs



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Versatility and performance  
for any application and  
material

## JS550 high performance end mills



---

### Your challenge

Get high productivity with great price positioning for any of your milling application.

### Our solution

The JS550 range offers a full combination of shank, diameters and corner radius.

---

### Your challenge

Reduce your stock inventory with a versatile tool for all your applications.

### Our solution

The JS550 solid end mill range works in any material and for a large variety of applications and can be easily switch from one to another with a great level of performance.

---

### Product designation

JS553: 3 teeth

JS554: 4 teeth

### Product description

The Seco JS550 high-performance solid carbide end mills offer an optimal material removal rates and also the versatility to handle a wide range of applications and materials.



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information

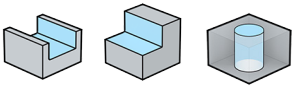


Versatility and performance  
for any application and  
material

# JS550 high performance end mills

Family name	Length index	Tool shape	DC (mm)	DMM (mm)	APMXS (mm)	LN (mm)	OAL (mm)	CHW (mm)	RE (mm)	PCEDC	Shank type	Number of items
JS553	1	D,F	Ø2-Ø12	Ø6-Ø12	≈1,2xDC	-	40-65	0,01xDC	0,2-1	3	Cylindrical, weldon	36
	2	D,F,G	Ø2-Ø25	Ø6-Ø25	≈2,2xDC	≈3xDC	50-125	0,01xDC	0,5-3,1	3	Cylindrical, weldon	116
	3	D,F	Ø2-Ø25	Ø6-Ø25	≈3,2xDC	-	50-150	0,01xDC	-	3	Cylindrical, weldon	22
JS554	1	D,F	Ø3-Ø16	Ø6-Ø16	≈1,2xDC	-	40-75	0,01xDC	0,2-1	4	Cylindrical, weldon	33
	2	D,E,F,G	Ø3-Ø25	Ø6-Ø25	≈2,2xDC	≈3xDC	50-125	0,01xDC	0,15-6	4	Cylindrical, weldon	134
	3	D,F	Ø3-Ø25	Ø6-Ø25	≈3,2xDC	-	55-150	0,01xDC	-	4	Cylindrical, weldon	34

## Possible applications



## Material range overview



## Product case studies

Objective	Cost reduction	
Material	Fe 360 - SMG <b>P2</b>	
Operation	Mainly contouring	
Coolant	External emulsion	
Criteria for tool change	Flank wear	
	Competitor in place	Seco proposal
Tool	Ø8 with 3 effective teeth	553080Z3.0-SIRON-A
Vc	200 m/min	175 m/min
fz	0,03 mm/tooth	0,04 mm/tooth
DoC	9 mm	9 mm
ae	2 mm	2 mm
Q	13 cm³/min	15 cm³/min
Tool life	125 min	200 min



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Achieve the best tool life  
for your turning operations

# Duratomic® General Turning Inserts



---

## Your challenge

Increase your productivity, reduce waste and get consistent part quality.

## Our solution

The improved mechanical properties, as well as the thermal and chemical inertness of the inserts, are achieved with the superior Duratomic coating that utilizes precisely arranged aluminum and oxygen atoms.

---

## Your challenge

Stop wasting unused edges thanks to used-edge detection.

## Our solution

Give every insert the long life it deserves with Duratomic® Used-Edge Detection technology, which makes wear visible to the naked eye without impacting turning performance to eliminate waste and reduce tooling costs.

---

## Your challenge

Better productivity with reduced cycle times.

## Our solution

Duratomic allows you to raise your cutting speeds thanks to new coating and its heat resistance.

---

## Product description

Duratomic® CVD aluminum-oxide is an exclusive insert coating technology that brings an exceptional combination of wear resistance and edge toughness to a wide variety of Seco grades.

By controlling the atomic structure of its coatings, Seco can ensure the best part of the structure is engaged in the cut. Such control also yields a smoother surface, resulting in less friction and heat during the cut for unmatched tool life and speed capabilities.



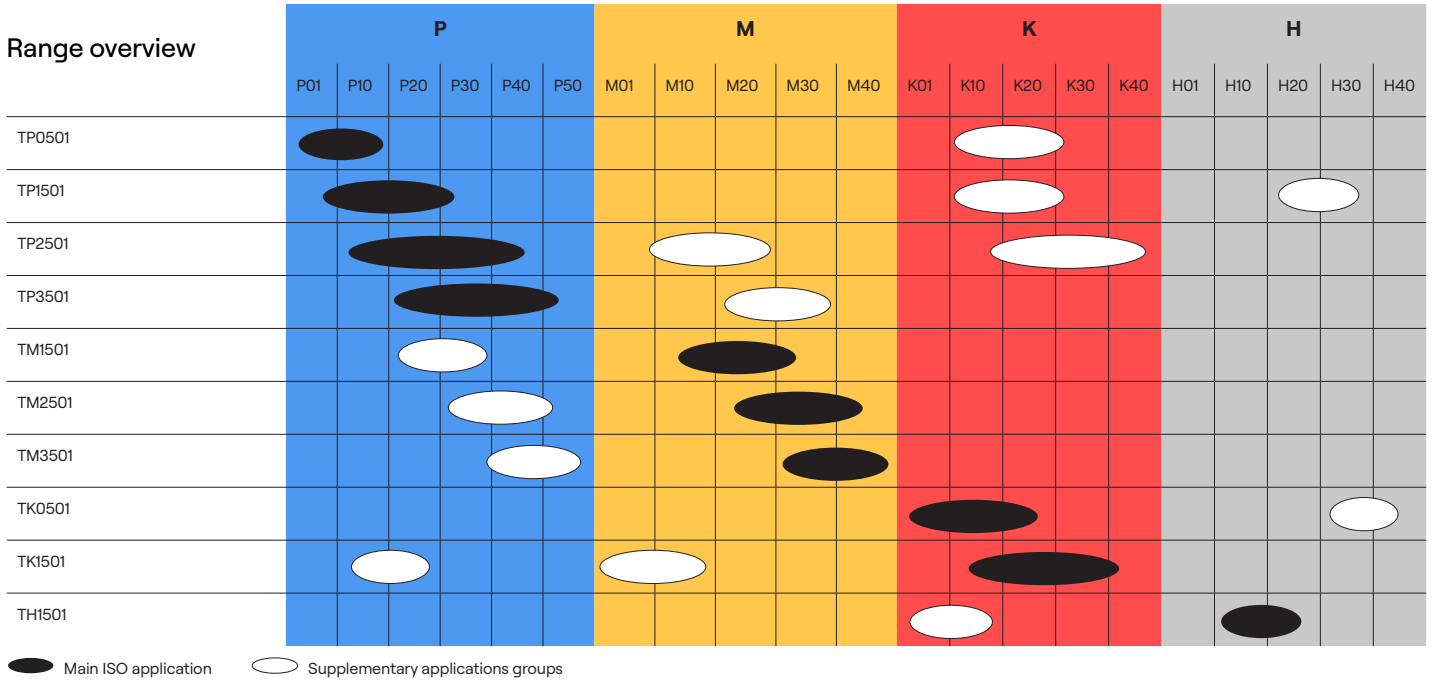
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Achieve the best tool life  
for your turning operations

# Duratomic® General Turning Inserts

## Range overview

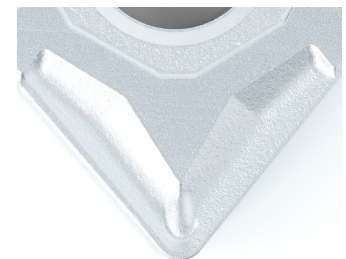
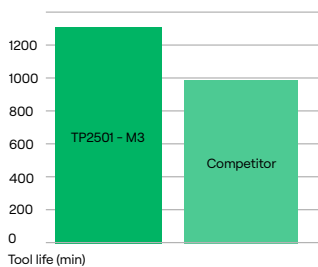


## Insert range overview (only main ones)

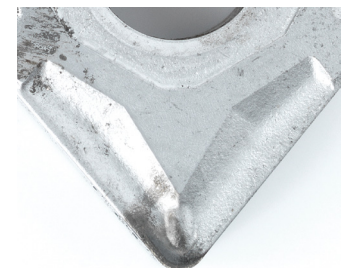
Grade	Purpose	Suitable materials
TP0501	High heat profile for P material	P K H
TP1501	Balance between performance and productivity	P M K
TP2501	Versatility	P M K
TP3501	Secure choice	P M K
TM1501	Productivity for continuous cut operations	M P S
TM2501	Versatility for M materials	M P S
TM3501	For difficult stainless steels	M P S
TK0501	First choice in grey cast iron material	K P H
TK1501	First choice in grey cast iron material	K P H
TH1501	First choice for H material	H P K

## Product case studies

Workpiece material	14 Ni 6	
Material	SMG P3	
Cutting mode	Internal interrupted cut	
Coolant	Emulsion	
Grade	TP2501	Competitor
Insert	WNMG060408-M3 TP2501	WNMG060408
Vc	150 m/min	120 m/min
f	0.25 mm/rev	0.25 mm/rev
APMX	1.5 mm	1.5 mm
Tool life	1200 parts	1000 parts



New edge



Used edge detection:  
10 seconds in cut



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information



Stop changing out  
inserts for every job and  
reduce downtime

## Turning Grade TP25



---

### Your challenge

Hidden tooling costs due to wasted/  
unused insert edges.

### Our solution

Reduce insert waste by 10-20%  
and avoid edge waste and reuse  
with chrome-colored UsedEdge  
Detection technology.

---

### Your challenge

Cutting a wide variety of steel parts  
with challenging features and  
machining requirements.

### Our solution

Reliably handle turning applications  
ranging from tough intermittent  
cutting to fine surface finishes with  
the versatile TP25 grade.

---

### Your challenge

Every new job in a different material  
requires a different cutting tool.

### Our solution

Achieve secure results in many  
operations in steel, stainless steels,  
cast irons, easier HRSA's and more  
with TP25's flexible grade design.

---

### Product description

The new TP25 grade from Seco Tools offers that level of reliability across the full range of steel turning applications, from roughing with intermittent cuts to finishing with high-quality surfaces.

Offered with a complete range of proven geometries, this versatile grade for steel also offers good performance in stainless steels, cast irons and easier heat-resistant superalloys.

And to make sure you get the most out of every edge, the grade includes chrome-colored Seco Used-Edge Detection technology for easy edge use identification.



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and find out more  
information

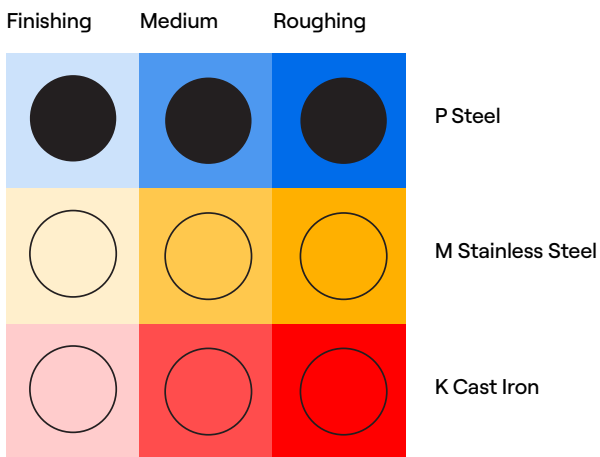


Stop changing out inserts for every job and reduce downtime

# Turning Grade TP25

## Insert types available

CCGX 06	DNMG 15/19	RCMT 06/08/10/12/16	TPMR 11/16
CCMT 06/09/12/16	DNMU 11	RCMX 20/25/32	VBMT 11/16
CNMG 12/16/19	DNMX 11	SCMT 06/09/12/25/38	WNMG 06/08
CNMM 12/16/19	DPMT 11	SNMG 12/15/19/25	VNMG 16/22
CPMT 06/09	KNUX 16	SNMM 15/19/25	VNMU 13
DCMT 07/11/15	LNMX 19 (2021 release)	TCMT 11/16/22	
DCMX 11	RCMM 12/19	TNMG 16/22/27/33	

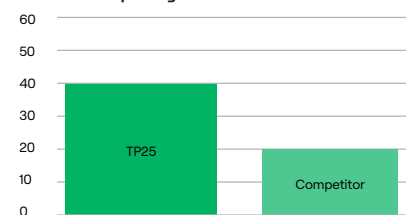


## Product case studies

Objective	Replacing competitor
Component	57 mm
Material	Low-alloy through-hardening steel SMG <b>P6</b>
Operation	Rough boring dia 32 mm
Coolant	Emulsion
Time in cut per part	0.1 min
Criteria for tool change	Surface finish

	Test TP25	Premium competitor
Tool	DCMT11T308-F1, TP25	DCMT11T308 insert type
Vc	285 m/min	285 m/min
f	0.2 mm/rev	0.2 mm/rev
ap	1.5 mm	1.5 mm
Tool life	40 min	20 min

Tool life – min per edge



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Run your stationary application with only one tool

# MDT – Multi-Directional Turning and Grooving



---

## Your challenge

Difficulty to achieve the quality surface you're looking for due to process instability.

## Our Solution

The unique Secoloc™ clamping system delivers the best stability and safety in addition to high productivity and performance for all your MDT applications.

---

## Your challenge

High inventory required to run all your stationary applications.

## Our solution

The unique modular MDT solution Seco provides offers an universal solution suitable for high variety of applications like grooving, profiling, turning, parting-off, threading and even dynamic turning.

---

## Your challenge

Long, stringy chips cause poor surface finishes, scrap workpieces or cause unplanned machine downtime.

## Our solution

MDT is available also in combination with Jetstream Tooling®, a high-pressure cooling system. The coolant supply to the cutting edge will help you to create smaller, more easily controlled chips for better surfaces and more secure processes.

---

## Product description

The Seco MDT (Multi-Directional Turning) is universally suitable for variety of applications including grooving, profiling, turning, parting-off, threading and even dynamic turning.

Applications include turning parts with many different diameters, complicated profiles and grooves, replacing the need for several standard and special tools with a single Seco MDT. Further savings can be achieved through fewer tool changes and reduced tool stock.



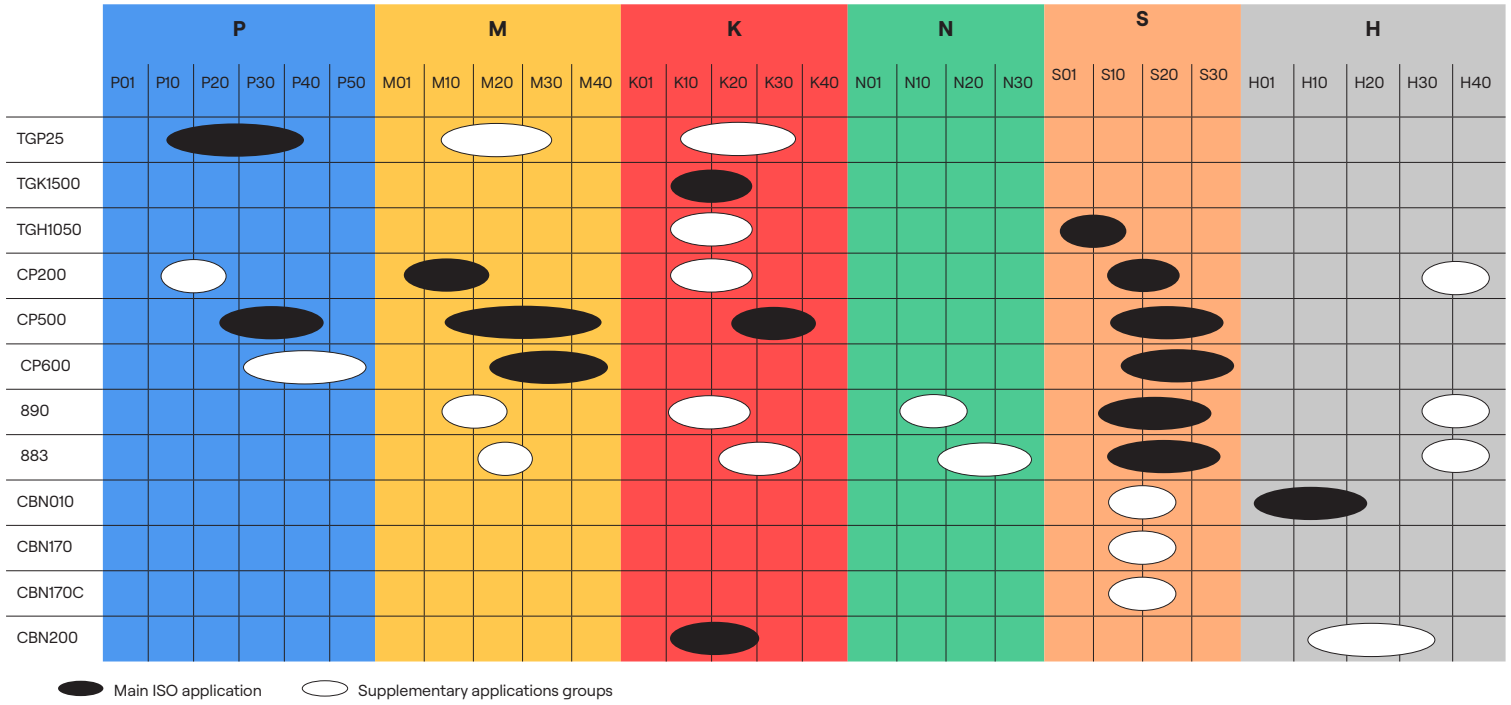
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Run your stationary application with only one tool

# MDT - Multi-Directional Turning and Grooving



● Main ISO application ○ Supplementary applications groups

## Possible applications

- Turning
- Threading
- Grooving
- Parting-off
- Profiling
- Dynamic turning

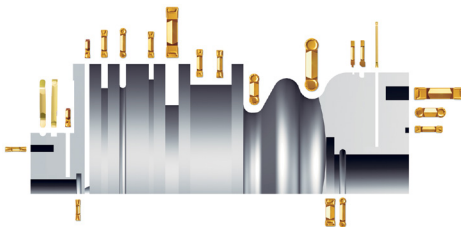
## Toolholder type

- Seco Capto (C4 - C5 and C6)
- Square shankholder (section 12 to 32)
- Internal holders (diameter 12mm to 40mm)
- Blade for parting off
- Heads for Steadyliner (anti damping system)

\*includes also a range of modular solution

## Insert range overview (only main ones)

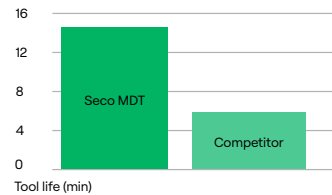
Grade	Purpose
CP500	Universal choice
TGP25	Most resistant grade for steel materials
TGK1500	Best choice for K materials



## Product case studies

Material	42 CD 4 - SMG <span style="background-color: #0070C0; color: white; padding: 2px;">P5</span>
Customer target	Better productivity and secure current process
Type of production	Mass production

	Seco MDT solution	Competitor
Tool	CFML2525008	
Insert	LCMR3008M0-MP TGP25	
Cutting datas	Vc = 130m/min n = 224 rpm f = 1200 mm/rev	Vc = 130m/min n = 224 rpm f = 1200 mm/rev
Tool life	15 parts	5 parts

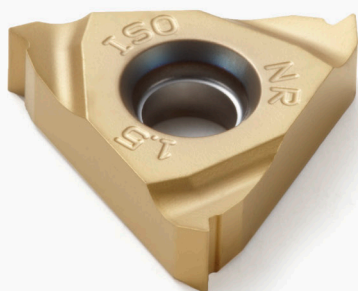


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Your must-have versatile grade for all threading applications

## CP500 grade - universal choice for threading applications



---

### Your challenge

Get a versatile and productive grade for all threading applications and materials.

### Our solution

CP500 grade features a highly wear resistant PVD coating to provide dependable machining for a large majority of common thread turning applications.

---

### Your challenge

Reduce the risk of inserts moving during threading operations.

### Our solution

The innovative toolholders made for use with Snap-Tap® inserts offer the best possible holding power available for long tool life and high accuracy. They employ an Anti-Twist insert locking system that features a carbide pin in the back of the insert pocket that resists wear and prevents the insert from turning or twisting under pressure during machining.



Scan the QR code and find out more information



Your must-have versatile grade for all threading applications

# CP500 grade - universal choice for threading applications

## Product description

Tough grade with thin grain associate with PVD coating. This combination provides the CP500 a high level of versatility in a wide range of materials for threading operations. This grade is also available for grooving, parting-off and ISO-turning applications.

## Available for the Seco range of threading profiles

60 = V profile, 60°  
 55 = V profile, 55°  
 ISO = ISO, Metric  
 UN = Am. UN  
 UNJ = Am. Aerospace  
 MJ = Metr. Aerospace

W = Whitworth, BSW  
 BSPT = Whitworth, Taper  
 NPT = Am. NPT  
 NPTF = Am. NPTF (Dryseal)  
 RD = Round, DIN405  
 TR = Trapezoidal, DIN103

ACME = Am. ACME-G  
 STACME = Am. Stub-ACME  
 API = API  
 BUT = Buttress

## Insert range overview (only main ones)

Suitable materials



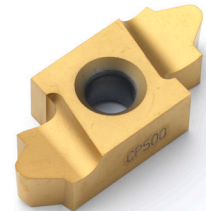
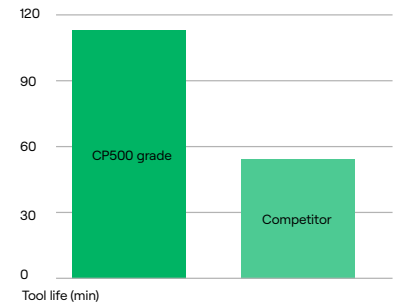
## Product case studies

**Material** DIN 42 CrMo 4 - SMG **P5**

**Customer target** Reduce tooling costs

**Operation** Threading

	CP500 grade	Competitor
<b>Insert</b>	16ER2.0ISO-TT CP500	
<b>Cutting datas</b>	Vc = 90m/min n = 550 rpm f = 2 mm/rev	Vc = 90m/min n = 550 rpm f = 2 mm/rev
<b>Tool life</b>	112 parts	56 parts



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Improve your chip  
evacuation with a reduced  
cost per edge

## Perfomax indexable insert drills



---

### Your challenge

Ensure a safe drilling operation for deeper holes.

### Our solution

Improved design of the body with wave pattern which allows a great chip evacuation.

---

### Your challenge

Reduce your drilling costs extending tool life of your bodies.

### Our solution

Laser-hardened drill body, which reduces wear during chip evacuation and allows for increased tool life.

---

### Your challenge

Reduce your inventory by having a versatile drill that is suitable for any application.

### Our solution

Perfomax easily handles crossing holes, angled entrances or exits in addition to the most common drilling applications.

---

### Product designation

Drills:

SD522 for 2xDc

SD523 for 3xDc

SD524 for 4xDc

SD525 for 5xDc

SD542 for 2xDc for bigger diameters

Inserts:

SCGX for periphery insert

SPGX for central insert

### Product description

Seco's range of Perfomax™ indexable insert drills features square inserts with four cutting edges, polished drill body high stability, unique chip flute design and inserts with modern grades that use Duratomic® technology.



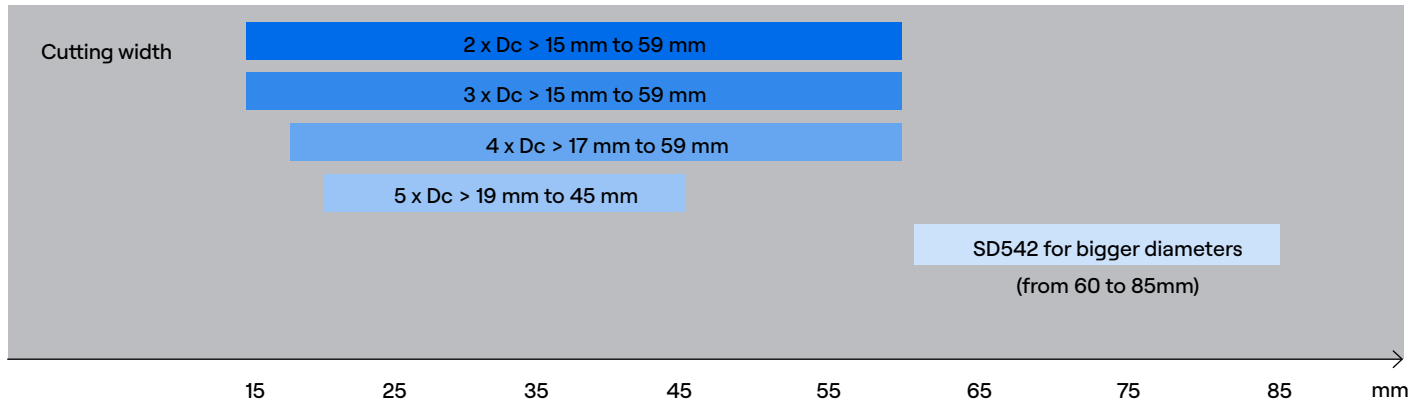
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Improve your chip evacuation with a reduced cost per edge

# Perfomax indexable insert drills

## Ratio length-width



Attachment type:  
ISO9766 (R7),  
Seco Capto C5,  
ABS Compatible (R2).

## Insert range overview (only main ones)

### Periphery inserts

Grade	Purpose	Suitable materials
DP3000	Universal grade	P M K
DS2050	Specific for M and S material	P M N S
DP2000	Optimized tool life in P and K material	P K
T250D	Specific for H material	P M K H

### Central inserts

Grade	Purpose	Suitable materials
T400D	Universal grade	P M K N S H
DP3000	Optimised tool life	P M K
DS4050	Specific for M and S material	P M N S



## Product case studies

Objective	Tool life / Productivity
Component	Ring gear
Material	42CrMo4 - SMG P5
Operation	Through hole / blind hole
Coolant	Emulsion 6%
Hole depth	86 mm
Tool change criteria	Flank wear
Machine	Machining centre

	Seco Perfomax	Competitor
Tool Peripheral insert	SD523-27-81-32R7 SCGX070308-P2, DP3000 SPGX0903-C1, T400D	
vc	203 m/min	190 m/min
f	0,13 mm/rev	0,12 mm/rev
vf	315 mm/min	280 mm/min
Tool life	120 pcs (10,3 m)	60 pcs



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Keep your drilling costs low  
and versatility high

# Universal solid carbide drills



---

## Your challenge

High-mix/low-volume manufacturing typically faces small batches and several different workpiece materials, which require stocking a wide, expensive range of tools.

## Our solution

Good drill performance in most workpiece materials thanks to Universal drill geometry with the corresponding cutting data from 3xD up to 12xD.

---

## Your challenge

Short tool life impacts tooling costs and incorrect length-diameter ratio impacts hole quality.

## Our solution

The wear resistant TiAlN coating across the entire range secures for tool life and performance.

---

## Product designation

SD1103 for 3xDc  
SD1105 for 5x Dc  
SD1108 for 8x Dc  
SD1112 for 12 x Dc

## Product description

Seco Universal solid carbide drills bring versatility and reduced stockholding costs to low and medium batch production. The line features a multipurpose, 4-facet point geometry that provides excellent centering capability, maintains an IT8/9 hole tolerance and is easy to regrind. Seco Universal drills also feature a polished TiAlN coating that offers high abrasion resistance, toughness and good chip evacuation.

The drills feature advanced coating technology and have a universal geometry suitable for most applications across all industry segments that focus on hole quality. They efficiently drill steel, stainless steel, cast iron and more.



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and find out more  
information



Keep your drilling costs low  
and versatility high

# Universal solid carbide drills

## Universal Drills 3xD up to 12xD

Reduce your inventory and the overall cost per hole. The wide mix of materials being machined in small and medium-batch production and modern high-mix/ low-volume manufacturing environments usually require a considerable amount of tools. You will need fewer drills because the Universal solid carbide drills from Seco are designed to cover a wide range of work piece materials, enabling versatile, lean, and cost-effective drilling operations.

### Range overview

Usable length $\phi$ ratio	$\phi$ mm	Designation	No. of items
3xD, non coolant	3 - 20 mm	SD1103-0300-014-06R1	162
		SD1103-2000-055-20R1	
3xD, coolant through	3 - 20 mm	SD1103A-0300-014-06R1	162
		SD1103A-2000-055-20R1	
5xD, coolant through	3 - 20 mm	SD1105A-0300-023-06R1	209
		SD1105A-2000-077-20R1	
8xD, coolant through	3 - 20 mm	SD1108A-0300-028-06R1	125
		SD1108A-2000-170-20R1	
12xD, coolant through	3 - 20 mm	SD1112A-0300-048-06R1	112
		SD1112A-2000-238-20R1	

### Suitable materials



### Cutting data example

<b>Material</b>	SD1105A-0800-043-08R1
<b>Cutting data</b>	Vc = 90 m/min. F = 0.15 mm/rev. Material: SS2244, DIN 42CrMo4, AISI 4140 - SMG P5.



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information



Stop changing taps every time you change part material

# Seco Threading Taps



---

## Your challenge

High-mix/low production involves various part materials and types that require extensive inventories of thread cutting and forming taps.

## Our solution

For versatility and cost savings, the Seco Tools line of thread cutting and forming taps handles a wide range of materials.

---

## Your challenge

Spending too much time selecting the proper tap for the application at hand.

## Our solution

The Seco range of thread cutting and forming taps offers various performance levels that encompass versatile and cost.

---

## Your challenge

Chips can cause tool breakage when threading stainless steel and other long chip materials.

## Our solution

Seco thread cutting and forming taps efficiently control chips at hole depths up to 3 x diameter.

---

## Product designation

T34 : High performance versatile cutting taps

- T34-R for right-hand helix taps (for blind holes)
- T34-P for spiral point taps (for through holes)

T32 : Versatile cutting taps :

- T32-R for right-hand helix taps (for blind holes)
- T32-P for spiral point taps (for through holes)
- T32-S for straight flutes (for blind and through holes up to 1,5 Dc)

## Product description

Seco Taps provide versatile and cost-effective thread cutting taps and forming taps for a wide range of materials and part types. With the combination of superior base materials, advanced coatings and special edge preparations, Seco Taps generate precision threads while they also maximize chip evacuation, shorten setup times and extend tool life.



Scan the QR code and find out more information





Stop changing taps every time you change part material

# Seco Threading Taps



## T34 New High Performance Versatile Taps

<b>Threads range</b>	M 1 ÷ 36; MF 3x0,35 ÷ 24x1,5  UNC #4-40 ÷ 5/8-11; UNF #4-48 ÷ 5/8-18  G 1/8 ÷ 1  EG (M, UNC, UNF)
<b>Application (Rm UP TO 1200 MPa):</b>	P, M, K, N
<b>Material &amp; coating:</b>	HSSE-PM & TiAlN+WC/C
<b>Type of flutes &amp; chamfers:</b>	Spiral point & chamfer B – through holes / available also with internal radial cooling  Helix flutes 45° & chamfer C or E – blind holes / available also with internal axial cooling
<b>Acc. to standards:</b>	DIN 371  DIN 376/374  DIN 5156
<b>Tolerance:</b>	6HX (4H for <M1,4) – for Metric threads  2BX – for UN threads  Normal-X – for G threads

## T32 New Universal Taps

<b>Threads range</b>	M 1 ÷ 52, MF 8x1 ÷ 30x2  UNC #4-40 ÷ 1 ½ -6; UNF #12-28 ÷ 1 ½ -12  G ½” – 1”
<b>Application (Rm UP TO 1000 MPa):</b>	P, M, K, N
<b>Material &amp; coating:</b>	HSSE & TiAlN+TiN
<b>Type of flutes &amp; chamfers:</b>	Straight & chamfer C – both types of holes  Spiral point & chamfer B – through holes  Helix flutes 40° & chamfer C – blind holes
<b>Acc. to standards:</b>	DIN 371 + Extra long version (EL)  DIN 376/374 + Extra long version (EL)  DIN 5156
<b>Tolerance:</b>	6H (4H for <M1,4), 6G – for M threads  2B – for UN threads  Normal – for G threads

## Product case studies

<b>Objective</b>	Increased tool life	
<b>Part name</b>	-	
<b>Material</b>	1.1121 – SMG <span style="background-color: #ADD8E6;">P2</span>	
<b>Operation</b>	Blind hole	
<b>Coolant</b>	Tapping fluid	
<b>Cutting Depth</b>	4mm	
<b>Criteria for tool change</b>	Flank wear/breakage	
<b>Machine type</b>	Tapping machine	
	<b>Seco</b>	<b>Reference tool</b>
<b>Tool</b>	T34-R45H01C03-2X0.4-63R	Competitor
<b>vc</b>	4 m/min	4 m/min
<b>f</b>	-	-
<b>vf</b>	-	-
<b>Tool life</b>	860 holes	130 holes



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Reduce vibration and  
increase productivity

# Steadyline Vibration damping holders for milling, turning and boring



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## Your challenge

When using long overhang tools to machine difficult-to-access areas, such as deep cavities or sections of large, complex monolithic workpieces, vibration often becomes an issue.

## Our solution

Steadyline® products, which include cost-effective milling holders as well as turning and boring bars, perform typical long overhang operations twice as fast as traditional tools. Plus, these highly productive vibration-damping solutions offer high metal-removal rates, smooth part surface finishes and long tool life – all while reducing machine tool stress.

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## Your challenge

Staying competitive while keeping high cutting parameters and good surface finish while have long holds, deep cavities to machine, or complex workpieces.

## Our solution

These highly productive vibration-damping solutions offer high metal-removal rates, smooth part surface finishes and long tool life – all while reducing machine tool stress.

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## Product description

Tooling systems equipped with a vibration absorber which is positioned where deflection is highest, at the front of the bar. The absorber damps vibrations as soon as they are transmitted from the cutting tool to the body of the bar.



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## Milling

- Available in shell-mill, spigot 16 to 40, or Combimaster M12 to M20
- Different back-end as HSK, BT, Seco-Capto, SK

## Turning

- From diameter 25 to 200 mm in standard, length up to 10xD
- Connection type GL, BA, square shank adapter or Seco-Capto

## Boring

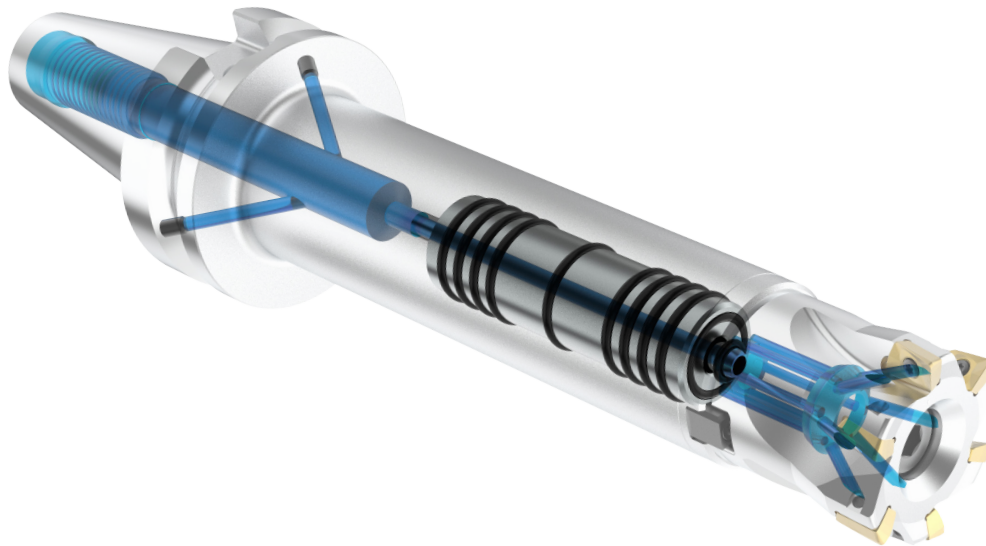
- Diameter 26 to 115mm, length up to 640 mm
- Rough and finishing heads, available in GL or BA connection

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### Possible applications

Milling  
Turning  
Boring

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