

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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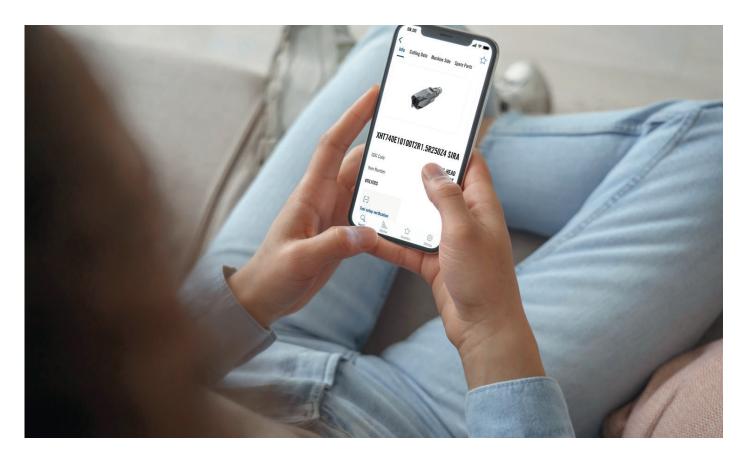
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Seco Digital Services



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



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.





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



Turbo range: Square shoulder milling cutters



Your challenge

Rationalize your milling cutter stock.

Our solution

Suitable for most roughing, semifinishing 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 throughcoolant 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 MIIling 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.



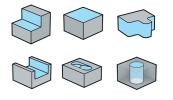


Turbo range: Square shoulder milling cutters

Range overview

2 cutting edges			Turbo 06	6								
				т	urbo 10							
							Turbo	12				
							Т	urbo 16				
								Turbo 18				
1	10 1	6 2	0 2	5 3	32	40	50	100	150	200	250	DC

Possible applications



Product features recommended a / max a.: 3 mm / 5 mm (XÓ.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

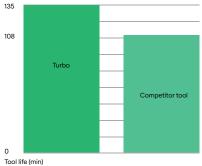
Cylindrical, Weldon, Seco-Weldon, Combimaster, Arbor

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	Ν	
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	
MP1501 (CVD)	Dry machining, stable, versatility in P & M	P M K	

Product case studies

Application	Contourning
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	Vc = 230 m/min f = 0,21 mm/dent Ap = 7,5 mm Ae = 9 mm









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 MIIIing 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





335.19 Disc milling cutter for small to medium width of cut

Range overview

_													
Cutting width			4mm (33	5.19/SNI	HQ-1102)								
			5mm (33	5.19/SNH	-1Q-1103)								
					e	6mm (335	.19/SNHQ	-1203)					
						7mm (3	335.19/SNI	HQ-1204)					
						8mm (3	35.19/SNF	IQ-12045)				
							10mm (33	35.19/SNH	IQ-1205)				
							12mm (33	35.19/SNH	IQ-1207)				
									14mm (335.19/SN	HQ-1205)		
	40 0	60	80	100	120	140	160	180	200	220	240	260	

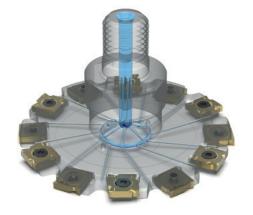
Possible applications



Mounting type Cylindrical, Combimaster, Arbor

Insert range overview (only main ones)

Grade	Purpose	Su	uitab	le ma	teria	ls
F40M (PVD)	Versatility	Ρ	М	K	S	Ν
F30M (PVD)	Optimized and suitable for P and H material	Ρ	М	K	Н	
MS2050 (PVD)	M and S material specific and suitable for P	Ρ	М	S		
MP2501 (CVD)	Dry machining, unstable, versatility in P & M	Ρ	М	К		
MM4500 (CVD)	Optimized for M material	Ρ	М	S		
H25 (Non revêtu)	N material specific	Ν				



Product case studies

	0400 0	aanoo						
Application		Side milling and slotting						
Industry seg	jment	General er	General engineering					
Material		42 Cr Mo	4 - SMG P5					
	Previous so	olution	Seco solution 335.19					
Coolant	External co	oolant	Internal coolant					
Tools	2 different disc cutter dia 100 for & dia. 125 fo side milling SN12 style in	slotting or g	Only one tool for both operations : R335.19-20125. RE-05.8A SNHQ110304TR/L4-M07 F40M					
Customer target	Increase to	ool life	Increase productivity and reduce cycle time					
Cutting data	Vc = 220 m fz = 0,047							
Machining time	4min		2min					





Improve your surface finishing quality for face milling applications

Quattromill - Face milling cutters



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 MIIling 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.





Quattromill - Face milling cutters

Cutting width																	
							Q	uattro C	9 : Ø20) to 315n	nm						
								Quatt	ro 12 : Ø	040 to 3	15mm						
								(Quattro	15 : Ø63	3 to 3151	nm					
	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	315	D
Possible applic	ation	6			Insert	range	over	view (c	only m	ain one	es)	Prod	uct ca	se stud	dies		
\bigcirc	\geq				Grade	Pu	rpose		Suit	able mater	rials	Applic	ation	Fa	ce milling		
					H25 (Non revê		naterial sp	pecific	Ν				ry segmen		eneral engi	_	
					F40M (PVD)	Vei	rsatility		Р	MK	S N	Materi		Co Ye		- SMG <mark>S2</mark>	
					MP2050 (PVD)		cured cho	ice for nd S mate	_{rial} P	M S		Tools		R2	20.53-006	3-12-5A	050

Product features recommended a_n: 3 mm (SEEX/SEMX09), 4,5 mm (SEEX/SEMX12) & 6 mm (SEEX/SEMX15)

Mounting type Seco Weldon, Capto, Arbor

Grade	Purpose	Suitable materials
H25 (Non revêtu)	N material specific	Ν
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	PK
MP3000 (PVD)	Optimized for stable machining	P M H

Application	Face milling
Industry segment	General engineering
Material	CoCr28Mo6 - SMG <mark>S2</mark>
Coolant	Yes
Tools	R220.53-0063-12-5A SEEX1204AFN-M10, MS2050
Customer target	Better surface finish
Cutting data	Vc = 49,5m/min fz = 0,40mm/tooth ap = 0,2mm ae = 50mm
Tool life	30min











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 builtup 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.

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.



Scan the QR code and find out more information

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

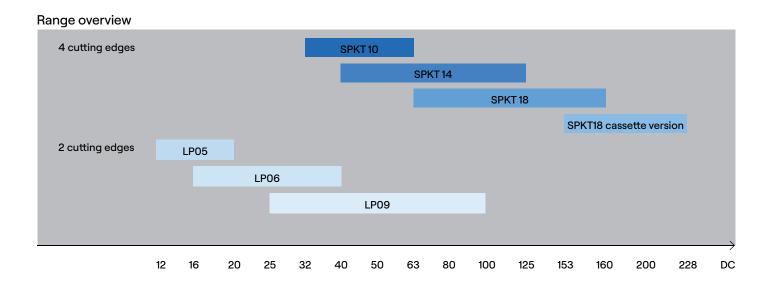
Optimized milling performance requires switching among numerous tools to implement various machining strategies and part materials.

Our solution

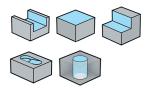
One High Feed SP tool handles a complete range of high feed milling operations and materials.



High Feed milling cutters



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	PK
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 stble conditions	P M S

Product case studies

Application	Copy milling							
Material	Casted 10/	18 stainless - SMG <mark>M3</mark>						
	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						
ар	1.6 mm	1 mm						
ae	48 / 25 / 70 mm	48 / 25 / 40 mm						
Coolant	On	On						
Q	230 / 120 / 336 cm³/ min	144 / 75 / 120 cm³/ min						
т	23 min	33 min						
QTY	1 pcs	0,33 pcs						





LP inserts





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.





Seco X-Head Exchangeable End Mill System

Specific High Performance

Versatile High Performance

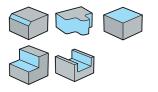
General Purpose / Universal

Seco High Perform	nance
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
	New proposal
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 ³ /min
Tool life	210 min





Milling stability with solid end mills built for reliable performance

Seco JSE510 cost-effective series



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, welloptimized 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

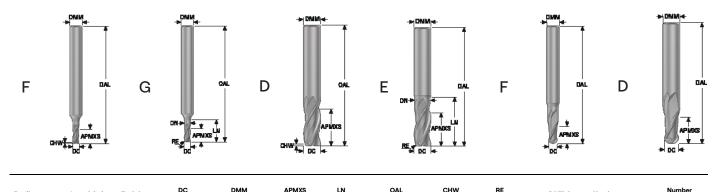
Product description

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.





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
	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
JSE514	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
	2	D	Ø1/4"-Ø3/4"	Ø1/4"-Ø3/4"	≈1,25*DC	-	2"-3"	-	0.03"-0.06"	4	Cylindrical	13
JSE514 Inch	3	D	Ø1/8"-Ø3/4"	Ø1/8"-Ø3/4"	≈2,0*DC	-	11/2"-4"	-	0.015"-0.06"	4	Cylindrical	17
	4	D	Ø1/8"-Ø3/4"	Ø1/8"-Ø3/4"	≈3,3*DC	-	11/2"-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

P M K N S

Product case studies

Objective	Outperform performance of existing solution
Part name	Roughing external slots
Material	20MnCr5 - SMG P3
Operation	Circumference slots machining
Coolant	Emulsion 40 Bar
Pocket depth	14 (max)
Criteria for tool change	Tool life end / chipping
Machine type	Multi machine (horizontal)
Tool	JSE514080D2C.0Z4-SIRA
	Vc = 110m/min

Cutting data

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





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.





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
	1	D,F	Ø2-Ø12	Ø6-Ø12	≈1,2xDC	-	40-65	0,01xDC	0,2-1	3	Cylindrical, weldon	36
JS553	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
	1	D,F	Ø3-Ø16	Ø6-Ø16	≈1,2xDC	-	40-75	0,01xDC	0,2-1	4	Cylindrical, weldon	33
JS554	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 <mark>P2</mark>
Operation	Mainly contouring
Coolant	External emulsion
Criteria for tool change	Flank wear
	Competitor in place Seco proposal

	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				





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.





Achieve the best tool life for your turning operations

Duratomic[®] General Turning Inserts

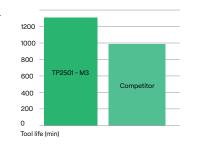
Range overview			I	Р					м					к					н		
	P01	P10	P20	P30	P40	P50	M01	M10	M20	M30	M40	K01	К10	K20	К30	K40	H01	H10	H20	H30	H40
TP0501													<								
TP1501													<						\subset	\geq	
TP2501							(
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TK1501			>				\subset														
TH1501																					
Main ISO application	> Sup	plemer	ntary ap	plicatio	ons grou	ips															

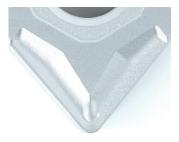
Insert range overview (only main ones)

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	Н Р К

Product case studies

Workpiece mate	erial 14 Ni 6	14 Ni 6					
Material	SMG P3						
Cutting mode	Internal int	Internal interrupted cut					
Coolant	Emulsion						
Grade	TP2501	Competitor					
Insert	WNMG060408-N TP2501	^{//3} WNMG060408					
Vc	150 m/min	120 m/min					
f	0.25 mm/rev	0.25 mm/rev					
ΑΡΜΧ	1.5 mm	1.5 mm					
Tool life	1200 parts	1000 parts					





New edge



Used edge detection: 10 seconds in cut





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 HRSAs 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.

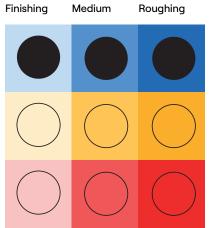




Turning Grade TP25

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	



P Steel

M Stainless Steel

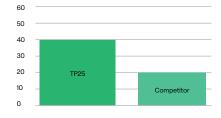
K Cast Iron

Product case studies

Objective	Replacing competitor
Component	57 mm
Material	Low-alloy through- hardening steel SMG P6
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
ар	1.5 mm	1.5 mm
Tool life	40 min	20 min

Tool life – min per edge







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 highpressure 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.

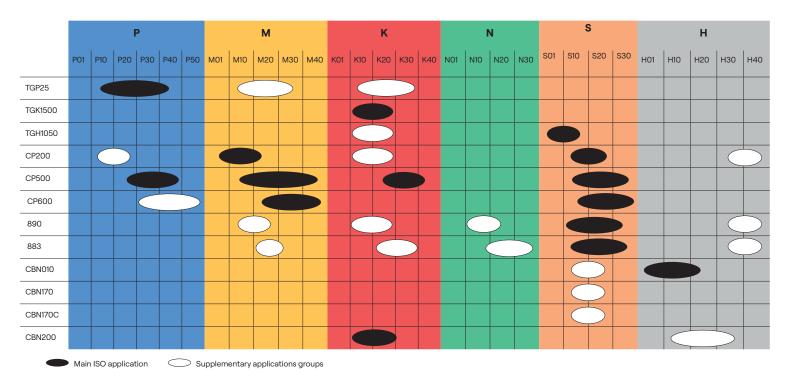
Applications include turning parts with many different diameters, complicated profiles and grooves, replacing the need for several standard and special tools with a single Seco MDT. Further savings can be achieved through fewer tool changes and reduced tool stock.





Run your stationary application with only one tool

MDT - Multi-Directional Turning and Grooving



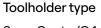
Possible applications

Turning
Threading
Grooving
Parting-off
Profiling
Dynamic turning

Insert range overview (only main ones)

	_
Grade	Purpose
CP500	Universal choice
TGP25	Most resistant grade for steel materials

TGK1500 Best choice for K materials



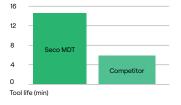
Seco Capto (C4 - C5 and C6) Square shankholder (section 12 to 32) Internal holders (diameter 12mm to 40mm) Blade for parting off Heads for Steadyline (anti damping system)

*includes also a range of modular solution



Product case studies

Material	42 CD 4 - SN	IG P5		
Customer target		Better productivity and secure current process		
Type of product	ion Mass produc	Mass production		
	Seco MDT solution	Competitor		
Tool	CFML2525P08			
Insert	LCMR3008M0-MP TGP25			
Cutting datas	Vc = 130m/min n = 224 rpm f = 0,19mm/rev	Vc = 130m/min n = 224 rpm f =0,19mm/rev		
Tool life	15 parts	5 parts		







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.





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

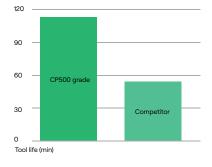
60 = V profile, 60° 55 = V profile, 55° ISO = ISO, Metric UN = Am. UN UNJ = Am. Aerospace MJ = Metr. Aerospace

Insert range overview (only main ones)

Suitable materialsPMKNS

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















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.





Perfomax indexable insert drills

Cutting width	2 x Dc > 15 mm to 59 mm							
		3 x Dc > 15 mm to 59 mm						
		4 x	Dc > 17 mm ⁻	to 59 m	ım			
	5 x	Dc > 19 m	m to 45 mm	1				
						SD542 for	r bigger diame	ters
						(from	60 to 85mm)	
15	25	_	35	45	55	65	75	85 mr
ttachment type:		Insert	range ove	rview	(only main ones)	Product	case studies	3
SO9766 (R7),		Periphery i	_			Objective		e / Productivity
eco Capto C5, BS Composible (D2)		Grade	Purpose		Suitable materials	Component	Ring ge	ar
BS Compatible (R2).		DP3000	Universal grac	de	P M K	Material	42CrM	04 - SMG P5
		DS2050	Specific for M material	and S	P M N S	Operation	Throug	h hole / blind hole
		DP2000	Optimized too P and K mater	ol life in rial	PK	Coolant	Emulsic	on 6%
		T250D	Specific for H material		P M K H	Hole depth	86 mm	
		Central inse	arte			Tool change of	criteria Flank w	ear
		Grade	Purpose		Suitable materials	Machine	Machin	ing centre
		T400D	Universal gra	ide	P M K N S H		Seco Perfomax	Competitor
		DP3000 DS4050	Optimised to Specific for M material		P M K P M N S	Tool Peripheral insert	SD523-27-81-321 SCGX070308-P2 SPGX0903-C1,T4	2, DP3000
						vc	203 m/min	190 m/min
						f	0,13 mm/rev	0,12 mm/rev
				8		vf	315 mm/min	280 mm/ min
						Tool life	120 pcs (10,3 m)	60 pcs





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 TiAIN 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 TiAIN 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.





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 ø ratio	ø mm	Designation	No. of items	
2.D. and contact	3 - 20 mm	SD1103-0300-014-06R1	162	
3xD, non coolant	3 - 20 mm	SD1103-2000-055-20R1	102	
	3 - 20 mm	SD1103A-0300-014-06R1	162	
3xD, coolant through	3 - 20 mm	SD1103A-2000-055-20R1	102	
	3 - 20 mm	SD1105A-0300-023-06R1	209	
5xD, coolant through	3 - 20 mm	SD1105A-2000-077-20R1	209	
8vD applant through	3 - 20 mm	SD1108A-0300-028-06R1	125	
8xD, coolant through	3 - 20 mm	SD1108A-2000-170-20R1	125	
12xD, coolant through	3 - 20 mm	SD1112A-0300-048-06R1	112	
izxo, coolant through	3 - 20 11111	SD1112A-2000-238-20R1	112	

Suitable materials

Cutting data example

Material SD1105A-0800-043-08B1

Cutting data Vc = 90 m/min. F = 0.15 mm/rev. Material: SS2244, DIN 42CrMo4, AISI 4140 – SMG P5.







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.





Stop changing taps every time you change part material

Seco Threading Taps



T34 New High Performance Versatile Taps

Threads range	M 1 ÷ 36; MF 3x0,35 ÷ 24x1,5	Threads range	I
	UNC #4-40 ÷ 5/8-11; UNF #4-48 ÷ 5/8-18		l
	G 1/8 ÷ 1		(
	EG (M, UNC, UNF)	Application (Rm UP TO 1000	ſ
Application	5.4.4.N	MPa):	
(Rm UP TO 1200 MPa):	P, M, K, N	Material & coating:	ł
Material & coating:	HSSE-PM & TIAIN+WC/C	Type of flutes & chamfers:	5
Type of flutes & chamfers:	Spiral point & chamfer B – through holes / available also with internal radial cooling	chame.	:
	Helix flutes 45° & chamfer C or E - blind holes / available also with internal axial cooling		ł
		Acc. to standards:	[
Acc. to standards:	DIN 371		[
	DIN 376/374		(
	DIN 5156		[
Tolerance:	6HX (4H for <m1,4) for="" metric<br="" –="">threads</m1,4)>	Tolerance:	6
	2BX – for UN threads		2
	Normal-X – for G threads		Ν



T32 New Universal Taps

Threads range	M 1 ÷ 52, MF 8x1 ÷ 30x2
	UNC #4-40 ÷ 1½ -6; UNF #12-28 ÷ 1½ -12
	G ½" – 1"
Application (Rm UP TO 1000 MPa):	P, M, K, N
Material & coating:	HSSE & TIAIN+TIN
Type of flutes & chamfers:	Straight & chamfer C – both types of holes
	Spiral point & chamfer B – through holes
	Helix flutes 40° & chamfer C - blind holes
Acc. to standards:	DIN 371 + Extra long version (EL)
	DIN 376/374 + Extra long version (EL)
	DIN 5156
Tolerance:	6H (4H for <m1,4), 6g="" for="" m="" td="" threads<="" –=""></m1,4),>
	2B - for UN threads
	Normal – for G threads

Product case studies				
Objective	Increased too	l life		
Part name	-			
Material	1.1121 - SMG P	2		
Operation	Blind hole			
Coolant	Tapping fluid			
Cutting Depth	4mm			
Criteria for tool change	Flank wear/breakage			
Machine type	Tapping machine			
	Seco	Reference tool		
Tool	T34-R45H01C03- 2X0.4-63R	Competitor		
vc	4 m/min	4 m/min		

Tool life 860 holes

_

f

vf

130 holes

_

_





Steadyline Vibration damping holders for milling, turning and boring



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 vibrationdamping solutions offer high metalremoval rates, smooth part surface finishes and long tool life – all while reducing machine tool stress.

Your challenge

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

Our solution

These highly productive vibrationdamping solutions offer high metalremoval rates, smooth part surface finishes and long tool life – all while reducing machine tool stress.

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.





Steadyline Vibration damping holders for milling, turning and boring

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, availbale in GL or BA connection

Possible applications Milling Turning Boring





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Technical specifications are subject to change without notice.

