

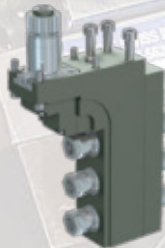
Live Tooling & Static Tool Holders

**For Star, Citizen, Tsugami, Tornos, Miyano, Hanwha,
& Nomura Swiss Machines**

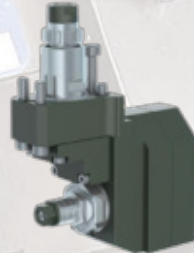
**CROSS
DRILL/MILL**



**END
DRILL/MILL**



**SLITTING
SAW**



**GEAR
HOBBING**



**POLYGON
MILLING**



**THREAD
WHIRLING**



**ANGLED
DRILL/MILL**



**TURNING
HOLDERS**



**ROUND
SHANK**



and more..

- **Exceptionally Accurate Spindle Concentricity**
- **Hardened & Ground Gearing For Smooth & Quiet Service Life**
- **Innovative Sealing System Protects Internals From Debris & Oil Contamination**
- **Maintenance Friendly Designs Are Serviceable.**

Genevieve Swiss Industries, Inc. was founded on Live Tools more than 20 years ago. We have the largest selection of Live Tools available and we have been selling Live Tools longer than any other company in the Swiss-Machine Industry.

Talk to our U.S. based team of technical experts for more information
call [413-562-4800](tel:413-562-4800).

Live Tooling Spindles & Attachments

Swiss Made by
PCM
be driven.



CITIZEN CINCOM MACHINES

A20	Pg. 425 - 426
C16	Pg. 427 - 428
K12 & K16	Pg. 429 - 430
L12	Pg. 431 - 433
L20	Pg. 434 - 439
	L2-20 VIII / X/ XII Pg. 435
	L5-20 / L7-20 / L20-E Pg. 437
A32, L32	Pg. 441 - 446
	L4-25 & L4-32 Pg. 440
	A32-VIII & L32-VIII / X/ XII Pg. 441
	L6-32 Pg. 446
M12 & M16	Pg. 447 - 454
	M2-12/ 16 & M3-12/ 16 Gang Pg. 447
	M4-12/ 16 Gang Pg. 449
	M12 & M16 Turret Pg. 451
M20 & M32	Pg. 455 - 468
	M4-20 & M4-32 Gang Pg. 455
	M3-20 & M3-32 Gang Pg. 457
	M3-20/ 32 & M4-20/ 32 Turret Pg. 458
	M5-32 Gang Pg. 463
	M5-32 Turret Pg. 465

TORNOS DECO MACHINES

DECO 13	Pg. 469- 470
DECO 20	Pg. 471 - 472
Evo DECO 16	Pg. 473

TSUGAMI SWISS-TYPE MACHINES

SS20/ 32, HS20/ 32	Pg. 474
BW20	Pg. 474
S205/ 206	Pg. 475
B026-II/ 032-II	Pg. 475
B026/ 032/ 038	Pg. 476
B01-III/ 02-III/ 07-III	Pg. 477
P034H	Pg. 478

STAR SWISS-TYPE MACHINES

ALL	Pg. 479 - 484
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REPAIRS & RESTORATION

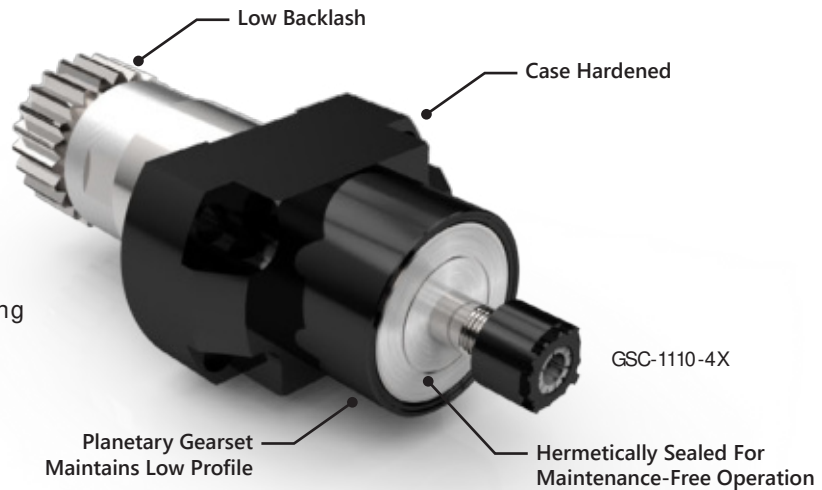
One of the benefits of buying live tooling and spindles from GenSwiss, is knowing we will repair them too. We will repair your spindle at a fraction of the cost to purchase a brand new one and have your Swiss-style CNC running again in no time.



- **Live Swiss machine attachments restored to factory specification**
- **PCM and major OEM brands: CITIZEN, STAR, TSUGAMI, TORNOS**
- **\$50 evaluation and inspection**
- **Repaired by factory trained professionals**

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Up To 30,000 RPM
Optimized For Micro Drilling & Milling



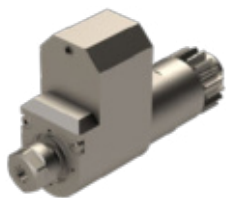
Citizen A20VII

(Machine's Live Tooling 4,500 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Machine	Other
		5505-000200	BSC-510-3X	(1) ER11	1:3	A ₂ 20VII	High speed
		5505-000351	BSC-510-3X-L	(1) ER11	1:3	A ₂ 20VII	High speed, added bearing
		5505-000261	GSC-1110	(1) ER16	1:1	A ₃ 20VII	
		5505-000285	GSC-1110-4X	(1) ER08	1:3.8	A ₂ 20VII	Up to 30,000 RPM
	Angled Drilling / Milling	5505-000226	BSA-107	(1) ER11	1:1	A ₂ 20VII, A ₃ 20VII	Adjustable 0-180°
		5505-000353	BSA-2010	(6) ER16	1:1	A ₃ 20VII	Double ended, adjustable 0-21°
	End Drilling / Milling	5505-000441	BSE-2007-2X	(4) ER11	1:2	A ₂ 20VII, A ₃ 20VII	Double ended
		5505-000386	BSE-3206	(6) ER11	1:1	A ₂ 20VII, A ₃ 20VII	Double ended
		5505-000230	BSE-3208-II	(8) ER16	1:1	A ₃ 20VII	Double ended, Tools turn in opposite direction
		5505-000222	BSE-3208-III	(8) ER16	1:1	A ₃ 20VII	Double ended, Tools turn in same direction
	Polygon Milling	5505-000271	BSP-509	(1) Ø13	1:1	A ₂ 20VII	
	Slitting Saw	5505-000362	GSC-1307-DEC	(1) Ø16	1:1	A ₂ 20VII	
	Thread Whirling	5505-000220	BSW-215	(1) Utilis	1:1	A ₂ 20VII, A ₃ 20VII	9 or 12 insert cutter, adjustable ±15°
	Static Tool Holders	5505-000312	GDF-1207-L	(4) Ø19.05		A ₂ 20VII	4 position 3/4" Ø sleeves, added bearing
Sub Spindle	End Drilling / Milling	5505-000437	BSC-2330	(1) ER11 (1) ER16	1:1	A ₃ 20VII	Double ended
		5505-000512	GSE-3307	(1) ER11	1:1	A ₃ 20VII	
		5505-000513	GSE-3307-3X	(1) ER08	1:3	A ₂ 20VII	High speed
		5505-000511	GSE-3307-II	(1) ER11	1:1	A ₃ 20VII	
		5505-000514	GSE-3307-L-3X	(1) ER08	1:3	A ₂ 20VII	High speed, added bearing
		5505-000294	MSC-507-4X *	(1) ER08	1:3.8	A ₂ 20VII	High speed, up to 30,000 RPM
		5505-000254	MSC-507-II *	(1) ER11	1:1	A ₂ 20VII	
		5505-000292	MSC-507-L *	(1) ER11	1:1	A ₂ 20VII, A ₃ 20VII	Added bearing

* MSC tools require optional back rotary tool (U153B)

Gang Slide



**BSC-510-3X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3
A₂20VII



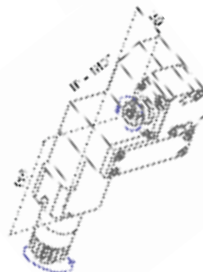
**BSC-510-3X-L
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3
A₂20VII



**GSC-1110
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
A₃20VII



**GSC-1110-4X
Cross Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High Speed Spindle
A₃20VII



**BSA-107
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 0-180°
A₂20VII
A₃20VII

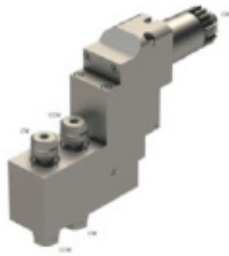


**BSA-2010
Angled Drill/Mill**
Collet Size: ER16
Output: 1:1
Adjustable 0-180°
Crashes with U150B
when working with
T11 and T12
A₃20VII

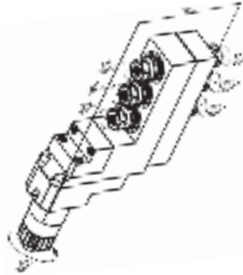
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Citizen Cincom A20

Gang Slide



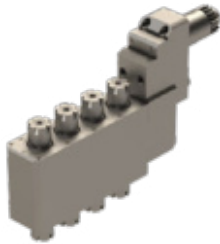
**BSE-2007-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2
A₂20VII
A₃20VII



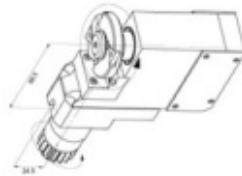
**BSE-3206
End Drill/Mill**
Collet Size: ER11
Output: 1:1
A₂20VII
A₃20VII



**BSE-3208-II
End Drill/Mill**
Collet Size: ER16
Output: 1:1
A₃20VII



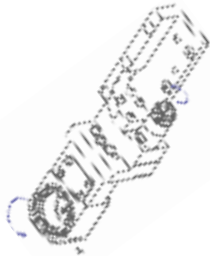
**BSE-3208-III
End Drill/Mill**
Collet Size: ER16
Output: 1:1
A₃20VII



**BSP-509
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1:1
A₂20VII
A₃20VII



**GSC-1307-DEC
Slitting Saw**
Arbor Size: Ø16mm
Output: 1:1
Max Tool Ø: 63mm
Max Tool Width: 6mm
A₂20VII

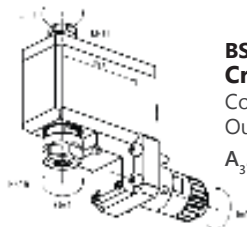


**BSW-215
Thread Whirling**
Ring: Utilis
Output: 1:1
A₂20VII

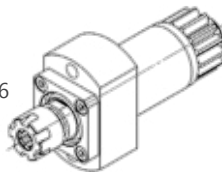


**GDF-1207-L
Tool Holder**
Tool Size: Ø19.05mm (3/4in)
4 Tool Positions
A₂20VII

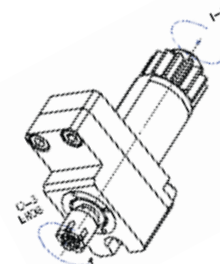
Sub Spindle



**BSC-2330
Cross Drill/Mill**
Collet Size: ER11, ER16
Output: 1:1
A₃20VII



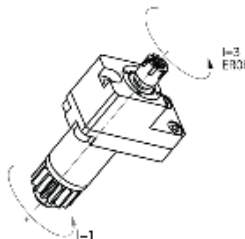
**GSE-3307
End Drill/Mill**
Collet Size: ER1.
Output: 1:1
A₃20VII



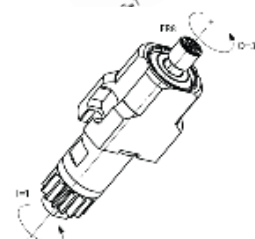
**GSE-3307-3X
End Drill/Mill**
Collet Size: ER08
Output: 1:3
A₃20VII



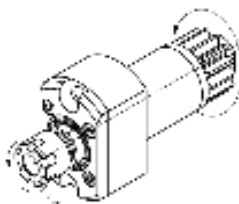
**GSE-3307-II
End Drill/Mil**
Collet Size: ER1
Output: 1:1
A₃20VII



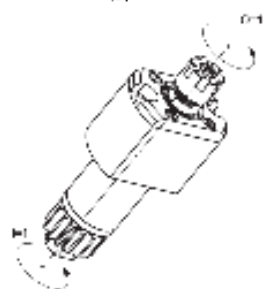
**GSE-3307-L-3X
End Drill/Mill**
Collet Size: ER08
Output: 1:3
A₃20VII



**MSC-507-4X
End Drill/Mill**
Collet Size: ER08
Output: 1:3.8
*Requires U152B
A₃20VII



**MSC-507-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1
*Requires U152B
A₃20VII



**MSC-507-L
End Drill/Mill**
Collet Size: ER11
Output: 1:1
*Requires U152B
A₂20VII
A₃20VII



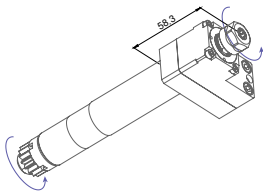
GSC-607-2X

Citizen C16-VII & C16-IX

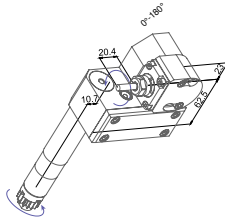
(Machine's Live Tooling 8,000 RPM Rating)

Position	Operation	Item No.	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling / Milling	GSC-607-2X	(1) ER11	1:2	
	Angled Drilling / Milling	GSA-407	(1) ER11	1:2.5	Adjustable 0-180°
		GSE-507	(1) ER11	1:1	
	End Drilling / Milling	GSE-507-2X	(1) ER11	1:2	
		GSE-507-DE	(1) ER11 (1) ER08	1:1	Double ended
		GSE-508	(1) ER11	1:1	
		GSE-707	(1) ER11	1:1	
		GSE-708	(1) ER11	1.65:1	
	Polygon Milling	GSE-509	(1) Ø10	1.6:1	
		GSS-250	(1) Ø16	2:1	
	Slitting Saw	GSS-250-13	(1) Ø13	2:1	
		GSS-250-15	(1) Ø15.875	2:1	
	Static Tool Holders	GDF901	(1) Ø19.05		
		GDF-901-HF	(1) Ø25		Holds Ibag/Meyrat spindles
		GDF-901-S1X6	(1) Ø6		
		GDF-901-S1X4	(1) Ø4		
		GDF-901-S2X4	(2) Ø4		
	Whirling	LSW-424	(1) Utilis	1:1	
Sub Spindle	End Drilling / Milling	GSE-808	(1) ER11	1:1	
		GSE-8-3X	(1) ER08	1:3	
	Static Tool Holders	SAU-319	(1) Ø19.05		

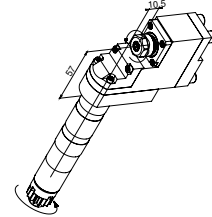
Gang Slide



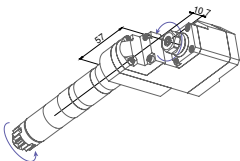
GSC-607-2X
Cross Drill/Mill
Collet Size: ER11
Output: 1:2



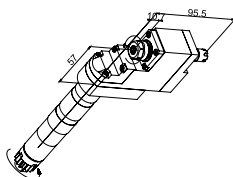
GSA-407
Angled Drill/Mill
Collet Size: ER11
Output: 1:2.5
Adjustable 0-180°
Interferes with adjacent tooling position



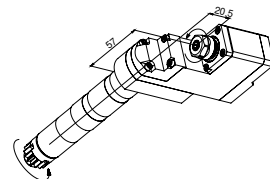
GSE-507
End Drill/Mill
Collet Size: ER11
Output: 1:1



GSE-507-2X
End Drill/Mill
Collet Size: ER11
Output: 1:2
High Speed



GSE-507-DE
End Drill/Mill
Collet Size: ER08, ER11
Output: 1:1
Double Ended

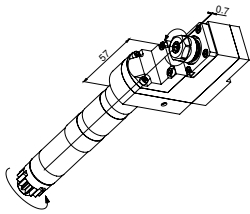


GSE-508
End Drill/Mill
Collet Size: ER11
Output: 1:1

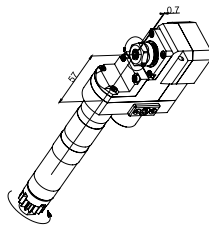
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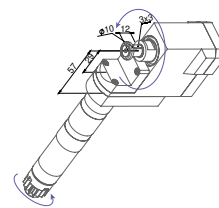
Gang Slide



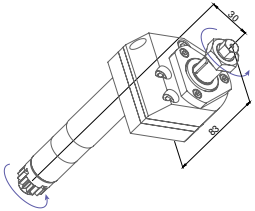
**GSE-707
End Drill/Mill**
Collet Size: ER11
Output: 1:1



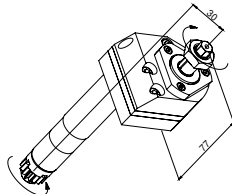
**GSE-708
End Drill/Mill**
Collet Size: ER11
Output: 1.65:1



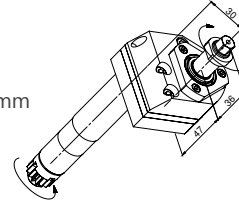
**GSE-509
Polygon Milling**
Tool ID Size: Ø10mm
Output: 1.6:1



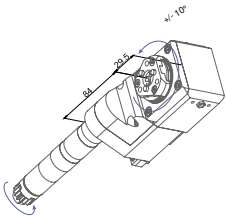
**GSS-250
Slitting Saw**
Arbor Size: Ø16mm
Output: 2:1



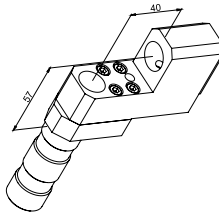
**GSS-250-13
Slitting Saw**
Arbor Size: Ø13mm
Output: 2:1



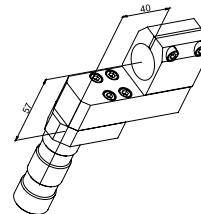
**GSS-250-15
Slitting Saw**
Arbor Size: Ø15.875mm
Output: 2:1



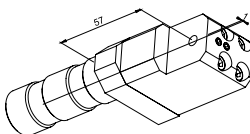
**LSW-424
Thread Whirling**
Ring: Utilis
Output: 1:1



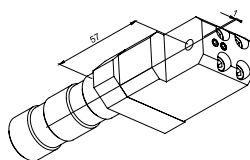
**GDF901
Tool Holder**
Tool Size: Ø19.05mm



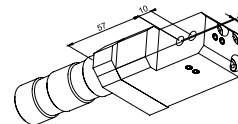
**GDF-901-HF
Tool Holder**
Tool Size: Ø25mm
Holds Ibag/Meyrat Spindles



**GDF-901-S1X6
Tool Holder**
Tool Size: Ø6mm

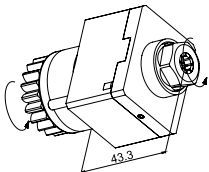


**GDF-901-S1X4
Tool Holder**
Tool Size: Ø4mm

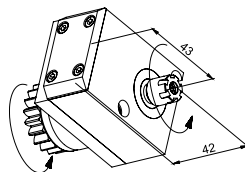


**GDF-901-S2X4
Tool Holder**
Tool Size: Ø4mm

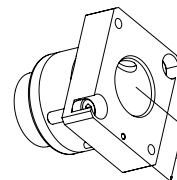
Sub Spindle



**GSE-808
End Drill/Mill**
Collet Size: ER11
Output: 1:1



**GSE-8-3X
End Drill/Mill**
Collet Size: ER08
Output: 1:3



**SAU-319
Tool Holder**
Tool Size: Ø19.05mm



GSC-850-2X

Citizen K12 & K16

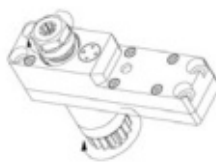
(Machine's Live Tooling 6,000 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling / Milling	5505-000375	GSC-807	(1) ER11	1:1	
		5505-000501	GSC-815	(1) ER11	2:3	Up to 9,000 RPM
		5505-000502	GSC-816	(2) ER11	2:3 1:1	Up to 6,000 RPM and 9,000 RPM
		5505-000191	GSC-850-2X	(1) ER11	1:2	High Speed Spindle, Up to 12,000 RPM
		5505-000192	GSC-860	(2) ER11	1:1	
		5505-000334	GSC1107-4X	(1) ER08	1:3.8	High Speed Spindle, Up to 22,800 RPM
	End Drilling / Milling	5505-000499	GSC1307-4X	(1) ER11	1:3.8	High Speed Spindle
		5505-000262	GSE-2107	(1) ER11	1:1	
		5505-000505	GSE-2107-2X	(1) ER11	1:2	High Speed Spindle, Up to 12,000 RPM
		5505-000196	GSE-2207	(1) ER11	1:1	
		5505-000282	GSE-2207-2X	(1) ER11	1:2.086	High Speed Spindle, Up to 12,000 RPM
		5505-000506	GSE-2307	(2) ER11	1:1	
		5505-000278	GSE-2407	(4) ER11	1:1	Double ended, Position T12-14 Right, Offset 37mm
		5505-000387	GSE-2407-2X	(4) ER11	1:2	Double ended, Position T12-14 Right, High speed up to 12,000 RPM
	Slitting Saw	5505-000365	GSE-2507	(4) ER11	1:1	Double ended, Position T12-14 Left
		5505-000249	GSE-2507-2X	(4) ER11	1:2	Double ended, Position T12-14 Left, High speed up to 12,000 RPM, Offset 37mm
	Hobbing	5505-000237	GSS-2145	(1) Ø8	1:1	Max tool Ø58mm, Width 3mm
		5505-000531	GSH-036	(1) Ø3.5	2:3	Hobbing disk Ø8mm, 8mm thick, Requires 1 tool position, Offset 5mm
		5505-000532	GSH-036-L	(1) Ø3.5	2:3	Hobbing disk Ø8mm, 12mm thick, Requires 1 tool positions, Offset 5mm
		5505-000533	GSH-037	(1) Ø3.5	2:3	Hobbing disk Ø16mm, 8mm thick, Requires 1 tool position
	Static Tool Holders	5505-000534	GSH-038	(1) Ø5	2:3	Hobbing disk Ø16mm, 8mm thick, Requires 1 tool position
		5505-000333	BDF-105	(1) Ø19.05		
	Whirling	5505-000238	BDF-107	(2) Ø19.05		
		5505-000135	GSW-101	(1) Utilis	1:1	7 or 9 insert cutter, Adjustable ±15°, Flight circle Ø6mm, Requires 3 tool positions
Sub Spindle	End Drilling / Milling	5505-000495	GSC1107	(1) ER11	1:1	
		5505-000502	GSC-816	(2) ER11	2:3 1:1	Up to 6,000 RPM and 9,000 RPM
		5505-000192	GSC-860	(2) ER11	1:1	

Gang Slide



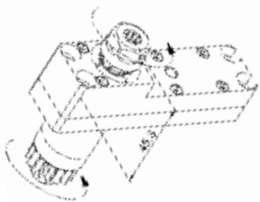
GSC-807
Cross Drill/Mill
Collet Size: ER11
Output: 1:1



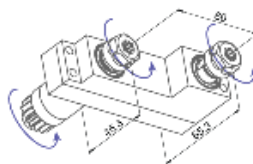
GSC-815
Cross Drill/Mill
Collet Size: ER11
Output: 2:3



GSC-816
Cross Drill/Mill
Collet Size: ER11
Output: 1:0.6, 1:1



GSC-850-2X
Cross Drill/Mill
Collet Size: ER11
Output: 1:2



GSC-860
Cross Drill/Mill
Collet Size: ER11
Output: 1:1



GSC1107-4X
Cross Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed Spindle

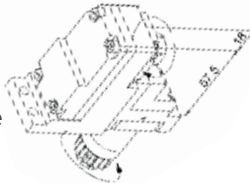
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Citizen Cincom K12 & K16

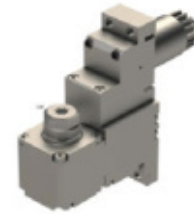
Gang Slide



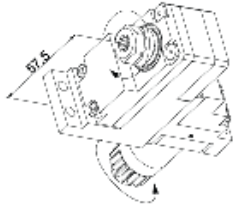
**GSC-1307-4X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3.8
High Speed Spindle



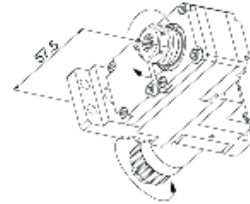
**GSE-2107
End Drill/Mill**
Collet Size: ER11
Output: 1:1



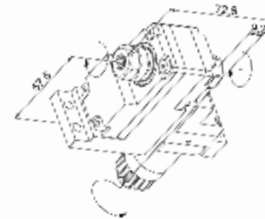
**GSE-2107-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2
High Speed Spindle



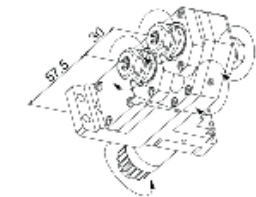
**GSE-2207
End Drill/Mill**
Collet Size: ER11
Output: 1:1



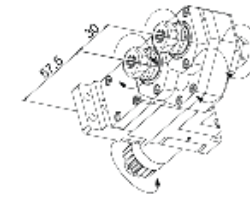
**GSE-2207-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2



**GSE-2307
End Drill/Mill**
Collet Size: ER11
Output: 1:1



**GSE-2407
End Drill/Mill**
Collet Size: ER11
Output: 1:1



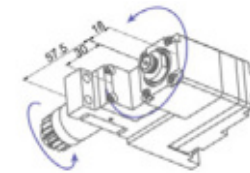
**GSE-2407-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2
High Speed Spindle



**GSE-2507
End Drill/Mill**
Collet Size: ER11
Output: 1:1



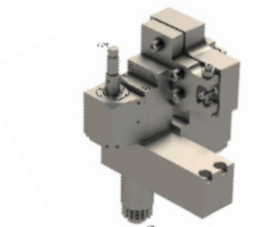
**GSE-2507-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2



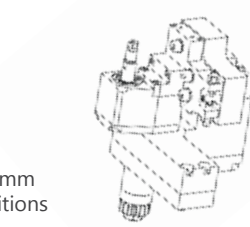
**GSS-2145
Slitting Saw**
Arbor Size: Ø8mm
Output: 1:1
Max Tool Ø: 58mm
Max Tool Thickness: 3mm



**GSH-036
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1.5:1
Hobb OD: Ø8mm
Hobb Thickness: 8mm
Requires 1 tool positions



**GSH-036-L
Gear Hobbing**
ID Size: Ø3.5mm
Output: 2:3
Hobb OD: Ø8mm
Hobb Thickness: 12mm
Requires 1 tool positions



**GSH-037
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1.5:1
Hobb OD: Ø16mm
Hobb Thickness: 8mm
Requires 1 tool positions



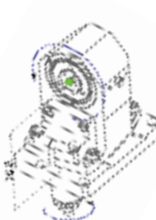
**GSH-038
Gear Hobbing**
ID Size: Ø5mm
Output: 1.5:1
Hobb OD: Ø16mm
Hobb Thickness: 8mm
Requires 1 tool positions



**BDF-105
Tool Holder**
Tool Size: Ø19.05mm

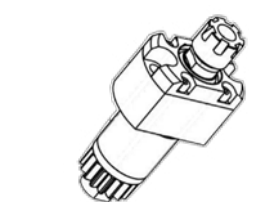


**BDF-107
Tool Holder**
Tool Size: Ø19.05mm



**GSW-101
Whirling**
Ring: Utilis
Output: 1:1
7 or 9 Insert Cutter
Flight Circle: Ø6

Sub Spindle



**GSC-1107
End Drill/Mill**
Collet Size: ER11
Output: 1:1



**GSC-816
End Drill/Mill**
Collet Size: ER11
Output: 1:1 & 2:3
1 position up to 6,000 &
1 position up to 9,000
RPM



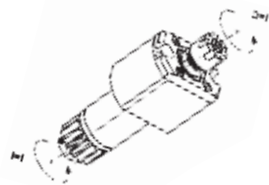
**GSC-860
End Drill/Mill**
Collet Size: ER11
Output: 1:1

Citizen L12

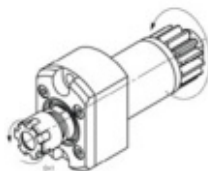
(Machine's Live Tooling 10,000 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling / Milling	5505-000292	MSC-507-L	(1) ER11	1:1	Caution: a collision could occur in the T08-T10 position
		5505-000254	MSC-507-II	(1) ER11	1:1	Up to 8,000 RPM Max
		5505-000608	MSC-507-2X	(1) ER11	1:2	High speed spindle up to 20,000 RPM
		5505-000294	MSC-507-4X	(1) ER08	1:3.8	High speed spindle up to 38,000 RPM
		5505-000610	MSC510-HP	(1) ER16	1:1	Internal coolant-thru Max pressure 150 bar
		5505-000376	MSC-512	(1) ER16	1:1	
	End Drilling / Milling	5505-000330	MSC-513	(1) ER20	1:1	
		5505-000399	GSE-1207-3X	(1) ER11	1:3	High speed spindle up to 30,000 RPM, Adjustable $\pm 30^\circ$, Double ended
		5505-000514	GSE-3307-L-3X	(1) ER08	1:3	High speed spindle up to 30,000 RPM, Long version
		5505-000231	GSE-3507-3X	(1) ER11	1:3	High speed spindle up to 30,000 RPM,
		5505-000517	GSE-3607-1B	(1) ER11	1:1	Adjustable $\pm 45^\circ$
		5505-000519	GSE-3607-2B	(2) ER11	1:1	Adjustable $\pm 30^\circ$
		5505-000522	GSE-3607-3B	(3) ER11	1:1	Adjustable $\pm 30^\circ$
		5505-000518	GSE-3607-1D	(2) ER11	1:1	Double ended, Adjustable $\pm 45^\circ$
		5505-000520	GSE-3607-2D	(4) ER11	1:1	Double ended, Adjustable $\pm 30^\circ$
		5505-000326	GSE-3607-3D	(6) ER11	1:1	Double ended, Adjustable $\pm 30^\circ$
		5505-000339	GSE-3607-1M	(1) ER11	1:1	Adjustable $\pm 45^\circ$
		5505-000521	GSE-3607-2M	(2) ER11	1:1	Adjustable $\pm 30^\circ$
		5505-000373	GSE-3607-3M	(3) ER11	1:1	Adjustable $\pm 30^\circ$
	Slitting Saw	5505-000523	GSE4307	(6) ER11	1:1	Double ended
		5505-000611	MSE-1007	(2) ER11	1:1	Double ended, Up to 9,000 RPM max, Requires 3 positions
	Polygon Milling	5505-000343	GSS610	(1) Ø10 mm	1:1	Max tool Ø40mm, Width 4.5mm
		5505-000529	GSF-080	(1) Ø08mm	1:1	Max tool Ø58mm, Width 3mm
Sub Spindle	Hobbing	5505-000538	GSP080	(1) Ø08mm	1:1	Max tool Ø30-70mm, Width 3-6mm, Adjustable $\pm 1.5^\circ$
		5505-000530	GSH-035-L	(1) Ø3.5mm	1:1	
	Whirling	5505-000536	GSH235	(1) Ø3.5mm	1:1	Adjustable $\pm 5^\circ$
		5505-000537	GSH245	(1) Ø4.5mm	1:1	Adjustable $\pm 5^\circ$
	Static Tool Holders	5505-000643	MSH507	(1) Ø4.5mm	1:1	Disk Ø12mm, Width 10mm, Up to 10,000 RPM max
		5505-000644	MSH50735	(1) Ø3.5mm	1:1	Disk Ø10mm, Width 10mm, Up to 10,000 RPM max
	Cross Drilling / Milling	5505-000256	LSW-515	(1) Utilis	1:1	Adjustable $\pm 15^\circ$, 7 or 9 insert cutter, 6mm flight Ø, Requires 3 positions, 10,000 Max RPM
		5505-000588	LDF-HF09	(2) Ø20mm	1:1	For high speed NSK spindles
	End Drilling / Milling	5505-000672	SAU819-HD	(1) .75in		Intern coolant-thru Max adjustable pressure 220 bar
		5505-000484	GDF3607	(3) .75in		Internal coolant-thru Max pressure 220bar
	Slitting Saw	5505-000667	RSC507	(1) ER11	1:1	Position T31 on U151B Max output torque 1Nm
		5505-000292	MSC-507-L	(1) ER11	1:1	Caution: a collision could occur in the T08-T10 position, Long version
Sub Spindle	End Drilling / Milling	5505-000254	MSC-507-II	(1) ER11	1:1	Up to 8,000 RPM Max
		5505-000608	MSC-507-2X	(1) ER11	1:2	High speed spindle up to 20,000 RPM
		5505-000294	MSC-507-4X	(1) ER08	1:3.8	High speed spindle up to 38,000 RPM
		5505-000610	MSC510-HP	(1) ER16	1:1	Internal coolant-thru Max pressure 150 bar, 8,000 RPM max,
		5505-000376	MSC-512	(1) ER16	1:1	
		5505-000330	MSC-513	(1) ER20	1:1	
	Slitting Saw	5505-000542	GSS-1510	(1) ER11	1:1	
		5505-000276	GSS-1530	(1) ER11	5:3	Max tool Ø63mm, Width 2mm
		5505-000668	RSH035	(1) Ø3.5mm	1:1	Max tool Ø30mm, Width 3.5mm, Inclination $\pm 5^\circ$, Requires 2 positions, Adjustable cutter height $\pm 2^\circ$, Max RPM 9,000
		5505-000669	RSH035-II	(1) Ø3.5mm	1:1	Max tool Ø30mm, Width 11mm, Inclination $\pm 5^\circ$, Requires 2 positions, Max RPM 9,000
Sub Spindle	Slitting Saw	5505-000670	RSH-045	(1) Ø4.5mm	1:1	Max tool Ø30mm, Width 3.5mm, Inclination $\pm 5^\circ$, Requires 2 positions, Adjustable cutter height $\pm 2^\circ$, Max RPM 9,000

Gang Slide



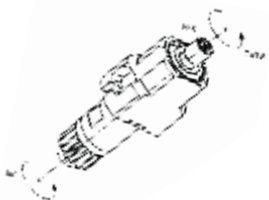
MSC-507-L
Cross Drill/Mill
Collet Size: ER11
Output: 1:1



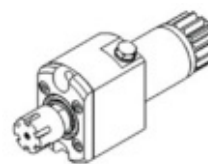
MSC-507-II
Cross Drill/Mill
Collet Size: ER11
Output: 1:1



MSC-507-2X
Cross Drill/Mill
Collet Size: ER11
Output: 1:2
High Speed



MSC-507-4X
Cross Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed



MSC510-HP
Cross Drill/Mill
Collet Size: ER16
Output: 1:1
High pressure
coolant-thru



MSC-512
Cross Drill/Mill
Collet Size: ER16
Output: 1:1

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Citizen Cincom L12

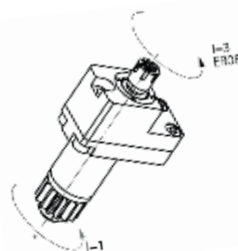
Gang Slide



MSC-513
Cross Drill/Mill
Collet Size: ER20
Output: 1:1



GSE-1207-3X
End Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed Spindle,
Adjustable $\pm 30^\circ$
Double Ended



GSE-3307-L-3X
End Drill/Mill
Collet Size: ER08
Output: 1:3



GSE-3507-3X
End Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed Spindle,



GSE-3607-1B
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 45^\circ$



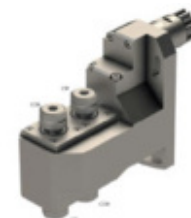
GSE-3607-2B
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 30^\circ$



GSE-3607-3B
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 30^\circ$



GSE-3607-1D
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 45^\circ$
Double Ended



GSE-3607-2D
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 30^\circ$
Double Ended



GSE-3607-3D
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 30^\circ$
Double Ended



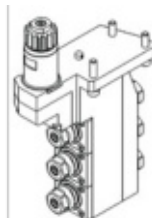
GSE-3607-1M
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 45^\circ$



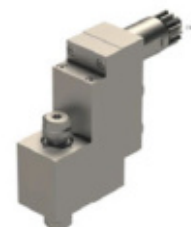
GSE-3607-2M
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 30^\circ$



GSE-3607-3M
End Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable $\pm 30^\circ$



GSE-4307
End Drill/Mill
Collet Size: ER11
Output: 1:1



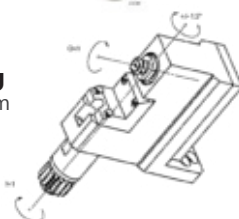
MSE-1007
End Drill/Mill
Collet Size: ER11
Output: 1:1
Requires 3 Positions



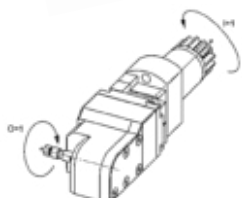
GSS610
Slitting Saw
Saw ID: 10mm
Output: 1:1
Max Tool $\varnothing 40$ mm
Max Width 4.5mm



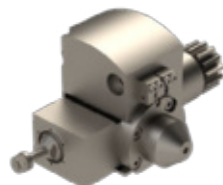
GSF-080
Polygon Milling
Tool ID Size: $\varnothing 8$ mm
Output: 1:1
Max Tool $\varnothing 58$ mm
Max Width 3mm



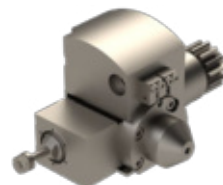
GSP080
Polygon Milling
Tool ID Size: $\varnothing 8$ mm
Output: 1:1
Max Tool $\varnothing 70$ mm
Max Width 6mm



GSH-035-L
Gear Hobbing
ID Size: $\varnothing 3.5$ mm
Output: 1:1



GSH235
Gear Hobbing
ID Size: $\varnothing 3.5$ mm
Output: 1:1



GSH245
Gear Hobbing
ID Size: $\varnothing 4.5$ mm
Output: 1:1

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Gang Slide



**MSH507
Gear Hobbing**
ID Size: Ø4.5mm
Output: 1:1
Hobb OD: Ø12mm
Hobb Thickness: 10mm



**MSH50735
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1:1
Hobb OD: Ø10mm
Hobb Thickness: 10mm



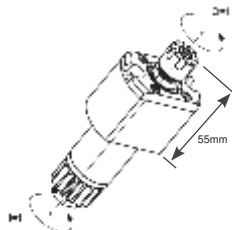
**LSW-515
Thread Whirling**
Ring: Utilis
Output: 1:1
7 or 9 Insert Cutter
Flight Circle: Ø6mm

Citizen Cincom L12

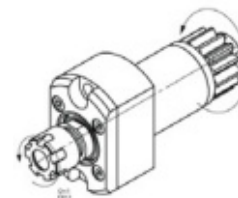
Sub Spindle



**RSC507
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
Max Output
Torque 1Nm
Fits T31 On U151B



**MSC-507-L
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Longer Spindle
Body



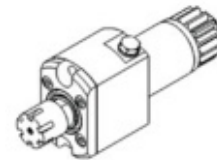
**MSC-507-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1



**MSC-507-2X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:2
High Speed



**MSC-507-4X
Cross Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High Speed



**MSC510-HP
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
High pressure
coolant-thru



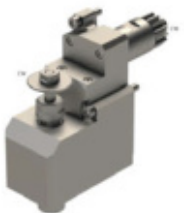
**MSC-512
End Drill/Mill**
Collet Size: ER16
Output: 1:1



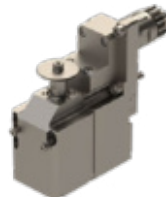
**MSC-513
End Drill/Mill**
Collet Size: ER20
Output: 1:1



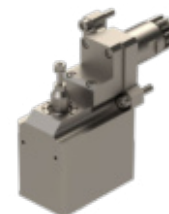
**GSS-1510
Slitting Saw**
Collet Size: ER11
Output: 1:1



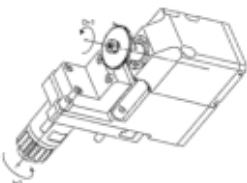
**GSS-1530
Slitting Saw**
Collet Size: ER11
Output: 5:3
Max Tool Ø63mm
Max Width 2mm



**RSH035
Slitting Saw**
Saw ID: 3.5mm
Output: 1:1
Max Tool Ø30mm
Max Width 3.5mm



**RSH035-II
Slitting Saw**
Saw ID: 3.5mm
Output: 1:1
Max Tool Ø30mm
Max Width 11mm



**RSH-045
Slitting Saw**
Saw ID: 4.5mm
Output: 1:1
Max Tool Ø30mm
Max Width 3.5mm



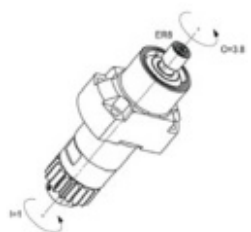
MSC-507-4X

Citizen L2-20 VIII / X / XII

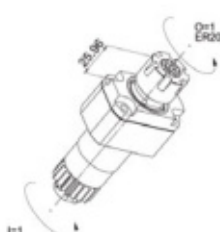
(Machine's Live Tooling 4,500 - 6,000 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling / Milling	5505-000285	GSC-1110-4X	(1) ER08	1:3.8	High speed
		5505-000329	GSC-1113	(1) ER20	1:1	
	End Drilling / Milling	5505-000444	BSE-307-3X	(2) ER11	1:3	High speed up to 18,000 RPM, Double ended
		5505-000445	BSE-3106	(3) ER11	1:1	Replaces BSE-607
	Angled Drilling & Milling	5505-000491	GSA1007	(1) ER11	1:1	Adjustable 0-10°
	Slitting Saw	5505-000455	BSS122	(1) Ø22mm	2:1	Tool OD 80-125mm, Tool thickness 5mm
		5505-000539	GSS1007-DEC	(1) Ø22mm	2:1	Tool OD 80mm, Tool thickness 2mm
		5505-000541	GSC-1335-DEC	(1) Ø13mm	1:1	Tool OD 58mm Max, Tool thickness 15mm, Up to 6,000 RPM
	Static Tool Holders	5505-000474	GDF-1207	(3) Ø3/4in		3 Position, Internal Coolant-thru with Max pressure 220 bar is OPTIONAL. For coolant-thru capability, GDF1207-H100 is required
		5505-000475	GDF-1207-HP	(3) Ø3/4in		3 Position, Internal Coolant-thru with Max pressure 220 bar INCLUDED
		5505-000312	GDF-1207-L	(4) Ø3/4in		4 Position 3/4" Ø sleeves
	Thread Whirling	5505-000550	GSW161	(1) PCM	1:1	Adjustable 0-16°, 6,000 Max RPM, Requires coolant kit Art. 876-613-80 for internal coolant capability with PCM coolant whirling ring, 6,7,9 or 12 insert Utilis ring
		5505-000552	GSW163	(1) Utilis	1:1	Adjustable 0-28°, 6,000 Max RPM, 9 insert cutter, 12mm flight Ø, Requires 2 positions, Whirling ring not included
Sub Spindle	Cross Drilling / Milling	5505-000369	GSC-1407	(1) ER11	1:1	Requires Block U127B
		5505-000268	GSC-1507	(1) ER11	1:1	Up to 5,000 RPM
		5505-000366	GSC-1507-3X	(1) ER11	1:3	High speed up to 15,000 RPM
		5505-000377	GSE-3407	(1) ER11	1:1	Up to 7,500 RPM Max
		5505-000293	GSE-3407-HP	(1) ER11	1:1	Up to 7,500 RPM Max, Internal high pressure coolant-thru with 150 bar max pressure, 50µm seal is required
	End Drilling / Milling	5505-000515	GSE-3407-HP-HIQ-ERAX	(1) ER11	1:1	Up to 7,500 RPM Max, Internal high pressure coolant-thru with 150 bar max pressure, 50µm seal is required, Internal Nut
		5505-000292	MSC-507-L	(1) ER11	1:1	Up to 10,000 RPM, Long version
		5505-000254	MSC-507-II	(1) ER11	1:1	Up to 8,000
		5505-000608	MSC-507-2x	(1) ER11	1:2	High speed up to 20,000 RPM
		5505-000294	MSC-507-4X	(1) ER08	1:3.8	High Speed up to 38,000 RPM
		5505-000376	MSC-512	(1) ER16	1:1	Up to 10,000 RPM
		5505-000330	MSC-513	(1) ER20	1:1	Up to 10,000 RPM
		5505-000514	GSE-3307-L-3X	(1) ER08	1:3	High speed up to 30,000 RPM, Long version
	Slitting Saw	5505-000231	GSE-3507-3X	(1) ER11	1:3	High speed up to 27,000 RPM
	Static Tool Holders	5505-000276	GSS-1530	(1) ER11	5:3	Max tool Ø63mm, Max tool thickness 2mm, Up to 5,400 RPM
		5505-000310	CIT-SAU919-S-CT	(1) Ø3/4in		Coolant-thru, Uses M5-1/4" JIC fitting, For L20-X

Gang Slide



GSC-1110-4X
Cross Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed,
Up to 30,000 RPMs
L20



GSC-1113
Cross Drill/Mill
Collet Size: ER20
Output: 1:1
L20



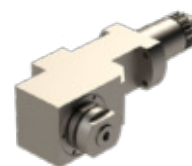
BSE-307-3X
End Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed,
Double Ended
L20



BSE-3106
End Drill/Mill
Collet Size: ER11
Output: 1:1
Replaces BSE-607



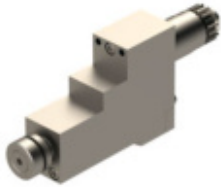
GSA1007
Angled Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable 0-10°



BSS122
Slitting Saw
Arbor Size: Ø22mm
Output: 2:1
Max Tool Ø125mm
Max Width 5mm

Citizen Cincom L2-20 VIII / X / XII

Gang Slide



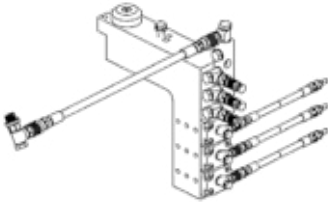
**GSS1007-DEC
Slitting Saw**
Arbor Size: Ø22mm
Output: 2:1
Max Tool Ø80mm
Max Width 2mm



**GSC-1335-DEC
Slitting Saw**
Arbor Size: Ø13mm
Output: 1:1
L₂₀



**GDF-1207
Tool Holder**
Tool Size: Ø3/4in
3 Positions
Coolant-thru Optional
L₂₀



**GDF-1207-HP
Tool Holder**
Tool Size: Ø3/4in
3 Positions,
Coolant-thru Included,
Max pressure 220 bar
L₂₀



**GDF-1207-L
Tool Holder**
Tool Size: Ø19.05mm
4 Positions with 3/4"
diameter sleeves
L₂₀

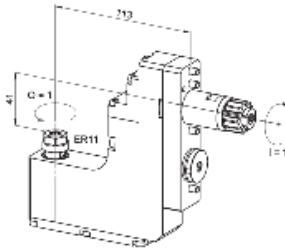


**GSW161
Thread Whirling**
Ring: PCM
Output: 1:1
Adjustable 0-16°,
Requires coolant kit
for use with PCM
coolant whirling ring



**GSW163
Thread Whirling**
Ring: Utilis
Output: 1:1
Adjustable 0-28°
9 Insert cutter
12mm flight circle

Sub Spindle



**GSC-1407
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1



**GSC-1507
Cross Drill/Mill**
Collet Size: ER1
Output: 1:1



**GSC-1507-3X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3



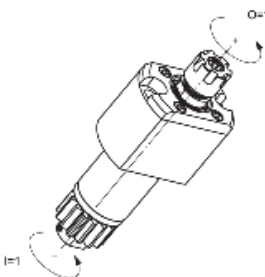
**GSE-3407
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1



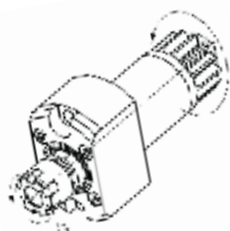
**GSE-3407-HP
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
High Pressure
Coolant-Thru



**GSE-3407-HP
-HIQ-ERAX
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
High Pressure
Coolant-Thru,
Internal Nut



**MSC-507-L
End Drill/Mill**
Collet Size: ER11
Output: 1:1



**MSC-507-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1

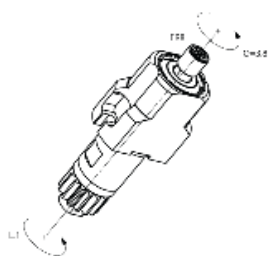


**MSC-507-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2
High speed up to
20,000RPM

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Citizen Cincom L2-20 VIII / X / XII

Sub Spindle



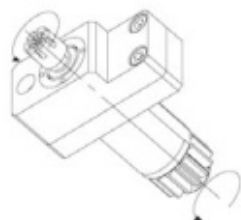
**MSC-507-4X
End Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High speed up to
38,000RPM



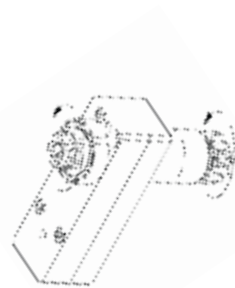
**MSC-512
End Drill/Mill**
Collet Size: ER16
Output: 1:1



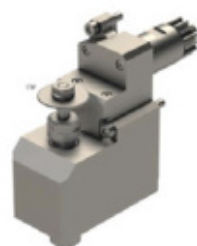
**MSC-513
End Drill/Mill**
Collet Size: ER20
Output: 1:1



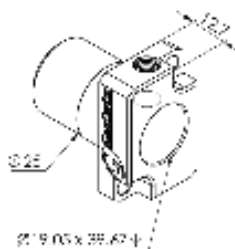
**GSE-3307-L-3X
End Drill/Mill**
Collet Size: ER08
Output: 1:3
High Speed



**GSE-3507-3X
End Drill/Mill**
Collet Size: ER11
Output: 1:3
High Speed



**GSS-1530
Slitting Saw**
Arbor Size: ER11
Output: 5:3



**CIT-SAU919-S-CT
Tool Holder**
Tool Size: Ø3/4"
Coolant-Thru Version
Uses M5-1/4" JIC Fitting

CITIZEN₅ L₂₀ / L₇20 / L20E-1M

Swiss Made by
PCM
be driven.

Citizen L5-20 / L7-20 / L20-E

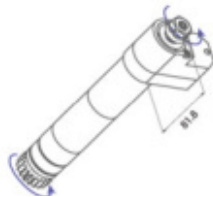
(Machine's Live Tooling 4,500 - 6,000 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Machine	Other
Gang Slide	Cross Drilling & Milling	5505-000118	GSC-310-3x	(1) ER11	1:3		High speed up to 15,000 RPM
		5505-000291	GSC-510-L-3X	(1) ER11	1:3		High speed up to 18,000 RPM
		5505-000281	GSC-510-4X	(1) ER08	1:3.8		High speed up to 22,800 RPM
		5505-000117	GSC-204-3X	(1) ER11	1:3		High speed up to 15,000 RPM
		5505-000498	GSC-1207-4X	(1) ER11	1:3.8	L20E	High speed up to 22,800 RPM
		5505-000331	GSC-1210	(1) ER16	1:1	L20E	For L20E-1M or newer, Requires GSE3110
		5505-000280	GSC-1210-4X	(1) ER08	1:3.8	L20E	For L20E-1M or newer, Requires GSE3110, High speed up to 19,000 RPM
	Angled Drilling & Milling	5505-000235	GSA107	(1) ER11	1:1		Adjustable 0-180°
		5505-000444	BSE307-3X	(2) ER11	1:3		High speed up to 18,000 RPM, Double ended
	End Drilling & Milling	5505-000493	GSA-1530	(1) ER16	1:1	L20E	Fixed angle at 93°
		5505-000125	GSE-306-SE312	(1) ER11	1:3		High speed up to 18,000 RPM
		5505-000123	GSE-306-DE312	(2) ER11	1:3		High speed up to 18,000 RPM, Double ended
		5505-000124	GSE-306-L-520	(1) ER11	1:1		
		5505-000274	GSE-306-DE011	(2) ER11	1:1		Double ended
		5505-000287	GSE-3107	(4) ER11	1:1		Double ended, Requires GSE3110
	Slitting Saw	5505-000342	GSE-3207	(6) ER11	1:1	L20E	Double ended, Requires GSE3110 or GSE3010
		5505-000134	GSS-510	(1) Ø16mm	2:1		Up to 3,000 RPM
	Static Tool Holders	5505-000250	GDF903	(1) Ø1in			1in sleeve holder
		5505-000424	852-354-OF-010	(1) Ø25mm			High speed Meyrant spindle holder
	Whirling	5505-000155	LSW-101-L20	(1) Utilis	2:1		9 or 12 insert cutter, Adjustable ±10°, 12mm flight cir.
		5505-000158	LSW-215	(1) Utilis	1:1		9 or 12 insert cutter, Adjustable ±15°
Sub Spindle	Cross Drilling & Milling	5505-000268	GSC-1507	(1) ER11	1:1		
		5505-000366	GSC-1507-3X	(1) ER11	1:3		High speed up to 15,000 RPM
		5505-000292	MSC-507-L	(1) ER08	1:1		
		5505-000254	MSC-507-II	(1) ER11	1:1		
		5505-000294	MSC-507-4X	(1) ER08	1:3.8		High speed up to 38,000
	End Drilling & Milling	5505-000330	MSC-513	(1) ER20	1:1		
		5505-000514	GSE-3307-L-3X	(1) ER08	1:3		High speed up to 18,000 RPM
		5505-000516	GSE3407-HP HIQ-ERAX-MAJ	(1) ER11	1:1		Internal coolant-thru with max pressure 150 bar, Internal nut
	Slitting Saw	5505-000231	GSE-3507-3X	(1) ER11	1:3		High speed, Up to 5,400 RPM
		5505-000276	GSS-1530	(1) ER11	5:3		Max tool Ø63mm, Max tool thickness 2mm
		5505-000306	GSS-1331	(1) ER11	1:1		

Gang Slide



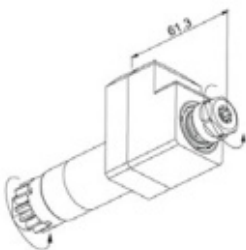
GSC-310-3X
Cross Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed



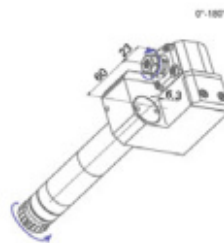
GSC-510-L-3X
Cross Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed



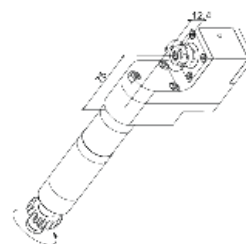
GSC-510-4X
Cross Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed



GSC-204-3X
Cross Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed



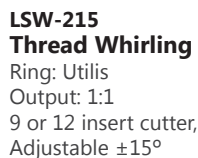
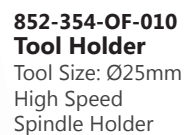
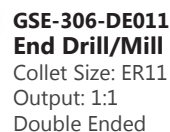
GSA107
Angled Drill/M
Collet Size: ER11
Output: 1:1
Adjustable 0-180°



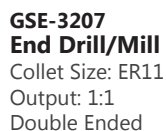
GSE-306-SE312
End Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed

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Gang Slide



For Use With GSE3110 or GSE3010 Expansion Block

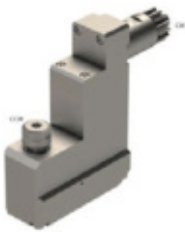


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Citizen Cincom L5-20 / L7-20 / L20-E

Sub Spindle

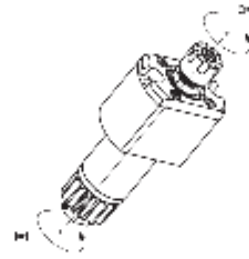
Equipped With U153B or U155B



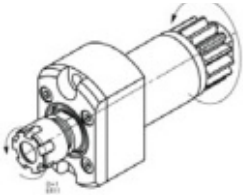
GSC-1507
Cross Drill/Mill
Collet Size: ER11
Output: 1:1



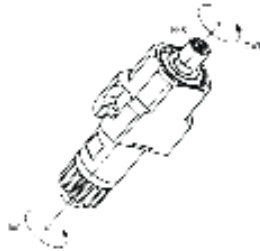
GSC-1507-3X
Cross Drill/Mill
Collet Size: ER11
Output: 1:3



MSC-507-L
Cross Drill/Mill
Collet Size: ER08
Output: 1:1



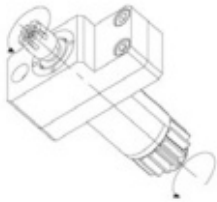
MSC-507-II
Cross Drill/Mill
Collet Size: ER11
Output: 1:1



MSC-507-4X
Cross Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed



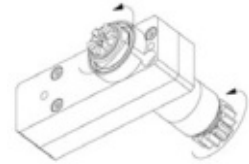
MSC-513
End Drill/Mill
Collet Size: ER20
Output: 1:1



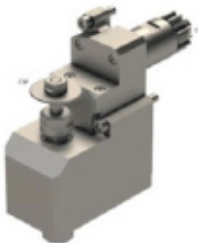
GSE-3307-L-3X
End Drill/Mill
Collet Size: ER08
Output: 1:3
High Speed



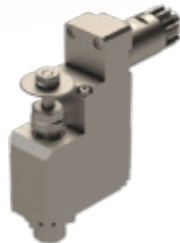
GSE3407-HP
HIQ-ERAX-MAJ
End Drill/Mill
Collet Size: ER11
Output: 1:1
Internal coolant-thru
Max pressure 150 bar
Internal Nut



GSE-3507-3X
End Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed



GSS-1530
Slitting Saw
Arbor Size: ER11
Output: 5:3



GSS-1331
Slitting Saw
Arbor Size: ER11
Output: 1:1

Citizen L₄ 25 / L₄ 32

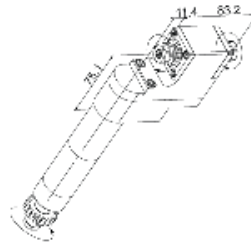
(Machine's Live Tooling 3,000 - 4,500 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling & Milling	5505-000118	GSC-310-3X	(1) ER11	1:3	High speed up to 15,000 RPM
		5505-000274	GSE-306-DE511	(2) ER11	1:1	Double Ended
	End Drilling & Milling	5505-000123	GSE-306-DE512	(2) ER11	1:3	Double Ended, High speed spindle
		5505-000507	GSE-306-SE512	(1) ER11	1:3	High speed spindle
		5505-000508	GSE-306-L-525	(1) ER11	1:1	Long version

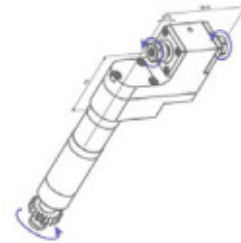
Gang Slide



**GSC-310-3X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3
High Speed



**GSE-306-DE511
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Double Ended



**GSE-306-DE512
End Drill/Mill**
Collet Size: ER11
Output: 1:3
High Speed
Double Ended



**GSE-306-SE512
End Drill/Mill**
Collet Size: ER11
Output: 1:3
High Speed



**GSE-306-L-525
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Long version

Citizen A32-VII & L32-VIII, X, XII

(Machine's Live Tooling 4,000 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Machine	Other
Gang Slide	Cross Drilling & Milling	5505-000261	GSC-1110	(1) ER16	1:1	A32, L32	
		5505-000496	GSC1110-L	(1) ER16	1:1	A32, L32	Length 70mm
		5505-000285	GSC-1110-4X	(1) ER08	1:3.8	A32, L32	High Speed, Up to 30,000 RPM
		5505-000329	GSC-1113	(1) ER20	1:1	A32, L32	
		5505-000436	BSC-210	(1) ER16	1:1	A32, L32	
		5505-000199	BSC-610-3X	(1) ER11	1:3	A32, L32	High speed up to 15,000 RPM
		5505-000355	BSC-610-L-3X	(1) ER11	1:3	A32, L32	High speed up to 15,000, Added bearing for strength, Long version
		5505-000435	MSC1107-4X	(1) ER11	1:3.8	A32, L32	High speed up to 30,000 RPM
	Angled Drilling & Milling	5505-000623	MSC810	(2) ER16	1:1	L32	Double Ended, For L32X, XII
		5505-000263	GSA-1510	(3) ER16	1:1	A32, L32	Adjustable 0-30°, Requires 2 tool positions
		5505-000353	BSA-2010	(6) ER16	1:1	A32, L32	Adjustable 0-21°, Interferes with adjacent tooling station when at angle
	End Drilling & Milling	5505-000232	BSA-3107	(1) ER11	1:1	A32	Adjustable 0-180°, interferes with adjacent tooling station when used at angle
		5505-000439	BSE107	(1) ER11	1:1	A32, L32	
		5505-000442	BSE207-II	(2) ER11	1:1	A32, L32	
		5505-000438	BSE1007-II	(2) ER11	1:1	A32, L32	Double Ended
		5505-000188	BSE2007-II	(4) ER11	1:1	A32, L32	Double Ended
		5505-000443	BSE3007-IK-3X	(3) ER11	1:1 & 1:3	A32, L32	High speed up to 18,000 RPM, Internal cooling with max pressure 120 bar, Position 1 at 1:1 and position 2 & 3 at 1:3
		5505-000445	BSE-3106	(3) ER11	1:1	A32, L32	
		5505-000446	BSE3107-II	(3) ER11	1:1	A32, L32	
		5505-000447	BSE3206-II	(6) ER11	1:1	A32, L32	Double Ended
		5505-000448	BSE-3207	(4) ER16	1:1	A32, L32	Double Ended, Spindles rotate in same direction
		5505-000258	BSE-3207-III	(4) ER16	1:1	A32, L32	Double Ended, Spindles rotate in alternating directions
		5505-000230	BSE-3208-II	(8) ER16	1:1	A32	Double Ended, Spindles rotate in the same direction
		5505-000222	BSE-3208-III	(8) ER16	1:1	A32	Double Ended, Spindles rotate in alternating directions
		5505-000367	BSE-3209	(3) ER16	1:1	A32, L32	Spindles rotate in alternating directions
		5505-000344	BSE-3210	(6) ER16	1:1	A32, L32	Double Ended, Spindles rotate in alternating directions
		5505-000513	GSE-3307-3X	(1) ER08	1:3	A32	High speed up to 30,000 RPM, Max torque of 1500 Nmm
		5505-000511	GSE-3307-II	(1) ER11	1:1	A32	
		5505-000231	GSE-3507-3X	(1) ER11	1:3	L32	High speed up to 27,000 RPM, Internal nut
		5505-000503	GSE-1710	(6) ER16	1:1	A32	Drill depth 40mm
		5505-000316	GSE-1710-2X	(6) ER16	1:2	A32	High Speed up to 10,000 RPM
		5505-000504	GSE1910	(1) ER16	1:1	A32, L32	
	Polygon Milling	5505-000449	BSF-509	(1) Ø13mm	1:1	A32, L32	Max tool Ø 60mm
		5505-000450	BSP-510	(1) Ø13mm	1:1	A32, L32	Max tool Ø 60mm, Width 15mm
		5505-000451	BSP-511	(1) Ø10mm	1:1	A32, L32	Max tool Ø 55mm
		5505-000452	BSP-513	(1) Ø13mm	1.5:1	A32, L32	Max tool Ø 72mm, Width 8.3mm
		5505-000453	BSP516	(1) Ø16mm	1.5:1	A32, L32	Max tool Ø 72mm, Width 8.3mm
		5505-000671	RSP-013	(1) Ø13mm	1:1	A32, L32	Max tool Ø 72mm, Width 8.3mm
	Slotting Saw	5505-000362	GSS-1307-DEC	(1) Ø16mm	1:1	A32, L32	Max tool Ø 63mm, Width 6mm
		5505-000541	GSS1335-DEC	(1) Ø13mm	1:1	A32, L32	Max tool Ø 58mm, Width 15mm
		5505-000543	GSS15835-DEC	(1) Ø15.875mm	1:1	A32, L32	Max tool Ø 63mm, Width 8mm
		5505-000540	GSS1035-DEC	(1) Ø10mm	1:1	A32, L32	Max tool Ø 50mm, Width 15.5mm
	Whirling	5505-000457	BSW-315	(1) Utilis	1:1	A32	9 or 12 Insert Cutter, Adjustable ±15°, Flight Ø12, Requires removal of the 4-position ID Tool Block , Utilis ring #137578
		5505-000458	BSW-315-II	(1) Utilis	1:1	A32	9 or 12 Insert Cutter, Adjustable ±15°, Flight Ø12, T07 Blocked, Postiton T08 can only be used with Ø25x52mm in position , Utilis ring #137578
	Static Tool Holders	5505-000551	GSW162	(1) Utilis or PCM	1:1	L32	Adjustable 0-16°, 6,000 Max RPM, Requires coolant kit Art. 876-613-80 for internal coolant capability with PCM coolant whirling ring, 6,7,9,12 insert Utilis ring, 15mm from Z0
			GDF-1207-L	(4) Ø0.75in		A32	4 Position 3/4" Ø Sleeves
		5505-000346	GDF1501-IK	(3) Ø1.0in		A32	Intern coolant-thru with max pressure 100 bar, External coolant-thru with max pressure 200 bar, Gang tools U30B - T10
		5505-000358	GDF-1501-II	(3) Ø1inch		A32, L32	Holds 3 Ø1inch sleeves, Position T06-T09
Sub Spindle	Cross Drilling & Milling	5505-000359	GDF-1601-L	(3) Ø1inch		L32	Holds 3 Ø1inch sleeves, Position T10, U30B, and U32B
		5505-000261	GSC-1110	(1) ER16	1:1	L32	
		5505-000496	GSC1110-L	(1) ER16	1:1	L32	Length 70mm
		5505-000285	GSC-1110-4X	(1) ER08	1:3.8	L32	High Speed, Up to 30,000 RPM
		5505-000329	GSC-1113	(1) ER20	1:1	L32	
		5505-000400	GSC-1310-HP-II	(1) ER16	1:1	L32	High Pressure Coolant-Thru, Max Pressure 137 Bar, G1/8 Fitting
		5505-000436	BSC-210	(1) ER16	1:1	L32	
		5505-000390	BSC-1330	(1) ER16	1:1	L32	Requires 2 Tool Positions
	Slitting Saw	5505-000437	BSC-2330	(1) ER11 (1) ER16	1:1	L32	Requires 2 Tool Positions
		5505-000385	BSS-1530	(1) ER16	5:3	A32	Max tool Ø 80mm, Width 3mm

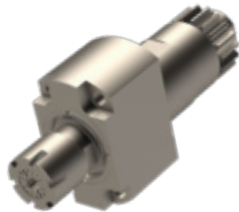
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Citizen A32-VII & L32-VIII, X, XII

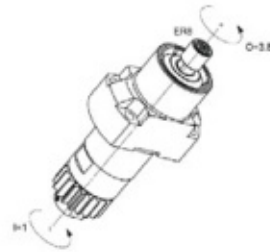
Gang Slide



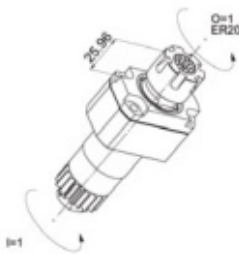
GSC-1110
Cross Drill/Mill
Collet Size: ER16
Output: 1:1
A32
L32



GSC-1110-L
Cross Drill/Mill
Collet Size: ER16
Output: 1:1
Length 70mm
A32
L32



GSC-1110-4X
Cross Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed,
Up to 30,000 RPMs
A32
L32



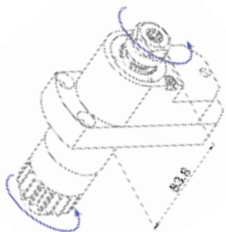
GSC-1113
Cross Drill/Mill
Collet Size: ER20
Output: 1:1
A32
L32



BSC-210
Cross Drill/Mill
Collet Size: ER16
Output: 1:1
A32
L32



BSC-610-3X
Cross Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed,
A32
L32



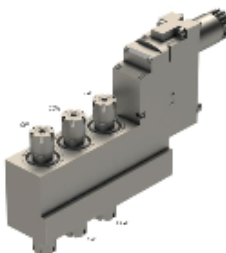
BSC-610-L-3X
Cross Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed,
Long Version
Added bearing
For strength
A32
L32



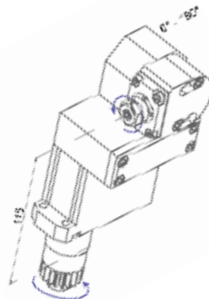
MSC810
Cross Drill/Mill
Collet Size: ER16
Output: 1:1
Double Ended
L32X, XII



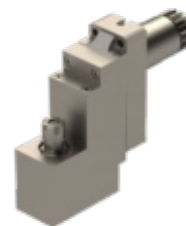
GSA-1510
Angled Drill/Mill
Collet Size: ER16
Output: 1:1
Adjustable 0-30°,
Requires 2 tool
positions
A32
L32



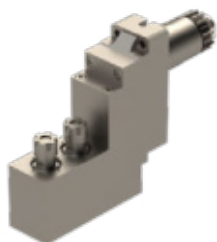
BSA-2010
Angled Drill/Mill
Collet Size: ER16
Output: 1:1
Adjustable 0-21°
Interferes with adjacent
tooling position when
used at angle
A32
L32



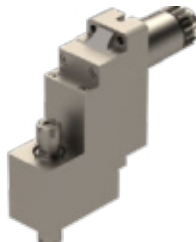
BSA-3107
Angled Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable 0-180°
Crashes with U150B/U151B
when working with tool
position T11 and T12
A32



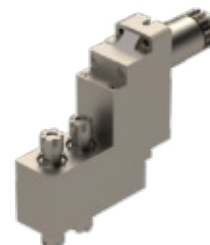
BSE107
End Drill/Mill
Collet Size: ER11
Output: 1:1
A32
L32



BSE207-II
End Drill/Mill
Collet Size: ER11
Output: 1:1
A32
L32



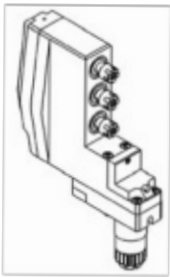
BSE1007-II
End Drill/Mill
Collet Size: ER11
Output: 1:1
Double Ended
Holds 2 tools
A32
L32



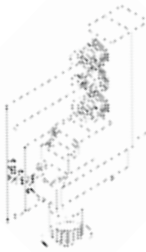
BSE2007-II
End Drill/Mill
Collet Size: ER11
Output: 1:1
Double Ended
Holds 4 tools
A32
L32

Citizen A32-VII & L32-VIII, X, XII

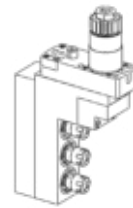
Gang Slide



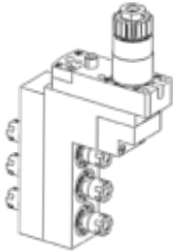
**BSE3007-IK-3X
End Drill/Mill**
Collet Size: ER11
Output: 1:1 & 1:3
Up to 18,000 RPM
1 tool @ 1:1, 2 tools @ 1:3
Internal cooling at 120 bar
A32
L32



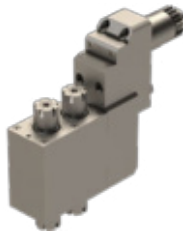
**BSE-3106
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Spindle positions rotate
in alternating directions
A32
L32



**BSE3107-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1
A32
L32



**BSE3206-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Double ended
A32
L32



**BSE-3207
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Double ended
Spindles positions rotate
in same direction
A32
L32



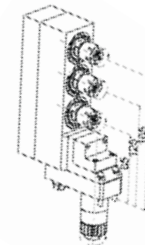
**BSE-3207-III
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Spindle positions rotate in
alternating directions
A32
L32



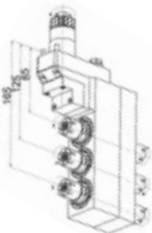
**BSE-3208-II
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice positions on
spindle rotate in
same direction
A32



**BSE-3208-III
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Spindle positions rotate
in alternating directions
A32



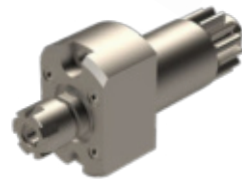
**BSE-3209
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice positions on
spindle rotate in
alternating directions
A32
L32



**BSE-3210
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice positions on
spindle rotate in
alternating directions
A32
L32



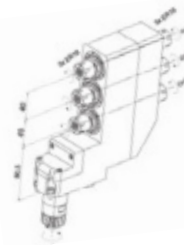
**GSE-3307-3X
End Drill/Mill**
Collet Size: ER08
Output: 1:3
High speed
A32



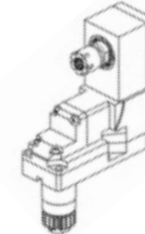
**GSE-3307-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1
A32



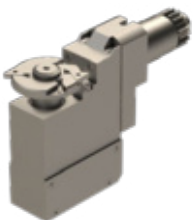
**GSE-1710
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice positions on
spindle rotate in
alternating directions
A32



**GSE-1710-2X
End Drill/Mill**
Collet Size: ER16
Output: 1:2
High Speed
Notice positions on
spindle rotate in
alternating directions
A32



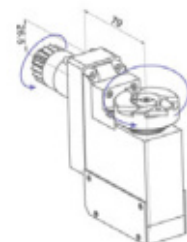
**GSE1910
End Drill/Mill**
Collet Size: ER16
Output: 1:1
A32
L32



**BSP-509
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1:1
Max Tool Ø 60mm
A32
L32



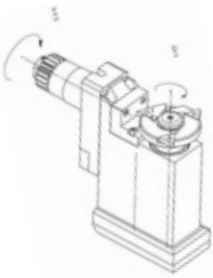
**BSP-510
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1:1
Max Tool Ø 60mm
Tool Thickness 15mm
A32
L32



**BSP-511
Polygon Milling**
Tool ID Size: Ø10mm
Output: 1:1
Max Tool Ø 55mm
A32
L32

CONTINUED ON NEXT PAGE

Citizen A32-VII & L32-VIII, X, XII



**BSP-513
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1.5:1
Max Tool Ø 72mm
Tool Thickness 8.3mm
A32
L32



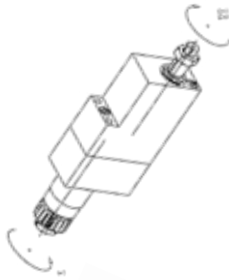
**BSP516
Polygon Milling**
Tool ID Size: Ø16mm
Output: 1.5:1
Max Tool Ø 72mm
Tool Thickness 8.3mm
A32
L32



**RSP-013
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1:1
Max Tool Ø 72mm
Tool Thickness 8.3mm
A32
L32



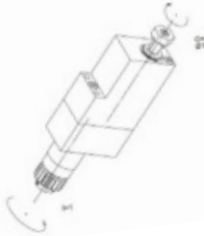
**GSS-1307-DEC
Slitting Saw**
Arbor Size: Ø16mm
Output: 1:1
Max Tool Ø 63mm
Tool Thickness 6mm
A32
L32



**GSS1335-DEC
Slitting Saw**
Arbor Size: Ø13mm
Output: 1:1
Max Tool Ø 58mm
Tool Thickness 15mm
A32
L32



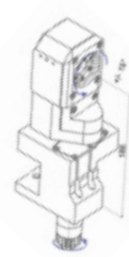
**GSS15835-DEC
Slitting Saw**
Arbor Size: Ø15.875mm
Output: 1:1
Max Tool Ø 63mm
Tool Thickness 8mm
A32
L32



**GSS1035-DEC
Slitting Saw**
Arbor Size: Ø10mm
Output: 1:1
A32
L32



**BSW-315
Thread Whirling**
Ring: Utilis
Output: 1:1
9 or 12 insert cutter,
Flight Ø12, Requires
removal of the 4-position
ID tool Block, Utilis ring
#137578
A32



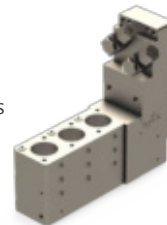
**BSW-315-II
Thread Whirling**
Ring: Utilis
Output: 1:1
9 or 12 insert cutter,
Flight Ø12, T07 blocked,
Position T08 can only be
used with Ø25x52mm
in position, Utilis ring
#137578
A32



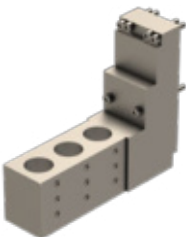
**GSW162
Thread Whirling**
Ring: PCM
Output: 1:1
Adjustable ±30°,
Requires coolant kit
internal cooling ap:
with PCM coolant v
ing ring.
A32



**GDF-1207-L
Tool Holder**
Tool Size: Ø3/4in
4 Position Ø3/4in Sleeves
A32



**GDF-1501-IK
Tool Holder**
Tool Size: Ø1in
3 Position Ø1in Sleeves,
Internal coolant-thru max
pressure 150bar,
External coolant-thru max
pressure 200 bar,
Gang tools U30B-T10
A32



**GDF-1501-II
Tool Holder**
Tool Size: Ø1in
3 Position Ø1in Sleeves,
Position T06-T09
A32
L32



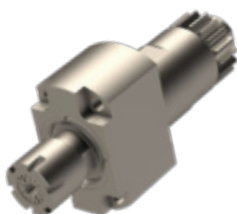
**GDF-1601-L
Tool Holder**
Tool Size: Ø1in
3 Position Ø1in Sleeves,
Position T10, U30B, and
U32B
L32

Citizen A32-VII & L32-VIII, X, XII

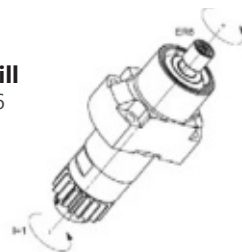
Sub Spindle



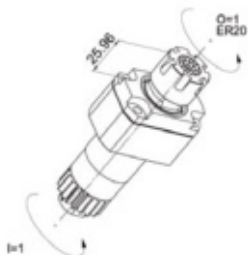
**GSC-1110
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
L32



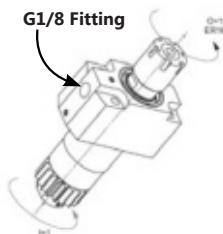
**GSC-1110-L
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Length 70mm
L32



**GSC-1110-4X
Cross Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High Speed,
Up to 30,000 RPMs
L32



**GSC-1113
Cross Drill/Mill**
Collet Size: ER20
Output: 1:1
L32



**GSC-1310-HP-II
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
High Pressure
Coolant-Thru
Max Pressure
137 Bar
G1/8 Fitting
L32



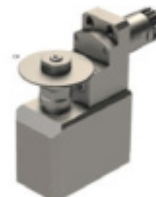
**BSC-210
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
L32



**BSC-1330
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Requires 2 Tool Positions
L32



**BSC-2330
Cross Drill/Mill**
Collet Size: ER11, ER16
Output: 1:1
Requires 2 Tool Positions
L32



**BSS-1530
Slitting Saw**
Arbor Size: ER16
Output: 5:3
Max Tool Ø: 80mm
Max Tool Thickness: 3mm
A32

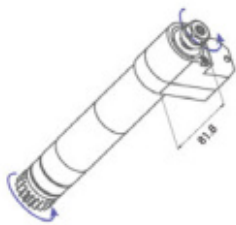
Citizen L₆32

(Machine's Live Tooling 3,000 - 4,500 RPM Rating)

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling / Milling	5505-000291	GSC-510-L-3X	(1) ER11	1:3	3X High speed
		5505-000281	GSC-510-4X	(1) ER08	1:3.8	4X High speed
	Angled Drilling / Milling	5505-000235	GSA107	(1) ER11	1:1	Adjustable 0-180°
		5505-000125	GSE-306-SE312	(1) ER11	1:3	
	End Drilling / Milling	5505-000123	GSE-306-DE312	(2) ER11	1:3	Double ended
		5505-000124	GSE-306-L-520	(1) ER11	1:1	
		5505-000274	GSE-306-DE011	(2) ER11	1:1	Double ended
		5505-000510	GSE-316-GS	(1) ER16	1:1	
	Slitting Saw	5505-000134	GSS-510	(1) Ø16	2:1	
	Tool Holder	5505-000250	GDF903	(1) Ø25.4		1" Sleeve holder
		5505-000424	852-354-OF-010	(1) Ø25		High speed spindle holder

Citizen Cincom L₆32

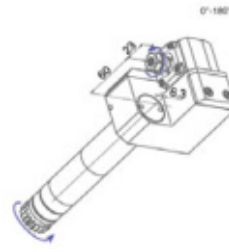
Gang Slide



GSC-510-L-3X
Cross Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed
L₆32



GSC-510-4X
Cross Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed
L₆32



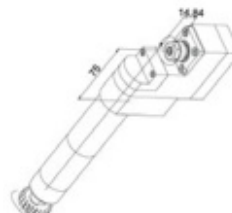
GSA107
Angled Drill/Mill
Collet Size: ER11
Output: 1:1
Adjustable 0-180°
L₆32



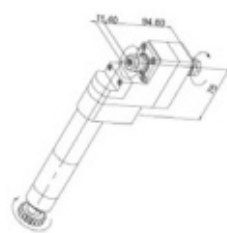
GSE-306-SE312
End Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed
L₆32



GSE-306-DE312
End Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed
Double Ended
L₆32



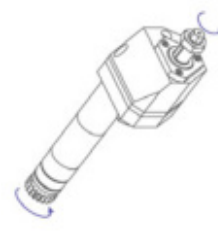
GSE-306-L-520
End Drill/Mill
Collet Size: ER11
Output: 1:1
L₆32



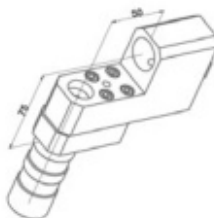
GSE-306-DE011
End Drill/Mill
Collet Size: ER11
Output: 1:1
Double Ended
L₆32



GSE-316-GS
End Drill/Mill
Collet Size: ER16
Output: 1:1
L₆32



GSS-510
Slitting Saw
Arbor Size: Ø16mm
Output: 2:1
L₆32



GDF903
Tool Holder
Tool Size: Ø25.4mm
Output: 1:3
1in Sleeve Holder
L₆32



852-354-OF-010
Tool Holder
Tool Size: Ø25mm
High Speed Spindle
Holder
L₆32

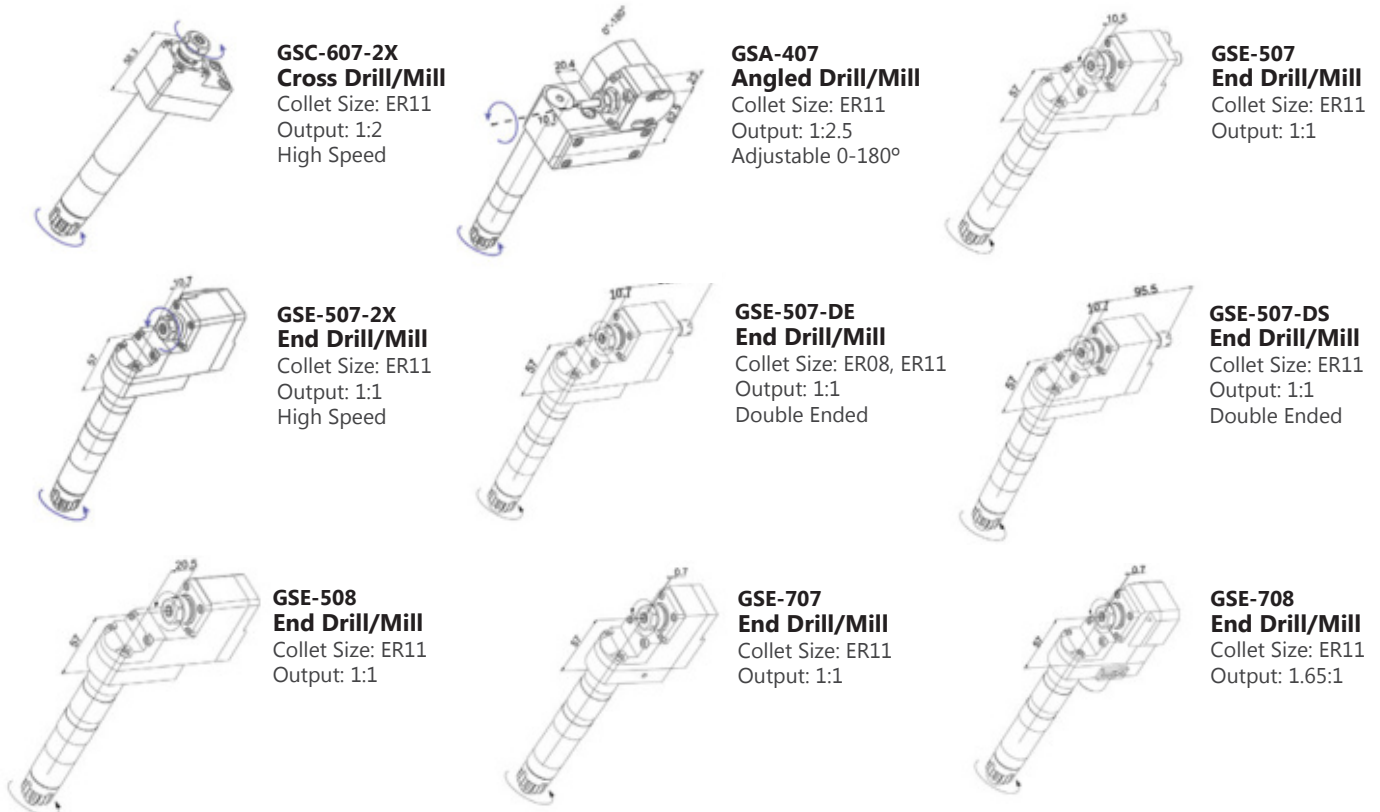
Citizen M₂12/16 & M₃12/16

Gang Slide Attachments

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling / Milling	5505-000120	GSC-607-2X	(1) ER11	1:2	High speed up to 16,928 RPM
	Angled Drilling / Milling	5505-000203	GSA-407	(1) ER11	1:2.5	Adjustable 0-180°, Up to 20,000 RPM
	End Drilling / Milling	5505-000126	GSE-507	(1) ER11	1:1	
		5505-000127	GSE-507-2X	(1) ER11	1:2	2X High Speed
		5505-000128	GSE-507-DE	(1) ER11 (1) ER08	1:1	Double Ended
		5505-000524	GSE-507-DS	(2) ER11	1:1	Double Ended
		5505-000525	GSE-508	(1) ER11	1:1	
		5505-000129	GSE-707	(1) ER11	1:1	
		5505-000527	GSE-708	(1) ER11	1.65:1	
		5505-000620	MSE607	(3) ER11	1:1	
	Polygon Milling	5505-000526	GSE-509	(1) Ø10	1.6:1	
	Slitting Saw	5505-000133	GSS-250	(1) Ø16	2:1	Max tool size: 50mm, Needs 2 positions
		5505-000545	GSS-250-13	(1) Ø13	2:1	Max tool size: 50mm, Needs 2 positions
	Whirling	5505-000205	LSW-424	(1) Utilis	1:1	9, or 12 Insert Cutter, Adjustable ±10°, 12mm flight circle
		5505-000320	LSW-424-II	(1) Utilis	1:1	9, or 12 Insert Cutter, Adjustable ±15°, 12mm flight circle
	Static Tool Holder	5505-000113	GDF901	(1) Ø3/4in		
		5505-000485	GDF901-HF	(1) Ø25		High speed spindle holder
		5505-000486	GDF901-HF19	(1) Ø3/4in		High speed spindle holder
		5505-000487	GDF901-HF20	(1) Ø20mm		High speed spindle holder
		5505-000488	GDF901-HF22	(1) Ø22mm		High speed spindle holder
		5505-000489	GDF902	(2) Ø3/4in		

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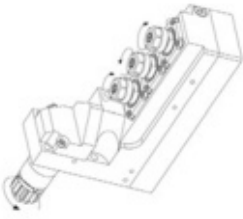
Gang Slide



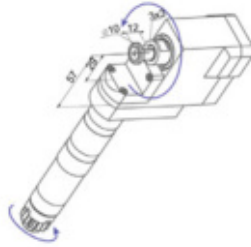
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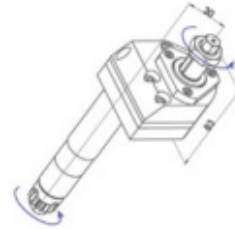
Gang Slide



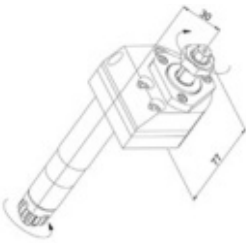
**MSE-607
End Drill/Mill**
Collet Size: ER11
Output: 1:1



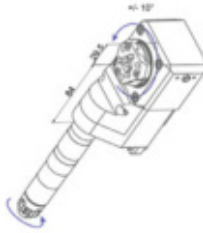
**GSE-509
Polygon Milling**
ID Size: Ø10mm
Output: 1.6:1



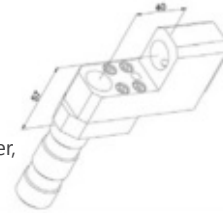
**GSS-250
Slitting Saw**
Arbor Size: Ø16mm
Output: 2:1



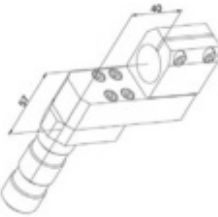
**GSS-250-13
Slitting Saw**
Arbor Size: Ø13mm
Output: 2:1



**LSW-424
Thread Whirling**
Ring: Utilis
Output: 1:1
3, 9, or 12 insert cutter,
Adjustable ±10°



**GDF-901
Tool Holder**
Tool Size: Ø19.05mm



**GDF901-HF
Tool Holder**
Tool Size: Ø25mm
For Broach Holders



**GDF901-HF19
Tool Holder**
Tool Size: Ø3/4in
For Broach Holders



**GDF901-HF20
Tool Holder**
Tool Size: Ø20mm
For Broach Holders



**GDF901-HF22
Tool Holder**
Tool Size: Ø22mm
For Broach Holders



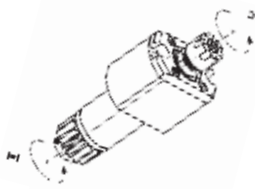
**GDF902
Tool Holder**
Tool Size: Ø3/4in

Citizen M₄12/16

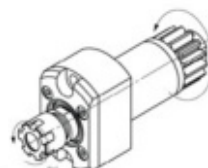
Gang Slide Attachments

Position	Operation	Item No.	Description	(#Tools)Size	Input:Output	Other
Gang Slide	Cross Drilling / Milling	5505-000292	MSC-507-L	(1) ER11	1:1	Long version
		5505-000254	MSC-507-II	(1) ER11	1:1	
		5505-000608	MSC-507-2X	(1) ER11	1:2	High speed up to 20,000 RPM
		5505-000294	MSC-507-4X	(1) ER08	1:3.8	High speed up to 38,000 RPM
		5505-000376	MSC512	(1) ER16	1:1	
		5505-000330	MSC-513	(1) ER20	1:1	
	Angled Drilling / Milling	5505-000494	GSA-607	(3) ER11	1:1	Adjustable ±30°, External cooling, Requires 2 tool positions
	End Drilling / Milling	5505-000620	MSE-607	(3) ER11	1:1	External cooling, requires B-Axis
		5505-000621	MSE-707	(8) ER11	1:1	External cooling, requires B-Axis
	Slitting Saw	5505-000546	GSS507	(1) Ø13mm	1:1	Max tool Ø50mm, Width 6mm
		5505-000547	GSS507-08	(1) Ø8mm	1:1	Max tool Ø50mm, Width 3mm
		5505-000548	GSS507-10	(1) Ø10mm	1:1	Max tool Ø50mm, Width 3mm
		5505-000343	GSS610	(1) Ø10mm	1:1	Max tool Ø40mm, Width 4.5mm
	Polygon Milling	5505-000529	GSF-080	(1) Ø8mm	1:1	Max tool Ø58mm, Width 3mm
	Whirling	5505-000593	LSW-420	(1) Utilis or PCM	1:1	Adjustable 0-16°, 8,000 Max RPM, Requires coolant kit Art. 876-635-80 for internal coolant capability with PCM coolant whirling ring, 6,7,9, or 12 Insert Utilis ring
		5505-000323	GSW-251	(1) Utilis	1:1	9 Insert Cutter, 8mm Flight Ø, Adjustable ±25°
		5505-000554	GSW-261	(1) Utilis	1:1	9 Insert Cutter, 8mm Flight Ø, Adjustable ±25°, Requires B-Axis
	Tool Holders	5505-000490	GDF902-19	(2) Ø3/4in		
		5505-000601	MEU107	(1) Ø10mm H7		Internal cooling with max pressure 80 bar, Requires B-Axis
	Tool Posts	5505-000430	864-615-OF190	(5) Ø3/4in		Internal & external cooling with max pressure 100 bar

Gang Slide



**MSC-507-L
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1



**MSC-507-II
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1



**MSC-507-2X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:2
High Speed



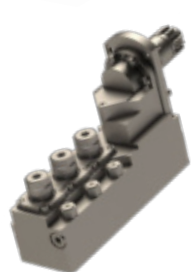
**MSC-507-4X
Cross Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High Speed



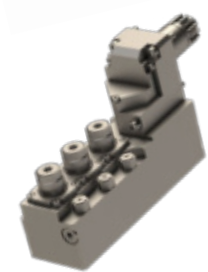
**MSC512
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1



**MSC-513
Cross Drill/Mill**
Collet Size: ER20
Output: 1:1



**GSA-607
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 30°,
External cooling,
Requires 2 positions



**MSE-607
End Drill/Mill**
Collet Size: ER11
Output: 1:1
External cooling,
Requires B-Axis



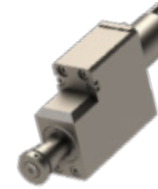
**MSE-707
End Drill/Mill**
Collet Size: ER11
Output: 1:1
External cooling,
Requires B-Axis



**GSS507
Slitting Saw**
Arbor Size: Ø13mm
Output: 1:1
Max Tool Ø 50mm
Tool Thickness 6mm



**GSS507-08
Slitting Saw**
Arbor Size: Ø8mm
Output: 1:1
Max Tool Ø 50mm
Tool Thickness 3mm



**GSS507-10
Slitting Saw**
Arbor Size: Ø10mm
Output: 1:1
Max Tool Ø 50mm
Tool Thickness 3mm

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Gang Slide



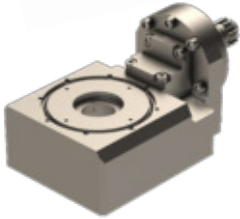
**GSS610
Slitting Saw**
Saw ID: 10mm
Output: 1:1
Max Tool Ø40mm
Max Width 4.5mm



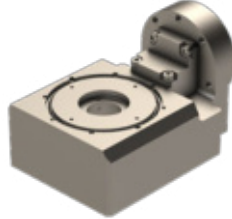
**GSF-080
Polygon Milling**
Tool ID Size: Ø8mm
Output: 1:1
Max Tool Ø 58mm
Max Width 3mm



**LSW-420
Thread Whirling**
Ring: Utilis or PCM
Output: 1:1
6,7,9, or 12 insert cutter,
Adjustable 0-16°



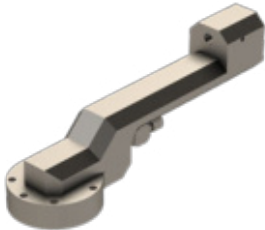
**GSW-251
Thread Whirling**
Ring: Utilis
Output: 1:1
9 insert cutter,
8mm flight Ø,
Adjustable ±25°



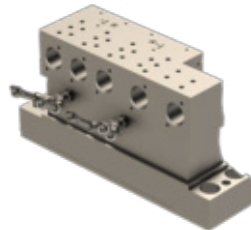
**GSW-261
Thread Whirling**
Ring: Utilis
Output: 1:1
9 insert cutter,
8mm flight Ø,
Adjustable ±25°,
Requires B-Axis



**GDF902-19
Tool Holder**
Tool Size: Ø3/4in



**MEU107
Tool Holder**
Tool Size: Ø10mm H7
Internal cooling,
Requires B-Axis



**864-615-OF190
Tool Post**
Tool Size: Ø3/4in
Internal cooling,
External cooling

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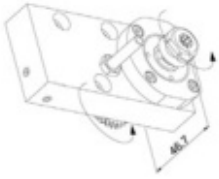
Turret Attachments

Operation	Item No.	Description	(#Tools) Size	Output	Coolant- Thru	Other
Cross Drilling / Milling	5505-000165	MSC-106-K	(1) ER11	1:1	Yes	External cooling, 33mm drill depth
	5505-000166	MSC-106-2X	(1) ER11	1:2	Yes	High speed up to 12,000 RPM
	5505-000605	MSC-110-K	(1) ER16	1:1	Yes	External cooling, Internal nut
	5505-000606	MSC-407	(2) ER11	1:1		Requires Y-axis
	5505-000607	MSC-407-3	(3) ER11	1:1		Requires Y-axis
Angled Drilling / Milling	5505-000163	MSA-103	(1) ER11	1:1		Adjustable 0-30°
	5505-000603	MSA-106	(1) ER16	1:1		Fixed at 6°
	5505-000164	MSA-203	(1) ER11	1:1		Adjustable 30-60°
	5505-000604	MSA-303	(1) ER11	1:1		Adjustable 55-90°
	5505-000625	MSF-130-ER	(1) ER11	1:1		Adjustable ±20°, Requires Y-Axis
End Drilling / Milling	5505-000615	MSE-106-K	(1) ER11	1:1	Yes	External cooling
	5505-000338	MSE106-KM-II	(1) ER11	1:1	Yes	External cooling
	5505-000349	MSE106KM2X-II	(1) ER11	1:2	Yes	High speed up to 12,000 RPM, External cooling, Drill depth 20mm
	5505-000612	MSE-106-2X	(1) ER11	1:2	Yes	High speed up to 12,000 RPM, External cooling
	5505-000613	MSE-106-3X	(1) ER11	1:3	Yes	High speed up to 18,000 RPM, External cooling
	5505-000267	MSE-106-KAI	(1) ER11	1:1	Yes	Internal cooling with max pressure 90 bar
	5505-000614	MSE-106-DS	(2) ER11	1:1	Yes	External cooling, Drill depth 20.45mm
	5505-000616	MSE-107-2X	(1) ER11	1:2	Yes	High speed up to 12,000 RPM, Drill depth 10mm
	5505-000169	MSE-306-K	(1) ER11	1:1	Yes	External cooling
	5505-000617	MSE-306-KBL	(1) ER11	1:1	Yes	External cooling
	5505-000618	MSE-403	(1) ER11	1:1	Yes	External cooling, Drill depth 35mm
	5505-000619	MSE403-II	(1) ER11	1:1	Yes	External cooling, Drill depth 40mm
	5505-000624	MSF-130	(1) Ø13mm	1:1		Adjustable ±20°, Max tool size: 59mm
	5505-000252	MSP-106	(1) Ø13mm	1:1		Max tool Ø50mm, Width 15mm
	5505-000645	MSP-130	(1) Ø13mm	1:3		High speed up to 18,000 RPM, Max tool size: 58mm
Polygon Milling	5505-000646	MSP-160	(1) Ø16mm	1:3		High speed up to 18,000 RPM, Max tool size: 58mm
	5505-000626	MSH110-035	(1) Ø3.5mm	1:1	Yes	External cooling, Max tool Ø10mm, Width 4-6mm, Adjustable ±10°
	5505-000627	MSH110-080	(1) Ø8.0mm	1:1	Yes	External cooling, Max tool Ø24mm, Width 16mm, Adjustable ±10°, Offset 9mm
	5505-000628	MSH-132-S-035	(1) Ø3.5mm	3:1		Max tool Ø16mm, Width 10mm, Adjustable ±10°, Offset 15mm
	5505-000629	MSH-132-S-080	(1) Ø8mm	3:1		Max tool Ø16mm, Width 10mm, Adjustable ±10°, Offset 15mm
Hobbing	5505-000303	MSH-132-08	(1) Ø8mm	3:1		Max tool Ø24mm, Width 16mm, Adjustable ±3°
	5505-000304	MSH-132-10	(1) Ø10mm	3:1		Max tool Ø32mm, Width 30mm, Adjustable ±3°
	5505-000630	MSH-133-035	(1) Ø3.5mm	1:0.762		Max tool Ø10mm, Width 6mm, Adjustable ±10°, Offset 15mm
	5505-000631	MSH-133-050	(1) Ø5mm	1:0.762		Max tool Ø12mm, Width 8mm, Adjustable ±10°, Offset 15mm
	5505-000633	MSH-134-035	(1) Ø3.5mm	1:0.846		Max tool Ø10mm, Width 6mm, Adjustable ±10°, Offset 15mm
	5505-000634	MSH-134-050	(1) Ø5mm	1:0.846		Max tool Ø12mm, Width 8mm, Adjustable ±10°, Offset 15mm
	5505-000635	MSH-134-080	(1) Ø8mm	1:0.846		Max tool Ø24mm, Width 16mm, Adjustable ±10°, Offset 15mm
	5505-000632	MSH-133-080	(1) Ø8mm	1:0.762		Max tool Ø24mm, Width 16mm, Adjustable ±10°, Offset 15mm
	5505-000636	MSH210-035	(1) Ø3.5mm	13:11	Yes	External Cooling, Max tool Ø10mm, Width 6mm, Adjustable 0-10°, Offset 9mm
	5505-000637	MSH210-045	(1) Ø4.5mm	13:11	Yes	External Cooling, Max tool Ø12mm, Width 8mm, Adjustable 0-10°, Offset 9mm
	5505-000638	MSH210-080	(1) Ø8mm	13:11	Yes	External Cooling, Max tool Ø24mm, Width 16mm, Adjustable 0-10°, Offset 9mm
	5505-000639	MSH310-035	(1) Ø3.5mm	13:11	Yes	External Cooling, Max tool Ø10mm, Width 6mm, Adjustable 0-10°, Offset 9mm, Belt driven
	5505-000640	MSH310-045	(1) Ø4.5mm	13:11	Yes	External Cooling, Max tool Ø12mm, Width 8mm, Adjustable 0-10°, Offset 9mm, Belt Driven
	5505-000641	MSH310-080	(1) Ø8mm	13:11	Yes	External Cooling, Max tool Ø24mm, Width 16mm, Adjustable 0-10°, Offset 9mm, Belt Driven
	5505-000642	MSH-432-35	(1) Ø3.5mm	1:1		Max tool Ø10mm, Width 6mm, Adjustable ±3°
	5505-000673	VDF-101	(1) Ø3/4in		Yes	Internal cooling with max pressure 150 bar, Max drill depth 20mm
	5505-000174	VDF-101-R-S	(1) Ø3/4in			Adjustable, Max drill depth 20mm
	5505-000266	VDF-201	(1) Ø3/4in		Yes	Internal cooling with max pressure 150 bar, Max drill depth 34mm
	5505-000363	VDF-205-HP	(1) Ø3/4in		Yes	Internal cooling with max pressure 100 bar, Max drill depth 58mm
	5505-000332	VDF-206-HP	(1) Ø3/4in		Yes	Internal & external cooling with max pressure 100 bar, Max drill depth 28mm
	5505-000178	VDF-401	(2) Ø3/4in			
	5505-000674	VDF-401-AR	(2) Ø3/4in		Yes	Internal cooling
	5505-000297	VDF-401-HP	(2) Ø3/4in		Yes	Internal & external cooling with max pressure 150 bar
	5505-000179	VDF-501	(1) Ø3/4in			
Static Tool Holders	5505-000300	VDF701-AR	(3) Ø3/4in		Yes	Internal cooling, Requires Y-Axis
	5505-000676	VDF701-HP	(3) Ø3/4in		Yes	Internal cooling with max pressure 150 bar, Requires Y-Axis
	5505-000299	VDF701-IK	(3) Ø3/4in		Yes	Internal cooling with max pressure 150 bar, Coolant can be enabled/disabled independently for each tool, Requires Y-axis
	5505-000598	MDF-107	(3) Ø19mm			For high speed spindle
	5505-000599	MDF-107-HFN	(3) Ø22mm			For high speed spindle
	5505-000600	MDF107-IK	(3) Ø19mm			High frequency spindle holder, Internal cooling max pressure 200 bar, External cooling max pressure 100 bar
	5505-000345	VTF110-AR	(1) 12x12mm		Yes	External cooling with max pressure 150 bar, Holds OD turning tools
	5505-000248	VTF1510	(2) 10x10mm		Yes	External cooling with max pressure 150 bar, Holds OD turning tools, Requires Y-Axis
	5505-000677	VTF1510-D	(4) 10x10mm		Yes	External cooling with max pressure 150 bar, Holds OD turning tools, Requires Y-Axis
	5505-000181	792-VTF110-R-HP	(1) 1/2in		Yes	1/2in square shank, External coolant-thru with max pressure 150 bar
Whirling	5505-000206	MSW-101	(1) Utilis	2:1		9, or 12 insert Utilis ring, Adjustable ±10°
	5505-000647	MSW-102	(1) Utilis	1:1		6,7,9, or 12 insert Utilis ring, Adjustable ±16°

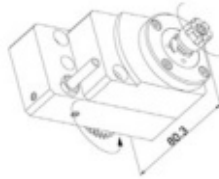
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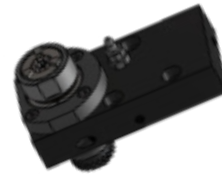
Turret



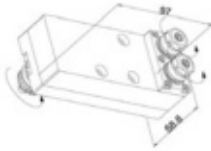
**MSC-106-K
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru



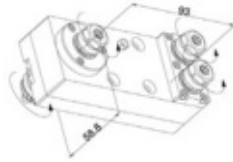
**MSC-106-2X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:2
Coolant-Thru
High Speed



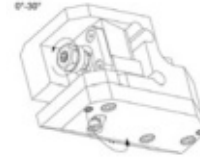
**MSC110-K
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Coolant-Thru,
Internal nut



**MSC-407
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
Requires Y-Axis



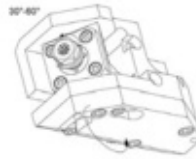
**MSC-407-3
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
Requires Y-Axis



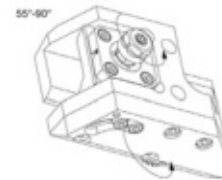
**MSA-103
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 0-30°



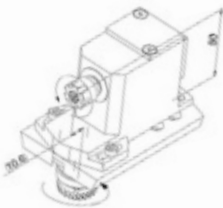
**MSA-106
Angled Drill/Mill**
Collet Size: ER16
Output: 1:1
Fixed at 6°



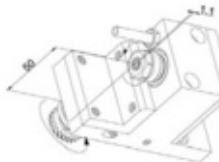
**MSA-203
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 30-60°



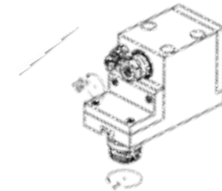
**MSA-303
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 55-90°



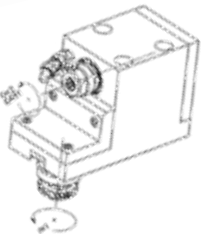
**MSF-130-ER
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable ±20°,
Requires Y-Axis



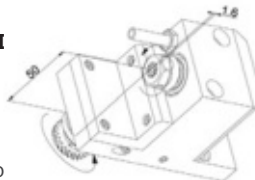
**MSE-106-K
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru



**MSE106-KM-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru



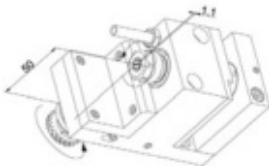
**MSE106KM2X-II
End Drill/Mill**
Collet Size: ER11
Output: 1:2
Coolant-Thru
High speed up to
12,000 RPM



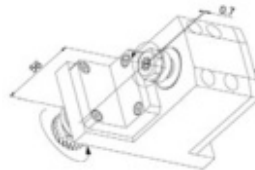
**MSE-106-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2
Coolant-Thru
High speed up to
12,000 RPM



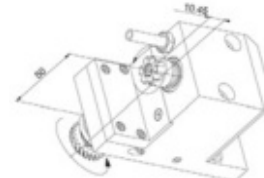
**MSE-106-3X
End Drill/Mill**
Collet Size: ER11
Output: 1:2
Coolant-Thru
High speed up to
18,000 RPM



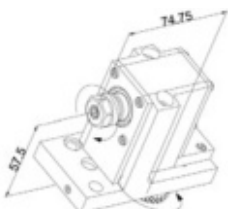
**MSE-106-KAI
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru



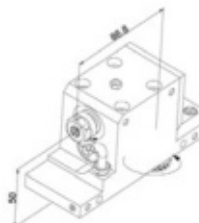
**MSE-106-DS
End Drill/Mill**
Collet Size: ER11
Output: 1:1



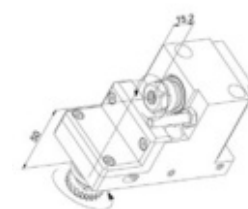
**MSE-107-2X
End Drill/Mill**
Collet Size: ER11
Output: 1:2
Coolant-Thru
High speed up to
12,000 RPM
Drill depth 10mm



**MSE-306-K
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru



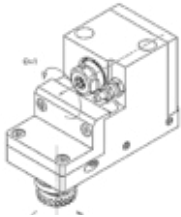
**MSE-306-KBL
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru



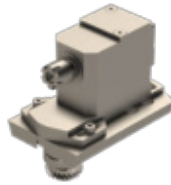
**MSE-403
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru
Drill depth 35mm

Citizen Cincom M12 & M16

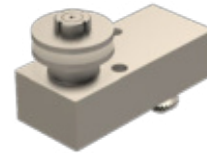
Turret



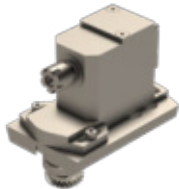
**MSE403-II
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Coolant-Thru
Drill depth 40mm



**MSF-130
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1:1
Max Tool Ø 59mm,
Adjustable $\pm 20^\circ$



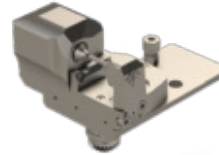
**MSP-106
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1:1
Max Tool Ø 50mm
Max Width 15mm



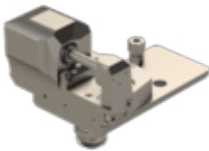
**MSP-130
Polygon Milling**
Tool ID Size: Ø13mm
Output: 1:3
Max Tool Ø 58mm
High speed up to
18,000 RPM



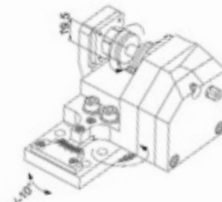
**MSP-160
Polygon Milling**
ID Size: Ø16mm
Output: 1:3
Max Tool Ø 58mm,
High speed up to
18,000 RPM



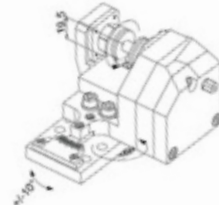
**MSH110-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1:1
Coolant-thru
Hobb OD: Ø10mm
Hobb Width: 6mm
Adjustable $\pm 10^\circ$



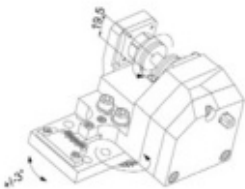
**MSH110-080
Gear Hobbing**
ID Size: Ø8mm
Output: 1:1
Coolant-thru
Hobb OD: Ø24mm
Hobb Width: 16mm
Adjustable $\pm 10^\circ$



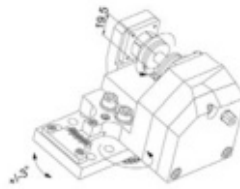
**MSH-132-S-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 3:1
Hobb OD: Ø16mm
Hobb Width: 10mm
Adjustable $\pm 10^\circ$



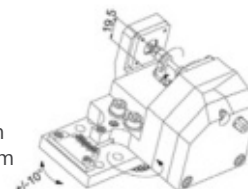
**MSH-132-S-080
Gear Hobbing**
ID Size: Ø8mm
Output: 3:1
Hobb OD: Ø16mm
Hobb Width: 10mm
Adjustable $\pm 10^\circ$



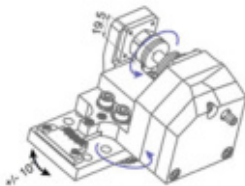
**MSH-132-08
Gear Hobbing**
ID Size: Ø8mm
Output: 3:1
Hobb OD: Ø24mm
Hobb Width: 16mm
Adjustable $\pm 3^\circ$



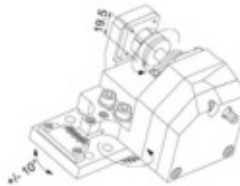
**MSH-132-10
Gear Hobbing**
ID Size: Ø10mm
Output: 3:1
Hobb OD: Ø32mm
Hobb Width: 30mm
Adjustable $\pm 3^\circ$



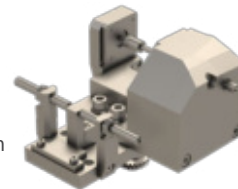
**MSH-133-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1:0.762
Hobb OD: Ø10mm
Hobb Width: 6mm
Adjustable $\pm 10^\circ$



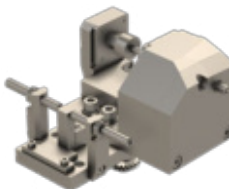
**MSH-133-050
Gear Hobbing**
ID Size: Ø05mm
Output: 1:0.762
Hobb OD: Ø12mm
Hobb Width: 8mm
Adjustable $\pm 10^\circ$



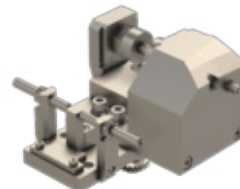
**MSH-133-080
Gear Hobbing**
ID Size: Ø8mm
Output: 1:0.762
Hobb OD: Ø24mm
Hobb Width: 16mm
Adjustable $\pm 10^\circ$



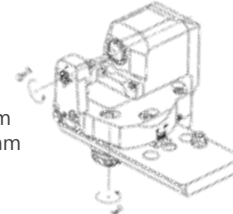
**MSH-134-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1:0.846
Hobb OD: Ø10mm
Hobb Width: 6mm
Adjustable $\pm 10^\circ$



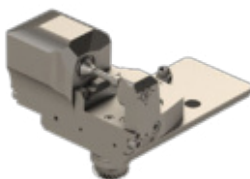
**MSH-134-050
Gear Hobbing**
ID Size: Ø5mm
Output: 1:0.846
Hobb OD: Ø12mm
Hobb Width: 8mm
Adjustable $\pm 10^\circ$



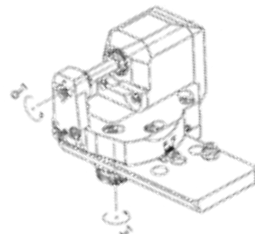
**MSH-134-080
Gear Hobbing**
ID Size: Ø8mm
Output: 1:0.846
Hobb OD: Ø24mm
Hobb Width: 16mm
Adjustable $\pm 10^\circ$



**MSH210-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 13:11
Coolant-thru
Hobb OD: Ø10mm
Hobb Width: 6mm
Adjustable 0-10°



**MSH210-045
Gear Hobbing**
ID Size: Ø4.5mm
Output: 1:0.846
Coolant-thru
Hobb OD: Ø12mm
Hobb Width: 8mm
Adjustable $\pm 10^\circ$



**MSH210-080
Gear Hobbing**
ID Size: Ø8mm
Output: 1:0.846
Coolant-thru
Hobb OD: Ø24mm
Hobb Width: 16mm
Adjustable $\pm 10^\circ$

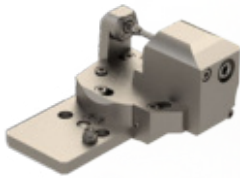


**MSH310-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 13:11
Coolant-thru
Hobb OD: Ø10mm
Hobb Width: 6mm
Adjustable 0-10°
Belt Driven

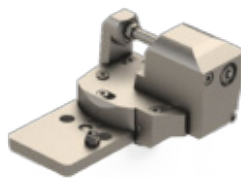
CONTINUED ON NEXT PAGE

Citizen Cincom M12 & M16

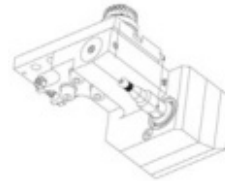
Turret



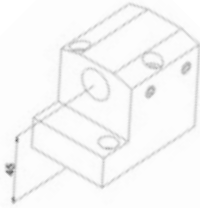
**MSH310-045
Gear Hobbing**
ID Size: Ø4.5mm
Output: 13:11
Coolant-thru
Hobb OD: Ø12mm
Hobb Width: 8mm
Adjustable 0-10°
Belt Driven



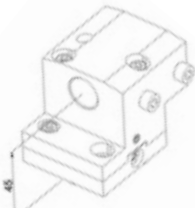
**MSH310-080
Gear Hobbing**
ID Size: Ø8mm
Output: 13:11
Coolant-thru
Hobb OD: Ø24mm
Hobb Width: 16mm
Adjustable 0-10°
Belt Driven



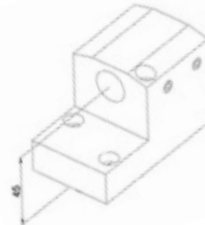
**MSH-432-35
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1:1
Hobb OD: Ø10mm
Hobb Width: 6mm
Adjustable ±3°



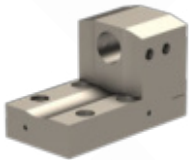
**VDF-101
Tool Holder**
Tool Size: Ø3/4in
Internal cooling
Max drill depth 20mm



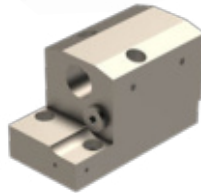
**VDF-101-R-S
Tool Holder**
Tool Size: Ø3/4in
Adjustable,
Max drill depth 20mm



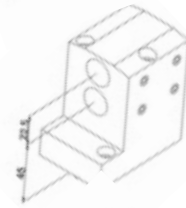
**VDF-201
Tool Holder**
Tool Size: Ø3/4in
Internal cooling
Max 150 bar,
Max drill depth 34mm



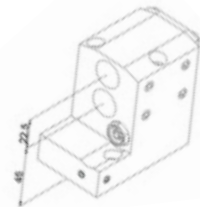
**VDF-205-HP
Tool Holder**
Tool Size: Ø3/4in
Internal cooling
Max 100 bar,
Max drill depth 58mm



**VDF-206-HP
Tool Holder**
Tool Size: Ø3/4in
Internal/External cooling,
Max 100 bar,
Max drill depth 58mm



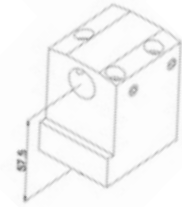
**VDF-401
Tool Holder**
Tool Size: Ø3/4in



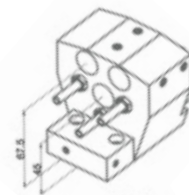
**VDF-401-AR
Tool Holder**
Tool Size: Ø3/4in
Internal cooling



**VDF-401-HP
Tool Holder**
Tool Size: Ø3/4in
Internal/External cooling,
Max 150 bar



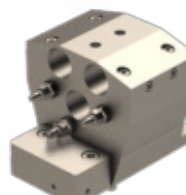
**VDF-501
Tool Holder**
Tool Size: Ø3/4in



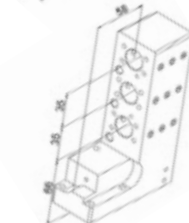
**VDF701-AR
Tool Holder**
Tool Size: Ø3/4in
Internal cooling,
Requires Y-Axis



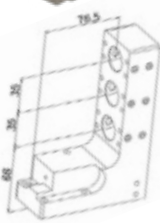
**VDF701-HP
Tool Holder**
Tool Size: Ø3/4in
Internal cooling,
Max 150 bar,
Requires Y-Axis



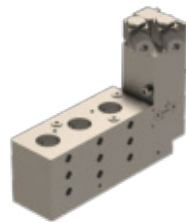
**VDF701-1K
Tool Holder**
Tool Size: Ø3/4in
Internal cooling,
Max 150 bar,
Independent valves,
Requires Y-Axis



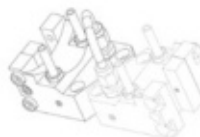
**MDF-107
Tool Holder**
Tool Size: Ø19mm
For High Speed
Spindles



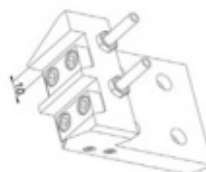
**MDF-107-HFN
Tool Holder**
Tool Size: Ø22mm
For High Speed
Spindles



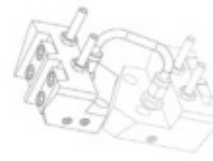
**MDF107-1K
Tool Holder**
Tool Size: Ø19mm
For High Speed
Spindles,
Int cooling 200 bar
Ext cooling 100 bar



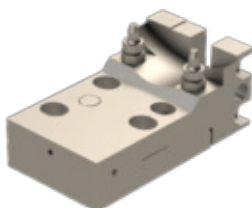
**VTF110-AR
Tool Holder**
Tool Size: 12x12mm
External cooling,
Max 150 bar,
Holds OD turning



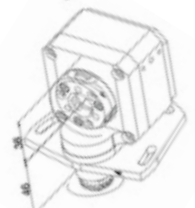
**VTF1510
Tool Holder**
Tool Size: 10x10mm
External cooling,
Max 150 bar,
Holds OD turning
Requires Y-Axis



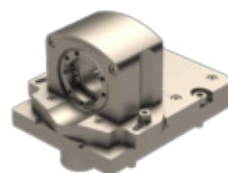
**VTF1510-D
Tool Holder**
Tool Size: 10x10mm
External cooling,
Max 150 bar,
Holds OD turning
Requires Y-Axis



**792-VTF110-R-HP
Tool Holder**
Tool Size: Ø1/2in
1/2in Square shank,
External coolant-thru
max pressure 150 bar



**MSW-101
Thread Whirling**
Ring: Utilis
Output: 2:1
9, or 12 Utilis ring,
Adjustable ±16°



**MSW-102
Thread Whirling**
Ring: Utilis
Output: 1:1
6,7,9, or 12 Utilis ring,
Adjustable ±16°

Citizen M₂₀ & M₃₂

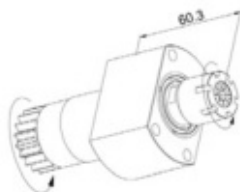
Gang Slide Attachments (Machine's Live Tooling 8,000 RPM Rating)

Operation	Item No.	Description	(#Tools)Size	Output	Other
Cross Drilling / Milling	5505-000435	BSC1107-4X	(1) ER11	1:3.8	High speed up to 30,000 RPM
	5505-000261	GSC-1110	(1) ER16	1:1	Cross or end work
	5505-000285	GSC-1110-4X	(1) ER08	1:3.8	High speed up to 30,000 RPM, For M432
	5505-000496	GSC1110-L	(1) ER16	1:1	Long version
	5505-000329	GSC-1113	(1) ER20	1:1	
Angled Drilling / Milling	5505-000400	GSC1310-HP-II	(1) ER16	1:1	Internal cooling with max pressure 150 bar,
	5505-000353	BSA-2010	(6) ER16	1:1	Adjustable 0-21°, Interferes with adjacent tooling station, Requires 2 tool positions
	5505-000263	GSA1510	(3) ER16	1:1	Adjustable 0-30°
	5505-000412	GSE1504	(3) Ø31mm	1:1	Holds GSC1110, GSC1110-4X, GSC1310-HP spindles, For M432
End Drilling / Milling	5505-000257	GSE1510	(3) ER16	1:1	For backworking
	5505-000361	GSE1510-IK	(3) ER16	1:1	For backworking, Coolant-thru ready
	5505-000445	BSE-3106	(3) ER11	1:1	
	5505-000258	BSE-3207-III	(4) ER16	1:1	Double ended, Spindles rotate in opposite directions to once another
	5505-000367	BSE-3209	(3) ER16	1:1	Spindles rotate in alternating directions
Slitting Saw	5505-000344	BSE-3210	(6) ER16	1:1	Double ended, Spindles rotate in alternating directions
	5505-000362	GSS-1307-DEC	(1) Ø16mm	1:1	Max tool Ø 63mm, Width 6mm
Static Tool Holders	5505-000358	GDF-1501-II	(3) Ø1in		3 Position 1" Ø Sleeves
	5505-000480	GDF1502-IK	(3) Ø3/4in		Int cooling with max pressure 200 bar; Ext cooling with max pressure 100 bar, Independent shutoff valves, For M432
Whirling	5505-000664	R432-OF5xØ25.4-KAI	(5) Ø1in		Internal cooling
	5505-000553	GSW-250	(1) Utilis	3:2	3, 9, or 12 insert Utilis ring, Adjustable 0-25°, 6mm flight circle, Fits manual B-Axis
	5505-000370	GSW-255	(1) Utilis	3:2	3, 9, or 12 insert Utilis ring, Adjustable 0-25°, 6mm flight circle, Fits programmable B-Axis

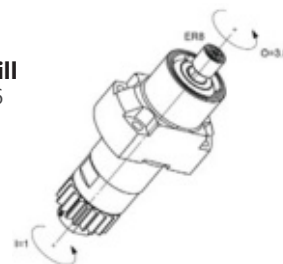
Gang Slide



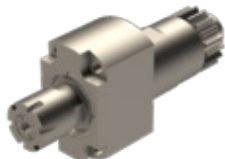
**BSC1107-4X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3.8
High speed up to 30,000 RPM



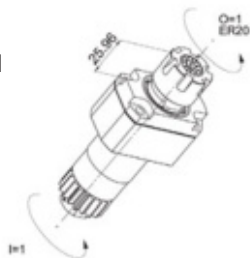
**GSC-1110
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1



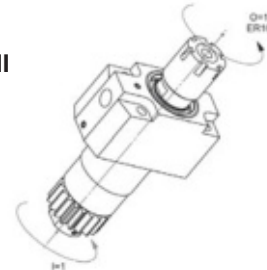
**GSC-1110-4X
Cross Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High speed up to 30,000 RPM



**GSC1110-L
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Long version



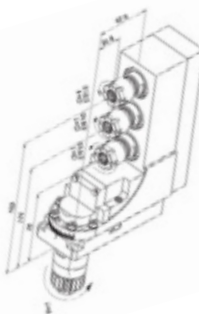
**GSC-1113
Cross Drill/Mill**
Collet Size: ER20
Output: 1:1



**GSC-1310-HP-II
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Internal cooling up to 150 bar



**BSA-2010
Angled Drill/Mill**
Collet Size: ER16
Output: 1:1
Adjustable 0-21°
Interferes with adjacent tooling position



**GSA1510
Angled Drill/Mill**
Collet Size: ER16
Output: 1:1
Adjustable 0-180°



**GSE1504
End Drill/Mill**
Bore Size: Ø31mm
Output: 1:1
Holds 3 compatible spindles (GSC1110, GSC1110-4X, GSC1310-HP)

CONTINUED ON NEXT PAGE

M₄20 & M₄32 Gang Slide Spindles & Attachments

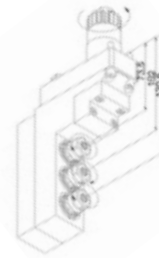
Gang Slide



**GSE1510
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice Spindle Rotation



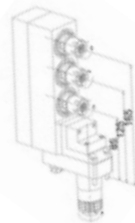
**GSE-1510-IK
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice Spindle Rotation
Coolant-Thru



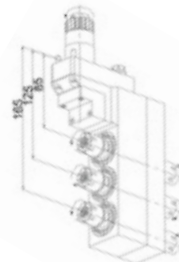
**BSE-3106
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Notice Spindle Rotation



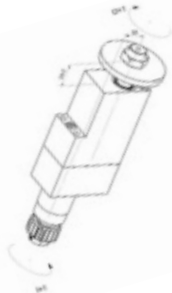
**BSE-3207-III
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice Spindle Rotation



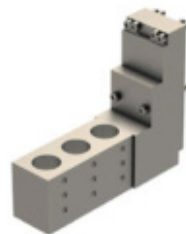
**BSE-3209
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice Spindle Rotation



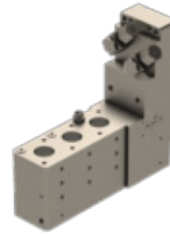
**BSE-3210
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Notice Spindle Rotation



**GSS-1307-DEC
Slitting Saw**
Arbor Size: Ø16mm
Output: 1:1
Max Tool Ø: 63mm
Max Tool Thickness: 6mm



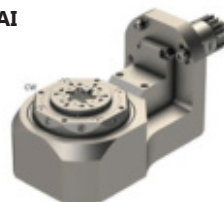
**GDF-1501-II
Tool Holder**
Tool Size: Ø1in
Coolant-Thru



**GDF1502-IK
Tool Holder**
Tool Size: Ø3/4in
Int cooling 200 bar,
Ext cooling 100 bar,
Independent shutoff
valves



**R432-OF5xØ25.4-KAI
Tool Holder**
Tool Size: Ø1in
Internal cooling



**GSW-250
Thread Whirling**
Ring: Utilis
Output: 3:2
3,9, or 12 insert cutter,
Adjustable 0 - 25°
6mm Flight Circle
Fits manual B-Axis



**GSW-255
Thread Whirling**
Ring: Utilis
Output: 3:2
3,9, or 12 insert cutter,
Adjustable 0 - 25°
6mm Flight Circle
For Programmable B-Axis

REPAIRS & RESTORATION

One of the benefits of buying live tooling and spindles from GenSwiss, is knowing we will repair them too. We will repair your spindle at a fraction of the cost to purchase a brand new one and have your Swiss-style CNC running again in no time.



- **Live Swiss machine attachments restored to factory specification**
- **PCM and major OEM brands: CITIZEN, STAR, TSUGAMI, TORNOS**
- **\$50 evaluation & inspection (fee waived if repaired or replaced by us)**
- **Repaired by factory trained professionals**

Call Us At: 1-413-562-4800

Operation	Item No.	Description	(#Tools)Size	Output	Other
	5505-000435	BSC1107-4X	(1) ER11	1:3.8	High speed up to 30,000 RPM
	5505-000119	GSC-510-3X	(1) ER11	1:3	High speed up to 18,000 RPM
	5505-000281	GSC-510-4X	(1) ER08	1:3.8	High speed up to 22,800 RPM
	5505-000291	GSC-510-L-3X	(1) ER11	1:3	High speed up to 18,000 RPM, Long version
	5505-000392	GSC-1010	(1) ER16	1:1	
Angled Drilling / Milling	5505-000235	GSA107	(1) ER11	1:1	Adjustable 0-180°
	5505-000125	GSE-306-SE312	(1) ER11	1:3	High speed up to 18,000 RPM
End Drilling / Milling	5505-000123	GSE-306-DE312	(2) ER11	1:3	High speed up to 18,000 RPM, Double ended
	5505-000124	GSE-306-L-520	(1) ER11	1:1	
	5505-000274	GSE-306-DE011	(2) ER11	1:1	Double ended
	5505-000509	GSE310-L-520	(1) ER16	1:1	Long version
	5505-000510	GSE-316-GS	(1) ER16	1:1	
Slitting Saw	5505-000134	GSS-510	(1) Ø16mm	2:1	
Whirling	5505-000155	LSW-101-L20	(1) Utilis	2:1	3, 9, or 12 Insert cutter, Adjustable ±10°
	5505-000158	LSW-215	(1) Utilis	1:1	3, 9, or 12 Insert cutter, Adjustable ±15°
	5505-000591	LSW215-II	(1) Utilis	1:1	3, 9, or 12 Insert cutter, Adjustable ±15°, Requires 2 tool positions

Gang Slide



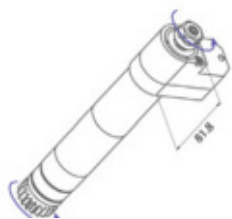
**BSC1107-4X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3.8
High speed up to 30,000 RPM



**GSC-510-3X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3
High speed up to 18,000 RPM



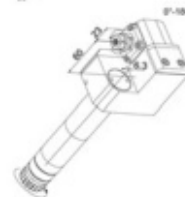
**GSC-510-4X
Cross Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High speed up to 22,800 RPM



**GSC-510-L-3X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3
High speed up to 18,000 RPM



**GSC-1010
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1



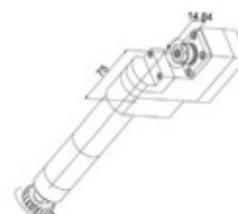
**GSA107
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 0-180°



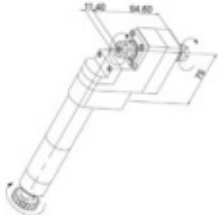
**GSE-306-SE312
End Drill/Mill**
Collet Size: ER11
Output: 1:3
High Speed



**GSE-306-DE312
End Drill/Mill**
Collet Size: ER11
Output: 1:3
High Speed
Double Ended



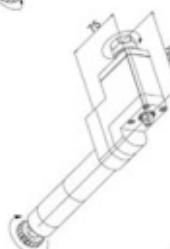
**GSE-306-L-520
End Drill/Mill**
Collet Size: ER11
Output: 1:1



**GSE-306-DE011
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Double Ended



**GSE310-L-520
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Long version



**GSE-316-GS
End Drill/Mill**
Collet Size: ER16
Output: 1:1



**GSS-510
Slitting Saw**
Arbor Size: Ø16mm
Output: 2:1



**LSW-101-L20
Thread Whirling**
Ring: Utilis
Output: 1:1
3, 9, or 12 insert cutter,
Adjustable ±10°



**LSW-215
Thread Whirling**
Ring: Utilis
Output: 1:1
3, 9, or 12 insert cutter,
Adjustable ±15°



**LSW-215-II
Thread Whirling**
Ring: Utilis
Output: 1:1
3, 9, or 12 insert cutter,
Adjustable ±15°

CONTINUED ON NEXT PAGE

Citizen M₃20/M₄20 & M₃32/M₄32

Turret Attachments (Machine's Live Tooling 8,000 RPM Rating)

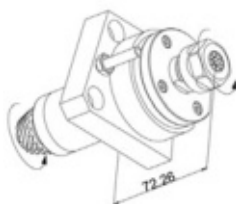
Operation	Item No.	Description	(#Tools) Size	Output	Coolant Thru	Other
Cross Drilling / Milling	5505-000140	KSC110-K	(1) ER16	1:1	Yes	External cooling
	5505-000141	KSC110-K-ER	(1) ER16	1:1	Yes	External cooling, Reduced width to fit 2 on 1 station
	5505-000558	KSC110-K-CR	(1) ER16	1:1	Yes	External cooling, Quick change system ECR
	5505-000264	KSC110-IK	(1) ER16	1:1	Yes	Internal cooling with max pressure 10 bar
	5505-000352	KSC110-HP	(1) ER16	1:1	Yes	Internal cooling with max pressure 70 bar
	5505-000557	KSC110-10000K	(1) ER11	1:2	Yes	External cooling, High speed 2X
	5505-000388	KSC310-II	(3) ER16	1:1.462	Yes	External cooling, 2 Main, 1 Sub
	5505-000560	KSC510	(2) ER16	1:1.462	Yes	External cooling, Y-axis required
	5505-000317	KSC510-10	(2) ER16	1:1.462	Yes	External cooling, Y-axis required, 10mm offset
	5505-000562	KSC-510-DEC-K	(1) ER16	1:1	Yes	External cooling, 10mm offset
Angled Drilling / Milling	5505-000563	KSC-DEC-10X3	(1) ER11	1:3	Yes	External cooling, High speed up to 15,000 RPM, 10mm offset,
	5505-000296	KSC-DEC-L-10X3	(1) ER11	1:3	Yes	External cooling, High speed up to 15,000 RPM, 10mm offset, Long version for improved milling
	5505-000556	KSA115	(1) ER11	1:1		External cooling with max pressure 200 bar, Fixed angle 15°
	5505-000139	KSA-307	(1) ER11	1:1		Adjustable 0-30°
	5505-000182	KSA-407	(1) ER11	1:1		Adjustable 30-90°
	5505-000313	KSE105	(1) Ø31	1:1.2		External cooling, Use with GSC-1110, GSC-1110-4X, or GSC1310-HP for extra speed
	5505-000380	KSE110-BKK	(1) ER16	1:1	Yes	Internal cooling with max pressure 120 bar, Max drill depth 29mm
	5505-000565	KSE110-DE	(1) ER11 (1) ER16	1:1	Yes	External cooling, Double ended, Drill depth 25mm on front, 17mm on sub
	5505-000144	KSE110-DE-32	(2) ER16	1:1	Yes	External cooling, Double ended, Drill depth 25mm on front, 17mm on sub,
	5505-000567	KSE110-IK-2X	(1) ER16	1:2	Yes	Internal cooling, High speed up to 10,000 RPM, Max drill depth 25mm
End Drilling / Milling	5505-000217	KSE110-US	(1) ER16	1:1	Yes	External cooling, Max drill depth 22mm
	5505-000570	KSE110-US-2X	(1) ER16	1:2	Yes	External cooling, High speed up to 10,000 RPM, Max drill depth 22mm
	5505-000568	KSE110-K	(1) ER16	1:1	Yes	External cooling, Max drill depth 29.5mm
	5505-000145	KSE110-2X	(1) ER16	1:2	Yes	External cooling, High speed spindle up to 10,000, Max drill depth 28mm
	5505-000146	KSE110-KAI	(1) ER16	1:1	Yes	Internal cooling with max pressure 120 bar, Max drill depth 22mm
	5505-000569	KSE110-KAI-2X	(1) ER16	1:2	Yes	External cooling with max pressure 120 bar, High speed spindle up to 10,000, Max drill depth 22mm
	5505-000308	KSE210-IK	(1) ER16	1:2	Yes	Internal cooling with max pressure 120 bar, Max drill depth 40mm
	5505-000149	KSE250-KAI-2X	(2) ER16	1:2	Yes	Internal cooling for the primary spindle with max pressure 30 bar, High speed up to 10,000 RPM, Max drill depth 22mm, Requires 2 tool positions
	5505-000368	KSE2507-KAI-2x	(2) ER11	1:2	Yes	Internal cooling for the primary spindle with max pressure 30 bar, High speed up to 10,000 RPM, Max drill depth 25mm, Requires 2 tool positions
	5505-000572	KSE307-IK	(1) ER11	1:1	Yes	Internal cooling with max pressure 120 bar, Max drill depth 53mm
Polygon Milling	5505-000151	KSE310-K	(1) ER16	1:1	Yes	External cooling, Max drill depth 44.5mm
	5505-000269	KSE310-IK	(1) ER16	1:1	Yes	Internal cooling with max pressure 120 bar, Max drill depth 40mm
	5505-000574	KSE310-IK-Cer	(1) ER16	1:1	Yes	Internal cooling with max pressure 120 bar, Max drill depth 40mm, Ceramic Bearings
	5505-000573	KSE310-2X	(1) ER16	1:2	Yes	External cooling, High speed up to 10,000 RPM, Max drill depth 44mm
	5505-000575	KSE310-UD	(1) ER16	2:1	Yes	External cooling, Reduced speed 2,500 RPM, Max drill depth 44.5mm
	5505-000265	KSE-510-KAI	(2) ER16	1:1	Yes	Internal & External cooling, Max drill depth 35mm, Y-axis required
	5505-000391	KSF-130	(1) Ø16mm	1:1		Adjustable +-20°
	5505-000576	KSF-130-ER	(1) ER11	1:1		Adjustable +-20°
	5505-000314	KSH132-25	(1) Ø13mm	1:1	Yes	External cooling with max pressure 100 bar, Adjustable +-25°, Max tool Ø32mm, Width 40mm
	5505-000315	KSH-132-27-17	(1) Ø10mm	1.588:1		Adjustable 0-20°, Max tool Ø32mm, Width 7mm
Hobbing	5505-000580	KSH-132-27-17-08	(1) Ø8mm	1.588:1		Adjustable 0-20°, Max tool Ø32mm, Width 7mm
	5505-000578	KSH-132-27-17-II	(1) Ø16mm	1.588:1		Adjustable 0-20°, Max tool Ø32mm, Width 7mm
	5505-000579	KSH-132-27-17-III	(1) Ø10mm	1.588:1		Adjustable 0-20°, Max tool Ø32mm, Width 7mm
	5505-000577	KSH-132-27-17-L	(1) Ø13mm	1.588:1		Adjustable 0-20°, Max tool Ø32mm, Width 7mm
	5505-000581	KSH-133-035	(1) Ø3.5mm	1.588:1		Adjustable +-10°, Max tool Ø10mm, Width 6mm, Requires 2 tool positions

Operation	Item No.	Description	(#Tools) Size	Output	Coolant Thru	Other
Static Tool Holders	5505-000102	CDF101	(1) Ø1in			Max drill depth 73mm
	5505-000459	CDF101-AR-1	(1) Ø1in		Yes	Int & Ext cooling, Max drill depth 73mm
	5505-000336	CDF101-HP	(1) Ø1in		Yes	Internal cooling with max pressure 150 bar, Max drill depth 48mm
	5505-000461	CDF101-HP-10	(1) Ø10mm		Yes	Internal cooling, For gun drilling
	5505-000460	CDF101-SP	(1) Ø1in			Max drill depth 113mm
	5505-000318	CDF-201	(1) Ø1in			Max drill depth 40mm
	5505-000463	CDF201-AR	(1) Ø1in		Yes	External cooling, Max drill depth 40mm
	5505-000374	CDF201-HP	(1) Ø1in		Yes	Int & Ext cooling with max pressure 150 bar, Max drill depth 40mm
	5505-000464	CDF201-Jauge				High precision gauge for centering turret position
	5505-000103	CDF-301	(1) Ø1in			Max drill depth 70mm
	5505-000465	CDF-301-AR	(1) Ø1in		Yes	External cooling, Max drill depth 70mm
	5505-000466	CDF301-HP	(1) Ø1in		Yes	Internal cooling with max pressure 100 bar, Max drill depth 70mm
	5505-000279	CDF-401	(2) Ø1in			Max drill depth 73mm
	5505-000467	CDF-401-AR	(2) Ø1in		Yes	Internal cooling for bottom position, Max drill depth 73mm
	5505-000468	CDF401-AR-II	(2) Ø1in		Yes	Internal cooling on both positions, Max drill depth 73mm
	5505-000246	CDF401-HP	(2) Ø1in		Yes	Internal cooling for bottom position with max pressure 150 bar, External cooling for both positions, Max drill depth 73mm
	5505-000469	CDF901-AR	(3) Ø1in			Max drill depth 75mm, Y-axis required
	5505-000335	CDF901-IK	(3) Ø1in		Yes	Int & Ext cooling with max pressure 100 bar, Max drill depth 75mm, Y-axis required
	5505-000471	CDF901-IK-T	(3) Ø1in		Yes	Delivery base (CDF901-IK) required for external cooling, Y-axis required, This is an interchangeable head
	5505-000372	CDF901-IK-T-HP	(3) Ø1in		Yes	Delivery base (CDF901-IK) required for ext & int cooling, Y-axis required, This is an interchangeable head, Max pressure 150 bar
	5505-000183	CDF-905-AR	(2) Ø.50in (4) Ø.75in			
	5505-000472	CDF905-HP	(2) Ø.50in (4) Ø.75in		Yes	External cooling with max pressure 100 bar,
	5505-000473	CDF-ER16	(2) ER16		Yes	Internal cooling with max pressure 100 bar, With special ER16 coolant sleeve
	5505-000187	CTF1116	(2) 16x16mm		Yes	External cooling, Holds OD turning tools
	5505-000364	CTF1116-D	(2) 16x16mm		Yes	External cooling, Holds OD turning tools, Short version
	5505-000348	CTF116-HP	(2) 16x16mm			External cooling with max pressure 150 bar, Holds OD turning tools
	5505-000427	778-CTF-116-R-AR-HP	(1) 5/8x5/8in		Yes	External cooling with max pressure 150 bar, Holds OD turning tools, Reversible wedge
Whirling	5505-000152	KSW-101	(1) Utilis	2:1		3,6,9, or 12 insert cutter, Adjustable +-15°

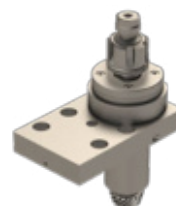
Turret



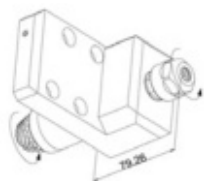
**KSC110-K
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
External cooling



**KSC110-K-ER
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
External cooling,
Reduced Width



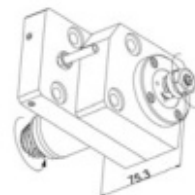
**KSC110-K-CR
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
External cooling,
Quick change system ECR



**KSC110-IK
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Internal cooling
10 bar



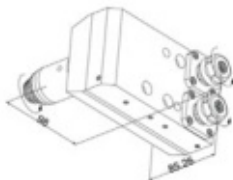
**KSC110-HP
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Internal cooling
70 bar



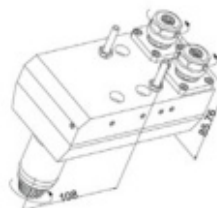
**KSC110-10000K
Cross Drill/Mill**
Collet Size: ER11
Output: 1:2
External cooling,
High speed



**KSC-310-II
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1.5
External cooling,
2 Main, 1 Sub



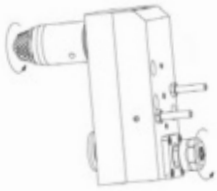
**KSC-510
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1.5
External cooling,
Y-Axis Required



**KSC-510-10
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1.5
External cooling,
Y-Axis Required
10mm Offset

M₃20/M₄20 & M₃32/M₄32 Turret Spindles & Attachments

Turret



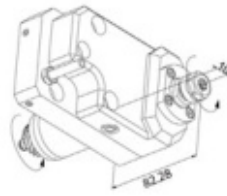
KSC-510-DEC-K Cross Drill/Mill

Collet Size: ER16
Output: 1:1
External cooling,
10mm Offset



KSC-DEC-10X3 Cross Drill/Mill

Collet Size: ER11
Output: 1:3
External cooling,
High speed up to
15,000 RPM
10mm Offset



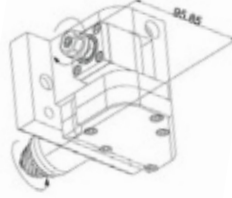
KSC-DEC-L-10X3 Cross Drill/Mill

Collet Size: ER11
Output: 1:3
External cooling,
High speed up to
15,000 RPM,
10mm Offset,
Long version



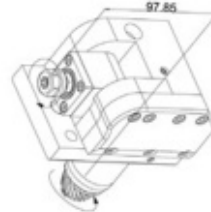
KSA115 Angled Drill/Mill

Collet Size: ER11
Output: 1:1
External cooling
200 bar,
Fixed angle 15°



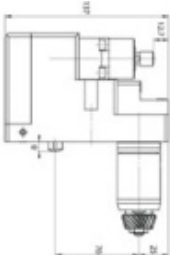
KSA-307 Angled Drill/Mill

Collet Size: ER11
Output: 1:1
Adjustable 0-30°



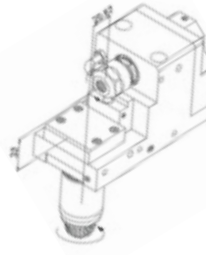
KSA-407 Angled Drill/Mill

Collet Size: ER11
Output: 1:1
Adjustable 30-90°



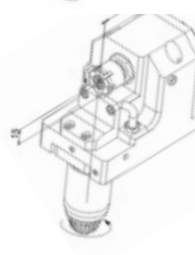
KSE105 End Drill/Mill

Collet Size: Ø31mm
Output: 1:1.2
Must Be Used With
GSC-1110-4X Or GSC-
1110 And Increases The
Output Of Spindle. GSC
Spindle Not Included.



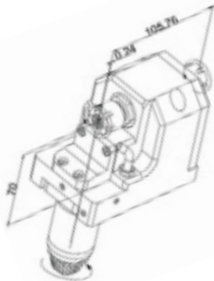
KSE110-BKK End Drill/Mill

Collet Size: ER16
Output: 1:1
Internal cooling
120 bar,
Drill depth 29mm



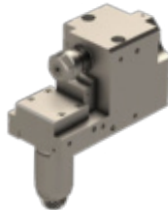
KSE110-DE End Drill/Mill

Collet Size: ER11, ER16
Output: 1:1
External cooling,
Double Ended
Drill depth 25mm front
17mm sub



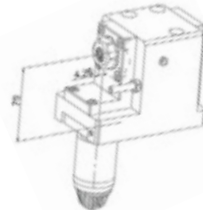
KSE110-DE-32 End Drill/Mill

Collet Size: ER16
Output: 1:1
External cooling,
Double Ended,
Drill depth 25mm front,
17mm back



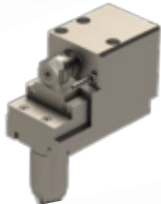
KSE110-1K-2X End Drill/Mill

Collet Size: ER16
Output: 1:2
Internal cooling,
High speed
up to 10,000 RPM,
Drill depth 25mm



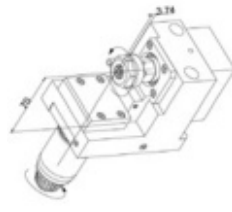
KSE110-US End Drill/Mill

Collet Size: ER16
Output: 1:1
Coolant-Thru



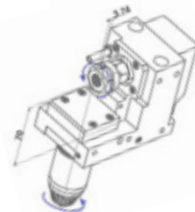
KSE110-US-2X End Drill/Mill

Collet Size: ER16
Output: 1:2
External cooling,
High speed
up to 10,000 RPM
Drill depth 22mm



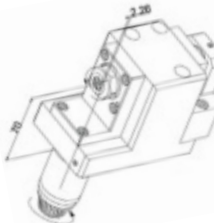
KSE110-K End Drill/Mill

Collet Size: ER16
Output: 1:1
External cooling,
Drill depth 29.5mm



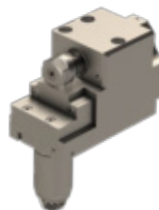
KSE110-2X End Drill/Mill

Collet Size: ER16
Output: 1:2
External cooling,
High speed up to
10,000 RPM,
Drill depth 28mm



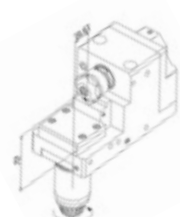
KSE110-KAI End Drill/Mill

Collet Size: ER16
Output: 1:1
Coolant-Thru



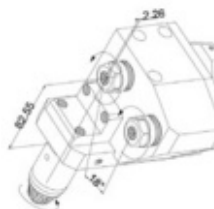
KSE110-KAI-2X End Drill/Mill

Collet Size: ER16
Output: 1:2
External cooling
120 bar,
High speed
up to 10,000 RPM,
Drill depth 22mm



KSE210-1K End Drill/Mill

Collet Size: ER16
Output: 1:2
Internal cooling
120 bar,
Drill depth 40mm



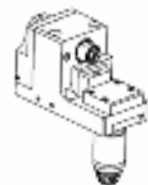
KSE250-KAI-2X End Drill/Mill

Collet Size: ER16
Output: 1:2
Internal cooling 30 bar,
High speed up to
10,000 RPM
*Second Position Is Half Index
Drill depth 22mm



KSE2507-KAI-2X End Drill/Mill

Collet Size: ER16
Output: 1:2
Internal cooling 30 bar,
High speed up to
10,000 RPM
*Second Position Is Half Index
Drill depth 25mm

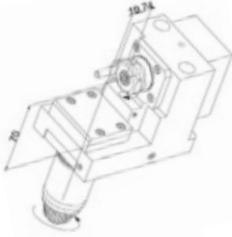


KSE307-1K End Drill/Mill

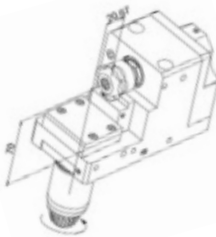
Collet Size: ER11
Output: 1:1
Internal cooling
120 bar,
Drill depth 53mm

M₃20/M₄20 & M₃32/M₄32 Turret Spindles & Attachments

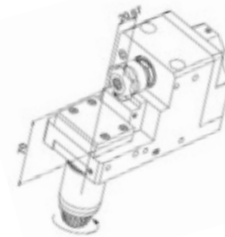
Turret



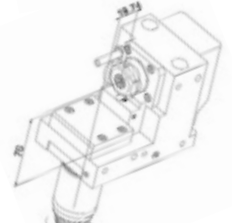
**KSE310-K
End Drill/Mill**
Collet Size: ER16
Output: 1:1
External cooling,
Drill depth 44.5mm



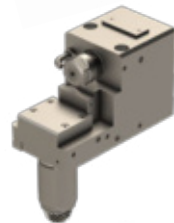
**KSE310-IK
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Internal cooling
120 bar,
Drill depth 40mm



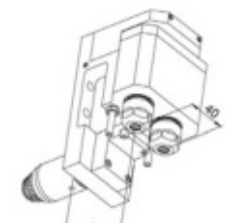
**KSE310-IK-Cer
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Internal cooling
120 bar,
Drill depth 40mm,
Ceramic bearings



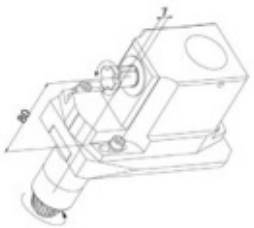
**KSE310-2X
End Drill/Mill**
Collet Size: ER16
Output: 1:2
External cooling,
High speed up
to 10,000 RPM,
Drill depth 44mm



**KSE310-UD
End Drill/Mill**
Collet Size: ER16
Output: 2:1
External cooling,
Reduced speed
2,500 RPM,
Drill depth 44.5mm



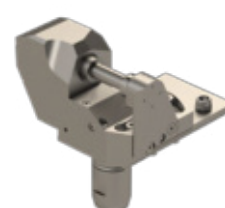
**KSE-510-KAI
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Int & Ext cooling
Drill depth 35mm
Y-Axis Required



**KSF-130
Polygon Milling**
Collet Size: Ø16
Output: 1:1
Adjustable ±20°



**KSF-130-ER
Polygon Milling**
Collet Size: ER11
Output: 1:1
Adjustable ±20°



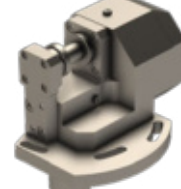
**KSH132-25
Gear Hobbing**
ID Size: Ø13mm
Output: 1:1
External cooling
100 bar,
Hobb OD: Ø32mm
Hobb Width: 40mm
Adjustable ±25°



**KSH-132-27-17
Gear Hobbing**
ID Size: Ø10mm
Output: 1.588:1
Hobb OD: Ø32mm
Hobb Width: 7mm
Adjustable 0-20°



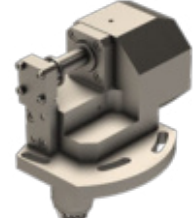
**KSH-132-27-17-08
Gear Hobbing**
ID Size: Ø8mm
Output: 1.588:1
Hobb OD: Ø32mm
Hobb Width: 7mm
Adjustable 0-20°



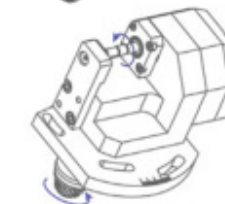
**KSH-132-27-17-II
Gear Hobbing**
ID Size: Ø16mm
Output: 1.588:1
Hobb OD: Ø32mm
Hobb Width: 7mm
Adjustable 0-20°



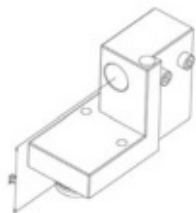
**KSH-132-27-17-III
Gear Hobbing**
ID Size: Ø10mm
Output: 1.588:1
Hobb OD: Ø32mm
Hobb Width: 7mm
Adjustable 0-20°



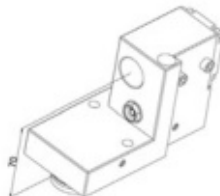
**KSH-132-27-17-L
Gear Hobbing**
ID Size: Ø13mm
Output: 1.588:1
Hobb OD: Ø32mm
Hobb Width: 7mm
Adjustable 0-20°
Long version



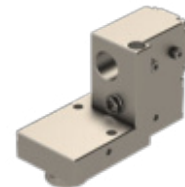
**KSH-133-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1.588:1
Hobb OD: Ø10mm
Hobb Width: 6mm
Adjustable 0-30°
Requires 2 positions



**CDF101
Tool Holder**
Tool Size: Ø1in
Drill depth 73mm



**CDF101-AR-1
Tool Holder**
Tool Size: Ø1in
Int & Ext cooling
Drill depth 79mm



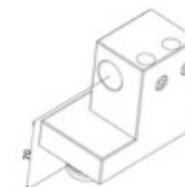
**CDF101-HP
Tool Holder**
Tool Size: Ø1in
Internal cooling
Max 150 bar,
Drill depth 48mm



**CDF101-HP-10
Tool Holder**
Tool Size: Ø10mm
Internal cooling,
For gun drilling



**CDF101-SP
Tool Holder**
Tool Size: Ø1in
Drill depth 113mm



**CDF-201
Tool Holder**
Tool Size: Ø1in
Drill depth 40mm

CONTINUED ON NEXT PAGE

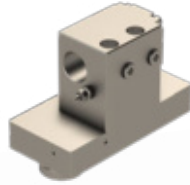
M₃20/M₄20 & M₃32/M₄32 Turret Spindles & Attachments

Turret



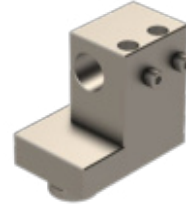
CDF-201-AR Tool Holder

Tool Size: Ø1in
External cooling,
Drill depth 40mm



CDF-201-HP Tool Holder

Tool Size: Ø1in
Int & Ext cooling
Max 150 bar,
Drill depth 40mm

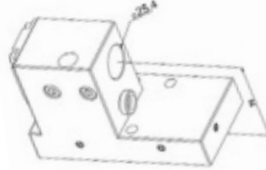


CDF-201-Jauge Gauge

High precision gauge
for centering turret
position

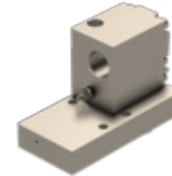
CDF-301 Tool Holder

Tool Size: Ø1in
Drill depth 70mm



CDF-301-AR Tool Holder

Tool Size: Ø1in
External cooling,
Drill depth 70mm

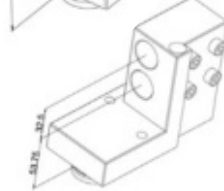


CDF-301-HP Tool Holder

Tool Size: Ø1in
Internal cooling
Max 100 bar,
Drill depth 70mm

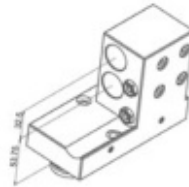
CDF-401 Tool Holder

Tool Size: Ø1in
Drill depth 73mm



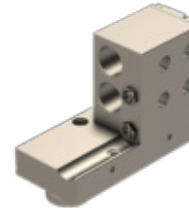
CDF-401-AR Tool Holder

Tool Size: Ø1in
Internal cooling
on bottom position,
Drill depth 73mm



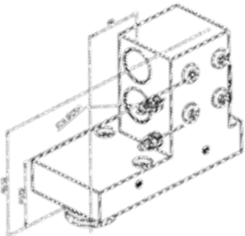
CDF401-AR-II Tool Holder

Tool Size: Ø1in
Internal cooling
on both positions,
Drill depth 73mm



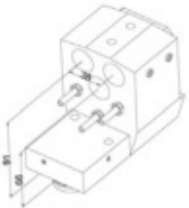
CDF401-HP Tool Holder

Tool Size: Ø1in
Internal cooling
on bottom position,
External cooling
on both positions
Drill depth 73mm



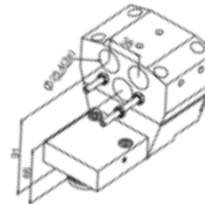
CDF901-AR Tool Holder

Tool Size: Ø1in
External cooling,
Drill depth 75mm,
Y-Axis Required



CDF901-IK Tool Holder

Tool Size: Ø1in
Int & Ext cooling
Max 100 bar,
Drill depth 75mm,
Y-Axis Required



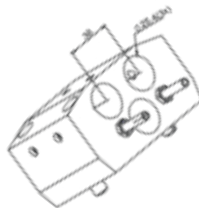
CDF901-IK-T Tool Holder

Tool Size: Ø1in
External cooling
Attaches to CDF-901-IK,
Y-Axis Required



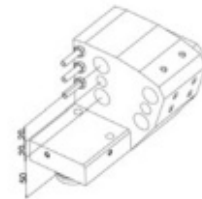
CDF-901-IK-T-HP Tool Holder

Tool Size: Ø1in
Ext & Int cooling
Attaches to CDF-901-IK
High Pressure 150 Bar
Requires Y-Axis



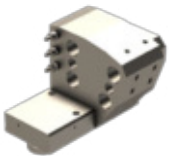
CDF-905-AR Tool Holder

Tool Size: Ø.50in, Ø.75in
Coolant-Thru
*Second Position
Is Half Index
*Designed For
M₃32 Only



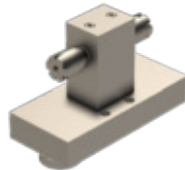
CDF905-HP Tool Holder

Tool Size: Ø.50in, Ø.75in
External cooling
Max 100 bar



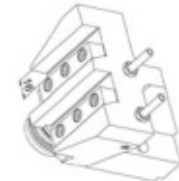
CDF-ER16 Tool Holder

Tool Size: ER16
Internal cooling
Max 100 bar,



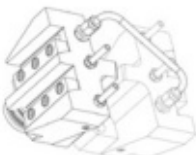
CTF-1116 Tool Holder

Tool Size: 16x16mm
External cooling,
Holds OD turning tools
Y-Axis Required



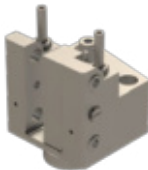
CTF1116-D Tool Holder

Tool Size: 16x16mm
External cooling,
Holds OD turning tools
Y-Axis Required
Short version



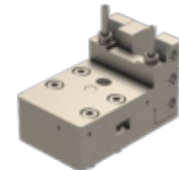
CTF116-HP Tool Holder

Tool Size: 16x16mm
External cooling
Max 150 bar,
Holds OD turning tools



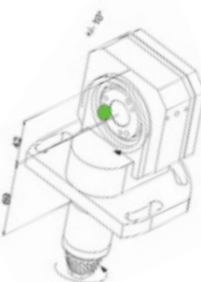
778-CTF-116-R-AR-HP Tool Holder

Tool Size: 5/8x5/8in
External cooling
Max 150 bar,
Holds OD turning tools,
Reversible wedge



KSW-101 Thread Whirling

Ring: Utilis
Output: 2:1
3, 9, or 12 insert cutter,
Adjustable ±10°



Citizen M₅32

Gang Slide Attachments (Machine's Live Tooling 8,000 RPM Rating)

Operation	Item No.	Description	(#Tools) Size	Output	Other
Cross Drilling / Milling	5505-000435	BSC1107-4X	(1) ER11	1:3.8	High speed up to 30,000 RPM
	5505-000294	MSC-507-4X	(1) ER08	1:3.8	High speed up to 38,000 RPM
	5505-000609	MSC507-HP	(1) ER11	1:1	Internal cooling with max pressure 150 bar
	5505-000254	MSC-507-II	(1) ER11	1:1	
	5505-000292	MSC-507-L	(1) ER11	1:1	Long version for increased rigidity, Up to 10,000 RPM
	5505-000376	MSC512	(1) ER16	1:1	Up to 10,000 RPM
End Drilling / Milling	5505-000666	RSC1107-4X	(1) ER11	1:3.8	High speed up to 22,800 RPM
	5505-000421	GSE1505	(2) Ø31mm	1:1	For use with GSC-1110 and GSC-1110-4X to enable end drilling / milling
	5505-000426	GSE1610	(3) ER16	1:1	Max drill depth 41mm
Slitting Saw	5505-000422	GSE1610-IK	(3) ER16	1:1	Internal cooling with max pressure 90 bar, Max drilling depth 37mm
	5505-000544	GSS15835-DEC-II	(1) Ø5/8in	1:1	Max tool Ø 63mm, Width 8mm
Static Tool Holders	5505-000358	GDF-1501-II	(3) Ø1in		3 Position 1" Ø Sleeves
	5505-000479	GDF1501-L350	(3) Ø16x50mm		Internal cooling with max pressure 200 bar
	5505-000425	GDF1701-IK	(3) Ø1in		External cooling with max pressure 100 bar, Internal cooling with max pressure 200 bar
	5505-000250	GDF903	(1) Ø1in		1" Sleeve holder
	5505-000419	GDF903-25	(1) Ø25mm		
Whirling	5505-000420	MEU208-MHF	(4) Ø20mm		Internal cooling max pressure 10 bar, For MDF-20 high frequency
	5505-000417	GSW016	(1) Utilis	1:1	Use with 6, 9, & 12 insert cutting ring, Adjustable +16°, Internal cooling kit is required for use with internal coolant threading ring, T10 on M532 V & VII, T31 on M532 VII & VIII
	5505-000418	GSW116	(1) Utilis	1:1	Use with 6, 9, & 12 insert cutting ring, Adjustable +16°, Internal cooling kit is required for use with internal coolant threading ring, T10 on M532 VIII only

Gang Slide



**BSC1107-4X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3.8
High speed up to 30,000 RPM



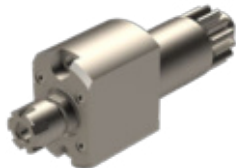
**MSC-507-4X
Cross Drill/Mill**
Collet Size: ER08
Output: 1:3.8
High speed up to 30,000 RPM



**MSC507-HP
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
Internal cooling
Max 150 bar



**MSC-507-II
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1



**MSC-507-L
Cross Drill/Mill**
Collet Size: ER11
Output: 1:1
Long version,
Increased rigidity



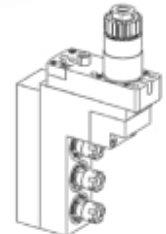
**MSC512
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Up to 10,000 RPM



**RSC1107-4X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3.8
High speed up to 22,800 RPM



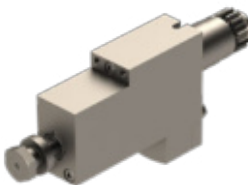
**GSE1505
End Drill/Mill**
Tool Size: Ø31mm
Output: 1:1
For use with
GSC-1110 &
GSC-1110-4X



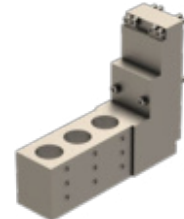
**GSE1610
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Drill depth 41mm



**GSE1610-IK
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Internal cooling
Max 90 bar,
Drill depth 37mm



**GSS15835-DEC-II
Slitting Saw**
Tool Size: Ø5/8in
Output: 1:1
Max Tool Ø: 63mm
Max Tool Width: 8mm



**GDF-1501-II
Tool Holder**
Tool Size: Ø1in

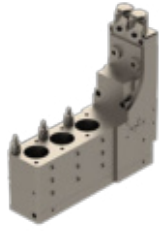
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M₅32 Gang Slide Attachments

Gang Slide



**GDF1501-L350
Tool Holder**
Tool Size: Ø16mm
Internal cooling
Max 200 bar



**GDF1701-IK
Tool Holder**
Tool Size: Ø1in
Int & Ext cooling
Max 150 & 200 bar,



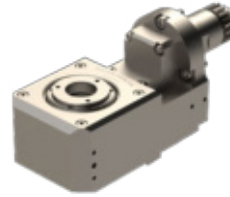
**GDF903
Tool Holder**
Tool Size: Ø1in



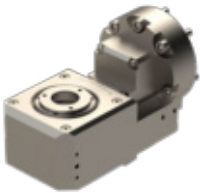
**GDF903-25
Tool Holder**
Tool Size: Ø25mm



**MEU208-MHF
Tool Holder**
Tool Size: Ø20mm
Internal cooling
Max 10 bar,
MDF-20 high freq



**GSW016
Thread Whirling**
Ring: Utilis
Output: 1:1
6,9, or 12 insert cutter,
Adjustable ±16°
T10 on M532 V/VII
T31 on M532 VII/VIII



**GSW116
Thread Whirling**
Ring: Utilis
Output: 1:1
6,9, or 12 insert cutter,
Adjustable ±16°
T10 on M532 VIII

Citizen M₃₂

Turret Attachments (Machine's Live Tooling 8,000 RPM Rating)

Operation	Item No.	Description	(#Tools) Size	Output	Coolant Thru	Other
Cross Drilling / Milling	5505-000395	KSC107-4X	(1) ER11	1:3.8	Yes	External cooling, High speed up to 22,800 RPM
	5505-000393	KSC113	(1) ER20	1:1	Yes	External cooling with max pressure 150 bar
	5505-000413	KSC113-IK	(1) ER20	1:1	Yes	Internal cooling with max pressure 150 bar
	5505-000414	KSC213	(1) ER20	1:1	Yes	External cooling with max pressure 150 bar
	5505-000381	KSC313	(2) ER20	1:1	Yes	External cooling, Requires Y-Axis
	5505-000564	KSC-DEC-10x3-V	(1) ER11	1:3	Yes	External cooling, High speed up to 15,000 RPM
Angled Drilling / Milling	5505-000389	KSC-DEC-L-10x3-V	(1) ER11	1:3	Yes	External cooling, 6mm extended spindle
	5505-000415	KSA507	(1) ER11	1:1		Adjustable 0-30°
	5505-000416	KSA607	(1) ER11	1:1		Adjustable 30-90°
End Drilling / Milling	5505-000411	KSE110-IC-V	(1) ER16	1:1	Yes	Internal cooling, Max drill depth 23mm
	5505-000410	KSE110-V	(1) ER16	1:1	Yes	External cooling, Max drill depth 22mm
	5505-000409	KSE113	(1) ER20	1:1	Yes	External cooling, Max drill depth 26.5mm
	5505-000408	KSE1410	(1) ER16	1:2	Yes	Internal cooling with max pressure 120 bar, High speed up to 12,000 RPM Drill depth 26mm
	5505-000407	KSE210-IC-V	(1) ER16	1:2	Yes	Internal cooling with max pressure 120 bar, High speed up to 12,000 RPM, Drill depth 22mm
	5505-000406	KSE210-V	(1) ER16	1:2	Yes	External cooling, Drill depth 22mm
Slitting Saw	5505-000382	KSE213	(1) ER20	1:1	Yes	External cooling, Drill depth 44.5mm
	5505-000402	KSS960	(1) Ø5/8in	8:1		Max tool Ø60mm, Width 4mm
	5505-000401	KSS963	(1) Ø5/8in	8:1		Max tool Ø63mm, Width 4mm, Requires 2 tool positions
Polygon Milling	5505-000404	KSP580	(1) Ø5/8in	54:17		Max tool Ø80mm, Width 16mm
	5505-000403	KSP680	(1) Ø5/8in	1:1		Max tool Ø80mm, Width 16mm
Hobbing	5505-000405	KSH332	(1) Ø10mm	54:17		Adjustable +-5°, Max tool Ø32mm, Width 30mm
	5505-000582	KSH432	(1) Ø10mm	1:1		Adjustable +-5°, Max tool Ø32mm, Width 30mm
Static Tool Holders	5505-000427	778-CTF-116-R-AR-HP	(1) 5/8x5/8in		Yes	External cooling with max pressure 150 bar, Holds OD turning tools, Reversible wedge
	5505-000424	852-354-0F010	(1) Ø25mm			Holds Meyrant high frequency spindle
	5505-000429	857-203-0F120	(3) Ø1in (1) Ø10mm			Replaces original back ID block
	5505-000423	866-349-0F030	(5) Ø1in H5		Yes	Int & Ext cooling
	5505-000102	CDF-101	(1) Ø1in			Max drill depth 73mm
	5505-000459	CDF-101-AR-1	(1) Ø1in		Yes	Int & Ext cooling, Max drill depth 73mm
	5505-000336	CDF101-HP	(1) Ø1in		Yes	Internal cooling with max pressure 150 bar, Max drill depth 48mm
	5505-000461	CDF101-HP-10	(1) Ø10mm		Yes	Internal cooling, For gun drilling
	5505-000460	CDF101-SP	(1) Ø1in			Max drill depth 113mm
	5505-000462	CDF1101-HP	(3) Ø1in		Yes	Int & Ext cooling with max pressure 150 bar, Max drill depth 75.5mm
	5505-000383	CDF1301	(1) Ø1in		Yes	External cooling with max pressure 150 bar, Max drill depth 43mm
	5505-000384	CDF1401	(1) Ø1in		Yes	External cooling with max pressure 150 bar, Max drill depth 83mm
	5505-000318	CDF-201	(1) Ø1in			Max drill depth 40mm
	5505-000463	CDF201-AR	(1) Ø1in		Yes	External cooling, Max drill depth 40mm
	5505-000374	CDF201-HP	(1) Ø1in		Yes	Int & Ext cooling with max pressure 150 bar, Max drill depth 40mm
	5505-000464	CDF201-Jauge				High precision gauge for centering turret position
	5505-000103	CDF-301	(1) Ø1in			Max drill depth 70mm
	5505-000465	CDF-301-AR	(1) Ø1in		Yes	External cooling, Max drill depth 70mm
	5505-000466	CDF301-HP	(1) Ø1in		Yes	Internal cooling with max pressure 100 bar, Max drill depth 70mm
	5505-000279	CDF-401	(2) Ø1in			Max drill depth 73mm
	5505-000467	CDF-401-AR	(2) Ø1in		Yes	Internal cooling for bottom position, Max drill depth 73mm
	5505-000468	CDF401-AR-II	(2) Ø1in		Yes	Internal cooling on both positions, Max drill depth 73mm
	5505-000246	CDF401-HP	(2) Ø1in		Yes	Internal cooling for bottom position with max pressure 150 bar, External cooling for both positions, Max drill depth 73mm
	5505-000469	CDF901-AR	(3) Ø1in			Max drill depth 75mm, Y-axis required
	5505-000335	CDF901-IK	(3) Ø1in		Yes	Int & Ext cooling with max pressure 100 bar, Max drill depth 75mm, Y-axis required
	5505-000471	CDF901-IK-T	(3) Ø1in		Yes	Delivery base (CDF901-IK) required for external cooling, Y-axis required, This is an interchangeable head
	5505-000372	CDF901-IK-T-HP	(3) Ø1in		Yes	Delivery base (CDF901-IK) required for ext & int cooling, Y-axis required, This is an interchangeable head, Max pressure 150 bar
	5505-000183	CDF-905-AR	(2) Ø.50in (4) Ø.75in			
	5505-000472	CDF905-HP	(2) Ø.50in (4) Ø.75in		Yes	External cooling with max pressure 100 bar,
	5505-000473	CDF-ER16	(2) ER16		Yes	Internal cooling with max pressure 100 bar, With special ER16 coolant sleeve

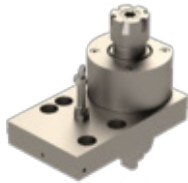
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M₃₂ Turret Attachments

Turret



**KSC107-4X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3.8
External cooling,
High speed up
to 22,800 RPM



**KSC113
Cross Drill/Mill**
Collet Size: ER20
Output: 1:1
External cooling
Max 150 bar



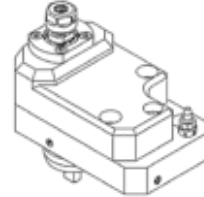
**KSC113-1K
Cross Drill/Mill**
Collet Size: ER20
Output: 1:1
Internal cooling
Max 150 bar



**KSC213
Cross Drill/Mill**
Collet Size: ER20
Output: 1:1
External cooling
Max 150 bar



**KSC313
Cross Drill/Mill**
Collet Size: ER20
Output: 1:1
External cooling,
Requires Y-Axis



**KSC-DEC-10x3-V
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3
External cooling,
High speed up
to 15,000 RPM



**KSC-DEC-L-10x3-V
Cross Drill/Mill**
Collet Size: ER11
Output: 1:3
External cooling,
High speed up
to 15,000 RPM,
6mm extended



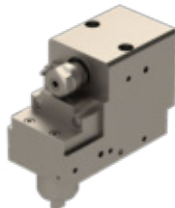
**KSA507
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 0-30°



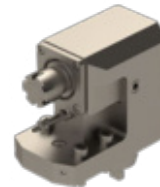
**KSA607
Angled Drill/Mill**
Collet Size: ER11
Output: 1:1
Adjustable 30-90°



**KSE110-IC-V
End Drill/Mill**
Collet Size: ER16
Output: 1:1
Internal cooling,
Drill depth 23mm



**KSE110-V
End Drill/Mill**
Collet Size: ER16
Output: 1:1
External cooling,
Drill depth 22mm



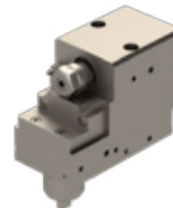
**KSE113
End Drill/Mill**
Collet Size: ER20
Output: 1:1
External cooling,
Drill depth 26.5mm



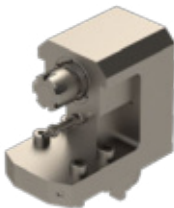
**KSE1410
End Drill/Mill**
Collet Size: ER16
Output: 1:2
Internal cooling,
Max 120 bar,
Up to 12,000 RPM
Drill depth 26mm



**KSE210-IC-V
End Drill/Mill**
Collet Size: ER16
Output: 1:2
Internal cooling,
Max 120 bar,
Up to 12,000 RPM
Drill depth 22mm



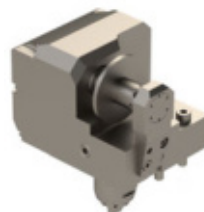
**KSE210-V
End Drill/Mill**
Collet Size: ER16
Output: 1:2
External cooling,
Drill depth 22mm



**KSE213
End Drill/Mill**
Collet Size: ER16
Output: 1:1
External cooling,
Drill depth 44.5mm



**KSS960
Slitting Saw**
Tool Size: Ø5/8in
Output: 8:1
Max Tool Ø: 60mm
Max Tool Width: 4mm



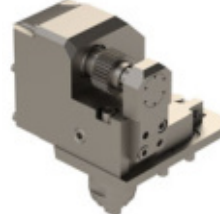
**KSS963
Slitting Saw**
Tool Size: Ø5/8in
Output: 8:1
Max Tool Ø: 63mm
Max Tool Width: 4mm
Requires 2 tool positions



**KSP580
Polygon Milling**
Tool ID Size: Ø5/8in
Output: 54:17
Max Tool Ø 80mm,
Max Tool Width: 16mm



**KSP680
Polygon Milling**
Tool ID Size: Ø5/8in
Output: 1:1
Max Tool Ø 80mm,
Max Tool Width: 16mm



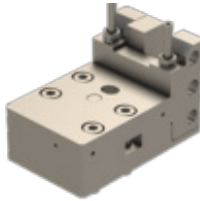
**KSH332
Gear Hobbing**
ID Size: Ø10mm
Output: 54:17
Coolant-thru
Hobb OD: Ø32mm
Hobb Width: 30mm
Adjustable ±5°

M₅32 Turret Attachments

Turret



**KSH432
Gear Hobbing**
ID Size: Ø10mm
Output: 1:1
Coolant-thru
Hobb OD: Ø32mm
Hobb Width: 30mm
Adjustable ±5°



**778-CTF-116-R-AR-HP
Tool Holder**
Tool ID Size: Ø5/8x5/8in
External cooling
Max 150 bar,
Holds OD turning tools,
Reversible wedge



**852-354-0F010
Tool Holder**
ID Size: Ø25mm
Holds Meyrant
high freq spindle



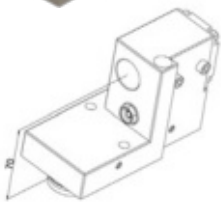
**857-203-0F120
Tool Holder**
ID Size: Ø1in & 10mm
Replaces original ID
block



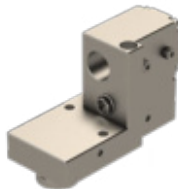
**866-349-0F030
Tool Holder**
Tool ID Size: Ø1in H5
Int & Ext cooling



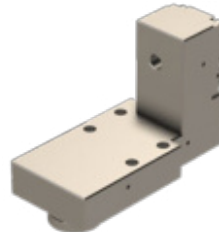
**CDF-101
Tool Holder**
ID Size: Ø1in
Drill depth 73mm



**CDF-101-AR-1
Tool Holder**
ID Size: Ø1in
Int & Ext cooling
Drill depth 73mm



**CDF101-HP
Tool Holder**
Tool ID Size: Ø1in
Internal cooling
Max 150 bar,
Drill depth 48mm



**CDF101-HP-10
Tool Holder**
ID Size: Ø10mm
Internal cooling,
Ideal for gun drilling



**CDF101-SP
Tool Holder**
ID Size: Ø1in
Drill depth 113mm



**CDF1101-HP
Tool Holder**
Tool ID Size: Ø1in
Int & Ext cooling
Max 150 bar,
Drill depth 75.5mm



**CDF1301
Tool Holder**
ID Size: Ø1in
External cooling
Max 150 bar,
Drill depth 43mm



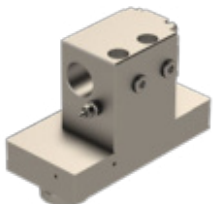
**CDF1401
Tool Holder**
ID Size: Ø1in
External cooling
Max 150 bar
Drill depth 83mm



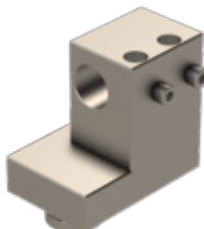
**CDF-201
Tool Holder**
Tool ID Size: Ø1in
Drill depth 40mm



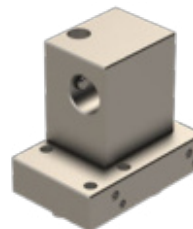
**CDF201-AR
Tool Holder**
ID Size: Ø1in
External cooling,
Drill depth 40mm



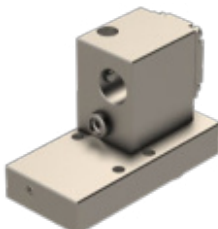
**CDF201-HP
Tool Holder**
ID Size: Ø1in
Int & Ext cooling
Max 150 bar
Drill depth 40mm



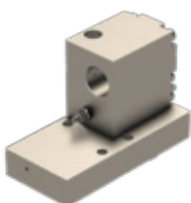
**CDF201-Jauge
Tool Holder**
High precision gauge for
centering turret position



**CDF-301
Tool Holder**
ID Size: Ø1in
Drill depth 70mm



**CDF-301-AR
Tool Holder**
ID Size: Ø1in
External cooling
Drill depth 70mm



**CDF301-HP
Tool Holder**
Tool ID Size: Ø1in
Internal cooling
Max 150 bar,
Drill depth 70mm

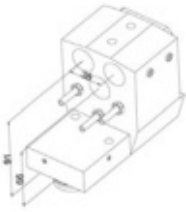


**CDF-401
Tool Holder**
ID Size: Ø1in
Drill depth 73mm

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M₅32 Turret Attachments

Turret



CDF901-AR Tool Holder

ID Size: Ø1in
Drill depth 75mm,
Y-Zxis required



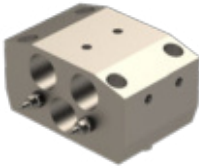
CDF901-IK Tool Holder

Tool ID Size: Ø1in
Int & Ext cooling
Max 100 bar,
Drill depth 75mm,
Y-Axis required



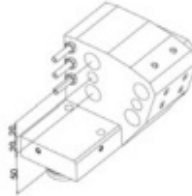
CDF901-IK-T Tool Holder

ID Size: Ø1in
Delivery base (CDF90-IK)
required for external
cooling, Y-Axis required



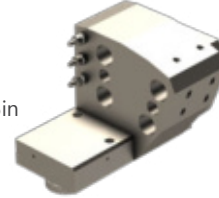
CDF901-IK-T-HP Tool Holder

ID Size: Ø1in
Delivery base (CDF90-IK)
required for external
cooling, Max 150 bar,
Y-Axis required



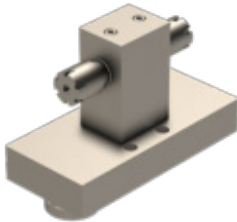
CDF-905-AR Tool Holder

Tool ID Size: Ø.5in, .75in



CDF905-HP Tool Holder

Tool ID Size: Ø.5in, .75in
External cooling (100 bar)

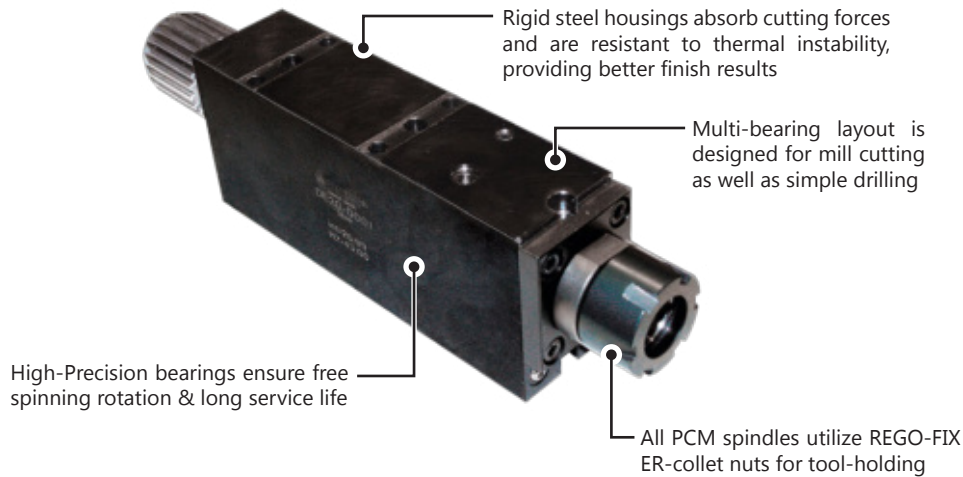


CDF-ER16 Tool Holder

Collet Size: ER16
Internal cooling
Max 100 bar with
special ER16 sleeve

TORNOS DECO 13

Swiss Made by
PCM
be driven.



Tornos DECO 13

(Machine's Live Tooling 8,000 RPM Rating)

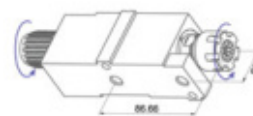
Operation	Item No.	(#Tools)Size	Output	Other
Cross Drilling / Milling	DE13-0001	(1) ER20	1:1	25mm height, 193 Length
	DE13-0001-H	(1) ER20	1:1	28mm height, 193 Length
	DE13-0002	(1) ER20	1:1	25mm height, 180 Length
	DE13-0002-H	(1) ER20	1:1	28mm height, 180 Length
	DE13-0003	(1) ER20	1:1	25mm height, 218 Length
	DE13-0003-H	(1) ER20	1:1	28mm height, 218 Length
Angled Drilling / Milling	DE13-0010	(3) ER11	1:1	
	DE13-0020	(1) ER11	1:1	Adjustable 0-180°
	DE13-0041	(1) ER11	1:1	Adjustable 0-90°
	DE13-0042	(1) ER11	1:1	Adjustable 0-90°
End Drilling / Milling	DE13-0011	(1) ER11	1:1	
	DE13-0012	(1) ER11	1:1	
Polygon Milling	DE13-0015	(1) Ø16	1:1	Max tool Ø80mm
Tool Holder	DE13-0050	(1) Ø25		For high speed broaches
	DE13-0060	(1) Ø25		
	DE13-OF-030	(1) Ø20		
	DE13-GTF-010	(1) 12x12mm		
	DE13-HF-220	(1) Ø22		For high speed broaches
Whirling	DE13-W15	(1) Utilis	1:1	9 or 12 Insert cutter, Adjustable ±15°, Coolant-thru
	DE13-W25	(1) Utilis	1:1	9 or 12 Insert cutter, Adjustable ±25°, Coolant-thru



DE13-0001
Cross Drilling / Milling
 Collet Size: ER20
 Output: 1:1
 Height 25mm



DE13-0001-H
Cross Drilling / Milling
 Collet Size: ER20
 Output: 1:1
 Height 28mm



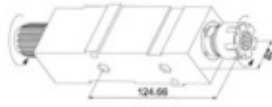
DE13-0002
Cross Drilling / Milling
 Collet Size: ER20
 Output: 1:1

CONTINUED ON NEXT PAGE

Tornos DECO 13



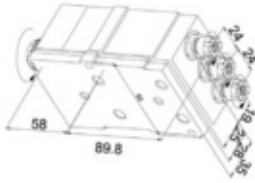
DE13-0002-H
Cross Drilling / Milling
Collet Size: ER20
Output: 1:1



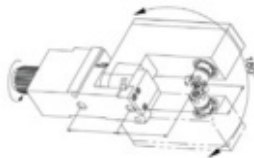
DE13-0003
Cross Drilling / Milling
Collet Size: ER20
Output: 1:1



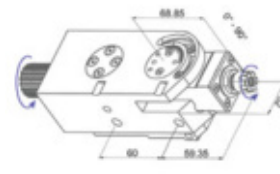
DE13-0003-H
Cross Drilling / Milling
Collet Size: ER20
Output: 1:1



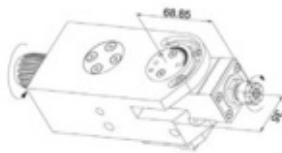
DE13-0010
Cross Drilling / Milling
Collet Size: ER11
Output: 1:1



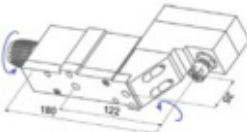
DE13-0020
Angled Drilling / Milling
Collet Size: ER11
Output: 1:1
Adjustable 0-180°



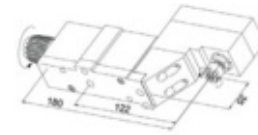
DE13-0041
Angled Drilling / Milling
Collet Size: ER11
Output: 1:1
Adjustable 0-90°



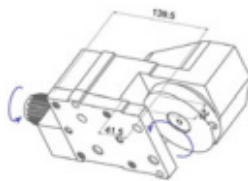
DE13-0042
Angled Drilling / Milling
Collet Size: ER11
Output: 1:1
Adjustable 0-90°



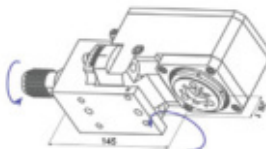
DE13-0011
End Drilling / Milling
Collet Size: ER11
Output: 1:1



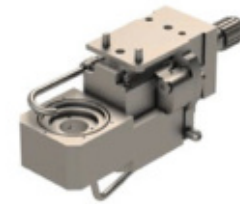
DE13-0012
End Drilling / Milling
Collet Size: ER11
Output: 1:1



DE13-0015
Polygon Milling
Tool ID: Ø16mm
Output: 1:1
Max Tool Ø80mm



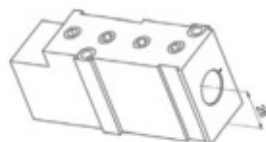
DE13-W15
Thread Whirling
Ring: Utilis
Output: 1:1
9 or 12 insert cutter,
Flight Circle Ø12mm,
Uses 2 Tooling Positions
Adjustable ±15°
Coolant-Thru



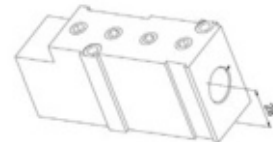
DE13-W25
Thread Whirling
Ring: Utilis
Output: 1:1
7 or 9 insert cutter,
Uses 2 Tooling Positions
Adjustable ±25°
Coolant-Thru



DEC13-0050
Tool Holder
Tool Size: Ø25mm
For High Speed Broaches



DEC13-0060
Tool Holder
Tool Size: Ø25mm

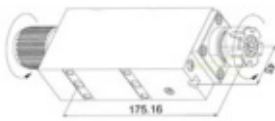


DE13-OF-030
Tool Holder
Tool Size: Ø20mm

Tornos DECO 20

(Machine's Live Tooling 8,000 RPM Rating)

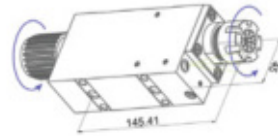
Operation	Item No.	(#Tools)Size	Output	Coolant Thru	Other
Drilling / Milling	DE20-0001	(1) ER25	1:1	External	258mm length
	DE20-0001-HP	(1) ER25	1:1	Int + Ext	258mm length
	DE20-0002	(1) ER25	1:1	External	228mm length
	DE20-0002-HP	(1) ER25	1:1	Int + Ext	228mm length
	DE20-0002-CR	(1) ER11 to ER20	1:1	External	Quick change, 187mm length
	DE20-0003	(1) ER25	1:1	External	292mm length
	DE20-0003-HP	(1) ER25	1:1	Int + Ext	292mm length
	DE20-0003-IK	(1) ER25	1:1	Int + Ext	292mm length
	DE20-0003-CR	(1) ER11 to ER20	1:1	External	Quick change, 277mm length
	DE20-0003-2X	(1) ER11	1:2		High speed, 277mm length
	DE20-0010	(3) ER11	1:1	External	Uses two locations
Angled Drilling / Milling	DE20-0004	(1) ER11	1:1	External	Adjustable 0-90°
	DE20-0005	(1) ER11	1:1	External	Adjustable 0-180°
	DE20-0020	(1) ER16	1:1		Adjustable 0-180°
Tool Holder	DE20-2160-L	(1) Ø8mm	1:1	External	Broaching holder, 319mm length
	DE20-OF-010	(1) 16x16mm			20mm height
	DE20-OF-020	(1) 16x16mm			24mm height
	DE20-OF-030	(1) Ø20		External	25mm height
Whirling	DE20-OF-040	(1) Ø25		External	25mm height
	DE20-W15	(1) Utilis	1:1	External	9 or 12 insert cutter, Ø12mm flight circle
	DE20-W15-II	(1) Utilis	1:1	External	9 or 12 insert cutter, Ø12mm flight circle



DE20-0001
Drilling / Milling
Collet Size: ER25
Output: 1:1
Length 258mm
Coolant-Thru (Ext)



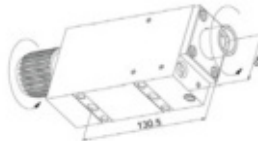
DE20-0001-HP
Drilling / Milling
Collet Size: ER25
Output: 1:1
Length 258mm
Coolant-Thru (Int+Ext)



DE20-0002
Drilling / Milling
Collet Size: ER25
Output: 1:1
Length 228mm
Coolant-Thru (Ext)



DE20-0002-HP
Drilling / Milling
Collet Size: ER25
Output: 1:1
Length 228mm
Coolant-Thru (Int+Ext)



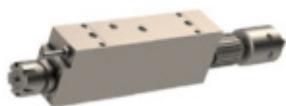
DE20-0002-CR
Drilling / Milling
Collet Size: ER11 to ER20
Output: 1:1
Length 187mm
Coolant-Thru (Ext)
Quick Change



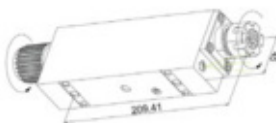
DE20-0003
Drilling / Milling
Collet Size: ER25
Output: 1:1
Length 292mm
Coolant-Thru (Ext)

CONTINUED ON NEXT PAGE

Tornos DECO 20



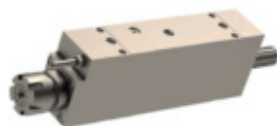
DE20-0003-HP
Drilling / Milling
Collet Size: ER25
Output: 1:1
Length 292mm
Coolant-Thru (Int+Ext)



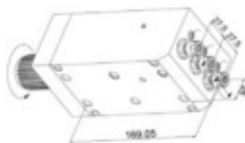
DE20-0003-1K
Drilling / Milling
Collet Size: ER25
Output: 1:1
Length 292mm
Coolant-Thru (Int+Ext)



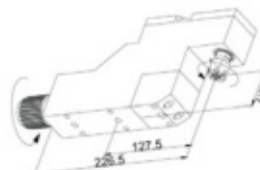
DE20-0003-CR
Drilling / Milling
Collet Size: ER11 to ER20
Output: 1:1
Length 277mm
Coolant-Thru (Ext)



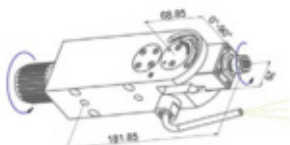
DE20-0003-2X
Drilling / Milling
Collet Size: ER11
Output: 1:2
Length 277mm
High Speed



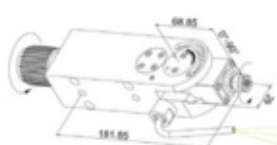
DE20-0010
Drilling / Milling
Collet Size: ER11
Output: 1:1
Coolant-Thru (Ext)
Uses Two Locations



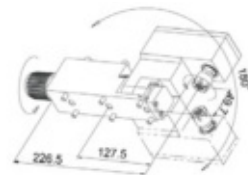
DE20-0011
Drilling / Milling
Collet Size: ER16
Output: 1:1



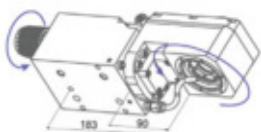
DE20-0004
Angled Drilling / Milling
Collet Size: ER11
Output: 1:1
Coolant-Thru (Ext)
Adjustable 0-90°



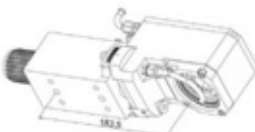
DE20-0005
Angled Drilling / Milling
Collet Size: ER11
Output: 1:1
Coolant-Thru (Ext)
Adjustable 0-180°



DE20-0020
Angled Drilling / Milling
Collet Size: ER16
Output: 1:1
Adjustable 0-180°



DE20-W15
Thread Whirling
Ring: Utilis
Output: 1:1
9 or 12 Insert Cutter,
Flight Circle Ø12mm
Coolant-Thru (Ext)



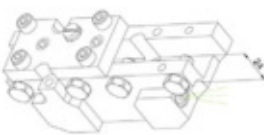
DE20-W15-II
Thread Whirling
Ring: Utilis
Output: 1:1
9 or 12 Insert Cutter,
Flight Circle Ø12mm
Coolant-Thru (Ext)



DE20-2160L
Tool Holder
Tool Size: Ø8mm
Length 319mm
Coolant-Thru (Ext)
Broach Holder



DE20-OF-010
Tool Holder
Tool Size: 16x16mm
Height 20mm



DE20-OF-020
Tool Holder
Tool Size: 16x16mm
Height 24mm

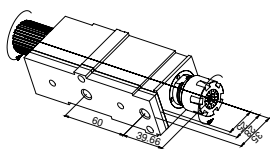


DE20-OF-030
Tool Holder
Tool Size: Ø20mm
Height 25mm
Coolant-Thru (Ext)

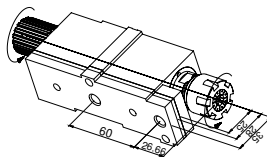
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be driven.

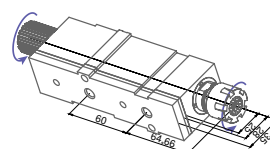
Operation	Item No.	(#Tools)Size	Output	Coolant Thru	Other
Drilling / Milling	DE13-0001-H	(1) ER20	1:1		
	DE13-0002-H	(1) ER20	1:1		
	DE13-0003-H	(1) ER20	1:1		
	DE13-0006	(1) ER16	1:1		
Polygon Milling	DE13-0015	(1) Ø16	1:1		



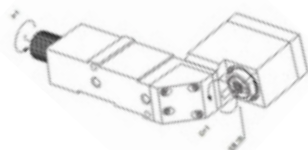
DE13-0001-H
Drilling / Milling
 Collet Size: ER20
 Output: 1:1



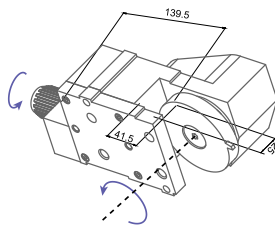
DE13-0002-H
Drilling / Milling
 Collet Size: ER20
 Output: 1:1



DE13-0003-H
Drilling / Milling
 Collet Size: ER20
 Output: 1:1



DE13-0006
Drilling / Milling
Collet Size: ER16
Output: 1:1



DE13-0015
Polygon Milling
Tool ID: Ø16mm
Output: 1:1

One of the benefits of buying live tooling and spindles from GenSwiss, is knowing we will repair them too. We will repair your spindle at a fraction of the cost to purchase a brand new one and have your Swiss-style CNC running again in no time.



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- **PCM and major OEM brands: CITIZEN, STAR, TSUGAMI, TORNOS**
- **\$50 evaluation & inspection (fee waived if repaired or replaced by us)**
- **Repaired by factory trained professionals**

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TSUGAMI SS20/32, HS20/32

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Machine	Operation	Item No.	Size	Output	Notes
SS20	Radial Drilling / Milling	HS20-GSC-107-3X-II	(1) ER11	1:3	High speed spindle up to 15,000 RPM
SS32	Axial Drilling / Milling	HS20-GSE-107-3X-II	(1) ER11	1:3	High speed spindle up to 15,000 RPM
HS20 HS32	Polygon Milling	HS20-GSP-613	(1) 13mm	1:1	Max tool Ø72mm, Max tool thickness 8.3mm



HS20-GSC-107-3X-II

Radial Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed
Machine: SS20/32,
HS20/32



HS20-GSE-107-3X-II

Radial Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed
Machine: SS20/32,
HS20/32



HS20-GSP-613

Polygon Milling
Tool Size:
ID Ø13
OD Ø72
Tool Thickness 8.3mm
Output: 1:1
Machine: SS20/32,
HS20/32

TSUGAMI BW20

Swiss Made by



Machine	Operation	Item No.	Size	Output	Notes
BW207 BW208 BW208Z BW209Z	Radial Drilling / Milling	BW20-GSC-105-4X	(1) ER08	1:3.8	High speed spindle up to 30,400 RPM



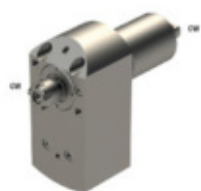
BW20-GSC-105-4X

Radial Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed
Machine: BW20

TSUGAMI S205/206

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Machine	Operation	Item No.	Size	Output	Notes
S205 S206	Radial Drilling / Milling	S20-RSC-107-3X	(1) ER11	1:3	High speed spindle up to 24,000 RPM
	Axial Drilling / Milling	S20-RSE-107-3X	(1) ER11	1:3	High speed spindle up to 24,000 RPM
	Polygon Milling	S20-GSP-613	(1) 13mm	1:1	Max tool Ø72mm Max tool thickness 8.3mm
	Slitting Saw	S20-RSS-110	(1) ER16	1:1	Max tool Ø70mm
	Thread Whirling	TSUGAMI1-GSW-220	(1) Utilis	1:1	Adjustable 0-20°, Utilis ring: 6mm flight circle



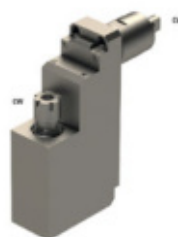
S20-RSC-107-3X
Radial Drilling / Milling
Collet Size: ER11
Output: 1:3
High Speed
Machine: S205/S206



S20-RSE-107-3X
Axial Drilling / Milling
Collet Size: ER11
Output: 1:3
High Speed
Machine: S205/S206



S20-GSP-613
Polygon Milling
Tool Size:
ID Ø13
OD Ø72
Tool Thickness 8.3mm
Output: 1:1
Machine: S205/S206



S20-RSS-110
Slotted Saw
Arbor Size: ER16
Output: 1:1
Max Tool Ø: 70mm
Machine: S205/S206



TSUGAMI1-GSW-220
Thread Whirling
Ring: Utilis Ring
Output: 1:1
Adjustable 0-20°
Flight Circle 6mm
Machine: S205/S206

TSUGAMI B026-II/032-II

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Machine	Operation	Item No.	Size	Output	Notes
B0265 II B0265B II B0266 II B0325 II B0325B II B0326 II	Radial Drilling / Milling	B026-GSC-105-4X	(1) ER08	1:3.8	High speed spindle up to 22,800 RPM
		B026-GSC-107-4X	(1) ER11	1:3.8	High speed spindle up to 22,800 RPM
		B026-GSC-107-3X	(1) ER11	1:3	High speed spindle up to 15,000
		B026-BSC-110-HP	(1) ER11	1:1	Internal coolant-thru



B026-GSC-105-4X
Radial Drill/Mill
Collet Size: ER08
Output: 1:3.8
High Speed
Machine: B026-II/B032-II



B026-GSC-107-4X
Radial Drill/Mill
Collet Size: ER11
Output: 1:3.8
High Speed
Machine: B026-II/B032-II



B026-GSC-107-3X
Radial Drill/Mill
Collet Size: ER11
Output: 1:3
High Speed
Machine: B026-II/B032-II



B026-BSC-110-HP
Radial Drill/Mill
Collet Size: ER11
Output: 1:1
Internal Coolant-Thru
Machine: B026-II/B032-II

TSUGAMI B026/032/038

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Machine	Operation	Item No.	Size	Output	Notes
B026 B032 B038	Axial Drilling / Milling	B026-RSE-110	(2) ER16	1:1	Double-ended
		B026-RSE-110-IK	(2) ER16	1:1	Double-ended, Internal coolant-thru
		B026-RSE-110M	(1) ER16	1:1	
		B026-RSE-110M-IK	(1) ER16	1:1	Internal coolant-thru
		B026-RSE-210	(4) ER16	1:1	Double-ended
		B026-RSE-210-IK	(4) ER16	1:1	Double-ended, Internal coolant-thru
		B026-RSE-210M	(2) ER16	1:1	
		B026-RSE-310	(6) ER16	1:1	Double-ended
		B026-RSE-310-IK	(6) ER16	1:1	Double-ended, Internal coolant-thru
		B026-RSE-310M	(3) ER16	1:1	
		B026-RSE-310M-IK	(3) ER16	1:1	Internal coolant-thru



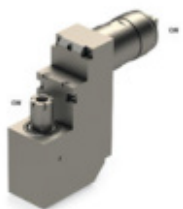
B026-RSE-110
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Double-Ended
 Machine: B026/32/38



B026-RSE-110-IK
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Internal Coolant-Thru
 Double-Ended
 Machine: B026/32/38



B026-RSE-110M
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Machine: B026/32/38



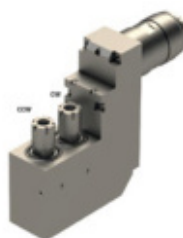
B026-RSE-110M-IK
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Internal Coolant-Thru
 Machine: B026/32/38



B026-RSE-210
Axial Drilling / Milling
 Arbor Size: ER16
 Output: 1:1
 Double-Ended
 Machine: B026/32/38



B026-RSE-210-IK
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Double-Ended
 Internal Coolant-Thru
 Machine: B026/32/38



B026-RSE-210M
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Machine: B026/32/38



B026-RSE-310
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Double-Ended
 Machine: B026/32/38



B026-RSE-310-IK
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Double-Ended
 Internal Coolant-Thru
 Machine: B026/32/38



B026-RSE-310M
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Machine: B026/32/38



B026-RSE-310M-IK
Axial Drilling / Milling
 Collet Size: ER16
 Output: 1:1
 Internal Coolant-Thru
 Machine: B026/32/38

TSUGAMI B01-III/02-III/07-III

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Machine	Operation	Item No.	Size	Output	Notes
B073-III B074-III B075-III B0123-III B0124-III B0125-III B0126-III B0203-III B0204-III B0205-III B0206-III	Radial Drilling / Milling	B07-GSC-105-4X	(1) ER08	1:3.8	High speed spindle up to 22,800 RPM
		B07-GSC-107-4X	(1) ER11	1:3.8	High speed spindle up to 22,800 RPM
		B07-GSC-110	(1) ER16	1:1	
	Axial Drilling / Milling	B07-RSE-207	(2) ER11	1:1	
		B07-RSE-207-IK	(2) ER11	1:1	Internal coolant-thru
		B07-RSE-207-2X	(2) ER11	1:2	High speed spindle up to 16,000 RPM
		B07-RSE-207-IK-2X	(2) ER11	1:2	High speed spindle up to 16,000 RPM, Internal coolant-thru
		B07-GSA-207	(2) ER11	1:1	Adjustable 90°
	Angled Drilling / Milling	B07-GSA-207-IK	(2) ER11	1:1	Adjustable 90°, Internal coolant-thru
		B07-GSA-207-2X	(2) ER11	1:2	High speed spindle up to 16,000 RPM, Adjustable 90°
		B07-GSA-207-IK-2X	(2) ER11	1:2	High speed spindle up to 16,000 RPM, Adjustable 90°, Internal coolant-thru
		B07-GSS-110	(1) ER16	1:1	Max tool Ø70mm
	Slitting Saw	B07-GSF-418	(1) 8mm	1:1	Max tool Ø72mm, Tool width 3-5mm
	Thread Milling	B07-GSF-518	(1) 8mm	1:1	Max tool Ø72mm, Tool width 3-5mm, Adjustable 1.5°



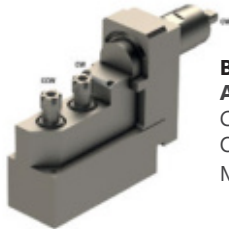
B07-GSC-105-4X
Radial Drilling / Milling
Collet Size: ER08
Output: 1:3.8
High Speed
Machine: B01/02/07



B07-GSC-107-4X
Radial Drilling / Milling
Collet Size: ER11
Output: 1:3.8
High Speed
Machine: B01/02/07



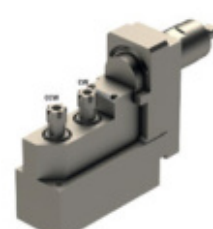
B07-GSC-110
Radial Drilling / Milling
Collet Size: ER16
Output: 1:1
Machine: B01/02/07



B07-RSE-207
Axial Drilling / Milling
Collet Size: ER11
Output: 1:1
Machine: B01/02/07



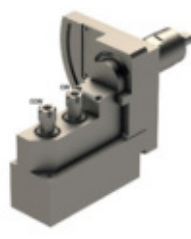
B07-RSE-207-IK
Axial Drilling / Milling
Collet Size: ER11
Output: 1:1
Internal Coolant-Thru
Machine: B01/02/07



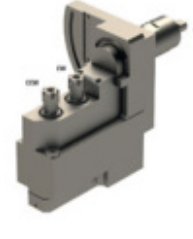
B07-RSE-207-2X
Axial Drilling / Milling
Collet Size: ER11
Output: 1:2
High Speed
Machine: B01/02/07



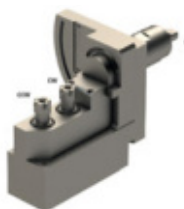
B07-RSE-207-IK-2X
Axial Drilling / Milling
Collet Size: ER11
Output: 1:2
High Speed
Internal Coolant-Thru
Machine: B01/02/07



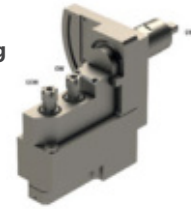
B07-GSA-207
Angled Drilling / Milling
Arbor Size: ER11
Output: 1:1
Adjustable 90°
Machine: B01/02/07



B07-GSA-207-IK
Angled Drilling / Milling
Arbor Size: ER11
Output: 1:1
Adjustable 90°
Internal Coolant-Thru
Machine: B01/02/07



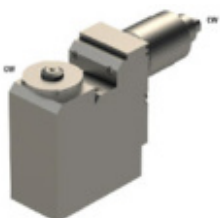
B07-GSA-207-2X
Angled Drilling / Milling
Arbor Size: ER11
Output: 1:2
Adjustable 90°
High Speed
Machine: B01/02/07



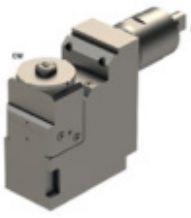
B07-GSA-207-IK-2X
Angled Drilling / Milling
Arbor Size: ER11
Output: 1:2
Adjustable 90°
High Speed,
Internal Coolant-Thru
Machine: B01/02/07



B07-GSS-110
Slotted Saw
Arbor Size: ER16
Output: 1:1
Max Tool Ø: 70mm
Machine: B01/02/07



B07-GSF-418
Thread Milling
Tool Size: 8mm
Output: 1:1
Max Tool Ø: 72mm
Tool Width: 3-5mm
Machine: B01/02/07



B07-GSF-518
Thread Milling
Tool Size: 8mm
Output: 1:1
Max Tool Ø: 72mm
Tool Width: 3-5mm
Adjustable 1.5°
Machine: B01/02/07

TSUGAMI P034H

Swiss Made by



Machine	Operation	Item No.	Size	Output	Notes
P034H	Axial Drilling / Milling	P03-GSE-207-II	(2) ER11	1:1	
	Radial Drilling / Milling	P03-GSC-015	(1) ER08	1:1	
	Gear Hobbing	P03-GSH-135-L	(1) 3.5mm	1:1	Adjustable $\pm 2.5^\circ$
	Polygon Milling	P03-GSP-118	(1) 8mm	1:1	Adjustable $\pm 2.5^\circ$, Max tool $\varnothing 45\text{mm}$
		P03-GSP-218	(1) 8mm	1:1	Adjustable $\pm 2.5^\circ$, Max tool $\varnothing 45\text{mm}$, Cutter offset
		P03-GSP-318	(1) 8mm	1:1	Adjustable in X $\pm 2.5^\circ$, Adjustable in Y $\pm 1.5^\circ$, Max tool $\varnothing 45\text{mm}$
	Thread Whirling	P03-GSW-220	(1) Utilis	1:1	Adjustable 0-20°
	Static Holders & Blocks	P03-GDF-416	(3) 16mm		
		P03-GDF-516	(3) 16mm		
		P03-GTF-018	(7) 8x8mm		
	Main Block Tool Holder with Gang Slide and High Speed Spindle	P03-GSC-117-S	See Notes To The Right	1:2	(2) 8x8mm square shank (1) $\varnothing 25\text{mm}$ holder for high speed spindle (1) ER11 high speed spindle, Up to 16,000 RPM (1) Modular



P03-GSE-207-II
End Drilling / Milling
Collet Size: ER11
Output: 1:1
Machine: P034H



P03-GSC-015
Cross Drilling / Milling
Collet Size: ER08
Output: 1:1
Machine: P034H



P03-GSH-135-L
Gear Hobbing
ID Size: $\varnothing 3.5\text{mm}$
Output: 1:1
Adjustable $\pm 2.5^\circ$
Machine: P034H



P03-GSP-118
Polygon Milling
Tool Size: $\varnothing 8\text{mm}$
Output: 1:1
Max Tool $\varnothing$: 45mm
Adjustable $\pm 2.5^\circ$
Machine: P034H



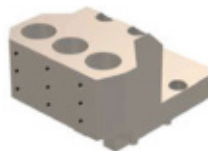
P03-GSP-218
Polygon Milling
Arbor Size: $\varnothing 8\text{mm}$
Output: 1:1
Max Tool $\varnothing$: 45mm
Adjustable $\pm 2.5^\circ$
Cutter Offset
Machine: P034H



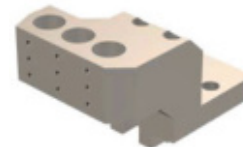
P03-GSP-318
Polygon Milling
Arbor Size: $\varnothing 8\text{mm}$
Output: 1:1
Max Tool $\varnothing$: 45mm
Y Adjustable $\pm 1.5^\circ$
X Adjustable $\pm 2.5^\circ$
Machine: P034H



P03-GSW-220
Thread Whirling
Ring: Utilis
Output: 1:1
9 or 12 Insert Cutter,
Adjustable 0-20°
Machine: P034H



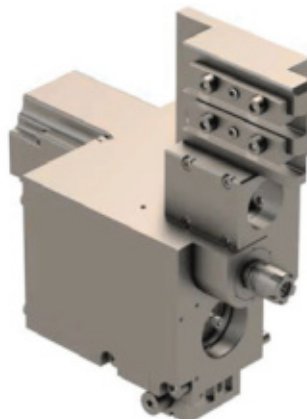
P03-GDF-416
Static Tool Holder
Tool Size: $\varnothing 16\text{mm}$
Machine: P034H



P03-GDF-516
Static Tool Holder
Tool Size: $\varnothing 16\text{mm}$
Machine: P034H



P03-GTF-018
Static Tool Holder
Tool Size: 8mmx8mm
Machine: P034H



P03-GSC-117-S
Main Block Tool Holder
Collet Size: ER11
Output: 1:2
Tool N°01 cutter carrier 8mm x 8mm
Tool N°02 cutter carrier 8mm x 8mm
Tool N°03 high frequency $\varnothing 25$
Tool N°04 in ER11 with RPM 16'000.
Tool N°05 is a modular quick change for different operation.
Machine: P034H



SR20J-W20
Thread Whirling

All Machines

Gang Slide Tools

Operation	Item No.	(#Tools)Size	Output	Machine	Other
Cross Drilling / Milling	E20-GSC-3X	(1) ER11	1:2.59	ECAS12/20, SB12-20R, SR20J/JN, SR-20RII/RIII/RIV, SR32J/JN, SV12/20/32, SV32JII, SV38R, SW20	High speed
	E20-GSC-110	(1) ER16	1:1	ECAS12/20, SB12-20R, SR20J/JN, SR-20RII/RIII/RIV, SR32J/JN, SV12/20/32, SV32JII, SV38R, SW20	
	STA-SR20J-GSC-010-HP	(1) ER16	1:1	ECAS12/20, SB12-20R, SR20J/JN/SR-20RIII, SR20RII, SR20 RIV, SR32J/JN, SV12/20/32, SV32JII, SV38R, SW20	2175psi max coolant cressure
	STA-A100-E16	(1) ER16	1:1	ECAS12/20, SB12-20R, SR20J/JN, SR-20RII/RIII/RIV, SR32J/JN, SV12/20/32, SV32JII, SV38R, SW20	
	STA-A106-E11	(1) ER11	1:1	ECAS12/20, SB12-20R, SR20J/JN, SR-20RIII, SR20RII/IV, SR32J/JN, SW20	
	STA-A120-E16	(1) ER16	1:1	ECAS12/20, ECAS-32T, SB12-20R, SR20J/JN/SR-20RIII, SR20RII/IV, SV38R, SW20	
	STA-A121-E08	(1) ER08	1:1	ECAS12/20, SB12-20R, SR20J/JN/SR-20RIII, SR20RII/IV, SV38R, SW20	
End Drilling / Milling	E20-DE-1111	(2) ER11	1:1	ECAS12/20, SB12-20R, SR20J/JN, SR-20RII/RIII/RIV, SR32J/JN, SV12/20/32, SV32JII, SV38R, SW20	Double ended
	E20-GSE-210	(2) ER16	1:1	ECAS12/20, SB12-20R, SR20J/JN, SR-20RII/RIII/RIV, SR32J/JN, SV12/20/32, SV32JII, SV38R, SW20	
	SR20J-GSE-3710	(3) ER11 (3) ER16	1:1	SR20J	
	SR32J-GSE-3710	(3) ER11 (3) ER16	1:1	SR32J	Double ended
	STA-R177-2E16	(2) ER16	1:1	SB-12/20R, SR20J/JN/RIII, SR20RII, SR20RIV	
	STA-R146-E16	(1) ER16	1:1	SB-12/20R, SR20J/JN/RIII, SR20RII/RIV, SW20	
	STA-R208-3E16	(3) ER16	1:1	SB-12/20R, SR20J/JN/RIII, SR20RIV	
	STA-R177-4E11	(4) ER11	1:1	SR20J/JN/RIII, SR-20RIV	Double ended
	STA-R146-E11	(1) ER11	1:1	ECAS12/20, SW20	
	STA-R146-2E11	(2) ER11	1:1	ECAS12/20, SW20	
Hobbing	E20RSH-035 *	(1) Ø3.5	1:1	SR20	Adjustable ±5°
	E20-RSH-080	(1) Ø8	1:1	SR20	Adjustable ±5°
	SW12-GSH-045	(1) Ø4.5	1:1	SW12-RII	Adjustable +15°/-3°
	SW12-GSH-080	(1) Ø8	1:1	SW12-RII	Adjustable +10°/-3°
Polygon Milling	SR20RII-GSP-713	(1) Ø13	1:1	SR20RII	Max tool Ø60mm Max thickness 8.3mm
	SB-GSP-218	(1) Ø8	1:1	SB16, SB20	Adjustable ±10°
	SW12-GSP-218	(1) Ø8	1:1	SW12-RII	Adjustable ±10°
Whirling	E20-W20	(1) Utilis	1:1	SR-20, SR-30, SW-20, ECAS-12, ECAS-20	9 or 12 Insert, Adjustable ±20°, Flight circle Ø6mm
	SR20J-W20	(1) Utilis	1:1	SR20J/JN/RIII	9 or 12 Insert, Adjustable ±20°, Flight circle Ø12mm
	STAR2-GSW-210	(1) Utilis	1:1	SR20J, SB-16R	7 or 9 Insert, Adjustable ±10°, Flight circle Ø6mm
	SW12-GSH-045 (Hobbing)	(1) Ø4.5	1:1	SW12-RII	Adjustable +15°/-3°
Modular	SW12-GSH-080 (Hobbing)	(1) Ø8	1:1	SW12-RII	Adjustable +10°/-3°
	SB-GSP-218 (Polygon Milling)	(1) Ø8	1:1	SB16, SB20	Adjustable ±10°
	SW12-GSP-218 (Whirling)	(1) Ø8	1:1	SW12-RII	Adjustable ±10°
	STAR2-GSW-210 (Whirling)	(1) Utilis	1:1	SR20J, SB-16R	7 or 9 Insert, Adjustable ±10°, Flight circle Ø6mm

All Machines

Sub Spindle Tools

Operation	Item No.	(#Tools)Size	Output	Machine	Other
Back Working	STA-BW096-E11	(1) ER11	1:1	ECAS12/20, SB12-20R, SR10J, SR20J/JN/SR-20RIII, SR20RII/RIV, SR32J/JN, SW12RII	
	STA-BW096-E16	(1) ER16	1:1	ECAS12/20, SB12-20R, SR20J/JN/SR-20RIII, SR20RII/RIV, SR32J/JN, SW12RII	
	STA-BW098-E16	(1) ER16	1:1	SR20-RIV, SW-12RII, SW20	
	STA-SR20J-GSE-010-HP	(1) ER16	1:1	ECAS12/20, SB12-20R, SR20J/JN/SR-20RIII, SR20RII, SR20 RIV, SR32J/JN, SW12RII	2175psi Max Coolant Pressure
	STA-SR20J-RSC-007	(1) ER11	1:1	ECAS12/20, SB12-20R, SR20J/JN/SR-20RIII, SR20RII, SR20 RIV, SR32J/JN, SW12RII	
End Drilling / Milling	E20-GSE-110	(1) ER16	1:1	ECAS12/20, SB12-20R, SR20J/JN, SR-20RII/RIII/RIV, SR32J/JN, SV12/20/32, SV32JII, SV38R, SW20	

20mm Machines

Turret Tools

Operation	Item No.	(#Tools)Size	Output	Machine	Other
Cross Drilling / Milling	SV20-TSC-210	(4) ER11	1:4	20T, SV20	Double ended
	SV20-T2X2X4	(4) ER11	1:4	SV12, SV20	Double ended, High speed
End Drilling / Milling	SV20-TSE-010	(2) ER16	1:1	20T, SV20	Double ended
	SV20-TSE-207	(4) ER11	1:1	20T, SV20	Double ended

32 & 38mm Machines

Turret Tools

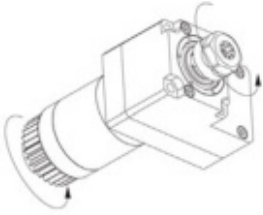
Operation	Item No.	(#Tools)Size	Output	Machine	Other
Cross Drilling / Milling	E20C-110-IK *	(1) ER16	1:1	20T, SV20	
	E20C-110-K *	(1) ER16	1:1	20T, SV20	
	SV32-TSC-210	(2) ER16	1:1	32T, SV32	
End Drilling / Milling	SV32-TSE-010	(4) ER11	1:1	SV-38R, ECAS-32T	Double ended
	SV32-TSE-207	(4) ER11	1:1	SV-38R, ECAS-32T	Double ended
Whirling	SV32-W20	(1) Utilis	1:1	SV-32	9 or 12 Insert, Adjustable $\pm 20^\circ$, Flight circle $\varnothing 12\text{mm}$

SR10J Machine Specific Tooling

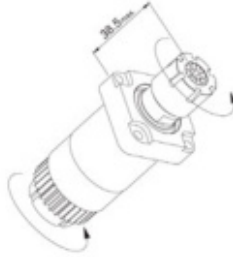
Operation	Item No.	(#Tools)Size	Output	Machine	Other
Cross Drilling / Milling	SR10J-GSC-E11-2X	(2) ER11	1:1	SR10J	
	SR10J-GSC-E11-2X-DEC	(2) ER11	1:1	SR10J	
	SR10J-GSC-E08	(1) ER08	1:1	SR10J	
	SR10J-GSH-035	(1) $\varnothing 3.5$		SR10J	
Hobbing	SR10J-GSH-035-II	(1) $\varnothing 3.5$		SR10J	
	SR10J-GSH-050-II	(1) $\varnothing 5$	1:1	SR10J	
Polygon Milling	SR10J-GSF-080-II	(1) $\varnothing 8$		SR10J	
	SR10J-GSF-100-II	(1) $\varnothing 10$		SR10J	
Tool Holder	SR10J-GSC-E11S	(1) ER11	1:1.666	SR10J	Replaces main block with fixed ER11 spindle plus quick change modular spindle.
	SR10J-GSC-E11AZ	(1) ER11	1:1.666	SR10J	Same as SR10J-GSC-E11S but spindle is 8.7mm set back and main block is 10mm longer.
	5510-000-139A	(1) ER11		SR10J	
Whirling	SR10J-GSW-010	(1) Utilis	1:1	SR10J	7 or 9 Insert, Adjustable $\pm 10^\circ$, Flight circle $\varnothing 6\text{mm}$

Star Spindles & Attachments

Gang Slide - All Machines



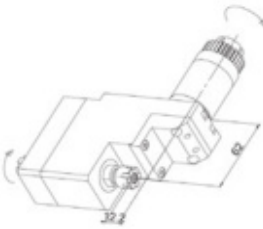
**E20-GSC-3X
Cross Drill/Mill**
Collet Size: ER11
Output: 1:2.59
High Speed
Double Ended



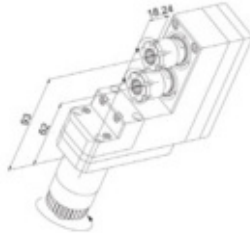
**E20-GSC-110
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1



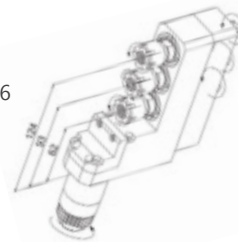
**STA-SR20J-GSC-010-HP
Cross Drill/Mill**
Collet Size: ER16
Output: 1:1
Coolant-Thru
2175psi Max



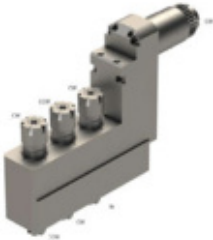
**E20-DE-1111
End Drill/Mill**
Collet Size: ER11
Output: 1:1
Double Ended



**E20-GSE-210
End Drill/Mill**
Collet Size: ER16
Output: 1:1



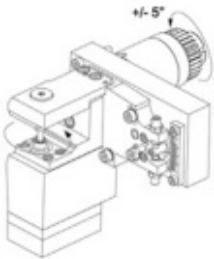
**SR20J-GSE-3710
End Drill/Mill**
Collet Size: ER11 ER16
Output: 1:1



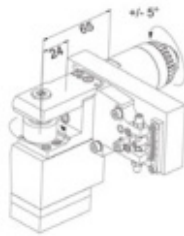
**SR32J-GSE-3710
End Drill/Mill**
Collet Size: ER11 ER16
Output: 1:1
Double Ended

Star Spindles & Attachments

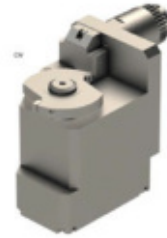
Gang Slide - All Machines



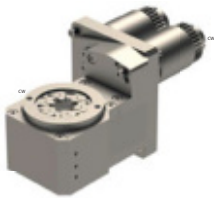
**E20-RSH-035
Gear Hobbing**
ID Size: Ø3.5mm
Output: 1:1
Adjustable $\pm 5^\circ$



**E20-RSH-080
Gear Hobbing**
ID Size: Ø8mm
Output: 1:1
Adjustable $\pm 5^\circ$



**SR20RII-GSP-713
Polygon Milling**
ID Size: Ø13mm
Output: 1:1
Max Tool Ø60mm
Max Thickness 8.3mm



**E20-W20
Thread Whirling**
Ring: Utilis
Output: 1:1
9 or 12 Insert Cutter,
Flight Circle Ø6mm
Adjustable $\pm 20^\circ$



**SR20J-W20
Thread Whirling**
Ring: Utilis
Output: 1:1
9 or 12 Insert Cutter,
Flight Circle Ø12mm
Adjustable $\pm 20^\circ$

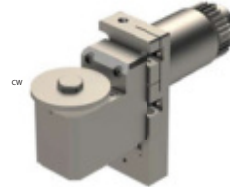
Gang Slide - Modular



**SW12-GSH-045
Modular
Gear Hobbing**
ID Size: Ø4.5mm
Output: 1:1
Adjustable $+15^\circ/-3^\circ$



**SW12-GSH-080
Modular
Gear Hobbing**
ID Size: Ø8mm
Output: 1:1
Adjustable $+15^\circ/-3^\circ$



**SB-GSP-218
Modular
Polygon Milling**
ID Size: Ø8mm
Output: 1:1
Adjustable $\pm 10^\circ$



**SW12-GSP-218
Modular
Polygon Milling**
ID Size: Ø8mm
Output: 1:1
Adjustable $\pm 10^\circ$



**STAR2-GSW-210
Modular
Thread Whirling**
Ring: Utilis
Output: 1:1
7 or 9 Insert Cutter,
Flight Circle Ø6mm
Adjustable $\pm 10^\circ$

Star Spindles & Attachments

Sub Spindle



STA-SR20J-GSE-010-HP Back Working

Collet Size: ER16
Output: 1:1
Coolant-Thru 2175psi Max



STA-SR20J-RSC-007 Back Working

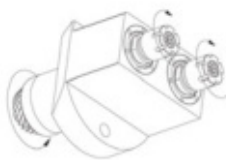
Collet Size: ER11
Output: 1:1



E20-GSE-110 End Drill/Mill

Collet Size: ER16
Output: 1:1

Turret - 20mm Machines



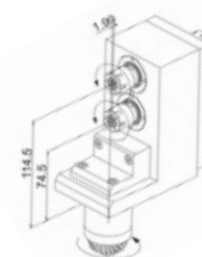
SV20-TSC-210 Cross Drill/Mill

Collet Size: ER11
Output: 1:4
High Speed
Double Ended



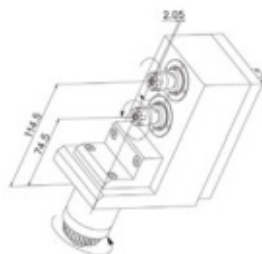
SV20-T2X2X4 End Drill/Mill

Collet Size: ER11
Output: 1:4
High Speed
Double Ended



SV20-TSE-010 End Drill/Mill

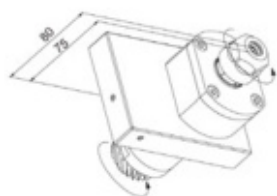
Collet Size: ER16
Output: 1:1
Double Ended



SV20-TSE-207 End Drill/Mill

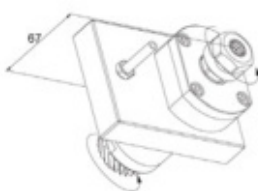
Collet Size: ER11
Output: 1:1
Double Ended

Turret - 32 & 38mm Machines



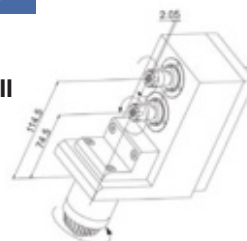
E20C-110-1K Cross Drill/Mill

Collet Size: ER16
Output: 1:1



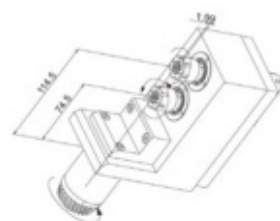
E20C-110-K Cross Drill/Mill

Collet Size: ER16
Output: 1:1



SV32-TSE-207 End Drill/Mill

Collet Size: ER11
Output: 1:1
Double Ended



SV32-TSE-010 End Drill/Mill

Collet Size: ER11
Output: 1:1



SV32-TSC-210 Cross Drill/Mill

Collet Size: ER16
Output: 1:1

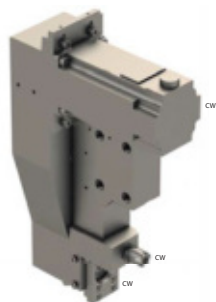


SV32-W20 Thread Whirling

Ring: Utilis
Output: 1:1
9 or 12 Insert Cutter,
Flight Circle Ø12mm
Adjustable ±20°

Star Spindles & Attachments

SR10J Specific Tooling



SR10J-GSC-E11S Tool Holder

Collet Size: ER11
Output: 1:1.666
Replaces main block with fixed ER11 spindle plus an additional quick-change modular spindle supporting various operations



SR10J-GSC-E11AZ Tool Holder

Collet Size: ER11
Output: 1:1.666
Same as SR10J-GSC-E11S but ER11 spindle is 8.7mm set back and main block 10mm longer



5510-000-139A Tool Holder

Collet Size: ER11

NOTE: Installation Of SR10J-GSC-E11S or SR10J-GSC-E11AZ Requires A Certified STAR Technician

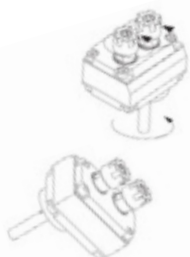
Modular Spindles Require SR10J-GSC-E11S or E11AZ



SR10J-GSC-E11-2X Cross Drill/Mill

Collet Size: ER11
Output: 1:1

MODULAR HEAD



SR10J-GSC-E11-2X-DEC Cross Drill/Mill

Collet Size: ER11
Output: 1:1

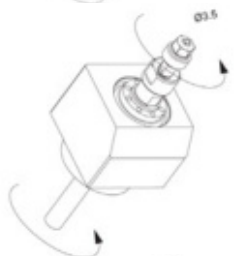
MODULAR HEAD



SR10J-GSC-E08 Cross Drill/Mill

Collet Size: ER08
Output: 1:1

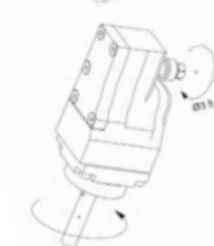
MODULAR HEAD



SR10J-GSH-035 Gear Hobbing

ID Size: Ø3.5mm
Output: 1:1

MODULAR HEAD



SR10J-GSH-035-II Gear Hobbing

ID Size: Ø3.5mm
Output: 1:1

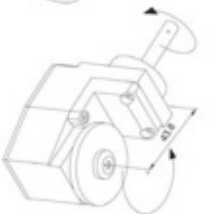
MODULAR HEAD



SR10J-GSH-050-II Gear Hobbing

ID Size: Ø5mm
Output: 1:1

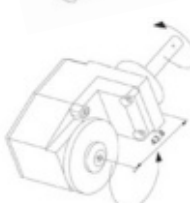
MODULAR HEAD



SR10J-GSF-080-II Polygon Milling

ID Size: Ø8mm
Output: 1:1

MODULAR HEAD



SR10J-GSF-100-II Polygon Milling

ID Size: Ø10mm
Output: 1:1

MODULAR HEAD



SR10J-GSW-010 Thread Whirling

Ring: Utilis
Output: 1:1
7 or 9 Insert Cutter,
Flight Circle Ø6mm
Adjustable ±10°

MODULAR HEAD