

TOHP VERY HIGH PRESSURE live tool program

Citizen, Star, Tornos, Tsugami & others

PRECITRONICS
SWISS Type Technology

Pressure up to
150 bar



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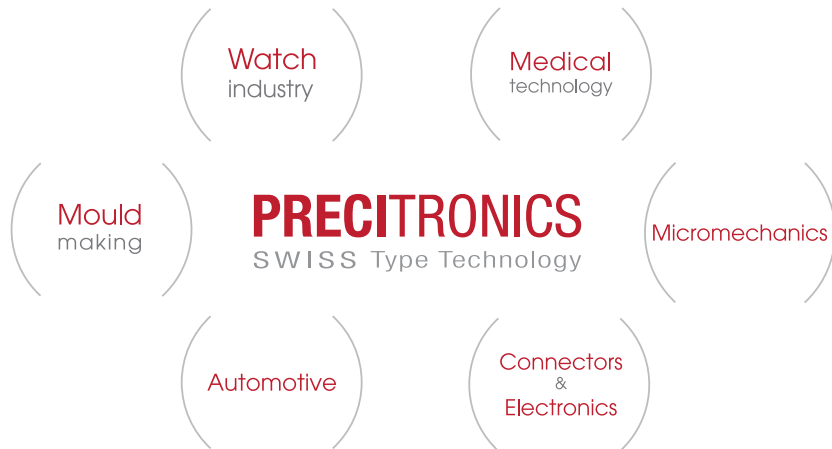
www.precitronics.com

Why Precitronics?

The knowledge of the processes and means of production in the areas of precision turning parts, milling and gear cutting, allows us to meet our customers' projects successfully.

La connaissance des processus et des moyens de production dans les domaines de pièces de précision (tournage, fraisage et taillage des engrenages), nous permet de répondre avec succès aux projets de nos clients.

Die Kenntnis der Arbeitsvorgänge und Produktionsmittel in den Bereichen Präzisionsdrehteile, Fräsen und Verzahnen ermöglicht uns, die Projekte unserer Kunden erfolgreich zu erfüllen.



We are associated with several processes development centers, but we also work together with leading watch manufacturers. This means for us an advantage: being able to put into practice the most advanced technical skills with them. Training people in the art of precision parts belongs to our working logic too.

Nous appartenons à plusieurs centres de développement de processus mais aussi nous travaillons ensemble avec les principales manufactures et sous-traitant horlogers; ce qui nous confère l'avantage d'être en mesure de connaître les compétences techniques les plus avancées. Être impliqué dans la formation de personnes dans l'art des pièces de précision correspond aussi à notre philosophie de travail.

Wir sind mit mehreren Prozessentwicklungszentren verbunden und arbeiten aber auch mit führenden Uhrenherstellern zusammen. Das bringt uns den Vorteil, die fortschrittlichsten technischen Fähigkeiten mit ihnen erleben zu können. Die Ausbildung von Menschen in der Kunst der Präzisionsteile gehört ebenfalls zu unserer Arbeitsphilosophie.

Application fields



Watch industry



Medical Technology



Micromechanics



Automotive



Mould making



Connectors & electronics

Who are we?

We, as company, work together with specialists of multiple disciplines who meet the experience in the area of the watchmaking, medical and micro parts, in order to offer modern and specific solutions by using the latest technologies reasonably. To increase competitiveness, quality, reliability in the applications of our customers is our main target.

Nous sommes une entreprise, qui s'allie à des spécialistes expérimentés dans diverses disciplines des secteurs de l'horlogerie, du médical et de la micromécanique afin d'offrir des solutions modernes et spécifiques en utilisant judicieusement les dernières technologies, avec ambition principale d'accroître la compétitivité, la qualité, la fiabilité des fabrications de nos clients.

Wir arbeiten in Verbindung mit Spezialisten verschiedener Bereiche zusammen, die über große Erfahrung auf den Gebieten der Uhrentechnik, der Medizin und der Mikroteile verfügen. Diese können moderne und spezifische Lösungen anbieten, indem die neuesten Technologien eingesetzt werden. Die Wettbewerbsfähigkeit, Qualität und Zuverlässigkeit der Bearbeitung unserer Kunden ist unsere höchste Priorität.





TOHP

FULL HIGH PRESSURE machining with our live tooling
Improved cutting for many different machining operations

PRECITRONICS
SWISS Type Technology



Pressure up to
150 bar



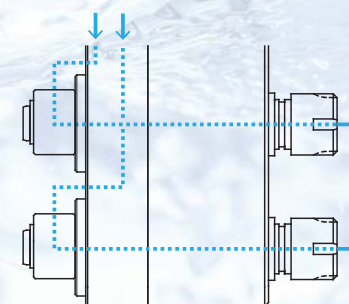
Slip-Off Proof Clamping Nut
Optional

**NO LEAKS INSIDE
THE TOOLHOLDER**



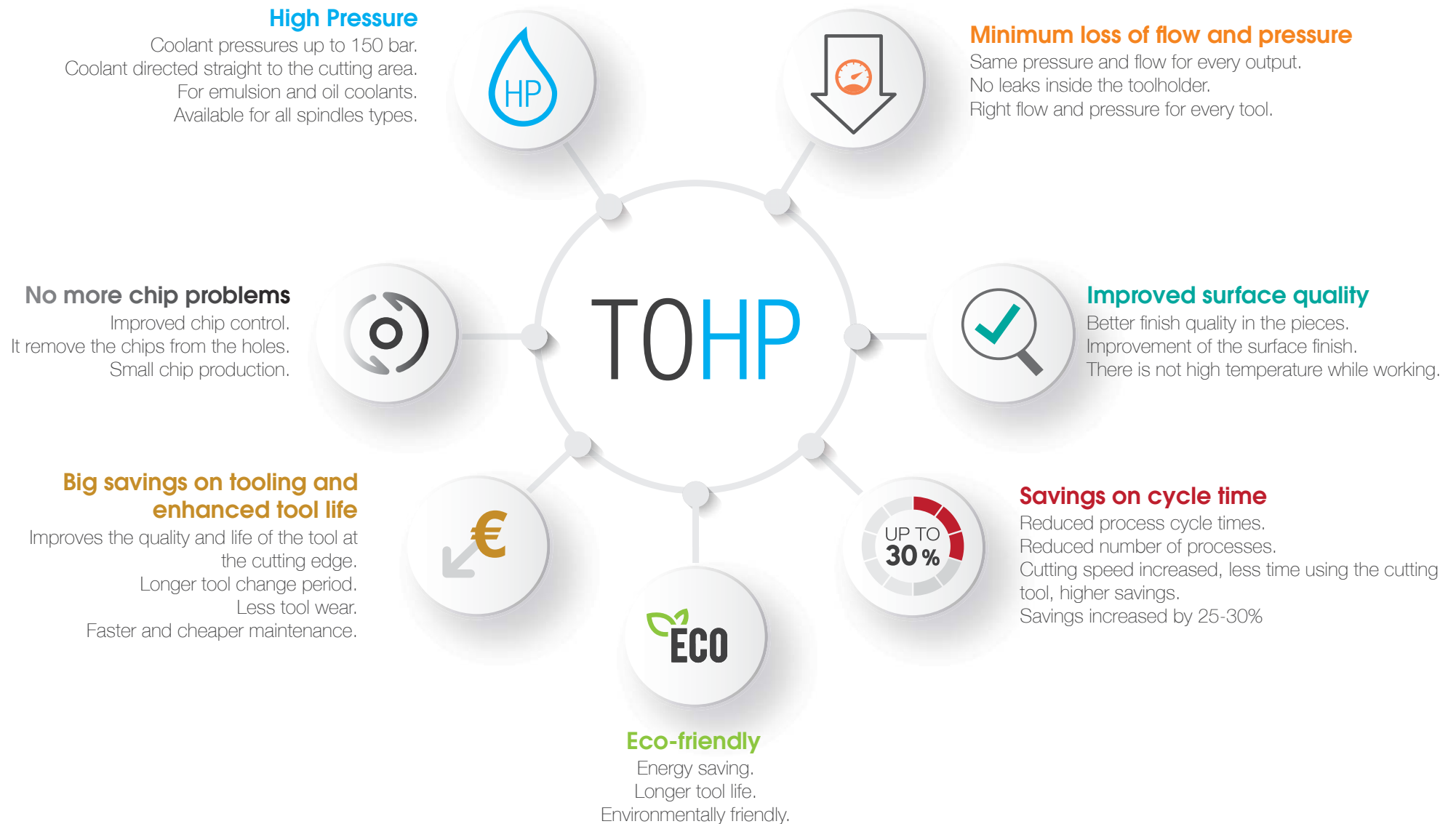
Specially designed to keep
the original tool length

MIC Multiple
Independent Channels



Right flow and pressure for
every tool.

System protected to avoid collisions with machine and impacts from chips.
Suitable for all types of spindles , not only collets.



Passion for precision

PRECITRONICS
SWISS Type Technology

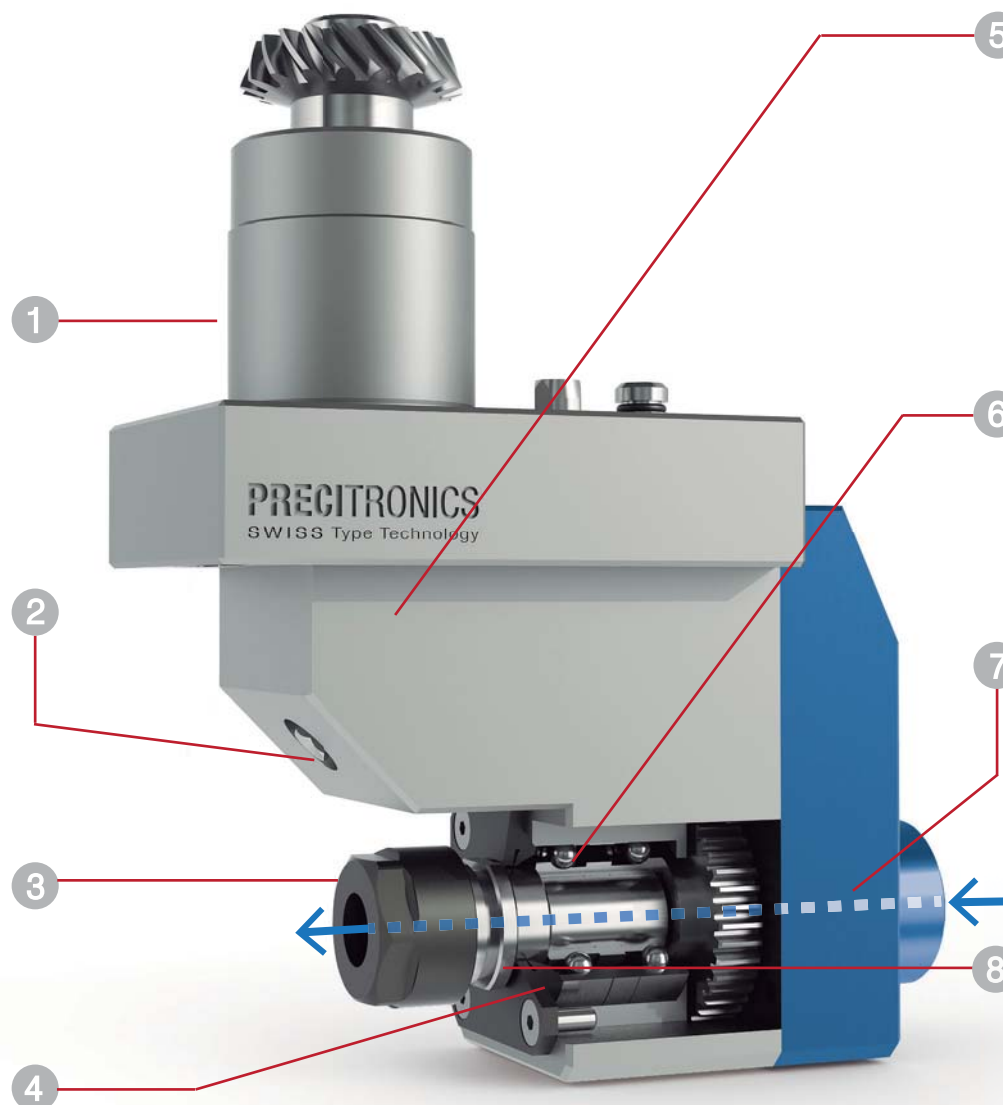
Precise and rigid manufacture
Adaptable to all types of machines
100% Checked and tested
High speed rotation
Longer tool life

All type of drive tool connections.

High grade synthetic grease for long life lubrication.

Multiple output options.

Primary labyrinth seal.



5 Hand matched or ground spiral bevel gears to minimize backlash. Smooth and quiet running with higher torque.

6 High precision P3 quality preloaded bearings.

7 Available with coolant through the spindle up to 150 bar.

8 Improved sealing design combining a labyrinth and optimized friction seals to get hermetically sealed spindles.

8 CITIZEN

8 A20

10 A32

12 K12 / K16

14 L12

15 L16 / L20 Type VII-VIII-IX-X-XII & L20E

Type VIII-X-XII

21 L25 / L32 Type IV-VI

22 L32 Type VIII-IX-X-XII

25 M12 / M16 Type III-V & C16 / C32

26 M12 / M16 Type V-VII-VIII

27 M12 / M16 Type III-V-VII-VIII Turret tooling

29 M20 / M32 Type III-V

30 M20 / M32 Type V-VII-VIII

31 M20 / M32 Type III-V-VII-VIII Turret tooling

33 STAR

Ø34 Gang Tooling

33 SB-12R, SB-20R

33 SR-20J/JN, SR-20JII, SR-32J/JN, SR-32JII, SR-20RIV

33 SW-20, SX-38

33 ECAS-12/20, ECAS-32T, SB-16, SR-20RII, SV-12/20/32, SV-32JII

Ø22 Back End Tooling

35 SB-12R, SB-20R, SR-10J, SR-20J/JN, SR-32J/JN, SW-12RII

35 ECAS-12/20, SB-16, SR-20RII

35 SR-20JII, SR-32JII, SR-20RIV, SR-38, SR-38J, SV-20R, SW-12RII, SW-20

Turret Tooling

36 ST-20, SV-20R

36 ECAS-20T, KNC-16/20, SV-12/20, SV-32JII

38 ST-38, SV-38R

38 ECAS-32T, KNC-32, SV-32

Current Models

Discontinued Models

40 TORNOS

- 40 DECO 20 / 26, EvoDECO 20 / 32
- 42 DECO 13, EvoDECO 16/10
- 44 DECO 7 / 10, EvoDECO 10/10 - 10/8
- 45 Swiss GT 13/ 26 / 26B / 32 / 32B
- 45 Swiss DT 13/ 26

46 TSUGAMI

Gang Tooling

- 46 B0265, B0325, B0265B, B0325B, B0266, B0326, B0385, B0385L Type II / III
- 46 SS20, SS26, SS32, SS32L - HS20, HS26, HS32, HS32L
- 46 SS267, SS327, SS267-5AX, SS327-5AX

Back End Tooling

- 47 B0125, B0205, B0126, B0206 Type II / III
- 47 B0265, B0325, B0265B, B0325B, B0266, B0326, B0385, B0385L Type II / III
- 47 SS20, SS26, SS32, SS32L - HS20, HS26, HS32, HS32L
- 47 SS267, SS327, SS267-5AX, SS327-5AX
- 48 BH20, BH20Z, BH38, B038T
- 49 S205-S206 Type II

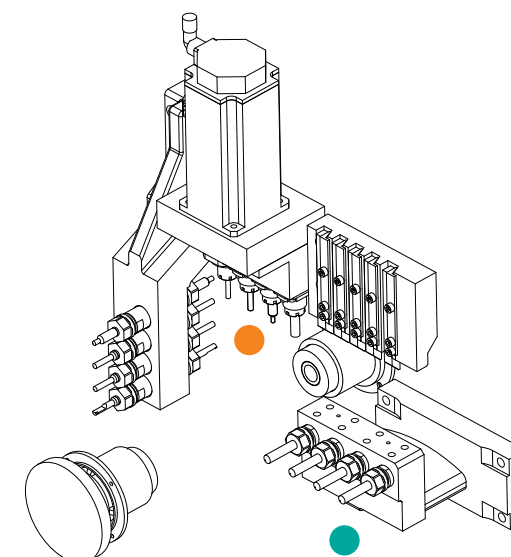




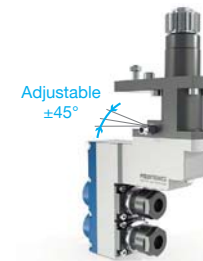
Type	Axial	Axial	Axial Speeder	Radial Double Output	Radial Set-Back	Radial Set-Back
Code	CZ.500.A20-ER16	CZ.500.A20-ER20	CZ.502.A20	CZ.508.A20	CZ.511.A20-ER11	CZ.511.A20-ER16
RPM Max	ER-16	ER-20	ER-11	ER-11	ER-11	ER-16
RPM Max	8.000	8.000	16.000	8.000	8.000	8.000
RPM Max	1:1	1:1	1:2	1:1	1:1	1:1



Type	Radial Set-Back Speeder	Radial Adjustable $\pm 90^\circ$	Radial 2 Outputs	Radial 3 Outputs
Code	CZ.513.A20	CZ.521.A20	CZ.529.A20-2	CZ.529.A20-3
RPM Max	ER-11	ER-11M	ER-11M	ER-11M
RPM Max	16.000	8.000	8.000	8.000
RPM Max	1:2	1:1	1:1	1:1



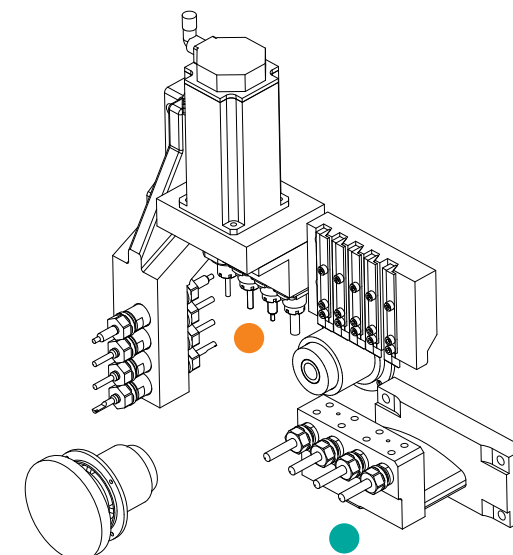
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Type	Radial 4 Outputs	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±45° 2 Outputs	Radial "Y" Axis ±45° 2 Outputs	Axial Back Rotary Tool
Code	CZ.529.A20-4	CZ.534.A20	CZ.535.A20-15	CZ.535.A20-30	CZ.551.A20-ER11	CZ.551.A20-ER16	CZ.500.A20-BE
ER-11M		Cyl-Shaft	Cutting Head	Cutting Head	ER-11M	ER-16	ER-11
RPM Max	8.000	8.000	8.000	8.000	8.000	8.000	5.000
1:1		1:1	1:1	1:1	1:1	1:1	1:1



Type	Axial Long Back Rotary Tool	Axial Speeder Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Speeder Back Rotary Tool	Radial Adjust. 0-90° Back Rotary Tool
Code	CZ.500.A20-BE-L	CZ.502.A20-BE	CZ.511.A20-BE	CZ.513.A20-BE	CZ.521.A20-BE
ER-11		ER-11	ER-11A	ER-11	ER-11
RPM Max	5.000	15.000	5.000	10.000	5.000
1:1		1:3	1:1	1:2	1:1



Patented



Axial



Axial



Axial Speeder



Radial Double Output



Radial Set-Back

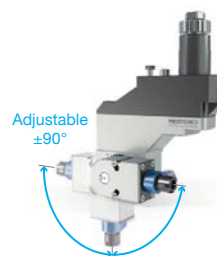
Type	Axial	Axial	Axial Speeder	Radial Double Output	Radial Set-Back
Code	CZ.500.A32-ER16	CZ.500.A32-ER20	CZ.502.A32	CZ.508.A32	CZ.511.A32
 ER	ER-16	ER-20	ER-11	ER-16M	ER-16
 RPM Max	8.000	8.000	16.000	8.000	8.000
 Ratio	1:1	1:1	1:2	1:1	1:1



Radial Set-Back Speeder

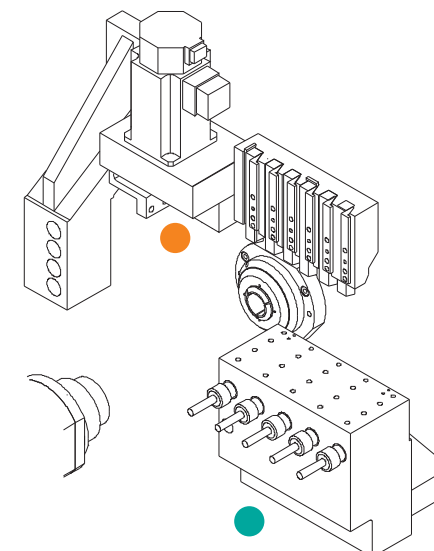


Radial Adjustable ±90°



Radial Adjustable ±90° Slim

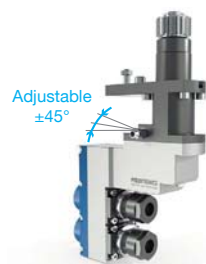
Type	Radial Set-Back Speeder	Radial Adjustable ±90°	Radial Adjustable ±90° Slim
Code	CZ.513.A32	CZ.521.A32	CZ.521.A32-S
 ER	ER-11	ER-11M	ER-11M
 RPM Max	16.000	8.000	8.000
 Ratio	1:2	1:1	1:1



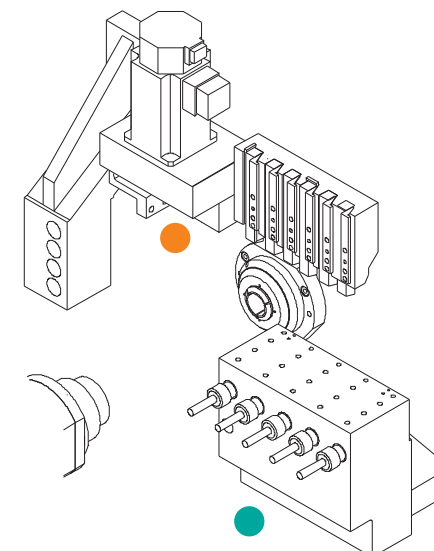
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Type	Radial 3 Outputs	Radial 3 Outputs (Same rotation sense)	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°
Code	CZ.529.A32-3A	CZ.529.A32-3B	CZ.534.A32	CZ.535.A20-15	CZ.535.A32-30
ER-16	ER-16	ER-16	Cyl-Shaft	Cutting Head	Cutting Head
RPM Max	8.000	8.000	8.000	8.000	8.000
1:1	1:1	1:1	1:1	1:1	1:1



Type	Radial "Y" Axis ±45° 2 Outputs	Axial Back Rotary Tool	Radial Set-Back Back Rotary Tool
Code	CZ.551.A32	CZ.500.A32-BE	CZ.511.A32-BE
ER-16	ER-16	ER-16	ER-16
RPM Max	8.000	8.000	8.000
1:1	1:1	1:1	1:1

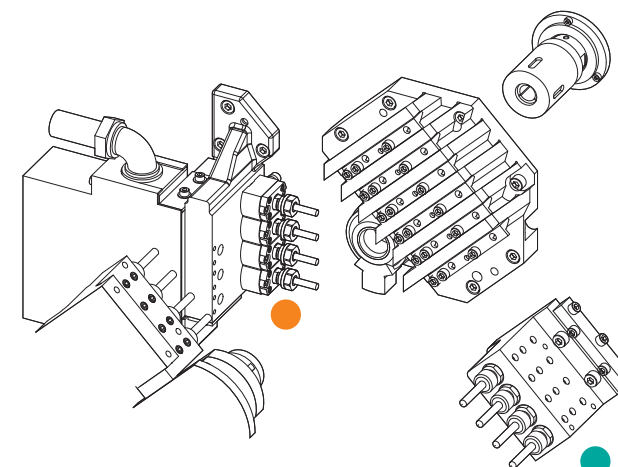




Type	Axial	Axial	Axial Speeder	Radial double output	Radial double output Speeder	Radial Set-Back
Code	CZ.500.K12/K16-ER11	CZ.500.K12/K16-ER16	CZ.502.K12/K16	CZ.508.K12/K16	CZ.508.K12/K16-S	CZ.511.K12/K16
	ER-11	ER-16M	ER-11	ER-11	ER-11	ER-11M
 RPM Max	6.000	6.000	18.000	6.000	12.000	6.000
	1:1	1:1	1:3	1:1	1:2	1:1



Type	Radial Set-Back Subspindle	Radial Set-Back Speeder	Radial Set-Back Subspindle Speeder	Axial Double Output
Code	CZ.511.K12/K16-S	CZ.513.K12/K16	CZ.513.K12/K16-S	CZ.523.K12/K16
	ER-11	ER-11M	ER-11	ER-11
 RPM Max	6.000	12.000	12.000	6.000
	1:1	1:2	1:2	1:1



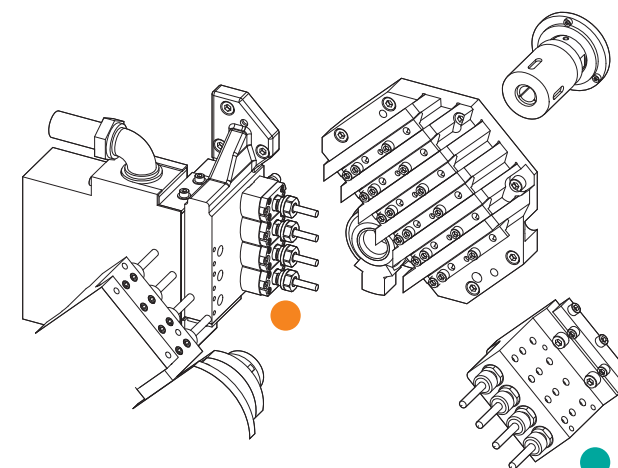
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Type	Polygon Maker	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 30^\circ$	Gear Hobbing $\pm 10^\circ$	Radial "Y" Axis 0-95°	Radial "Y" Axis 0-95° 2 Outputs
Code	CZ.534.K12/K16	CZ.535.K12/K16-15	CZ.535.K12/K16-30	CZ.536.K12/K16	CZ.551.K12/K16	CZ.551.K12/K16-2
Cyl-Shaft		Cutting Head	Cutting Head	Cyl-Shaft	ER-11	ER-8M
RPM Max	6.000	6.000	6.000	6.000	6.000	6.000
1:1	1:1	1:1	1:1	1:1	1:1	1:1

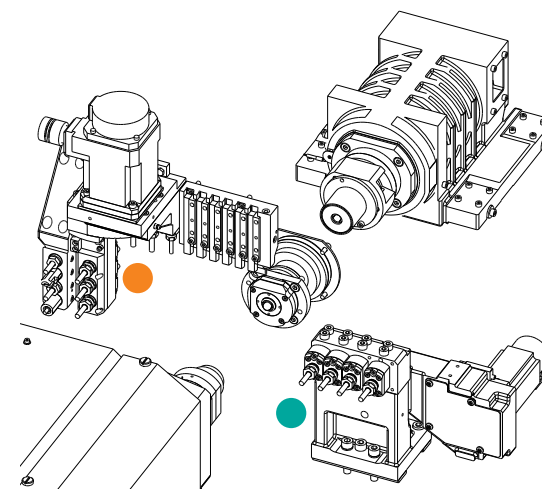


Type	Radial "Y" Axis 0-95° 3 Outputs	Axial Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Set-Back Speeder Back Rotary Tool
Code	CZ.551.K12/K16-3	CZ.500.K12/K16-BE	CZ.511.K12/K16-BE	CZ.513.K12/K16-BE
ER-8M		ER-11	ER-11	ER-11
RPM Max	6.000	6.000	6.000	12.000
1:1	1:1	1:1	1:1	1:2





Type	Axial	Axial Long	Axial Offset	Axial Speeder	Radial double output	Radial Set-Back	Radial Set-Back Speeder
Code	CZ.500.L12	CZ.500.L12-L	CZ.501.L12	CZ.502.L12	CZ.508.L12	CZ.511.L12	CZ.513.L12
ER-11	ER-11	ER-11	ER-11	ER-11	ER-11	ER-11A	ER-11
RPM Max	8.000	8.000	8.000	16.000	8.000	8.000	16.000
1:1	1:1	1:1	1:1	1:2	1:1	1:1	1:2



Type	Radial Adjustable 0-90°	Radial 2 Outputs	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°
Code	CZ.521.L12	CZ.529.L12-2	CZ.529.L12-3	CZ.535.L12-15	CZ.535.L12-30
ER-11	ER-11	ER-11	ER-11	Cutting Head	Cutting Head
RPM Max	8.000	8.000	8.000	8.000	8.000
1:1	1:1	1:1	1:1	1:1	1:1

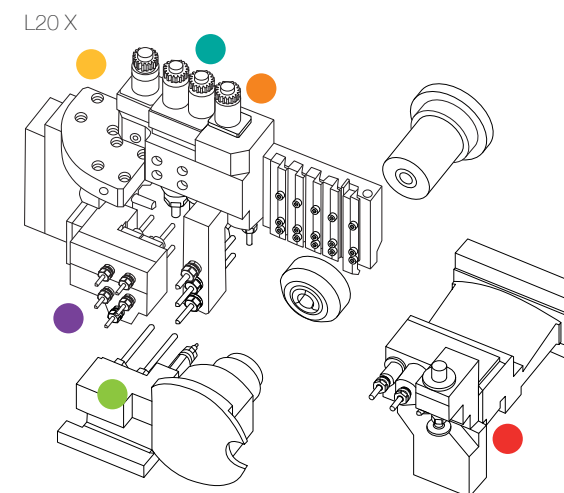
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Type	Axial	Axial Offset	Axial Speeder	Radial Double Output	Radial Double Output Speeder	Radial Set-Back
Code	CZ.500.L16/L20	CZ.501.L16/L20	CZ.502.L16/L20	CZ.508.L16/L20	CZ.508.L16/L20-S	CZ.511.L16/L20
ER	ER-16	ER-16	ER-11	ER-11	ER-11	ER-11M
RPM Max	5.000	5.000	15.000	5.000	15.000	5.000
Gear	1:1	1:1	1:3	1:1	1:3	1:1
Compatible with	All versions	All versions	All versions	All versions	All versions	All versions



Type	Radial Set-Back Speeder	Radial Adjustable ±90°	Radial Adjustable ±90° Speeder	Radial 2 Outputs
Code	CZ.513.L16/L20	CZ.521.L16/L20	CZ.521.L16/L20-S	CZ.529.L16/L20-2
ER	ER-11M	ER-11M	ER-11M	ER-11M
RPM Max	15.000	5.000	15.000	5.000
Gear	1:3	1:1	1:3	1:1
Compatible with	All versions	All versions	All versions	All versions



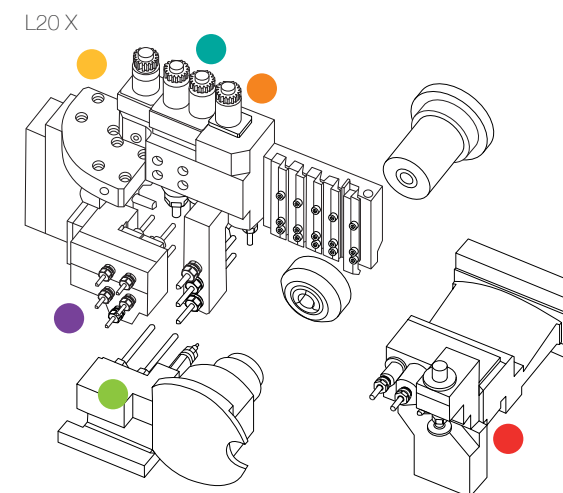
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Type	Radial 2 Outputs Speeder	Radial 3 Outputs	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°
Code	CZ.529.L16/L20-2S	CZ.529.L16/L20-3ER11	CZ.529.L16/L20-3ER16	CZ.535.L16/L20-15	CZ.535.L16/L20-30
 ER-11	ER-11	ER-11M	ER-16	Cutting Head	Cutting Head
 RPM Max	15.000	5.000	5.000	5.000	5.000
 1:3	1:3	1:1	1:1	1:1	1:1
Compatible with	All versions	All versions	All versions	All versions	All versions



Type	Radial "Y" Axis ±15°	Radial "Y" Axis ±15° 2 Outputs	Axial
Code	CZ.551.L16/L20	CZ.551.L16/L20-2	CZ.500.L20-S
 ER-11M	ER-11M	ER-11M	ER-11M
 RPM Max	5.000	5.000	5.000
 1:1	1:1	1:1	1:1
Compatible with	All versions	All versions	L20 VIII-IX-X-XII / E VIII-IX-X



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Type

Axial

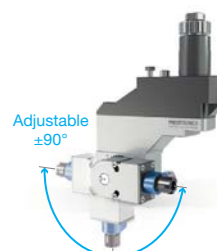
Axial

Axial Speeder

Radial double output

Radial Set-Back

Code	CZ.500.L20C-ER16	CZ.500.L20C-ER20	CZ.502.L20C	CZ.508.L20C	CZ.511.L20C-ER11
	ER-16	ER-20	ER-11	ER-11	ER-11
RPM Max	6.000	6.000	12.000	6.000	6.000
	1:1	1:1	1:2	1:1	1:1
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII



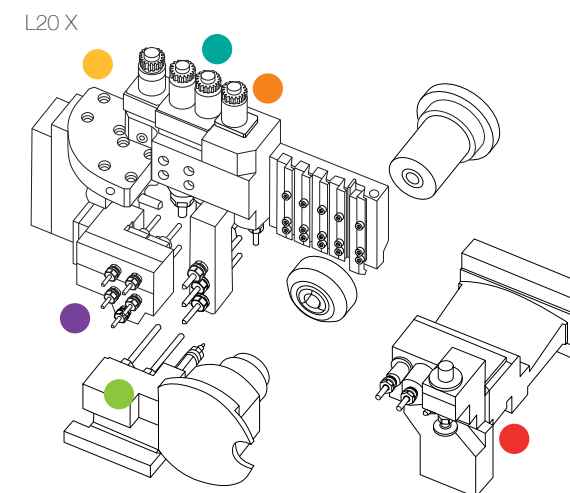
Type

Radial Set-Back

Radial Set-Back Speeder

Radial Adjustable $\pm 90^\circ$

Code	CZ.511.L20C-ER16	CZ.513.L20C	CZ.521.L20C
	ER-16	ER-11	ER-11M
RPM Max	6.000	12.000	6.000
	1:1	1:2	1:1
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII



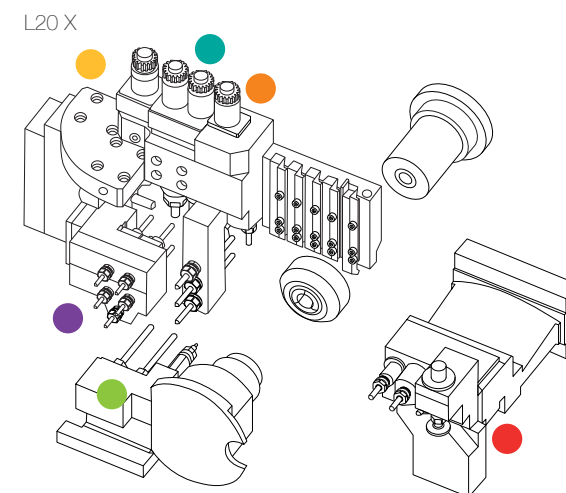
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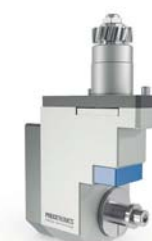
Type	Radial 2 Outputs	Radial 3 Outputs	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°
Code	CZ.529.L20C-2	CZ.529.L20C-3	CZ.534.L20C	CZ.535.L20C-15	CZ.535.L20C-30
ER-11M	ER-11M	ER-11M	Cyl-Shaft	Cutting Head	Cutting Head
RPM Max	6.000	6.000	6.000	6.000	6.000
1:1	1:1	1:1	1:1	1:1	1:1
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII



Type	Radial "Y" Axis ±45° 2 Outputs	Radial "Y" Axis ±45° 2 Outputs
Code	CZ.551.L20C-ER11	CZ.551.L20C-ER16
ER-11M	ER-11M	ER-16
RPM Max	6.000	6.000
1:1	1:1	1:1
Compatible with	L20 VIII-IX-X-XII / E VIII-X-XII	L20 VIII-IX-X-XII / E VIII-X-XII



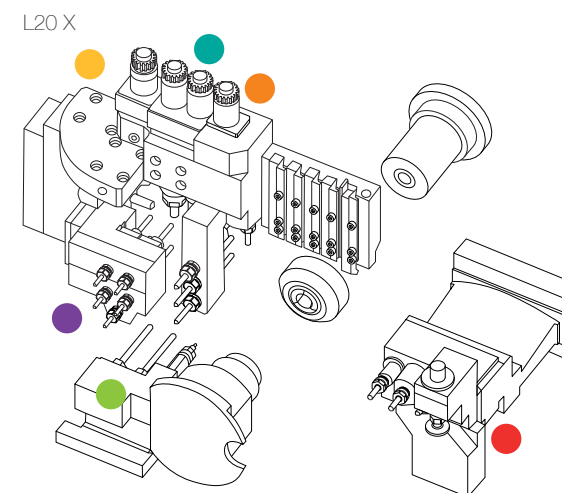
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Type	Axial	Radial Double Output	Radial Set-Back	Axial Double Output	Polygon Maker
Code	CZ.500.L20N	CZ.508.L20N	CZ.511.L20N	CZ.523.L20N	CZ.534.L20N
ER	ER-16	ER-11	ER-11	ER-11	Cyl-Shaft
RPM Max	5.000	5.000	5.000	5.000	5.000
Ratio	1:1	1:1	1:1	1:1	1:1
Compatible with	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII



Type	Thread Whirling $\pm 15^\circ$ / $\pm 30^\circ$	Radial "Y" Axis 0-90° Double Output	Radial "Y" 0-90° Axis 2 Outputs
Code	CZ.535.L20N-15 / 30	CZ.551.L20N	CZ.551.L20N-2
Cutting Head	Cutting Head	ER-11	ER-11
RPM Max	5.000	5.000	5.000
Ratio	1:1	1:1	1:1
Compatible with	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII



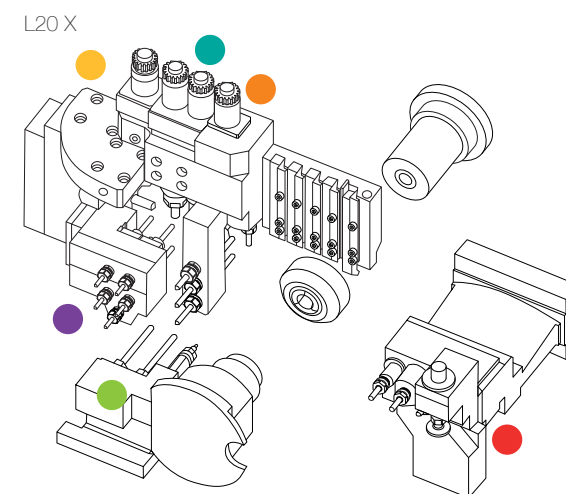
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Type	Axial Back Rotary Tool	Axial Long Back Rotary Tool	Axial Offset Back Rotary Tool	Axial Speeder Back Rotary Tool	Radial Set-Back Back Rotary Tool
Code	CZ.500.L20-BE	CZ.500.L20-BE-L	CZ.501.L20-BE	CZ.502.L20-BE	CZ.511.L20-BE
ER-11	ER-11	ER-11	ER-11	ER-11	ER-11A
RPM Max	5.000	5.000	5.000	10.000	5.000
1:1	1:1	1:1	1:1	1:2	1:1
Compatible with	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII



Type	Radial Set-Back Speeder Back Rotary Tool	Radial Adjustable 0-90° Back Rotary Tool
Code	CZ.513.L20-BE	CZ.521.L20-BE
ER-11	ER-11	ER-11
RPM Max	10.000	5.000
1:2	1:2	1:1
Compatible with	L20 IX-X-XII / E VIII-X-XII	L20 IX-X-XII / E VIII-X-XII



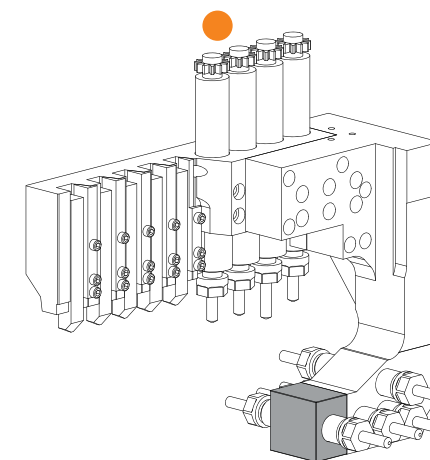
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Type	Axial	Axial Offset	Axial Speeder	Radial Double Output / Speeder	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable 0-90° / Speeder
Code	CZ.500.L25/L32	CZ.501.L25/L32	CZ.502.L25/L32	CZ.508.L25/L32	CZ.511.L25/L32	CZ.513.L25/L32	CZ.521.L25/L32
 ER	ER-16	ER-16	ER-11M	ER-11M	ER-11M	ER-11M	ER-11M
 RPM Max	6.000	6.000	18.000	6.000 / 18.000	6.000	18.000	6.000 / 18.000
 Gear	1:1	1:1	1:3	1:1 / 1:3	1:1	1:3	1:1 / 1:3



Type	Radial 2 Outputs	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±15°
Code	CZ.529.L25/L32-2	CZ.529.L25/L32-3	CZ.535.L25/L32-15	CZ.535.L25/L32-30	CZ.551.L25/L32
 ER	ER-11M	ER-11M	Cutting Head	Cutting Head	ER-11M
 RPM Max	6.000	6.000	6.000	6.000	6.000
 Gear	1:1	1:1	1:1	1:1	1:1



Patented



Type

Axial

Axial

Axial Speeder

Radial Double Output

Radial Set-back

Code

CZ.500.L32-ER16

CZ.500.L32-ER20

CZ.502.L32

CZ.508.L32

CZ.511.L32-ER11



ER-16

ER-20

ER-11

ER-11

ER-11

RPM Max

6.000

6.000

12.000

6.000

6.000



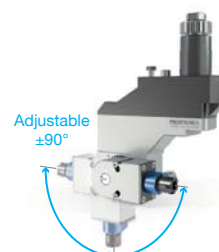
1:1

1:1

1:2

1:1

1:1



Type

Radial Set-back

Radial Set-back Speeder

Radial Adjustable ±90°

Code

CZ.511.L32-ER16

CZ.513.L32

CZ.521.L32



ER-16

ER-11

ER-11M

RPM Max

6.000

12.000

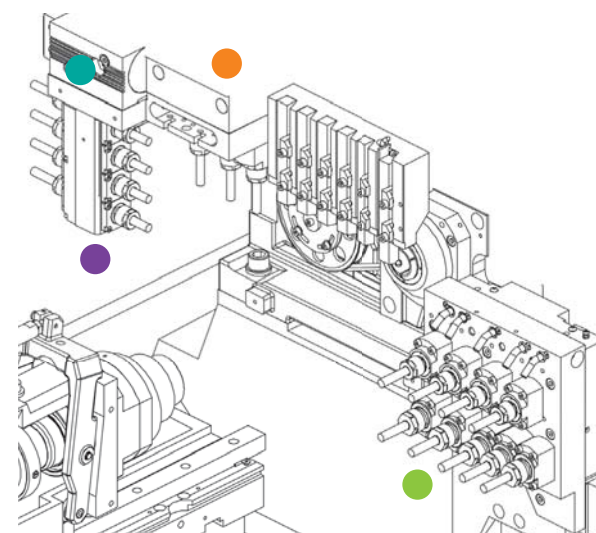
6.000



1:1

1:2

1:1



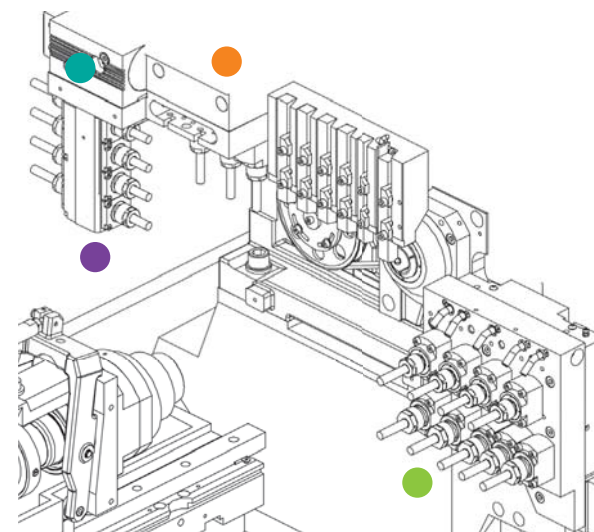
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Type	Radial 2 Outputs	Radial 3 Outputs	Radial 4 Outputs	Polygon Maker	Thread Whirling $\pm 15^\circ$
Code	CZ.529.L32-2	CZ.529.L32-3	CZ.529.L32-4	CZ.534.L32	CZ.535.L32-15
ER-11M	ER-11M	ER-11M	ER-11M	Cyl-Shaft	Cutting Head
RPM Max	6.000	6.000	6.000	6.000	6.000
1:1	1:1	1:1	1:1	1:1	1:1



Type	Thread Whirling $\pm 30^\circ$	Gear Hobbing $\pm 32^\circ$	Radial 3 Outputs
Code	CZ.535.L32-30	CZ.536.L32	CZ.529.L32T-3
Cutting Head	Cutting Head	Cyl-Shaft	ER-16
RPM Max	6.000	6.000	6.000
1:1	1:1	1:1	1:1



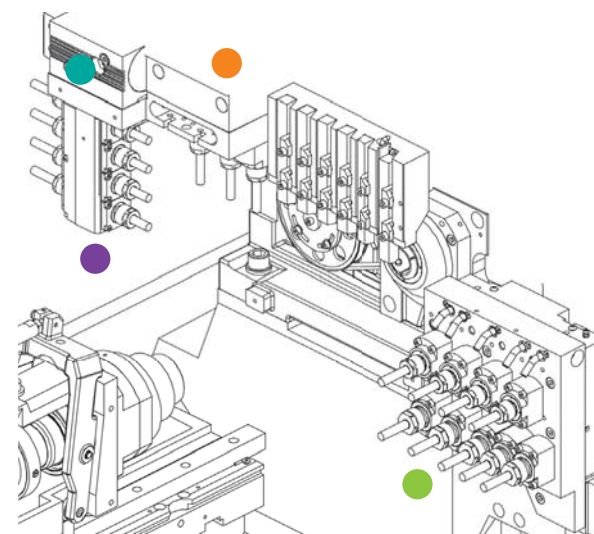
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Type	Axial	Radial Double Output	Radial Set-Back	Axial Double Output	Polygon Maker
Code	CZ.500.L32N	CZ.508.L32N	CZ.511.L32N	CZ.523.L32N	CZ.534.L32N
ER	ER-16	ER-11	ER-11	ER-11	Cyl-Shaft
RPM Max	5.000	5.000	5.000	5.000	5.000
Gear	1:1	1:1	1:1	1:1	1:1



Type	Thread Whirling $\pm 15^\circ$ / $\pm 30^\circ$	Radial "Y" Axis Double Output	Radial "Y" Axis 2 Outputs
Code	CZ.535.L32N-15 / 30	CZ.551.L32N	CZ.551.L32N-2
ER	Cutting Head	ER-11	ER-11
RPM Max	5.000	5.000	5.000
Gear	1:1	1:1	1:1



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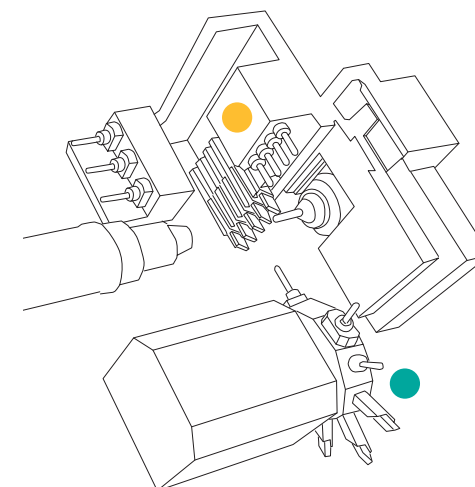


Type	Axial	Axial	Axial Offset	Axial Speeder	Radial Double Output	Radial Double Output	Radial Set-Back
Code	CZ.500.M12/M16-ER11	CZ.500.M12/M16-ER16	CZ.501.M12/M16	CZ.502.M12/M16	CZ.508.M12/M16	CZ.508.M12/M16-ER11	CZ.511.M12/M16
ER	ER-11	ER-16M	ER-16M	ER-11	ER-8M / ER-11	ER-11	ER-11
RPM Max	8.000	8.000	8.000	16.000	8.000	8.000	8.000
Gear	1:1	1:1	1:1	1:2	1:1	1:1	1:1



Type	Radial Set-Back Speeder	Radial Adjustable 0-90°	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±15°
Code	CZ.513.M12/M16	CZ.521.M12/M16	CZ.535.M12/M16-15	CZ.535.M12/M16-30	CZ.551.M12/M16
ER	ER-11	ER-11M	Cutting Head	Cutting Head	ER-11M
RPM Max	16.000	8.000	8.000	8.000	8.000
Gear	1:2	1:1	1:1	1:1	1:1

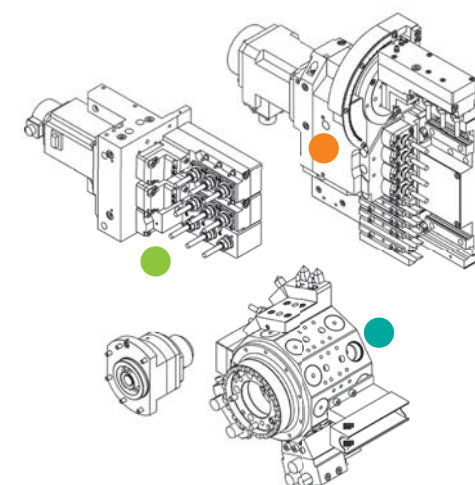
M12/M16 Type V



Patented



Type	Axial	Axial Long	Axial Offset	Axial Speeder	Radial double output	Radial Set-Back	Radial Set-Back Speeder
Code	CZ.500.M16	CZ.500.M16-L	CZ.501.M16	CZ.502.M16	CZ.508.M16	CZ.511.M16	CZ.513.M16
ER-11	ER-11	ER-11	ER-11	ER-11	ER-11	ER-11A	ER-11
RPM Max	8.000	8.000	8.000	16.000	8.000	8.000	16.000
1:1	1:1	1:1	1:1	1:2	1:1	1:1	1:2



Type	Radial Adjustable 0-90°	Radial 2 Outputs	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°
Code	CZ.521.M16	CZ.529.M16-2	CZ.529.M16-3	CZ.535.M16-15	CZ.535.M16-30
ER-11	ER-11	ER-11	ER-11	Cutting Head	Cutting Head
RPM Max	8.000	8.000	8.000	8.000	8.000
1:1	1:1	1:1	1:1	1:1	1:1

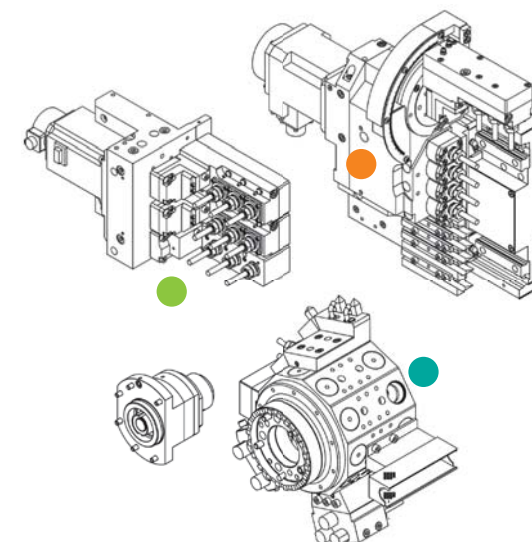
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Type	Axial	Axial	Axial Speeder	Radial Double Output	Radial Set-Back	Radial Set-Back
Code	CZ.500.M12/M6T-ER11	CZ.500.M12/M6T-ER16	CZ.502.M12/M6T	CZ.508.M12/M6T	CZ.511.M12/M6T	CZ.511.M12/M6T-SUB
	ER-11M	ER-16M	ER-11	ER-11	ER-11	ER-11
 RPM Max	6.500	6.500	13.000	6.500	6.500	6.500
	1:1	1:1	1:2	1:1	1:1	1:1



Type	Radial Set-Back Speeder	Radial Adjustable 0-30°	Radial Adjustable 0-90°	Radial Adjustable 0-30° Speeder
Code	CZ.513.M12/M6T	CZ.521.M12/M6T-ER8	CZ.521.M12/M6T-ER11	CZ.521.M12/M6T-2S
	ER-11	ER-8M	ER-11M	ER-8M
 RPM Max	18.000	6.500	6.500	13.000
	1:3	1:1	1:1	1:2



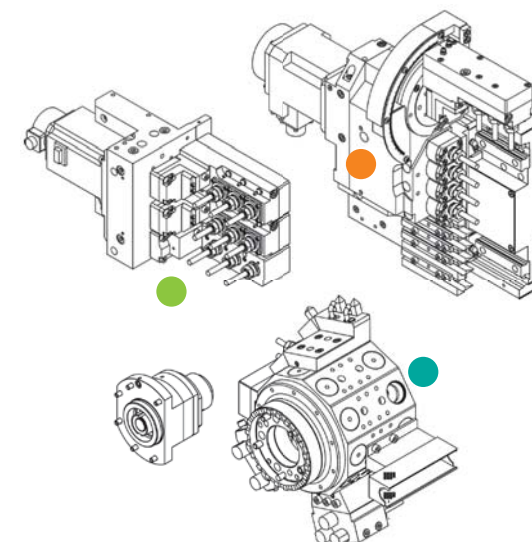
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Type	Radial Adjustable 0-30° Speeder	Axial Double Output	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°
Code	CZ.521.M12/M6T-3S	CZ.523.M12/M6T	CZ.534.M12/M6T	CZ.535.M12/M6T-15	CZ.535.M12/M6T-30
 RPM Max	ER-8M 18.000	ER-11 6.500	Cyl-Shaft 6.500	Cutting Head 3.250	Cutting Head 3.250
	1:3	1:1	1:1	2:1	2:1



Type	Gear Hobbing ±10°	Axial "Y" Axis ±3mm	Radial "Y" Axis
Code	CZ.536.M12/M6T	CZ.550.M12/M6T	CZ.551.M12/M6T
 RPM Max	Cyl-Shaft 2.000	ER-11M 6.500	ER-11 6.500
	3:1	1:1	1:1



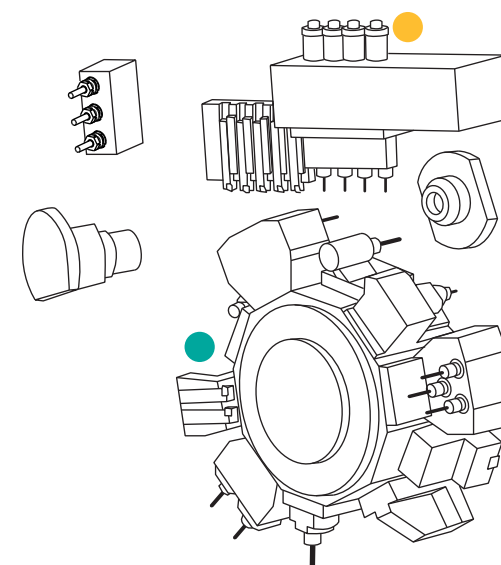
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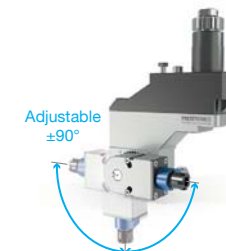
Type	Axial	Axial Offset	Axial Speeder	Radial Double Output	Radial Set-back	Radial Set-back Speeder	Radial Adjustable 0-90°
Code	CZ.500.M20/M32	CZ.501.M20/M32	CZ.502.M20/M32	CZ.508.M20/M32	CZ.511.M20/M32	CZ.513.M20/M32	CZ.521.M20/M32
	ER-16	ER-16	ER-11M	ER-11M	ER-11M	ER-11M	ER-11M
 RPM Max	5.000	5.000	15.000	5.000	5.000	15.000	5.000
	1:1	1:1	1:3	1:1	1:1	1:3	1:1



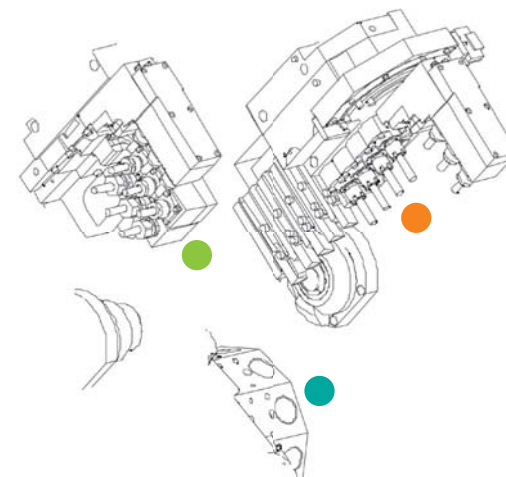
Type	Radial 2 Outputs	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±90°
Code	CZ.529.M20/M32-2	CZ.529.M20/M32-3	CZ.535.M20/M32-15	CZ.535.M20/M32-30	CZ.551.M20/M32
	ER-11M	ER-11M	Cutting Head	Cutting Head	ER-11M
 RPM Max	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1



Patented



Type	Axial	Axial	Axial Speeder	Radial Set-Back	Radial Set-Back	Radial Set-back Speeder	Radial Adjustable ±90°
Code	CZ.500.M32-ER16	CZ.500.M32-ER20	CZ.502.M32	CZ.511.M32-ER11	CZ.511.M32-ER16	CZ.513.M32	CZ.521.M32
ER	ER-16	ER-20	ER-11	ER-11	ER-16	ER-11	ER-11M
RPM Max	6.000	6.000	12.000	6.000	6.000	12.000	6.000
Gear	1:1	1:1	1:2	1:1	1:1	1:2	1:1



Type	Radial 3 Outputs	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing ±32°
Code	CZ.529.M32-3	CZ.534.M32	CZ.535.M32-15	CZ.535.M32-30	CZ.536.M32
ER	ER-16	Cyl-Shaft	Cutting Head	Cutting Head	Cyl-Shaft
RPM Max	6.000	6.000	6.000	6.000	6.000
Gear	1:1	1:1	1:1	1:1	1:1

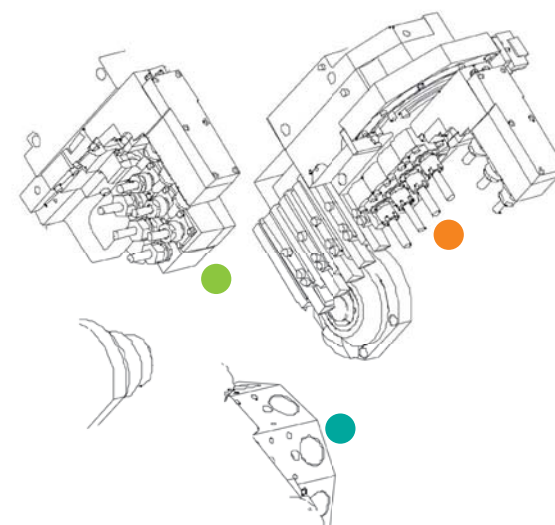
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Type	Axial	Axial	Axial	Axial Offset	Axial Offset	Axial Speeder
Code	CZ.500.M20/M32T-ER16	CZ.500.M20/M32T-ER20	CZ.500.M20/M32T-ER25	CZ.501.M20/M32T-A	CZ.501.M20/M32T-B	CZ.502.M20/M32T-2
	ER-16	ER-20	ER-25M	ER-16	ER-16	ER-11
 RPM Max	5.000	5.000	5.000	5.000	5.000	10.000
	1:1	1:1	1:1	1:1	1:1	1:2



Type	Axial Speeder	Radial Double Output	Radial Set-Back	Radial Set-Back
Code	CZ.502.M20/M32T-3	CZ.508.M20/M32T	CZ.511.M20/M32T-ER16	CZ.511.M20/M32T-ER20
	ER-11	ER-11M	ER-16A	ER-20A
 RPM Max	15.000	5.000	5.000	5.000
	1:3	1:1	1:1	1:1



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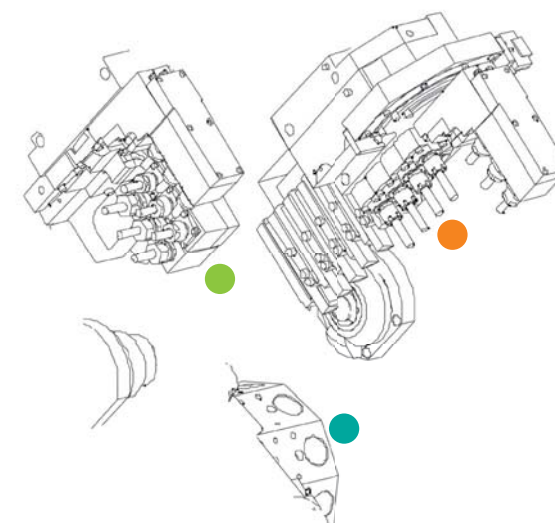


Type	Fixed Angle (Any Angle)	Radial Set-Back Speeder	Radial Adjustable 0-90°	Radial Adjustable 0-90°	Axial Double Output
Code	CZ.512.M20/M32T	CZ.513.M20/M32T	CZ.521.M20/M32T-ER11	CZ.521.M20/M32T-ER16	CZ.523.M20/M32T
	ER-11	ER-16A	ER-11M	ER-16M	ER-16
 RPM Max	5.000	15.000	5.000	5.000	5.000
	1:1	1:3	1:1	1:1	1:1

NEW!



Type	Thread Whirling ±32°	Gear Hobbing ±30°	Radial "Y" Axis ±90°	Radial "Y" Axis ±90° Speeder
Code	CZ.535.M20/M32T-32	CZ.536.M20/M32T	CZ.551.M20/M32T	CZ.551.M20/M32T-S
	Cutting Head	Cyl-Shaft	ER-16A	ER-16A
 RPM Max	5.000	5.000	5.000	10.000
	1:1	1:1	1:1	1:2



STAR MODELS: SB-12/20R, SR-20J/JN, SR-20JII, SR-32J/JN, SR-32JII, SR-20RIV, SW-20, SX-38, ECAS-12/20, SB-16, SR-20RII, SV-12/20/32, SV-32JII
OTHERS: Ganesh SL-20 Y2, Goodway GTW-1500, SW-20/20II, Manurhin KMX 816, 916 / 820, 920 Clever, Nomura DS NN-20UB8, DS 32 J



Type	Axial	Axial	Axial	Axial Long	Axial	Axial Offset	Axial Speeder
Code	ST.500.34-ER8	ST.500.34-ER11	ST.500.34-ER16	ST.500.34-ER16L	ST.500.34-ER20	ST.501.34	ST.502.34-ER8
	ER-8M	ER-11M	ER-16	ER-16	ER-20M	ER-11M	ER-8M
 RPM Max	8.000	8.000	8.000	8.000	8.000	8.000	16.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:2



Type	Axial Speeder	Radial Double Output	Radial Double Output	Radial Set-Back	Radial Set-Back	Fixed Angle (Any Angle)	Radial Adjustable ±90°
Code	ST.502.34-ER11	ST.508.34-ER11	ST.508.34-ER16	ST.511.34-62	ST.511.34-93	ST.512.34	ST.521.34
	ER-11	ER-11M	ER-16M	ER-16	ER-16	ER-11	ER-8M
 RPM Max	16.000	16.000	8.000	8.000	8.000	8.000	8.000
	1:2	1:2	1:1	1:1	1:1	1:1	1:1

STAR MODELS: SB-12/20R, SR-20J/JN, SR-20JII, SR-32J/JN, SR-32JII, SR-20RIV, SW-20, SX-38, ECAS-12/20, SB-16, SR-20RII, SV-12/20/32, SV-32JII
OTHERS: Ganesh SL-20 Y2, Goodway GTW-1500, SW-20/20II, Manurhin KMX 816, 916 / 820, 920 Clever, Nomura DS NN-20UB8, DS 32 J



Type	Radial Adjustable $\pm 90^\circ$ Speeder	Radial 2 Outputs	Radial 3 Outputs	Polygon Maker	Polygon Maker Reducer	Thread Whirling $\pm 12.5^\circ$
Code	ST.521.34-S	ST.529.34-2	ST.529.34-3	ST.534.34	ST.534.34-R	ST.535.34-12.5
	ER-8M	ER-16M	ER-16M	Cyl-Shaft	Cyl-Shaft	Cutting Head
 RPM Max	16.000	8.000	8.000	8.000	4.000	8.000
	1:2	1:1	1:1	1:1	2:1	1:1



Type	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 30^\circ$	Gear Hobbing $\pm 30^\circ$	Radial "Y" Axis 360°	Radial "Y" Axis 360° 2 Outputs	Radial "Y" Axis $\pm 90^\circ$ 3 Outputs
Code	ST.535.34-15	ST.535.34-30	ST.536.34	ST.551.34	ST.551.34-2	ST.551.34-3
	Cutting Head	Cutting Head	Cyl-Shaft	ER-11A	ER-11A	ER-11M
 RPM Max	8.000	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1	1:1

STAR MODELS: SB-12/20R, SR-10J, SR-20J/JN, SR-32J/JN, SW-12RII, ECAS-12/20, SB-16, SR-20RII

OTHERS: Ganesh SL-20 Y2, Goodway SW-12, SW-20, SW-20III



Type	Axial	Axial	Axial Speeder	Axial "X" Axis 3 Outputs	Radial Set-Back	Radial Adjustable 0-90°
Code	ST.500.22-ER11	ST.500.22-ER16	ST.502.22	ST.504.22	ST.511.22	ST.521.22
	ER-11M	ER-16	ER-11	ER-11	ER-11	ER-11M
 RPM Max	6.000	6.000	12.000	6.000	6.000	6.000
	1:1	1:1	1:2	1:1	1:1	1:1

STAR MODELS: SR-20JII, SR-32JII, SR-20RIV, SR-38, SR-38J, SV-20R, SW-12RII, SW-20



Type	Axial Short	Axial Long	Radial Set-Back	Radial Set-Back	Fixed angle (Any Angle)	Radial Adjustable 0-90°
Code	ST.500.SW20-S	ST.500.SW20-L	ST.511.SW20-ER16	ST.511.SW20-ER16A	ST.512.SW20	ST.521.SW20
	ER-16M	ER-16M	ER-16M	ER-16A	ER-11	ER-11M
 RPM Max	8.000	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1	1:1

STAR MODELS: ST-20, SV-20R, ECAS-20T, KNC-16/20, SV-12/20, SV-32JII

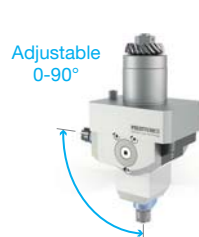


Type	Axial	Axial	Axial	Axial	Radial Double Output
Code	ST.500.20-ER11	ST.500.20-ER16	ST.500.20-ER20	ST.500.20-ER25	ST.508.20-80
	ER-11M	ER-16	ER-20	ER-25	ER-11
 RPM Max	6.000	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:1



Type	Radial Double Output	Radial Double Output Speeder	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable +95°/-110°
Code	ST.508.20-90	ST.508.20-S	ST.511.20	ST.513.20	ST.521.20-ER16
	ER-11M	ER-11M	ER-11M	ER-11M	ER-16M
 RPM Max	6.000	18.000	6.000	18.000	6.000
	1:1	1:3	1:1	1:3	1:1

STAR MODELS: ST-20, SV-20R, ECAS-20T, KNC-16/20, SV-12/20, SV-32JII



Type	Radial Adjustable 0-90°	Axial 2 Outputs Speeder	Axial 2 Outputs	Radial 2 Outputs	Polygon Maker	Polygon Maker Reducer
Code	ST.521.20-ER11	ST.523.20-ER11	ST.523.20-ER16	ST.529.20	ST.534.20	ST.534.20-R
	ER-11M	ER-11	ER-16	ER-16	Cyl-Shaft	Cyl-Shaft
 RPM Max	6.000	9.000	6.000	6.000	6.000	4.000
	1:1	1:1.67	1:1	1:1	1:1	1.5:1



Type	Thread Whirling ±15°	Thread Whirling ±30°	Radial "Y" Axis ±90°	Radial "Y" Axis ±90° Speeder	Radial "Y" Axis ±90° 2 Outputs
Code	ST.535.20-15	ST.535.20-30	ST.551.20	ST.551.20-S	ST.551.20-2
	Cutting Head	Cutting Head	ER-11M	ER-16	ER-11M
 RPM Max	3.750	4.000	6.000	18.000	6.000
	1.6:1	1.5:1	1:1	1:3	1:1

STAR MODELS: ST-38, SV-38R, ECAS-32T, KNC-32, SV-32



Type	Axial	Axial	Axial	Radial Double Output	Radial Double Output Speeder
Code	ST.500.32-ER16	ST.500.32-ER20	ST.500.32-ER25	ST.508.32-ER11	ST.508.32-S
	ER-16	ER-20	ER-25	ER-11M	ER-11M
 RPM Max	6.000	6.000	6.000	6.000	18.000
	1:1	1:1	1:1	1:1	1:3



Type	Radial Double Output	Radial Set-Back	Radial Set-Back	Radial Set-Back	Radial Set-Back Speeder
Code	ST.508.32-ER16	ST.511.32-ER11	ST.511.32-ER16	ST.511.32-ER25	ST.513.32
	ER-16M	ER-11M	ER-16	ER-25	ER-11M
 RPM Max	6.000	6.000	6.000	6.000	18.000
	1:1	1:1	1:1	1:1	1:3

STAR MODELS: ST-38, SV-38R, ECAS-32T, KNC-32, SV-32



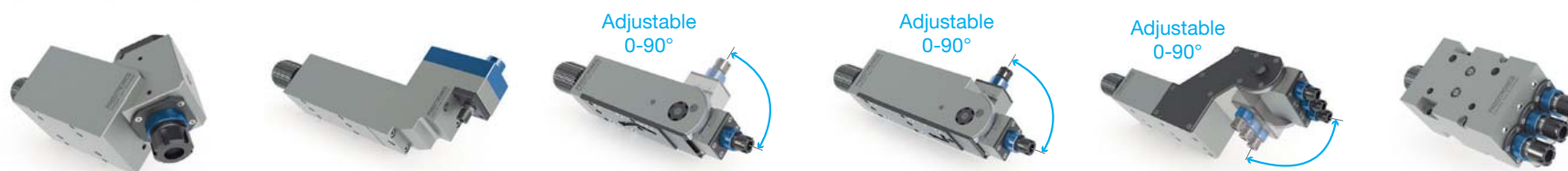
Type	Radial Adjustable +95°/-110°	Axial 2 Outputs Speeder	Axial 2 Outputs	Thread Whirling ±15°	Thread Whirling ±30°
Code	ST.521.32	ST.523.32-ER11	ST.523.32-ER16	ST.535.32-15	ST.535.32-30
	ER-16	ER-11M	ER-16	Cutting Head	Cutting Head
 RPM Max	6.000	18.000	6.000	6.000	3.000
	1:1	1:3	1:1	1:1	1:2



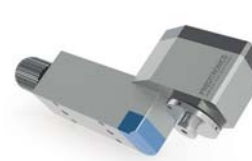
Type	Gear Hobbing 360°	Radial "Y" Axis ±90°	Radial "Y" Axis ±90°	Radial "Y" Axis ±90° 2 Outputs	Tilting "B" Axis ±90° 2 Outputs
Code	ST.536.32	ST.551.32-ER11	ST.551.32-ER16	ST.551.32-2	ST.551.32-B
	Cyl-Shaft	ER-11M	ER-16	ER-11M	ER-16M
 RPM Max	6.000	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:1



Type	Axial Short	Axial Medium	Axial Long	Axial Offset	Radial Set-Back	Fixed Angle (Any Angle)
Code	DE.500.20-S	DE.500.20-M	DE.500.20-L	DE.501.20	DE.511.20	CZ.512.20
	ER-25M	ER-25M	ER-25M	ER-25	ER-16A	ER-11M
 RPM Max	8.000	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1	1:1



Type	Fixed Angle Offset (Any Angle)	Radial Set-Back Speeder	Radial Adjustable 0-90° Short	Radial Adjustable 0-90° Long	Radial Adjustable 0-90° Triple	Axial 3 Outputs Short
Code	DE.512.20-O	DE.513.20	DE.521.20-S	DE.521.20-L	DE.521.20-3	CZ.523.20-S
	ER-25M	ER-8M	ER-11M	ER-11M	ER-11M	ER-16M
 RPM Max	8.000	16.000	8.000	8.000	8.000	8.000
	1:1	1:2	1:1	1:1	1:1	1:1



Type	Axial 3 Outputs Medium	Axial 3 Outputs Long	Radial Set-Back 3 Outputs	Polygon Maker	Thread Whirling $\pm 15^\circ$
Code	DE.523.20-M	DE.523.20-L	DE.529.20	DE.534.20	DE.535.20-15
ER-16M	ER-16M	ER-16M	ER-16M	Cyl-Shaft	Cutting Head
RPM Max	8.000	8.000	8.000	8.000	8.000
1:1	1:1	1:1	1:1	1:1	1:1



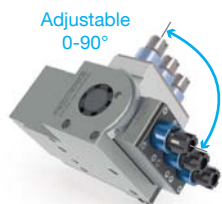
Type	Thread Whirling $\pm 30^\circ$	Double Thread Whirling $\pm 15^\circ$	Triple Thread Whirling $\pm 15^\circ$	Gear Hobbing $\pm 180^\circ$	Radial "Y" Axis $\pm 90^\circ$
Code	DE.535.20-30	DE.535.20-2	DE.535.20-3	DE.536.20	DE.551.20
Cutting Head	Cutting Head	Cutting Head	Cutting Head	Cyl-Shaft	ER-16A
RPM Max	8.000	8.000	8.000	8.000	8.000
1:1	1:1	1:1	1:1	1:1	1:1



Type	Axial Short	Axial Medium	Axial Long	Axial Offset	Axial Offset
Code	DE.500.13-S	DE.500.13-M	DE.500.13-L	DE.501.13-45	DE.501.13-63
	ER-20M	ER-20M	ER-20M	ER-20M	ER-20M
 RPM Max	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1



Type	Radial Set-Back	Fixed Angle (Any Angle)	Fixed Angle Offset (Any Angle)	Radial Set-Back Speeder	Radial Adjustable 0-90°
Code	DE.511.13	DE.512.13	DE.512.13-O	DE.513.13	DE.521.13
	ER-11A	ER-16M	ER-16	ER-11A	ER-11M
 RPM Max	8.000	8.000	8.000	24.000	8.000
	1:1	1:1	1:1	1:3	1:1



Type	Triple Radial Adjustable 0-90°	Axial 3 Outputs Short	Axial 3 Outputs Medium	Axial 3 Outputs Long	Radial Set-Back 3 Outputs
Code	DE.521.20-3	DE.523.13-S	DE.523.13-M	DE.523.13-L	DE.529.13
ER-11M	ER-11M	ER-11M	ER-11M	ER-11M	ER-11M
RPM Max	8.000	8.000	8.000	8.000	8.000
1:1	1:1	1:1	1:1	1:1	1:1



Type	Polygon Maker	Thread Whirling ±15°	Thread Whirling ±25°	Double Thread Whirling ±15°	Radial "Y" Axis ±90°
Code	DE.534.13	DE.535.13-15	DE.535.13-25	DE.535.13-2	DE.551.13
Cyl-Shaft	Cyl-Shaft	Cutting Head	Cutting Head	Cutting Head	ER-11A
RPM Max	8.000	8.000	8.000	8.000	8.000
1:1	1:1	1:1	1:1	1:1	1:1

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Type	Axial	Axial Speeder	Radial Set-Back	Fixed Angle (Any Angle)	Fixed Angle Offset (Any Angle)	Radial Set-Back Speeder	Radial Adjustable 0-90°	Axial 3 Outputs
Code	DE.500.10	DE.502.10	DE.511.10	DE.512.10	DE.512.10-O	DE.513.10	DE.521.10	CZ.523.10
	ER-11M	ER-11M	ER-11A	ER-11M	ER-8M	ER-11A	ER-11M	ER-8M
 RPM Max	12.000	24.000	12.000	12.000	12.000	24.000	12.000	12.000
	1:1	1:2	1:1	1:1	1:1	1:2	1:1	1:1



Type	Radial Set-Back 3 Outputs	Polygon Maker	Thread Whirling ±22.5°	Radial "Y" Axis ±90°	Axial	Axial Speeder	Radial Set-Back	Radial Adjustable 0-90°
Code	DE.529.10	DE.534.10	DE.535.10-22.5	DE.551.10	DE.500.10-C	DE.502.10-C	DE.511.10-C	DE.521.10-C
	ER-8M	Cyl-Shaft	Cutting Head	ER-11A	ER-11M	ER-11M	ER-11M	ER-11M
 RPM Max	12.000	12.000	12.000	12.000	12.000	24.000	12.000	12.000
	1:1	1:1	1:1	1:1	1:1	1:2	1:1	1:1



Type	Axial Low Type	Axial High Type	Radial Double Output	Fixed Angle (Any Angle)	Polygon Maker	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 25^\circ$	Radial "Y" Axis 0-90°
Code	GT.500.13-L GT.500.26-L GT.500.32-L	GT.500.13-H GT.500.26-H GT.500.32-H	GT.508.13 GT.508.26 GT.508.32	GT.512.13 GT.512.26 GT.512.32	GT.534.13 GT.534.26 GT.534.32	GT.535.13-15 GT.535.26-15 GT.535.32-15	GT.535.13-25 GT.535.26-25 GT.535.32-25	GT.551.13 GT.551.26 GT.551.32
	ER-20M	ER-20M	ER-11M	ER-11	Cyl-Shaft	Cutting Head	Cutting Head	ER-11M
RPM Max	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1



Type	Axial Low Type	Axial High Type	Radial Double Output	Fixed Angle (Any Angle)	Polygon Maker	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 25^\circ$	Radial "Y" Axis 0-90°
Code	DT.500.13-L DT.500.26-L	DT.500.13-H DT.500.26-H	DT.508.13 DT.508.26	DT.512.13 DT.512.26	DT.534.13 DT.534.26	DT.535.13-15 DT.535.26-15	DT.535.13-25 DT.535.26-25	DT.551.13 DT.551.26
	ER-20M	ER-20M	ER-11M	ER-11	Cyl-Shaft	Cutting Head	Cutting Head	ER-11M
RPM Max	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:1

Patented

B0265 / B0325 / B0265B / B0325B / B0266 / B0326 / B0385 / B0385L - Type II / III, SS20 / SS26 / SS32 / SS32L - HS20 / HS26 / HS32 / HS32L, SS267 / SS327 / SS267-5AX / SS327-5AX



Type	Axial	Axial	Axial Offset Speeder	Radial Double Output	Radial Set-Back	Radial Set-Back Speeder	Radial 2 Outputs
Code	TS.500.SS-ER16	TS.500.SS-ER20	TS.502.SS	TS.508.SS	TS.511.SS	TS.513.SS	TS.529.SS-2
	ER-16	ER-20	ER-11M	ER-11M	ER-16	ER-16	ER-11M
RPM Max	5.000	5.000	10.000	5.000	5.000	10.000	5.000
	1:1	1:1	1:2	1:1	1:1	1:2	1:1



Type	Radial 3 Outputs	Polygon Maker	Thread Whirling $\pm 20^\circ$	Thread Whirling $\pm 30^\circ$	Gear Hobbing $\pm 30^\circ$	Radial "Y" Axis 0-90° 2 Outputs	Radial "Y" Axis 0-90° 3 Outputs
Code	TS.529.SS-3	TS.534.SS	TS.535.SS-20	TS.535.SS-30	TS.536.SS	TS.551.SS-2	TS.551.SS-3
	ER-11M	Cyl-Shaft	Cutting Head	Cutting Head	Cyl-Shaft	ER-16M	ER-16M
RPM Max	5.000	5.000	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1

Patented

B0125 / B0205 / B0126 / B0206 - Type II / III



Type	Axial	Axial Speeder	Radial Set-Back	Radial Set-Back Speeder
Code	TS.500.B0-BE	TS.502.B0-BE	TS.511.B0-BE	TS.513.B0-BE
ER	ER-16	ER-11	ER-11	ER-11
RPM Max	8.000	16.000	8.000	16.000
Ratio	1:1	1:2	1:1	1:2

B0265 / B0325 / B0265B / B0325B / B0266 / B0326 / B0385 / B0385L - Type II / III, SS20 / SS26 / SS32 / SS32L - HS20 / HS26 / HS32 / HS32L, SS267 / SS327 / SS267-5AX / SS327-5AX



Type	Axial	Axial Speeder	Radial Set-Back	Radial Set-Back Speeder
Code	TS.500.SS-BE	TS.502.SS-BE	TS.511.SS-BE	TS.513.SS-BE
ER	ER-16	ER-11	ER-16	ER-11
RPM Max	5.000	10.000	5.000	10.000
Ratio	1:1	1:2	1:1	1:2



Type	Axial Offset	Axial Offset Speeder	Radial Double Output	Radial Double Output	Radial Double Output	Axial Double Output	Radial 2 Outputs
Code	TS.501.BH	TS.502.BH	TS.508.BH-ER11	TS.508.BH-ER16	TS.508.BH-ER20/25	TS.523.BH	TS.529.BH-ER11
	ER-16	ER-11	ER-11	ER-16	ER-20 / ER-25	ER-16	ER-11
 RPM Max	5.000	10.000	5.000	5.000	5.000	5.000	5.000
	1:1	1:2	1:1	1:1	1:1	1:1	1:1



Type	Radial 2 Outputs Parallel	Radial 2 Outputs	Radial 2 Outputs Parallel	Thread Whirling $\pm 25^\circ$	Thread Whirling $\pm 35^\circ$	Radial "Y" Axis 0-90°	Radial "Y" Axis 0-90°
Code	TS.529.BH-ER11P	TS.529.BH-ER16	TS.529.BH-ER16P	TS.535.BH-25	TS.535.BH-35	TS.551.BH-ER11	TS.551.BH-ER16
	ER-11	ER-16	ER-16	Cutting Head	Cutting Head	ER-11	ER-16
 RPM Max	5.000	5.000	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1



Type	Axial	Axial Speeder	Radial Double Output	Radial Set-Back	Radial Adjustable 0-90°
Code	TS.500.S205	TS.502.S205	TS.508.S205	TS.511.S205	TS.521.S205
ER	ER-16	ER-11	ER-16M	ER-16	ER-11M
RPM Max	8.000	16.000	8.000	8.000	8.000
Gear	1:1	1:2	1:1	1:1	1:1



Type	Radial 2 Outputs	Thread Whirling $\pm 15^\circ$	Gear Hobbing $\pm 30^\circ$	Radial "Y" Axis 0-90° Double Output	Radial "Y" Axis 0-90° 2 Outputs
Code	TS.529.S205	TS.535.S205	TS.536.S205	TS.551.S205	TS.551.S205-2
ER	ER-16	Cutting Head	Cyl-Shaft	ER-16M	ER-16
RPM Max	8.000	8.000	8.000	8.000	8.000
Gear	1:1	1:1	1:1	1:1	1:1

Collets							Clamping nuts for coolant through			Sealing disks				Wrenches		
Type	Standard		Watertight (Max. 40 bar)		Metallic sealed (Max. 150 bar)		ERMC Mini	ERMXC Slip-off proof	ERAXC Internal	Standard sealing disks		Coolant flush disks		E M Mini	E MX Slip-off proof	E AX Internal
	Order n°	Range Ø	Order n°	Range Ø	Order n°	Range Ø	Order n°	Order n°	Order n°	Order n°	Range Ø	Order n°	Range Ø	Order n°	Order n°	Order n°
ER-8	1108.0XXXX	0.5-5					3508.20XXX	3508.70XXX						7113.08000	7118.08000	
ER-11	1111.0XXXX	0.5-7	5573 RF	1-7	1216.XXX00	1.4-3.6	3511.20XXX	3511.70XXX	3311.70000	3911.0XXXX	3-6	3911.20XXX 3911.30XXX	3-6	7113.11000	7118.11000	7117.11000
ER-16	1116.0XXXX	0.5-10	0364 RF	1-10	1216.XXX00	1.4-6.3	3516.20000	3516.70000	3316.70000	3916.0XXXX	3-10	3916.20XXX 3916.30XXX	3-10	7113.16000	7118.16000	7117.16000
ER-20	1120.0XXXX	1-13	0787 RF	2-13	1220.XXX00	2.2-7	3520.20000	3520.70000	3320.70000	3920.0XXXX	3-13	3920.20XXX 3920.30XXX	3-13	7113.20000	7118.20000	7117.20000
ER-25	1125.0XXXX	2-16	0996 RF	2-16	1225.XXX00	2.5-10	3525.20000	3525.70000	3325.70000	3925.0XXXX	3-16	3925.20XXX 3925.30XXX	3-16	7113.25000	7118.25000	7117.25000

How to order. Example: ER-16 Standard collet / Range 3-2.5 = 1116.03000

Very high pressure live tool program available for:
Citizen, Star, Tornos & Tsugami

Pressure up to
150 
bar
Patented



Axial



Axial offset



Axial speeder



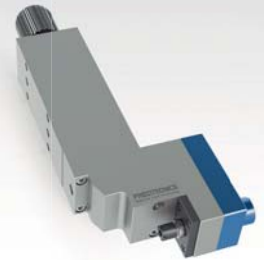
Radial double
output



Radial 90°



Fixed angle



Radial 90°
speeder



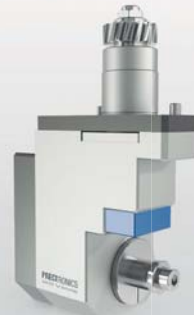
Radial
adjustable



Axial multiple
spindles



Radial multiple
outputs



Polygon
maker



Thread whirling



Gear hobbing



Radial
"Y" axis