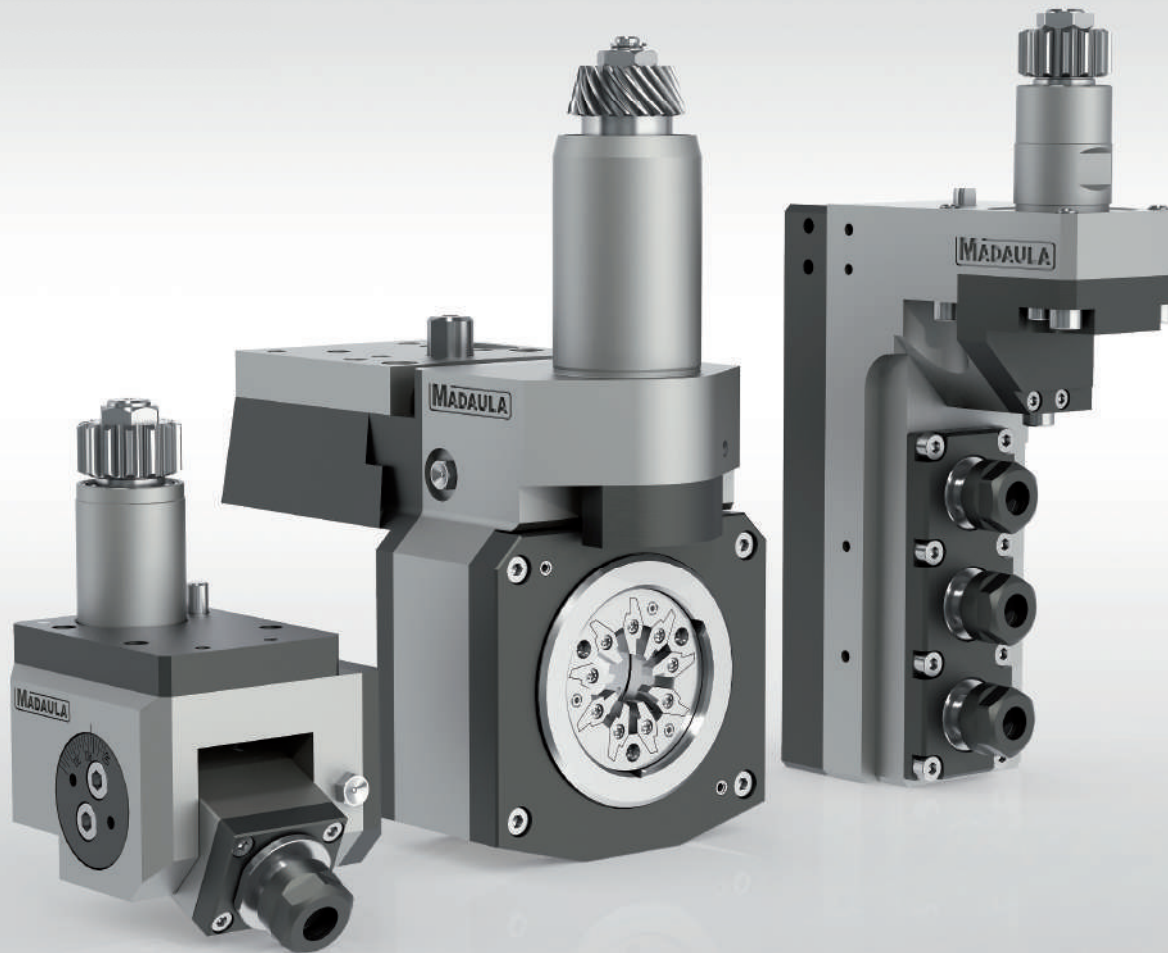


Live tooling for Swiss type lathes

CITIZEN



"Perfect work requires passion, precision
and well designed and reliable tools.
Madaula's focus
is to supply these tools to world-wide industry"



Tradition in precision

Since 1956 **Madaula** has stood for the highest quality and the best reliability of its products.

We have more than 55 years of experience in design, development and manufacture all kind of accessories for the machine tool industry.



Depuis 1956, **Madaula** est synonyme de la plus haute qualité et de la meilleur fiabilité pour ses produits.

Nous avons plus de 55 ans d'expérience dans la conception, le développement et la fabrication de tous types de accessoires pour l'industrie de la machine-outil.

Dal 1956 Madaula è sinonimo di massima qualità e di grande affidabilità.

Abbiamo più di 55 anni di esperienza nella progettazione, sviluppo e produzione di tutti i tipi di accessori per il settore delle machine utensili.



Innovation and reliability

We're focused on our ability to create products adapted to our customer's needs, reduce their manufacturing cost, thereby improving their competitive edge in the market.

We work to ensure optimally designed, precise, robust and durable products.

We love challenges.

Our goal is to turn your vision into reality and thereby increase your productivity.

Nous nous sommes consacrés sur notre capacité à créer des produits adaptés aux besoins des clients, à réduire leurs coûts de fabrication et ainsi améliorer leur avantage compétitive sur le marché.

Nous travaillons pour créer des produits de conception optimale, durables, robustes et précis.

Nous aimons les défis.

Notre objectif est d'augmenter votre productivité.

Siamo concentrati sulla nostra capacità di creare prodotti adatti alle esigenze dei nostri clienti, ridurre i loro costi di produzione, migliorando in tal modo il loro vantaggio competitivo nel mercato.

Lavoriamo costantemente per progettare in modo ottimale i nostri prodotti per renderli precisi, robusti e durevoli.

Noi amiamo le sfide. Il nostro obiettivo è quello di trasformare la vostra richiesta in realtà e di conseguenza aumentare la vostra produttività.

All over the world

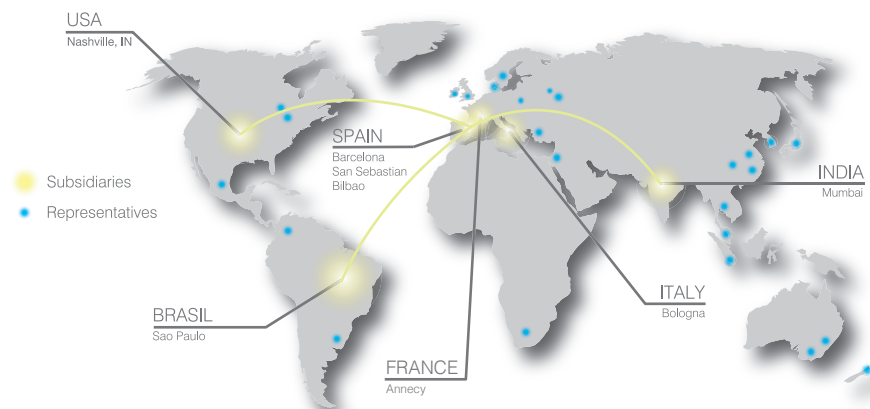
MADAULA
creative solutions

Our head office and factory are located in Barcelona, recognized city throughout the world by the creativity and constant innovation of its industries.

We sell all over the world with subsidiaries in USA, Italy, France, Brazil and India, with representatives all over the world. We export the 80% of our production.

Notre siège social et l'usine sont situés à Barcelone, ville reconnue mondialement par sa la créativité et constante innovation. Nous vendons partout dans le globe avec des filiales en USA, Italie, France, Brésil et l'Inde, et avec des représentations dans le monde entier. Nous exportons le 80% de notre production.

La nostra sede principale e lo stabilimento si trova a Barcellona, città riconosciuta in tutto il mondo per la creatività e l'innovazione costante delle sue industrie. Vendiamo in tutto il mondo con filiali in Stati Uniti, Italia, Francia, Brasile e India con i rappresentanti di tutto il mondo. Esportiamo l'80% della nostra produzione.



Manufacturing facilities

We welcome you to our facilities. Madaula has a continuous improvement policy, we invest to improve our technical production, assembly and quality departments.

Soyez les bienvenus dans nos nouvelles installations. Madaula investit constamment afin d'accroître sa capacité de production. Nous avons développé nos départements usinage et montage mais aussi qualité.

Abbiamo il piacere di informarvi a riguardo i nostri nuovi servizi. Madaula investe per migliorare la propria capacità di produzione di utensili. Ampliamo i nostri reparti di assemblaggio e di qualità.



Passion for precision

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

Adjustable coolant nozzle.

Buse orientable pour l'arrosage.
Ugello refrigerante regolabile.

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

Amélioration de la conception de l'étanchéité en combinant un labyrinthe et joints à friction optimisée pour obtenir une parfaite étanchéité.

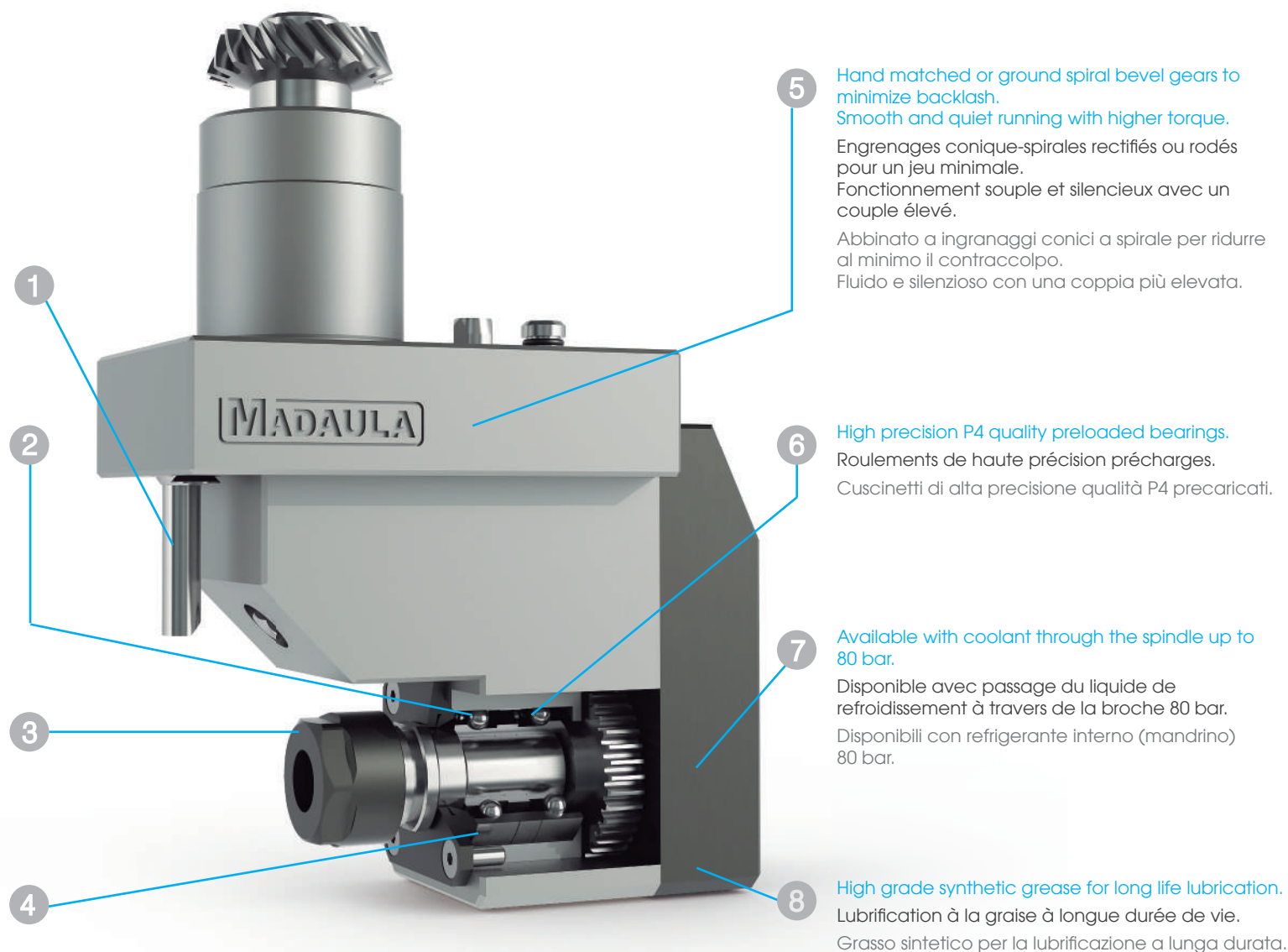
Design migliorato che combina labirinti e guarnizioni di tenuta, ottimizzati per ottenere mandrini ermetici.

Multiple output options.

Multiples options de sortie.
Diverse opzioni di uscita.

Primary labyrinth seal.

Joint à labyrinthe primaire.
Tenuta primaria a labirinto.



Hand matched or ground spiral bevel gears to minimize backlash.

Smooth and quiet running with higher torque.

Engrenages conique-spirales rectifiés ou rodés pour un jeu minimale.

Fonctionnement souple et silencieux avec un couple élevé.

Abbinato a ingranaggi conici a spirale per ridurre al minimo il contraccolpo.

Fluida e silenziosa con una coppia più elevata.

High precision P4 quality preloaded bearings.

Roulements de haute précision précharges.

Cuscinetti di alta precisione qualità P4 precaricati.

Available with coolant through the spindle up to 80 bar.

Disponible avec passage du liquide de refroidissement à travers de la broche 80 bar.

Disponibili con refrigerante interno (mandrino) 80 bar.

High grade synthetic grease for long life lubrication.

Lubrification à la graisse à longue durée de vie.

Grasso sintetico per la lubrificazione a lunga durata.

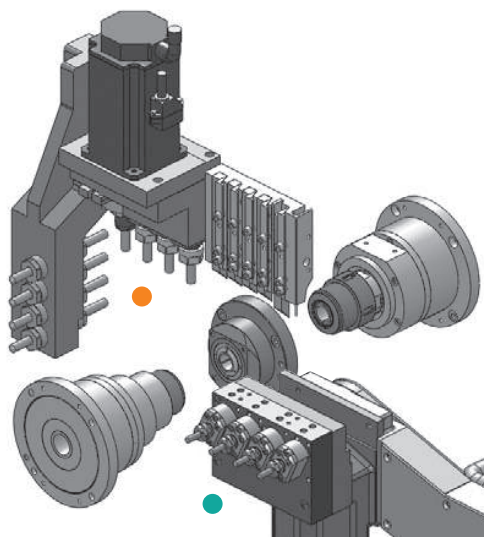
5 CITIZEN

- 5 A20 Type VII / A20-3F7N
- 9 A32 Type VII
- 12 K12 / K16 Type VII
- 15 L12 Type VII (L12-1M7) / VIII (L12-2M8) / X (L12-2M10)
- 17 L16/L20 Type V / VII / VIII / X - L20E Type VIII (L20E-2M8) / X (L20E-2M10) / XII (L20E-2M12) - Gang Tooling
- 20 L20 Type VIII (L20-2M8) / X (L20-2M10) / XII (L20-2M12) / XII B5 (L20-3M12B5) - Gang Tooling
- 24 L16 / L20 Type V / VII / VIII / X - L20E Type VIII / X / XII - L20 Type VIII / X / XII / XII B5 - Back End Tooling & Opposite Tooling
- 26 L25 / L32 Type IV / VI / VII
- 28 L32 Type VIII (L32-1M8) / IX (L32-1M9) / X (L32-1M10) / XII (L32-1M12)
- 32 M12 / M16 Type III / V - C16 Type VII / IX - C32 Type VIII - Gang Tooling
- 34 M16 Type V (M16-4M5) / VIII (M16-4M8) - Gang Tooling & Back End Tooling
- 36 M12 / M16 Type III / V - M16 Type V (M16-4M5) / VIII (M16-4M8) - Turret tooling
- 38 M20 / M32 Type III / V - Gang Tooling
- 40 M32 Type III / V (M32-5M5) / VII (M32-5M7) / VIII (M32-5M8) - Gang Tooling & Back End Tooling
- 42 M20 / M32 Type III / V - M32 Type III / V / VII / VIII - Turret tooling / Conical Gear
- 45 M32 Type V (M32-5M5) / VII (M32-5M7) / VIII (M32-5M8) - Turret tooling / DIN1809

Current Models

Discontinued Models





Type	Axial	Axial	Axial Speeder	Axial Ultraspin
Code	CZ.000.A20-ER16	CZ.000.A20-ER20	CZ.002.A20	CZ-U.002.A20
Citizen Ref.	BSC210/GSC1110/GSC1310	-	BSC610	-
	ER-16	ER-20	ER-11	ER-11
 RPM Max	8.000	8.000	16.000	24.000
	1:1	1:1	1:2	1:4

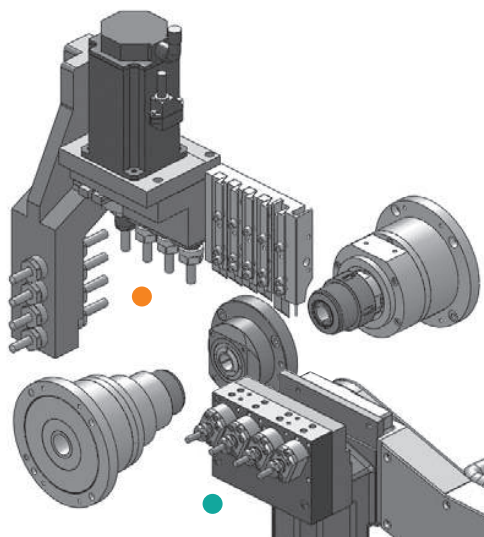


Type	Axial Reducer	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial 4+4 Outputs	Radial Set-Back
Code	CZ.003.A20	CZ.008.A20	CZ.008.A20-4	CZ.008.A20-6	CZ.008.A20-8	CZ.011.A20-ER11
Citizen Ref.	-	BSE1007	BSE2007	BSE507 / BSE707	-	BSE107
	ER-16	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11
 RPM Max	3.200	8.000	8.000	8.000	8.000	8.000
	2.5:1	1:1	1:1	1:1	1:1	1:1



Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



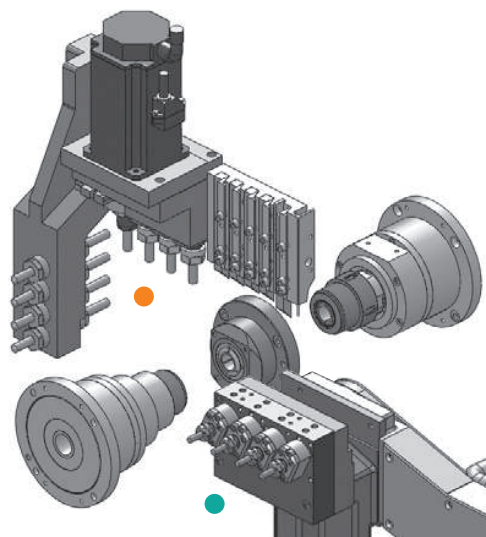
Type	Radial Set-Back	Radial Set-Back	Radial Set-Back Tool Length Adjust.	Radial Set-Back Speeder
Code	CZ.011.A20-ER16	CZ.011.A20-ER20	CZ.011.A20-ER20-TA	CZ.013.A20
Citizen Ref.	-	-	-	-
	ER-16	ER-20	ER-20	ER-11
RPM Max	8.000	8.000	8.000	24.000
	1:1	1:1	1:1	1:3



Type	Radial Set-Back Reducer	Radial Adjustable $\pm 90^\circ$	Radial 2 Outputs	Radial 3 Outputs	Radial 4 Outputs	Polygon Maker
Code	CZ.014.A20	CZ.021.A20	CZ.029.A20	CZ.029.A20-3	CZ.029.A20-4	CZ.034.A20-12
Citizen Ref.	-	BSA107	BSE207	BSE607	-	BSP509 / BSP512
	ER-20	ER-11	ER-11	ER-11	ER-11	Cyl-Shaft Ø12
RPM Max	4.000	8.000	8.000	8.000	8.000	8.000
	2:1	1:1	1:1	1:1	1:1	1:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Polygon Maker	Thread Whirling $\pm 12.5^\circ$	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 30^\circ$
Code	CZ.034.A20-15	CZ.035.A20-12.5	CZ.035.A20-15	CZ.035.A20-30
Citizen Ref.	-	-	BSW215	-
	Cyl-Shaft Ø15	Cutting Head	Cutting Head	Cutting Head
RPM Max	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1

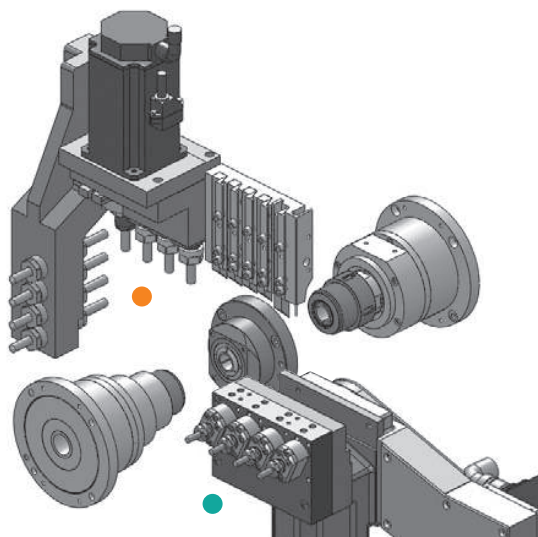


Type	Axial Saw-Mill	Radial Y-Axis $\pm 45^\circ$ 2 Outputs	Radial Y-Axis $\pm 45^\circ$ 2 Outputs	Axial Back Rotary Tool	Axial Long Back Rotary Tool	Axial Offset Back Rotary Tool
Code	CZ.038.A20	CZ.051.A20-ER11	CZ.051.A20-ER16	CZ.000.A20-BE	CZ.000.A20-BE-L	CZ.001.A20-BE
Citizen Ref.	-	-	-	GSE3507/MS507/GSE3307	GSE3407	-
	Cyl-Shaft Ø12	ER-11	ER-16	ER-11	ER-11	Cyl-Shaft Ø12
RPM Max	8.000	8.000	8.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1



Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Axial Speeder Back Rotary Tool	Axial Ultraspin Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Set-Back 90° Back Rotary Tool
Code	CZ.002.A20-BE	CZ-U.002.A20-BE	CZ.011.A20-BE	CZ.011.A20-BE-90
Citizen Ref.	-	-	-	-
	ER-11	ER-11	ER-11A	ER-11
RPM Max	15.000	20.000	5.000	5.000
	1:3	1:4	1:1	1:1

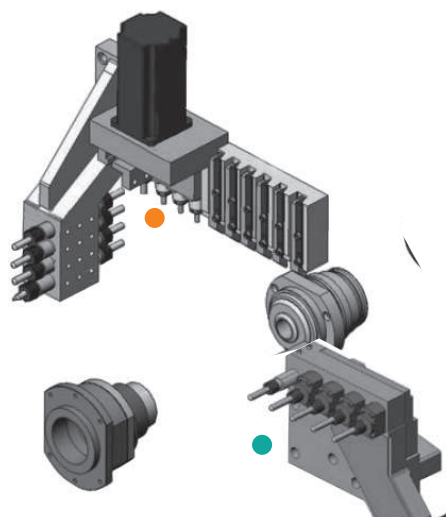


Type	Radial Set-Back 90° Horizontal	Radial Set-Back tool length adjust.	Fixed Angle Back Rotary Tool	Radial Speeder 90° Back Rotary Tool	Radial Speeder tool length adjust.	Radial Adjust. 0-90° Back Rotary Tool	Tool Holder with Fine Y-Axis Adjust. ±0.01
Code	CZ.011.A20-BE-90H	CZ.011.A20-BE-TA	CZ.012.A20-BE	CZ.013.A20-BE-90	CZ.013.A20-BE-TA	CZ.021.A20-BE	CZ.025.A20-BE
Citizen Ref.	-	GSS1530	-	-	-	-	-
	ER-16	ER-11	ER-11	ER-11	ER-11	ER-11	ER-16
RPM Max	5.000	5.000	5.000	15.000	15.000	5.000	-
	1:1	1:1	1:1	1:3	1:3	1:1	-

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque





Type	Axial	Axial	Axial Speeder	Axial Ultraspinn	Axial Reducer
Code	CZ.000.A32-ER16	CZ.000.A32-ER20	CZ.002.A32	CZ-U.002.A32	CZ.003.A32
Citizen Ref.	BSC210/GSC1110/GSC1310	-	BSC610	-	-
	ER-16	ER-20	ER-11	ER-11	ER-20
RPM Max	5.000	5.000	15.000	20.000	2.500
	1:1	1:1	1:3	1:4	2:1

NEW

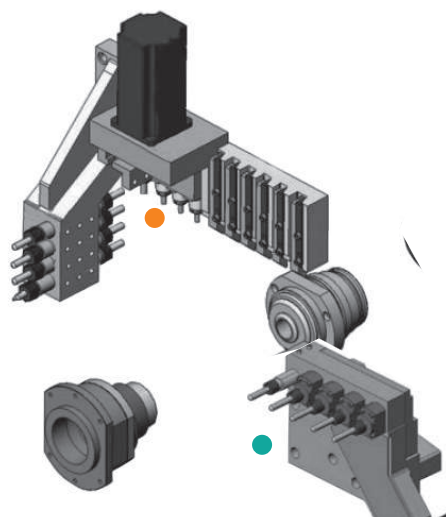


Type	Radial Double Output	Radial 2+2 Outputs	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial 3+3 Outputs	Radial 4+4 Outputs	Radial 4+4 Outputs
Code	CZ.008.A32	CZ.008.A32-4ER16/11	CZ.008.A32-4ER16	CZ.008.A32-6ER16/11	CZ.008.A32-6ER16	CZ.008.A32-8ER16/11	CZ.008.A32-8ER16
Citizen Ref.	-	-	BSE3207	-	GSE1710	-	BSE3208
	ER-16 / ER-16	ER-16 / ER-11	ER-16 / ER-16	ER-16 / ER-11	ER-16 / ER-16	ER-16 / ER-11	ER-16 / 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



Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Radial Set-Back	Radial Set-Back	Radial Set-Back Tool Length Adjust.	Radial Set-Back Speeder	Radial Set-Back Reducer
Code	CZ.011.A32-ER16	CZ.011.A32-ER20	CZ.011.A32-ER20-TA	CZ.013.A32	CZ.014.A32
Citizen Ref.	-	-	-	-	-
	ER-16	ER-20	ER-20	ER-11	ER-20
 RPM Max	5.000	5.000	5.000	5.000	2.500
	1:1	1:1	1:1	1:1	2:1

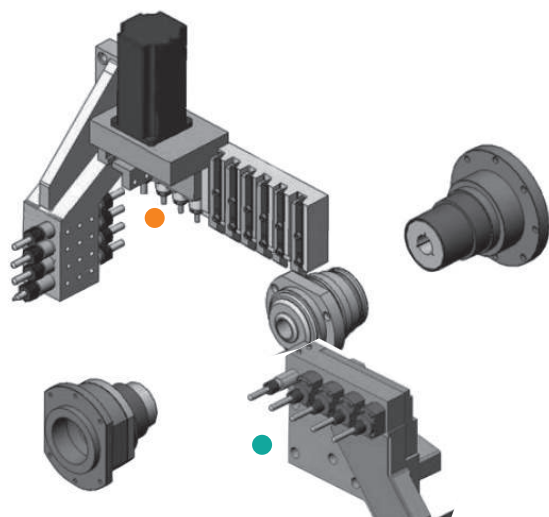


Type	Radial Adjustable $\pm 90^\circ$	Radial Slim Adjustable $\pm 90^\circ$	Radial 3 Outputs	Radial 3 Outputs (Same rotation sense)	Polygon Maker	Thread Whirling $\pm 12.5^\circ$	Thread Whirling $\pm 15^\circ$
Code	CZ.021.A32	CZ.021.A32-S	CZ.029.A32-3	CZ.029.A32-3SRS	CZ.034.A32	CZ.035.A32-12.5	CZ.035.A32-15
Citizen Ref.	BSA3107	-	-	-	-	-	-
	ER-11	ER-11	ER-16	ER-16	Cyl-Shaft	Cutting Head	Cutting Head
 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

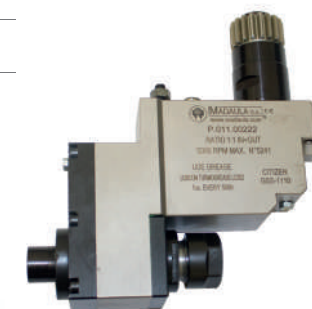


Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



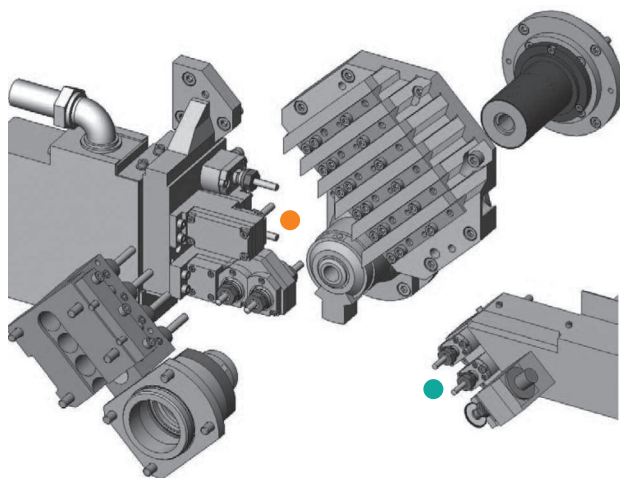
Type	Thread Whirling ±30°	Axial Saw-Mill	Radial Y-Axis ±90° 2 Outputs	Radial Y-Axis ±90° 2 Outputs
Code	CZ.035.A32-30	CZ.038.A32	CZ.051.A32-ER11	CZ.051.A32-ER16
Citizen Ref.	-	-	-	-
	Cutting Head	Cyl-Shaft Ø12	ER-11	ER-16
 RPM Max	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1



Type	Axial Back Rotary Tool	Axial Ultraspinn Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Set-Back tool length adjust.	Fixed Angle Speeder Back Rotary Tool	Radial Reducer Back Rotary Tool	Tool Holder with Fine Y-Axis Adjust. ±0.01
Code	CZ.000.A32-BE	CZ-U.002.A32-BE	CZ.011.A32-BE	CZ.011.A32-BE-TA	CZ.012.A32-BE	CZ.014.A32-BE	CZ.025.A32-BE
Citizen Ref.	GSE3507/MSC507/GSC1310	-	-	GSS1110	-	-	-
Cutting Head	ER-16	ER-11	ER-16	ER-16	ER-11A	ER-20	ER-16
RPM Max	5.000	20.000	5.000	5.000	10.000	2.500	-
Gear Ratio	1:1	1:4	1:1	1:1	1:2	2:1	-

Symbology

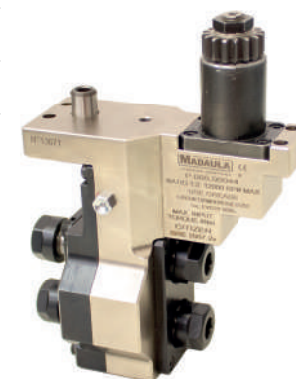
- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Axial	Axial	Axial Speeder	Axial Ultraspinn
Code	CZ.000.K12/K16-ER11	CZ.000.K12/K16-ER16	CZ.002.K12/K16	CZ-U.002.K12/K16
Citizen Ref.	GSC807 / GSC1107	-	-	-
	ER-11	ER-16	ER-11	ER-11
 RPM Max	6.000	6.000	18.000	24.000
	1:1	1:1	1:3	1:4

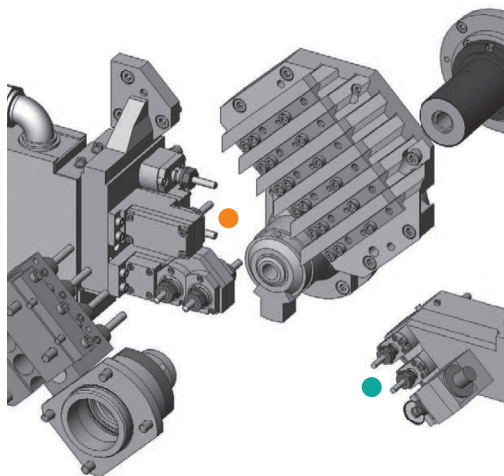


Type	Radial Double Output	Radial Double Output Speeder	Radial 2+2 Outputs Left	Radial 2+2 Outputs Right	Radial 2+2 Outputs Left Speeder	Radial 2+2 Outputs Right Speeder	Radial Set-Back
Code	CZ.008.K12/K16	CZ.008.K12/K16-S	CZ.008.K12/K16-4L	CZ.008.K12/K16-4R	CZ.008.K12/K16-4LS	CZ.008.K12/K16-4RS	CZ.011.K12/K16
Citizen Ref.	GSE2807/GSE2307/GSE2708	-	GSE2007 / GSE2507	GSE2407	GSE2507-2X	-	GSE2607 / GSE2107
	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11
 RPM Max	6.000	18.000	6.000	6.000	18.000	18.000	6.000
	1:1	1:3	1:1	1:1	1:3	1:3	1:1

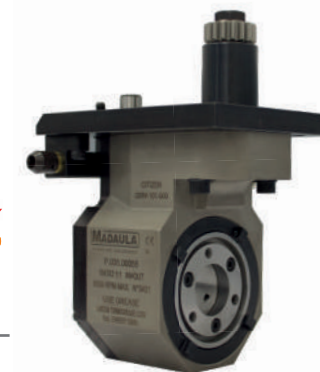


Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



Type	Radial Set-Back Sub-Spindle	Radial Set-Back Speeder	Radial Set-Back Speeder Sub-Spindle	Radial Set-Back Reducer
Code	CZ.011.K12/K16-SUB	CZ.013.K12/K16	CZ.013.K12/K16-SUB	CZ.014.K12/K16
Citizen Ref.	GSE2707 / GSE2207	-	-	-
	ER-11	ER-11	ER-11	ER-11
 RPM Max	6.000	18.000	18.000	4.500
	1:1	1:3	1:3	1.5:1

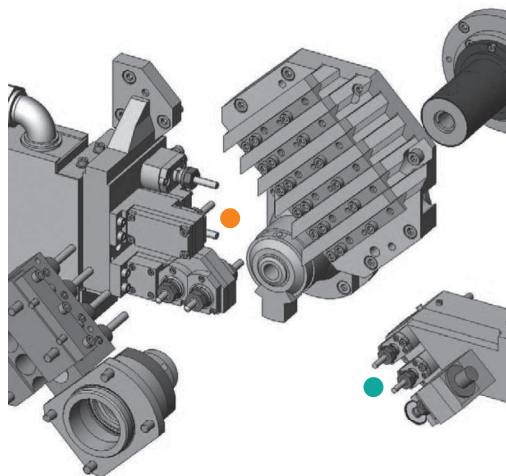


Type	Axial Double Output	Axial Triple Output Speeder	Polygon Maker Reducer	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 30^\circ$	Gear Hobbing $\pm 30^\circ$
Code	CZ.023.K12/K16	CZ.023.K12/K16-S	CZ.034.K12/K16	CZ.035.K12/K16-15	CZ.035.K12/K16-30	CZ.036.K12/K16
Citizen Ref.	GSC860	-	-	GSW101	-	-
	ER-11 / ER-11	ER-11 / ER-11	Cyl-Shaft Ø16	Cutting Head	Cutting Head	Cyl-Shaft Ø8
 RPM Max	6.000	6.000 / 18.000	2.000	6.000	6.000	6.000
	1:1	1:1 / 1:3	3:1	1:1	1:1	1:1

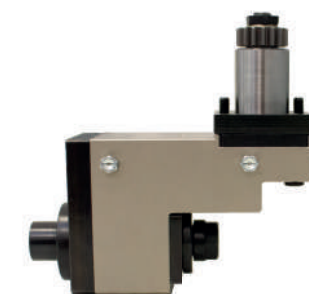


Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



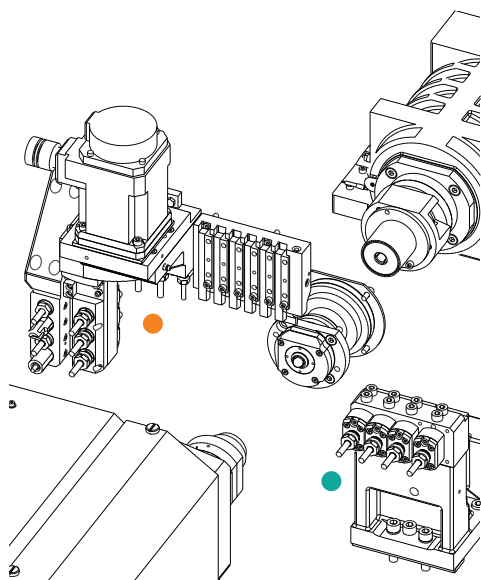
Type	Axial Saw-Mill Reducer	Radial Y-Axis 0-95°	Radial Y-Axis 0-95° 2 Outputs	Radial Y-Axis 0-95° 3 Outputs
Code	CZ.038.K12/K16	CZ.051.K12/K16	CZ.051.K12/K16-2	CZ.051.K12/K16-3
Citizen Ref.	GSS350/450/750/850/950/1050	-	-	-
	Cyl-Shaft Ø13 / Ø16	ER-11	ER-8	ER-8
 RPM Max	3.000	6.000	6.000	6.000
	2:1	1:1	1:1	1:1



Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque

Type	Axial Back Rotary Tool	Axial Ultraspin Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Set-Back Speeder Back Rotary Tool	Radial Saw-Mill Back Rotary Tool	Tool Holder with Fine Y-Axis Adjust. ±0.01
Code	CZ.000.K12/K16-BE	CZ-U.002.K12/K16-BE	CZ.011.K12/K16-BE	CZ.013.K12/K16-BE	CZ.030.K12/K16-BE	CZ.025.K12/K16-BE
Citizen Ref.	-	-	-	-	-	-
	ER-11	ER-11	ER-11	ER-11	Cyl-Shaft	ER-16
 RPM Max	6.000	24.000	6.000	18.000	6.000	-
	1:1	1:4	1:1	1:3	1:1	-



Type	Axial	Axial Long	Axial Offset	Axial Speeder	Axial Ultraspinn
Code	CZ.000.L12	CZ.000.L12-L	CZ.001.L12	CZ.002.L12	CZ-U.002.L12
Citizen Ref.	GSE3507 / MSC507	GSE3407	-	-	-
	ER-11	ER-11	Cyl-Shaft Ø13	ER-11	ER-11
 RPM Max	10.000	10.000	10.000	18.000	24.000
	1:1	1:1	1:1	1:3	1:4



Type	Axial Reducer	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back	Radial Set-Back Tool Length Adjust.	Radial Set-Back Cartridge adjust.
Code	CZ.003.L12	CZ.008.L12	CZ.008.L12-4	CZ.008.L12-6	CZ.011.L12	CZ.011.L12-TA	CZ.011.L12-CA
Citizen Ref.	-	-	-	-	GSC1507	GSS1533	-
	ER-16	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11	ER-11	ER-11
 RPM Max	5.000	10.000	10.000	10.000	10.000	10.000	10.000
	2:1	1:1	1:1	1:1	1:1	1:1	1:1



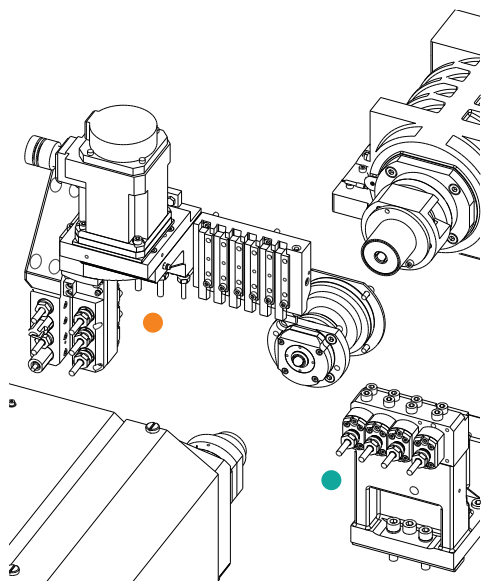
Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque

CITIZEN

MODEL
L12 Type VII (L12-1M7) / VIII (L12-2M8) / X (L12-2M10)
 Ø25 Gang Tooling // Ø25 Back End Tooling

MADAULA
 creative solutions



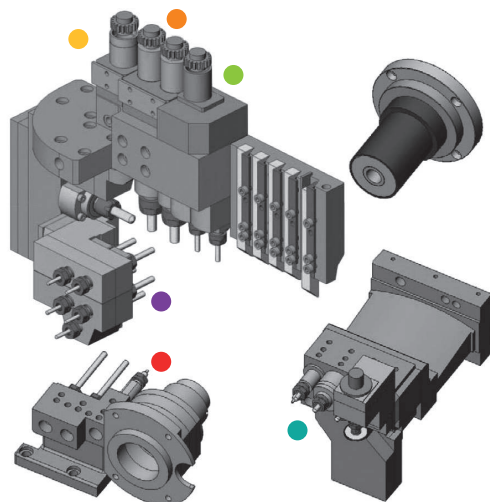
Type	Radial Set-Back Speeder	Radial Adjustable 0-90°	Radial 2 Outputs	Radial 3 Outputs
Code	CZ.013.L12	CZ.021.L12	CZ.029.L12-2	CZ.029.L12-3
Citizen Ref.	-	-	-	-
	ER-11	ER-11	ER-11	ER-11
 RPM Max	20.000	10.000	10.000	10.000
	1:2	1:1	1:1	1:1



Type	Radial Saw-Mill Reducer	Thread Whirling ±12.5°	Thread Whirling ±15°	Thread Whirling ±30°	Axial Saw-Mill	Radial Y-Axis 0-30° 3+3 Outputs
Code	CZ.030.L12	CZ.035.L12-12.5	CZ.035.L12-15	CZ.035.L12-30	CZ.038.L12	CZ.051.L12
Citizen Ref.	-	-	-	-	-	-
	Cyl-Shaft Ø13	Cutting Head	Cutting Head	Cutting Head	Cyl-Shaft	ER-11 / ER-11
 RPM Max	2.500	10.000	10.000	10.000	10.000	10.000
	4:1	1:1	1:1	1:1	1:1	1:1

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



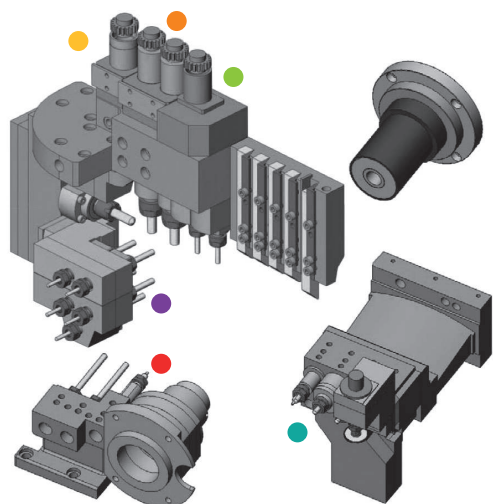
Type	Axial	Axial Offset	Axial Speeder	Axial Ultraspin
Code	CZ.000.L16/L20	CZ.001.L16/L20	CZ.002.L16/L20	CZ-U.002.L16/L20
Citizen Ref.	GSC510 / GSC1010	-	-	-
	ER-16	ER-16	ER-11	ER-11
RPM Max	5.000	5.000	15.000	20.000
	1:1	1:1	1:3	1:4



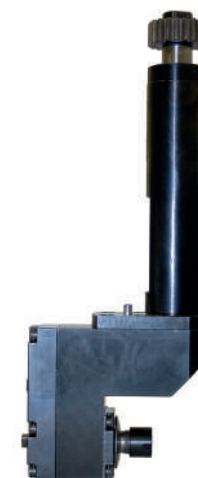
Type	Radial Double Output	Radial Double Output Speeder	Radial 2+2 Outputs	Radial 2+2 Outputs (Only for Station T10)	Radial 3+3 Outputs	Radial 3+3 Outputs
Code	CZ.008.L16/L20	CZ.008.L16/L20-S	CZ.008.L16/L20-4	CZ.008.L16/L20-4T10	CZ.008.L16/L20-6	CZ.008.L16/L20-GSE1007
Citizen Ref.	-	-	-	-	-	GSE1007
	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11
RPM Max	5.000	15.000	5.000	5.000	5.000	5.000
	1:1	1:3	1:1	1:1	1:1	1:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



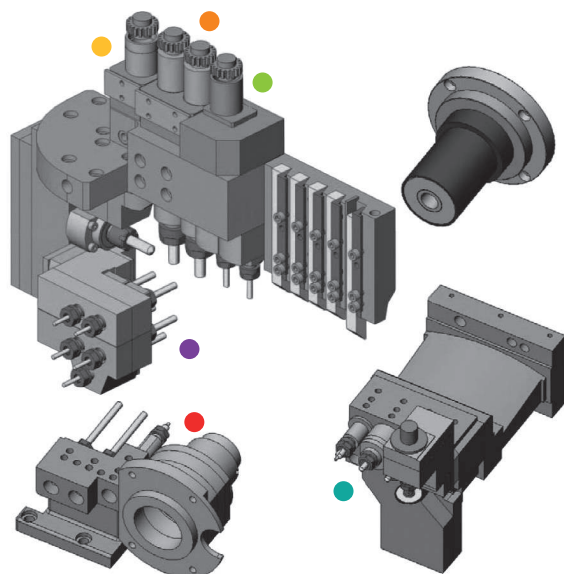
Type	Radial 3+3 Outputs (Only for Station T10)	Radial Set-Back	Radial Set-Back Sub-spindle	Radial Set-Back Speeder
Code	CZ.008.L16/L20-6T10	CZ.011.L16/L20	CZ.011.L16/L20-SUB	CZ.013.L16/L20
Citizen Ref.	GSE1307	GSE306	GSE107	-
	ER-11 / ER-11	ER-11	ER-11	ER-11
RPM Max	5.000	5.000	5.000	15.000
	1:1	1:1	1:1	1:3



Type	Radial Adjustable 0-90°	Radial Adjustable 0-90° Speeder	Axial Offset Reducer	Radial 2 Outputs	Radial 2 Outputs Speeder	Radial 3 Outputs
Code	CZ.021.L16/L20	CZ.021.L16/L20-S	CZ.027.L16/L20	CZ.029.L16/L20-2	CZ.029.L16/L20-2S	CZ.029.L16/L20-3ER11
Citizen Ref.	-	-	-	-	-	GSE910
	ER-11	ER-11	ER-16	ER-11	ER-11	ER-11
RPM Max	5.000	15.000	2.500	5.000	15.000	5.000
	1:1	1:3	2:1	1:1	1:3	1:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



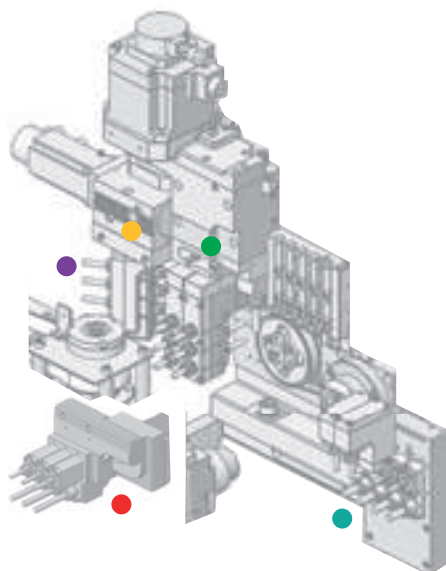
Type	Radial 3 Outputs (Only for Station T10)	Polygon Maker Reducer	Thread Whirling $\pm 15^\circ$
Code	CZ.029.L16/L20-3ER16	CZ.034.L16/L20	CZ.035.L16/L20-15
Citizen Ref.	GSE1110	-	LSW215
	ER-11	Cyl-Shaft Ø10	Cutting Head
RPM Max	5.000	2.500	5.000
	1:1	2:1	1:1



Type	Thread Whirling $\pm 25^\circ$	Thread Whirling $\pm 30^\circ$	Axial Saw-Mill Reducer	Radial Y-Axis $\pm 15^\circ$	Radial Y-Axis $\pm 15^\circ$ 2 Outputs	Axial (Only for Station T07-T06)
Code	CZ.035.L16/L20-25	CZ.035.L16/L20-30	CZ.038.L16/L20	CZ.051.L16/L20	CZ.051.L16/L20-2	CZ.000.L20-S
Citizen Ref.	BTE1000	-	-	-	-	GSC907
	Cutting Head	Cutting Head	Cyl-Shaft Ø12	ER-11	ER-11	ER-11
RPM Max	5.000	5.000	2.500	5.000	5.000	5.000
	1:1	1:1	2:1	1:1	1:1	1:1

Symbology

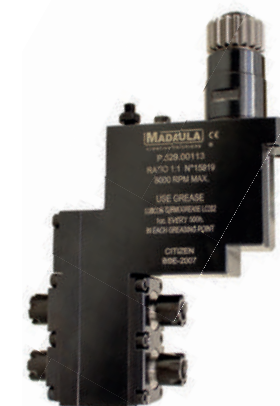
- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Axial	Axial	Axial Speeder	Axial Ultraspin	Axial Reducer
Code	CZ.000.L20C-ER16	CZ.000.L20C-ER20	CZ.002.L20C	CZ-U.002.L20C	CZ.003.A20
Citizen Ref.	BSC210/GSC1110/GSC1310	-	-	-	-
	ER-16	ER-20	ER-11	ER-11	ER-20
RPM Max	5.000	5.000	15.000	20.000	3.000
	1:1	1:1	1:3	1:4	2:1

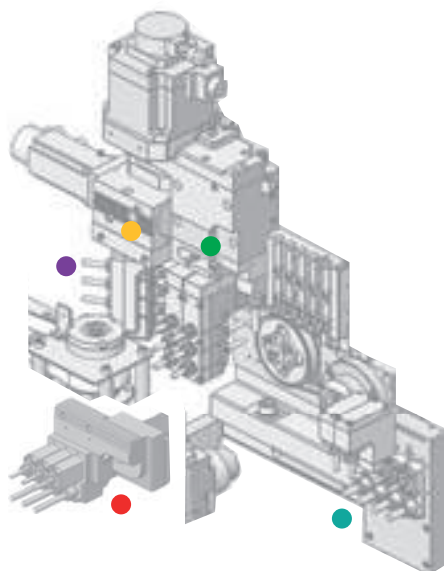


Type	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back	Radial Set-Back	Radial Set-Back	Radial Set-Back Tool Length Adj.	Radial Set-Back Speeder
Code	CZ.008.L20C	CZ.008.L20C-4	CZ.008.L20C-6	CZ.011.L20C-ER11	CZ.011.L20C-ER16	CZ.011.L20C-ER20	CZ.011.L20C-ER20-TA	CZ.013.L20C
Citizen Ref.	BSE1007	BSE2007	BSE507 / BSE707	BSE107	-	-	-	-
	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11	ER-16	ER-20	ER-20	ER-11
RPM Max	5.000	5.000	5.000	5.000	5.000	5.000	5.000	15.000
	1:1	1:1	1:1	1:1	1:1	1:1	1:1	1:3

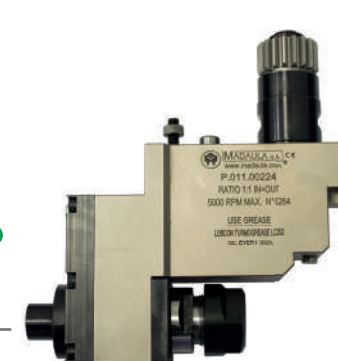


Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Radial Set-Back Reducer	Radial Adjustable $\pm 90^\circ$	Axial Double Output Reducer	Radial 2 Outputs	Radial 3 Outputs
Code	CZ.014.L20C	CZ.021.L20C	CZ.023.L20C	CZ.029.L20C	CZ.029.L20C-3
Citizen Ref.	-	BSA107	-	BSE207	BSE607
	ER-20	ER-11	ER-11 / ER-16	ER-11	ER-11
 RPM Max	2.500	5.000	5.000 / 2.500	5.000	5.000
	2:1	1:1	1:1 / 2:1	1:1	1:1

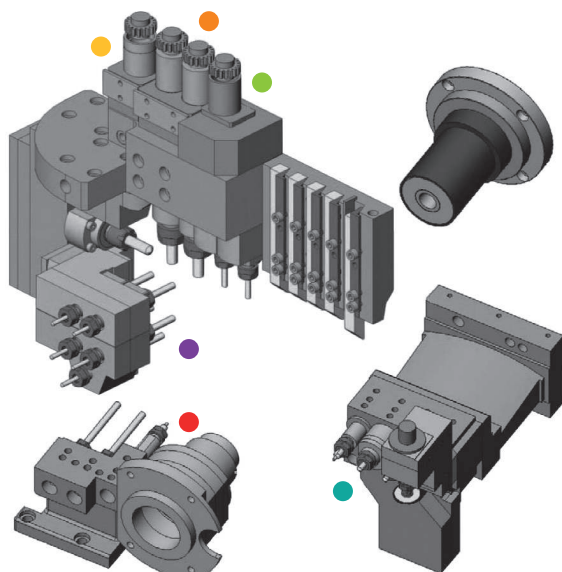


Type	Polygon Maker	Polygon Maker	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 30^\circ$	Axial Saw-Mill	Radial Y-Axis $\pm 35^\circ$ 2 Outputs	Radial Y-Axis $\pm 35^\circ$ 2 Outputs
Code	CZ.034.L20C-12	CZ.034.L20C-15	CZ.035.L20C-15	CZ.035.L20C-30	CZ.038.L20C	CZ.051.L20C-ER11	CZ.051.L20C-ER16
Citizen Ref.	-	-	-	-	-	-	-
	Cyl-Shaft Ø12	Cyl-Shaft Ø15	Cutting Head	Cutting Head	Cyl-Shaft Ø12	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



Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



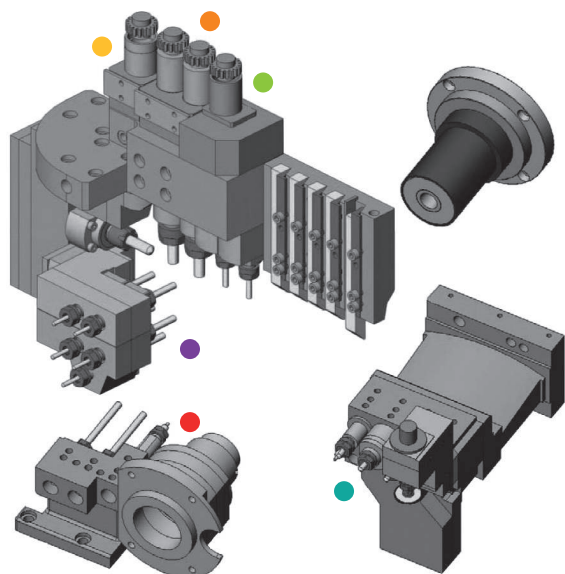
Type	End Face Drilling (Without Rotary Tool)	Axial
Code	CZ.031.L20N-T	CZ.000.L20N
Citizen Ref.	GSE3010 / GSE3110	GSC1210
	-	ER-16
 RPM Max	5.000	5.000
	1:1	1:1



Type	Axial Ultraspinn	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back
Code	CZ-U.002.L20N	CZ.008.L20N	CZ.008.L20N-4	CZ.008.L20N-6	CZ.011.L20N
Citizen Ref.	-	-	GSE3107	GSE3207	-
	ER-11	ER-11	ER-11	ER-11	ER-11
 RPM Max	20.000	5.000	5.000	5.000	5.000
	1:4	1:1	1:1	1:1	1:1

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



Type **Radial Set-Back Speeder** **Axial Double Output**

Code	CZ.013.L20N	CZ.023.L20N
Citizen Ref.	-	GSC1307
	ER-11	ER-11
 RPM Max	15.000	5.000
	1:3	1:1

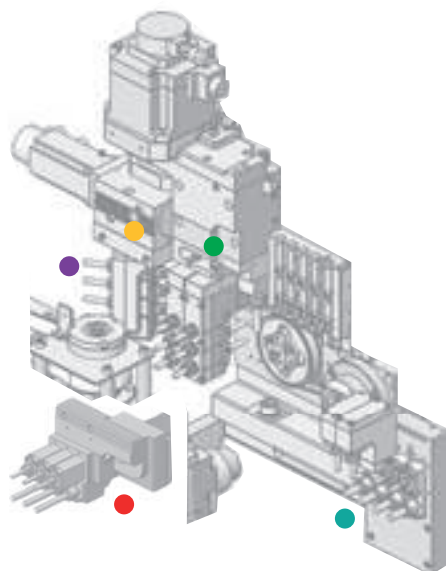


Type **Polygon Maker Reducer** **Thread Whirling ±15°** **Thread Whirling ±30°** **Radial Y-Axis 0-90° Double Output** **Radial Y-Axis 0-90° 2 Outputs**

Code	CZ.034.L20N	CZ.035.L20N-15	CZ.035.L20N-30	CZ.051.L20N	CZ.051.L20N-2
Citizen Ref.	-	-	-	-	-
	Cyl-Shaft	Cutting Head	Cutting Head	ER-11	ER-16
 RPM Max	2.500	5.000	5.000	5.000	5.000
	2:1	1:1	1:1	1:1	1:1

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



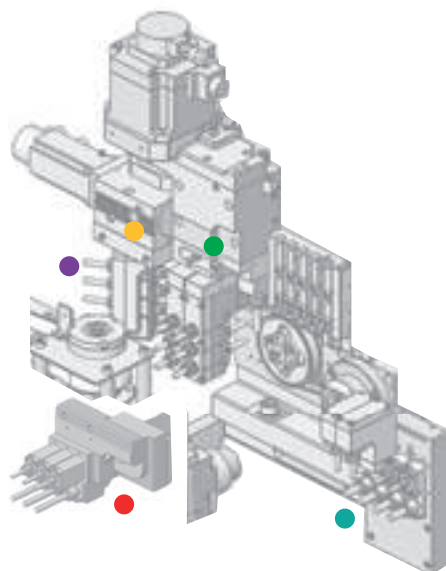
Type	Axial Back Rotary Tool	Axial Long Back Rotary Tool
Code	CZ.000.L20-BE	CZ.000.L20-BE-L
Citizen Ref.	GSE3507/MSC507/GSE3307	GSE3407
	ER-11	ER-11
 RPM Max	5.000	5.000
	1:1	1:1



Type	Axial Offset Back Rotary Tool	Axial Speeder Back Rotary Tool	Axial Ultraspinn Back Rotary Tool	Radial Set-Back Back Rotary Tool	Radial Set-Back tool length adjust. Back Rotary Tool
Code	CZ.001.L20-BE	CZ.002.L20-BE	CZ-U.002.L20-BE	CZ.011.L20-BE	CZ.011.L20-BE-TA
Citizen Ref.	-	-	-	GSE1510	GSS1330/GSS1530
	Cyl-Shaft Ø12	ER-16	ER-11	ER-11	ER-11
 RPM Max	5.000	15.000	20.000	5.000	5.000
	1:1	1:3	1:4	1:1	1:1

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



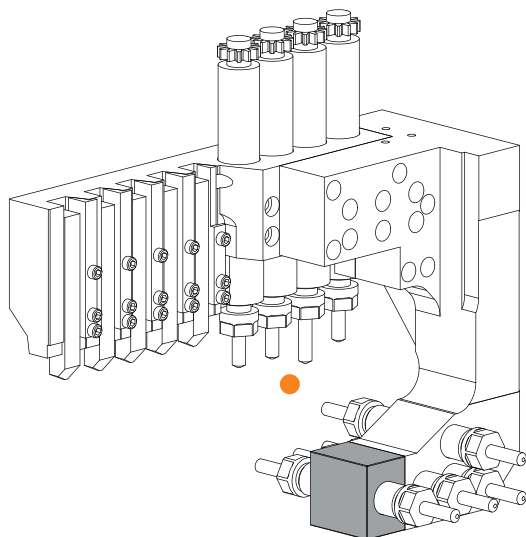
Type	Radial Set-Back Cartridge Adjust. Back Rotary Tool	Fixed Angle Back Rotary Tool
Code	CZ.011.L20-BE-CA	CZ.012.L20-BE
Citizen Ref.	-	-
ER-11	ER-11	ER-11
RPM Max	5.000	5.000
1:1	1:1	1:1



Type	Radial Speeder Back Rotary Tool	Radial Speeder tool length adjust. Back Rotary Tool	Radial Adjust. 0-90° Back Rotary Tool	Radial Saw-Mill Back Rotary Tool	Tool Holder with Fine Y-Axis Adjust. ±0.01
Code	CZ.013.L20-BE	CZ.013.L20-BE-TA	CZ.021.L20-BE	CZ.030.L20-BE	CZ.025.L20-BE
Citizen Ref.	-	-	-	-	-
ER-11	ER-11	ER-11	ER-11	Cyl-Shaft Ø12	ER-16
RPM Max	15.000	15.000	5.000	5.000	-
1:3	1:3	1:3	1:1	1:1	-

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Axial	Axial Offset	Axial Speeder
Code	CZ.000.L25/L32	CZ.001.L25/L32	CZ.002.L25/L32
Citizen Ref.	GSE310	-	-
	ER-16	ER-16	ER-11
RPM Max	6.000	6.000	18.000
	1:1	1:1	1:3



Type	Axial Ultraspinn	Axial Reducer	Radial Double Output	Radial Double Output Speeder	Radial 2+2 Outputs	Radial 3+3 Outputs
Code	CZ-U.002.L25/L32	CZ.003.L25/L32	CZ.008.L25/L32	CZ.008.L25/L32-S	CZ.008.L25/L32-4	CZ.008.L25/L32-6
Citizen Ref.	-	-	GSX510	-	-	-
	ER-11	ER-16A	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11
RPM Max	24.000	4.000	6.000	6.000 / 18.000	6.000	6.000
	1:4	2:1	1:1	1:1 / 1:3	1:1	1:1



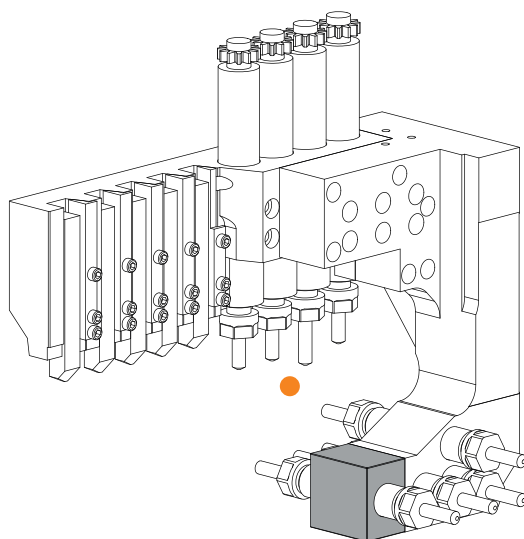
Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque

CITIZEN

MODEL
L25 / L32 Type IV / VI / VII
Ø32 Gang Tooling

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Type	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable 0-90°
Code	CZ.011.L25/L32	CZ.013.L25/L32	CZ.021.L25/L32
Citizen Ref.	-	-	-
	ER-11	ER-11	ER-11
RPM Max	6.000	18.000	6.000
	1:1	1:3	1:1

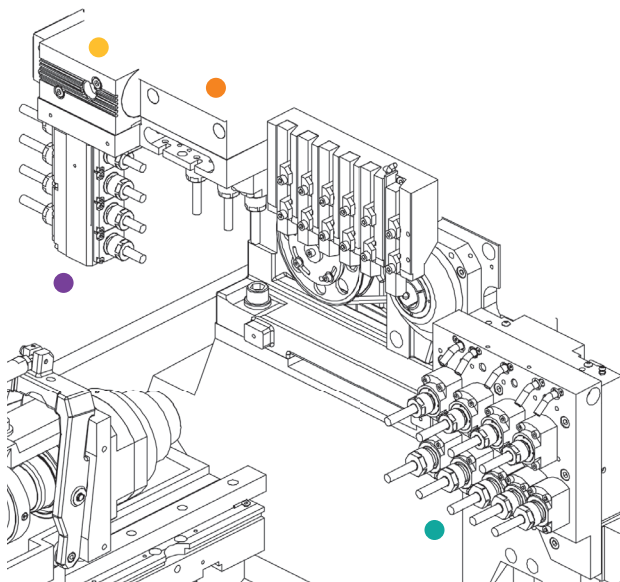


Type	Radial Adjustable 0-90° Speeder	Thread Whirling ±15°	Thread Whirling ±25°	Axial Saw-Mill	Radial Y-Axis ±15°
Code	CZ.021.L25/L32-S	CZ.035.L20N-15	CZ.035.L20N-25 LSW101	CZ.038.L20N	CZ.051.L20N GSA107
Citizen Ref.	-	-	-	-	-
	ER-11	Cutting Head	Cutting Head	Cyl-Shaft Ø13	ER-11
RPM Max	18.000	6.000	6.000	6.000	6.000
	1:3	1:1	1:1	1:1	1:1



Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Axial	Axial	Axial Speeder	Axial Ultraspin
Code	CZ.000.L32-ER16	CZ.000.L32-ER20	CZ.002.L32	CZ-U.002.L32
Citizen Ref.	BSC210/GSC1110/GSC1310	-	-	-
ER	ER-16	ER-20	ER-11	ER-11
RPM Max	6.000	6.000	18.000	24.000
Gears	1:1	1:1	1:3	1:4



Type	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable ±90°
Code	CZ.008.L32	CZ.008.L32-4	CZ.008.L32-6	CZ.011.L32-ER11	CZ.011.L32-ER16	CZ.013.L32	CZ.021.L32
Citizen Ref.	-	-	BSE707	-	-	-	-
ER	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11	ER-16	ER-11	ER-11
RPM Max	6.000	6.000	6.000	6.000	6.000	18.000	6.000
Gears	1:1	1:1	1:1	1:1	1:1	1:3	1:1

Symbology



Adjustable



High Speed



Speeder



Reducer / Higher torque

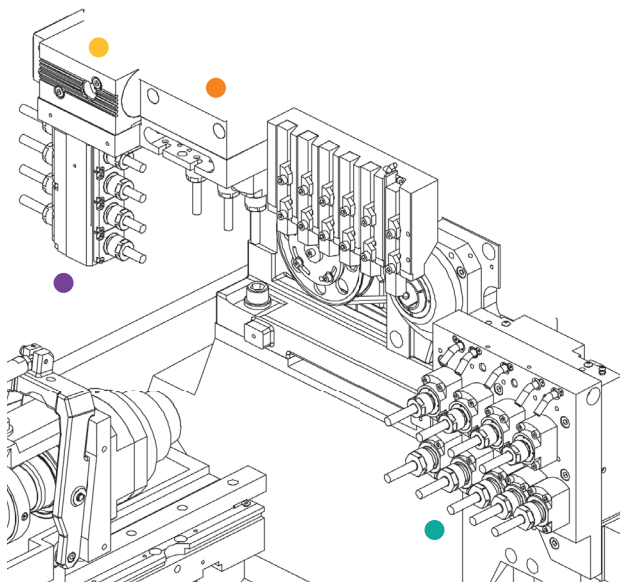
CITIZEN

MODEL

L32 Type VIII (L32-1M8) / IX (L32-1M9) / X (L32-1M10) / XII (L32-1M12)

Ø31 Gang Tooling // Ø31 Back End Tooling

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Type	Radial 2 Outputs	Radial 3 Outputs	Radial 4 Outputs	Polygon Maker
Code	CZ.029.L32-2	CZ.029.L32-3	CZ.029.L32-4	CZ.034.L32
Citizen Ref.	-	BSE607	-	-
	ER-11	ER-11	ER-11	Cyl-Shaft Ø12
 RPM Max	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1

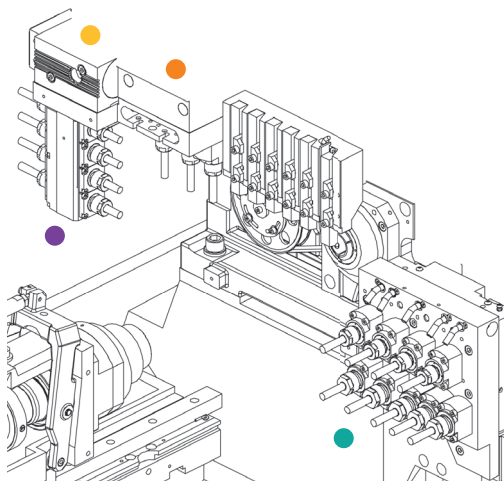


Type	Polygon Maker Red. (T08-T09 Station)	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing	Axial Saw-Mill	Radial Y-Axis ±50°	Radial Y-Axis ±50° 3 Outputs
Code	CZ.034.L32-R	CZ.035.L32-15	CZ.035.L32-30	CZ.036.L32	CZ.038.L32	CZ.051.L32	CZ.051.L32-3
Citizen Ref.	-	-	-	-	-	GSA107	GSA107
	Cyl-Shaft Ø12	Cutting Head	Cutting Head	Cyl-Shaft	Cyl-Shaft	ER-16	ER-16
 RPM Max	2.000	6.000	6.000	6.000	6.000	6.000	6.000
	3:1	1:1	1:1	1:1	1:1	1:1	1:1



Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



Type **Radial 3+3 Outputs** **Radial 4+4 Outputs** **Radial Set-Back** **Radial 3 Outputs**

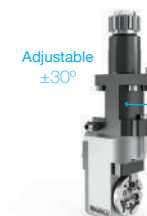
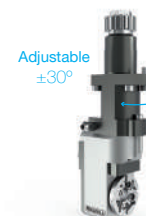
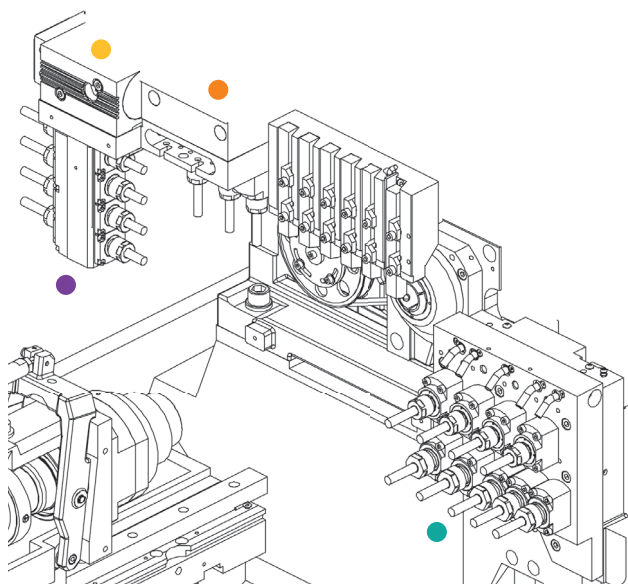
Code	CZ.008.L32T-6	CZ.029.L32T-8	CZ.011.L32T	CZ.029.L32T-3
Citizen Ref.	GSE1810	GSE2010	GSE1910	GSE1610
	ER-16	ER-16	ER-16	ER-16
RPM Max	6.000	6.000	6.000	6.000
	1:1	1:1	1:1	1:1



Type	End Face Drilling (Without Rotary Tool)	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back	Axial Double Output
Code	CZ.031.L32T	CZ.008.L32N	CZ.008.L32N-4	CZ.008.L32N-6	CZ.011.L32T	CZ.023.L32T
Citizen Ref.	GSE3210	-	GSE3707	GSE3807	-	GSC1607
	-	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11	ER-11 / ER11
RPM Max	5.000	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1	1:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Polygon Maker	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 30^\circ$
Code	CZ.034.L32N	CZ.035.L32N-15	CZ.035.L32N-30
Citizen Ref.	-	-	-
	Cyl-Shaft Ø12	Cutting Head	Cutting Head
RPM Max	5.000	5.000	5.000
	1:1	1:1	1:1



Type	Radial Y-Axis 0-90° Double Output	Radial Y-Axis 0-90° 2 Outputs	Radial Set-Back Back Rotary Tool	Radial Adjust. 0-90° Back Rotary Tool	Radial Saw-Mill Back Rotary Tool	Tool Holder with Fine Y-Axis Adjust. ± 0.01
Code	CZ.051.L32N	CZ.051.L32N-2	CZ.011.L32-BE GSE1910	CZ.021.L32-BE -	CZ.030.L32-BE GSS1910	CZ.025.L32-BE -
Citizen Ref.	-	-	-	-	-	-
	ER-11	ER-11	ER-16	ER-11	Cyl-Shaft	ER-16
RPM Max	5.000	5.000	6.000	6.000	6.000	-
	1:1	1:1	1:1	1:1	1:1	-

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



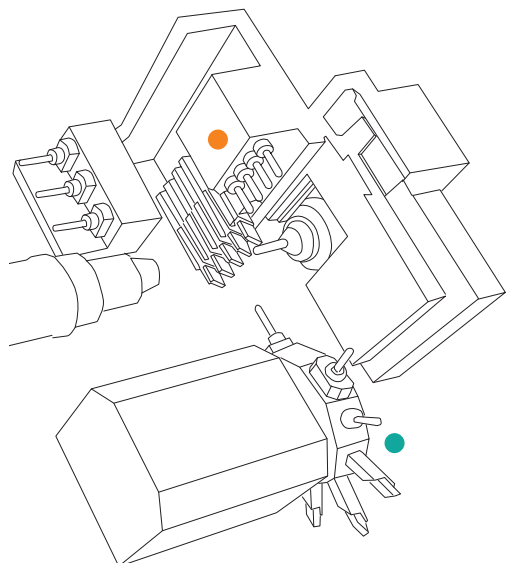
CITIZEN

MODEL

M12 / M16 Type III / V // **C16** Type VII / IX // **C32** Type VIII

Ø25 Gang Tooling

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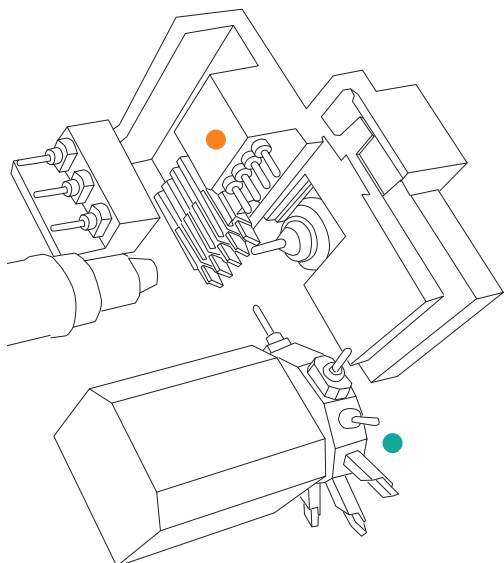
Type	Axial	Axial	Axial Offset	Axial Offset
Code	CZ.000.M12/M16-ER11	CZ.000.M12/M16-ER16	CZ.001.M12/M16-ER11A	CZ.001.M12/M16-ER16
Citizen Ref.	GSC607 / GSC507	GSC510	-	-
	ER-11	ER-16	ER-11A	ER-16
 RPM Max	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1



Type	Axial Speeder	Axial Ultraspinn	Radial Double Output	Radial Double Output	Radial Double Output Speeder	Radial Set-Back
Code	CZ.002.M12/M16	CZ-U.002.M12/M16	CZ.008.M12/M16	CZ.008.M12/M16-ER11	CZ.008.M12/M16-S	CZ.011.M12/M16-13
Citizen Ref.	-	-	-	-	-	GSE507
	ER-11	ER-11	ER-8 / ER-11	ER-11 / ER-11	ER-11 / ER-11	ER-11
 RPM Max	24.000	24.000	8.000	8.000	24.000	8.000
	1:3	1:4	1:1	1:1	1:3	1:1

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



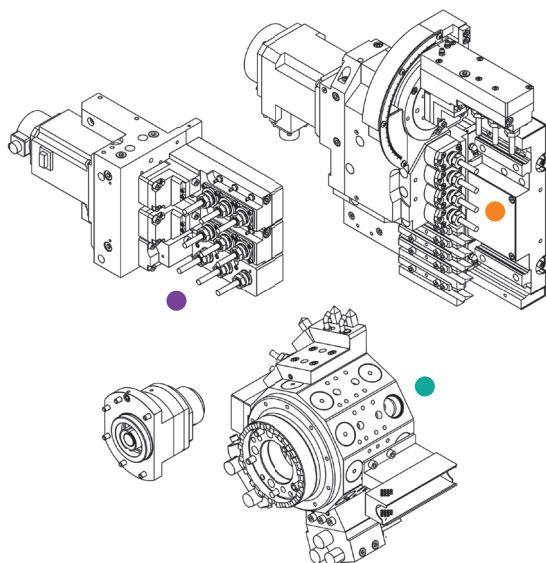
Type	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable 0-90°	Radial Adjustable 0-90° Sub-spindle
Code	CZ.011.M12/M16-20	CZ.013.M12/M16	CZ.021.M12/M16	CZ.021.M12/M16-SUB
Citizen Ref.	GSE508	-	GSA507 / GSA407	-
	ER-11	ER-11	ER-11	ER-11
RPM Max	8.000	16.000	8.000	8.000
	1:1	1:2	1:1	1:1



Type	Radial Adjustable 0-90° Speeder	Thread Whirling ±12.5°	Thread Whirling ±15°	Thread Whirling ±30°	Axial Saw-Mill Reducer	Radial Y-Axis ±15°
Code	CZ.021.M12/M16-S	CZ.035.M12/M16-12.5	CZ.035.M12/M16-15	CZ.035.M12/M16-30	CZ.038.M12/M16	CZ.051.M12/M16
Citizen Ref.	-	-	LSW424	-	-	-
	ER-11	Cutting Head	Cutting Head	Cutting Head	Cyl-Shaft	ER-11
RPM Max	24.000	8.000	8.000	8.000	4.000	8.000
	1:3	1:1	1:1	1:1	2:1	1:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



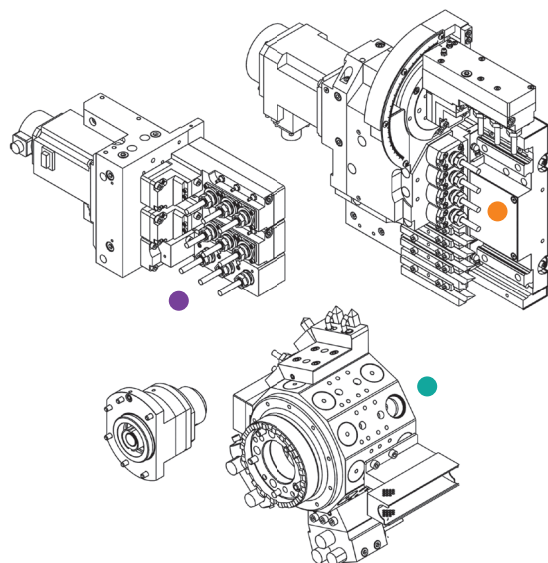
Type	Axial	Axial Offset	Axial Speeder
Code	CZ.000.M16	CZ.001.M16	CZ.002.M16
Citizen Ref.	MSC507	-	-
	ER-11	Cyl-Shaft Ø12	ER-11
 RPM Max	8.000	8.000	24.000
	1:1	1:1	1:3



Type	Axial Ultraspinn	Axial Reducer	Radial 4+4 Outputs	Radial Set-Back	Radial Set-Back Tool Lengt Adjustment
Code	CZ-U.002.M16	CZ.003.M16	CZ.008.M16-8	CZ.011.M16	CZ.011.M16-TA
Citizen Ref.	-	-	MSE707	-	-
	ER-11	ER-16	ER-11	ER-11	ER-11
 RPM Max	24.000	4.000	8.000	8.000	8.000
	1:4	2:1	1:1	1:1	1:1

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



Type	Radial Set-Back Cartridge Adjustment	Fixed Angle (Any Angle)	Radial Set-Back Speeder
Code	CZ.011.M16-CA	CZ.012.M16	CZ.013.M16
Citizen Ref.	-	-	-
	ER-11	ER-11	ER-11
 RPM Max	8.000	8.000	24.000
	1:1	1:1	1:3

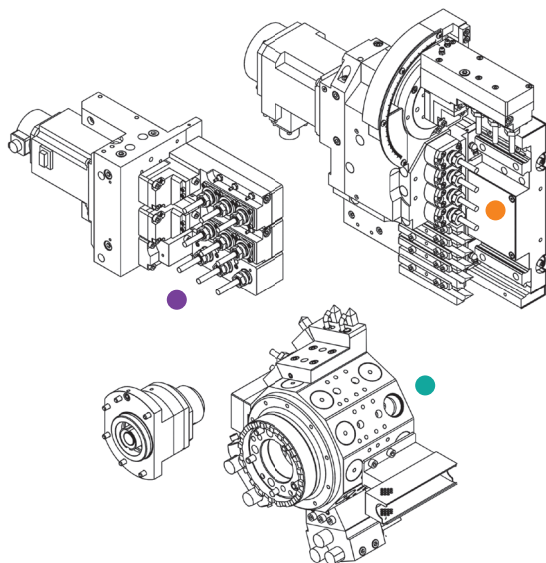


Type	Radial Adjustable 0-90°	Radial 3 Outputs	Radial Saw-Mill	Thread Whirling ±15°	Thread Whirling ±30°
Code	CZ.021.M16	CZ.029.M16-3	CZ.030.M16	CZ.035.M16-15	CZ.035.M16-30
Citizen Ref.	-	MSE607	-	-	-
	ER-11	ER-11	Cyl-Shaft	Cutting Head	Cutting Head
 RPM Max	8.000	8.000	8.000	8.000	8.000
	1:1	1:1	1:1	1:1	1:1



Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



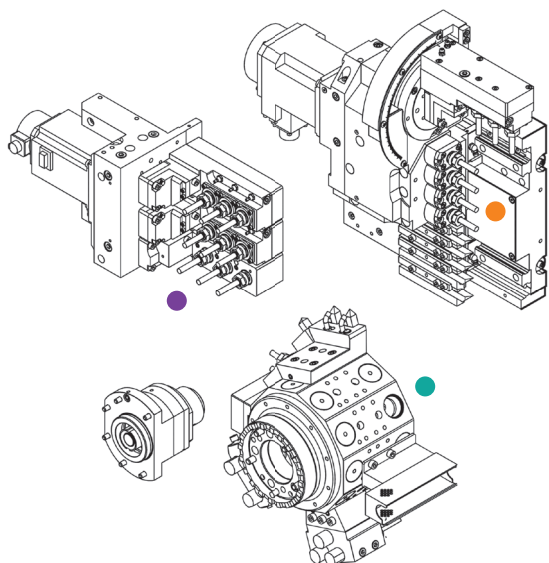
Type	Axial	Axial	Axial Speeder
Code	CZ.000.M12/M16T-ER11	CZ.000.M12/M16T-ER16	CZ.002.M12/M16T
Citizen Ref.	MSC106 / MSC107BT	MSC406	-
	ER-11	ER-16	ER-16
 RPM Max	6.500	6.500	13.000
	1:1	1:1	1:2



Type	Radial Double Output	Radial 2+2 Outputs	Radial Set-Back	Radial Set-Back Sub-spindle	Radial Set-Back Speeder	Radial Adjustable 0-30°
Code	CZ.008.M12/M16T	CZ.008.M12/M16T-4	CZ.011.M12/M16T	CZ.011.M12/M16T-SUB	CZ.013.M12/M16T	CZ.021.M12/M16T-ER8
Citizen Ref.	-	-	MSE106	-	-	-
	ER-11 / ER-11	ER-11 / ER-11	ER-11	ER-11	ER-11	ER-8
 RPM Max	6.500	6.500	6.500	6.500	19.500	6.500
	1:1	1:1	1:1	1:1	1:3	1:1

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque



**Radial Adjustable
0-90°**



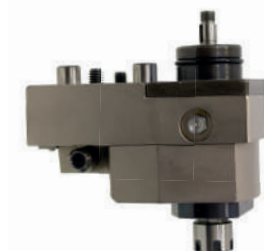
**Radial Adjustable
0-30° Speeder**



Axial Double Output



Type	Radial Adjustable 0-90°	Radial Adjustable 0-30° Speeder	Axial Double Output
Code	CZ.021.M12/M16T-ER11	CZ.021.M12/M16T-3S	CZ.023.M12/M16T
Citizen Ref.	MSA103/MSA203/MSA303	-	MSC407
ER-11	ER-11	ER-11	ER-11
RPM Max	6.500	19.500	6.500
1:1	1:1	1:3	1:1



**Polygon Maker
Reducer**



Thread Whirling ±15°



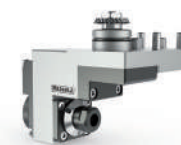
Thread Whirling ±30°



Gear Hobbing ±10°



Axial Y-Axis ±3mm



Radial Y-Axis



Type	Polygon Maker Reducer	Thread Whirling ±15°	Thread Whirling ±30°	Gear Hobbing ±10°	Axial Y-Axis ±3mm	Radial Y-Axis
Code	CZ.034.M12/M16T	CZ.035.M12/M16T-15	CZ.035.M12/M16T-30	CZ.036.M12/M16T	CZ.050.M12/M16T	CZ.051.M12/M16T
Citizen Ref.	MSP160	MSW101	-	-	MSC206 / MSC303	-
Cyl-Shaft Ø16	Cyl-Shaft Ø16	Cutting Head	Cutting Head	Cyl-Shaft	ER-11	ER-11
RPM Max	2.167	6.500	6.500	6.500	6.500	6.500
3:1	3:1	1:1	1:1	1:1	1:1	1:1

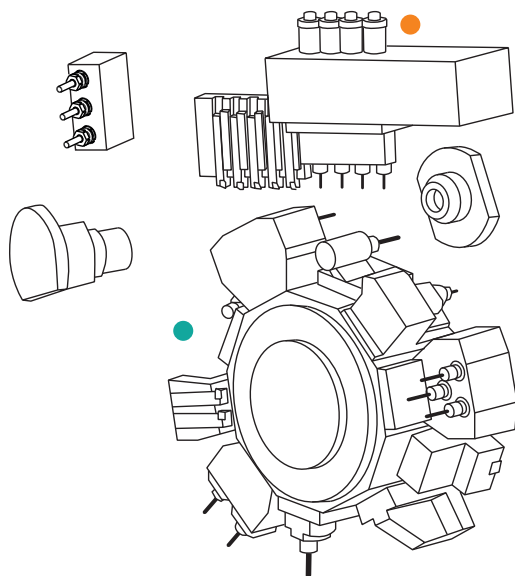
Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque

CITIZEN

MODEL
M20 / M32 Type III / V
Ø32 Gang Tooling

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Type	Axial	Axial Offset	Axial Speeder
Code	CZ.000.M20/M32	CZ.001.M20/M32	CZ.002.M20/M32
Citizen Ref.	GSC510	-	-
	ER-16	ER-16	ER-16
 RPM Max	5.000	5.000	15.000
	1:1	1:1	1:3



Type	Axial Ultraspinn	Axial Reducer	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs
Code	CZ-U.002.M20/M32	CZ.003.M20/M32	CZ.008.M20/M32	CZ.008.M20/M32-4	CZ.008.M20/M32-6
Citizen Ref.	-	-	GSE306	-	-
	ER-16	ER-16A	ER-11 / ER-11	ER-11 / ER-11	ER-11 / ER-11
 RPM Max	20.000	1.667	5.000	5.000	5.000
	1:4	3:1	1:1	1:1	1:1

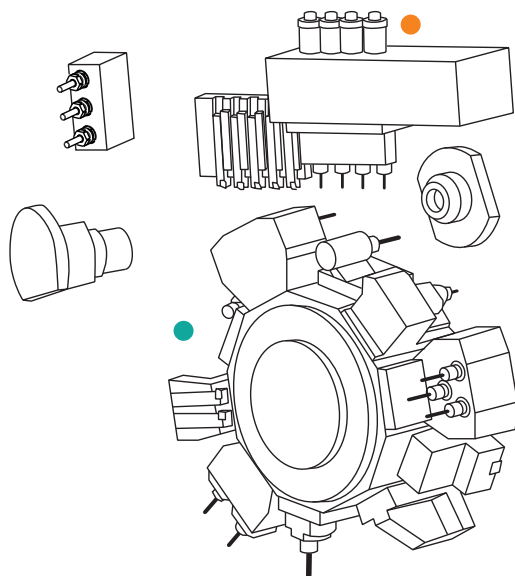
Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque

CITIZEN

MODEL
M20 / M32 Type III / V
Ø32 Gang Tooling

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Type	Radial Set-Back	Radial Set-Back Speeder	Radial Adjustable 0-90°
Code	CZ.011.M20/M32	CZ.013.M20/M32	CZ.021.M12/M16T
Citizen Ref.	GSE607	GSE508	-
	ER-11	ER-11	ER-11
RPM Max	5.000	15.000	5.000
	1:1	1:3	1:1

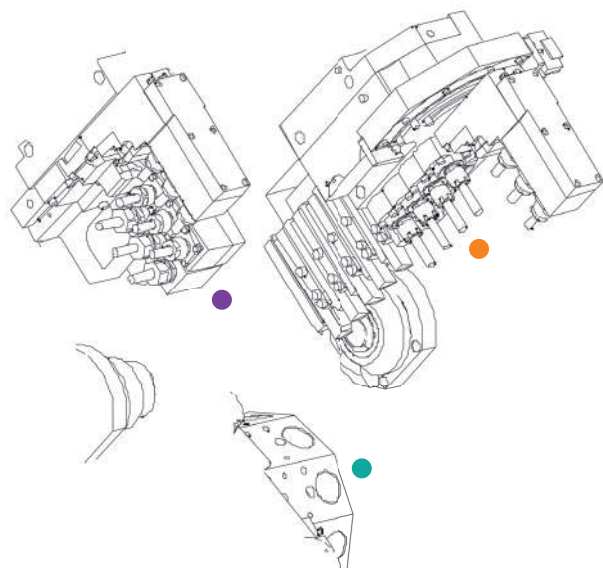


Type	Radial 3 Outputs	Thread Whirling ±15°	Thread Whirling ±30°	Radial Y-Axis ±90°	Radial Y-Axis ±90° 3 Outputs
Code	CZ.029.M20/M32-3	CZ.035.M20/M32-15	CZ.035.M20/M32-30	CZ.051.M20/M32	CZ.051.M20/M32-3
Citizen Ref.	-	LSW215	-	-	-
	ER-11	Cutting Head	Cutting Head	ER-16	ER-11
RPM Max	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1



Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



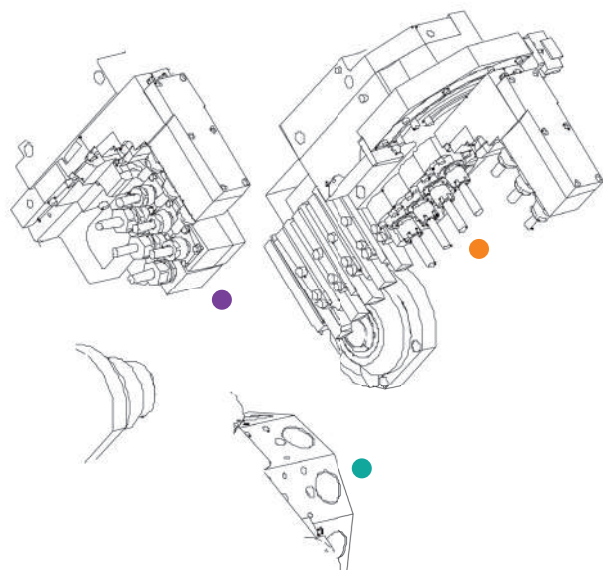
Type	Axial	Axial	Axial Speeder
Code	CZ.000.M32-ER16	CZ.000.M32-ER20	CZ.002.M32
Citizen Ref.	BSC210/GSC1110/GSC1310	-	-
	ER-16	ER-20	ER-11
RPM Max	6.000	6.000	18.000
	1:1	1:1	1:3



Type	Axial Ultraspinn	Radial Double Output	Radial 2+2 Outputs	Radial 3+3 Outputs	Radial Set-Back	Radial Set-Back
Code	CZ-U.002.M32	CZ.008.M32	CZ.008.M32-4	CZ.008.M32-6	CZ.011.M32-ER11	CZ.011.M32-ER16
Citizen Ref.	-	-	-	-	-	-
	ER-11	ER-16 / ER-16	ER-16 / ER-16	ER-16 / ER-16	ER-11	ER-16
RPM Max	24.000	6.000	6.000	6.000	6.000	6.000
	1:4	1:1	1:1	1:1	1:1	1:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Radial Set-Back Speeder	Radial Set-Back Reducer	Radial Adjustable $\pm 90^\circ$
Code	CZ.013.M32	CZ.014.M32	CZ.021.M32
Citizen Ref.	-	-	-
	ER-11	ER-20	ER-11
 RPM Max	18.000	3.000	6.000
	1:3	2:1	1:1



Type	Radial 3 Outputs	Polygon Maker	Thread Whirling $\pm 15^\circ$	Thread Whirling $\pm 30^\circ$	Gear Hobbing $\pm 32^\circ$	Axial Saw-Mill
Code	CZ.029.M32-3	CZ.034.M32	CZ.035.M32-15	CZ.035.M32-30	CZ.036.M32	CZ.038.M32
Citizen Ref.	GSE1510	-	-	-	-	-
	ER-16	Cyl-Shaft	Cutting Head	Cutting Head	Cyl-Shaft Ø13	Cyl-Shaft Ø13
 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

Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque

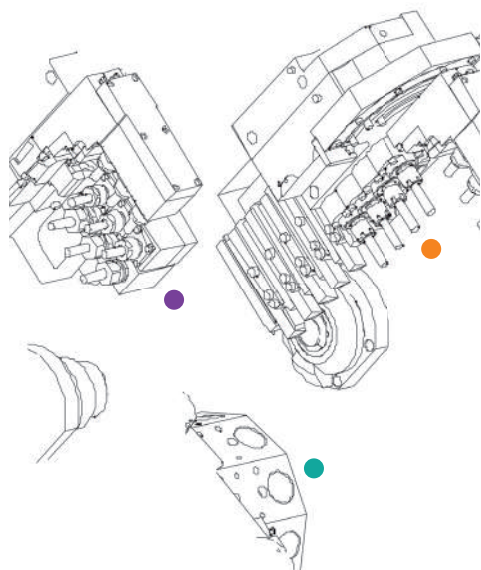
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MODEL

M20 / M32 Type III / V // M32 Type III / V / VII / VIII

Ø36 Turret Tooling - Conical Gear

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Type	Axial	Axial	Axial	Axial Offset	Axial Offset
Code	CZ.000.M20/M32T-ER16	CZ.000.M20/M32T-ER20	CZ.000.M20/M32T-ER25	CZ.001.M20/M32T-O145	CZ.001.M20/M32T-O110
Citizen Ref.	KSC110	-	-	-	-
	ER-16	ER-20	ER-25	ER-16	ER-16
 RPM Max	5.000	5.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:1	1:1



Type	Axial Speeder	Axial Speeder	Axial Speeder	Axial Reducer	Radial Double Output	Radial Double Output	Radial 2+2 Outputs
Code	CZ.002.M20/M32T-2	CZ.002.M20/M32T-3	CZ.002.M20/M32T-3ER20	CZ.003.M20/M32T	CZ.008.M20/M32T-ER11	CZ.008.M20/M32T-ER16	CZ.008.M20/M32T-4ER11
Citizen Ref.	-	-	-	-	-	-	-
	ER-11	ER-11	ER-20A	ER-16	ER-11 / ER-11	ER-16 / ER-16A	ER-11 / ER-11
 RPM Max	10.000	15.000	15.000	2.500	5.000	5.000	5.000
	1:2	1:3	1:3	2:1	1:1	1:1	1:1



Symbology

-  Adjustable
-  High Speed
-  Speeder
-  Reducer / Higher torque

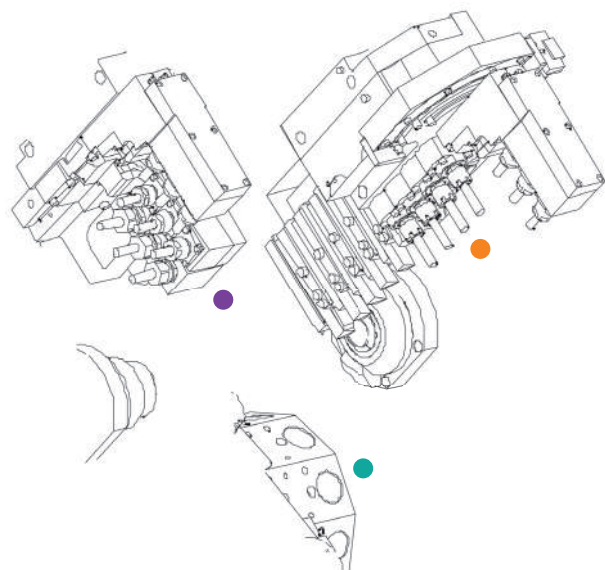
CITIZEN

MODEL

M20 / M32 Type III / V // M32 Type III / V / VII / VIII

Ø36 Turret Tooling - Conical Gear

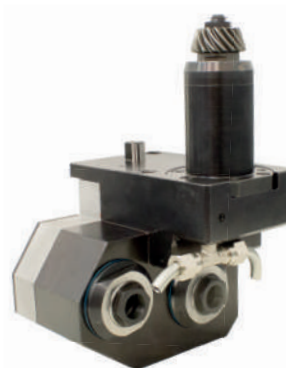
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Type	Radial 2+2 Outputs	Radial	Radial Micro Series Speeder	Radial Set-Back
Code	CZ.008.M20/M32T-4ER16	CZ.010.M20/M32T	CZ.010.M20/M32T-MS	CZ.011.M20/M32T-ER20
Citizen Ref.	-	-	-	-
	ER-16 / ER-16A	ER-25	Ø2.5	ER-20A
RPM Max	5.000	5.000	10.000	5.000
	1:1	1:1	1:2	1:1



Type	Radial Set-Back	Radial Set-Back	Fixed Angle (Any Angle)	Radial Set-Back Speeder	Radial Adjustable 0-90°	Radial Adjustable 0-90°	Axial Offset Double Output
Code	CZ.011.M20/M32T-ER16-O10 / KSE110	CZ.011.M20/M32T-ER16-O29 / KSE310	CZ.012.M20/M32T	CZ.013.M20/M32T	CZ.021.M20/M32T-ER11 KSA107/KSA107BT/KSA207	CZ.021.M20/M32T-ER16	CZ.023.M20/M32T KSC510
Citizen Ref.	-	-	-	-	-	-	-
	ER-16A	ER-16A	ER-11	ER-16A	ER-11	ER-16	ER-16
RPM Max	5.000	5.000	5.000	15.000	5.000	5.000	5.000
	1:1	1:1	1:1	1:3	1:1	1:1	1:1



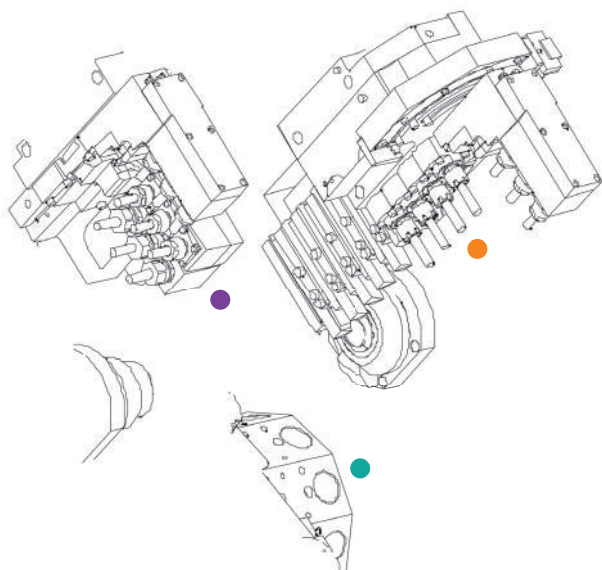
Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque

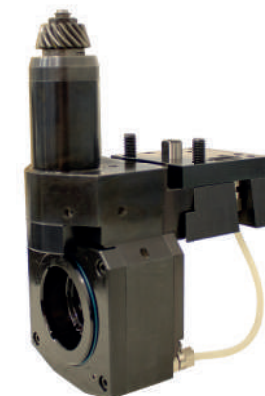
CITIZEN

MODEL
M20 / M32 Type III / V // M32 Type III / V / VII / VIII
Ø36 Turret Tooling - Conical Gear

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Type	Radial 2 Outputs	Radial 3 Outputs	Radial Saw-Mill Reducer	Thread Whirling $\pm 15^\circ$
Code	CZ.029.M20/M32T	CZ.029.M20/M32T-3	CZ.030.M20/M32T	CZ.035.M20/M32T-15
Citizen Ref.	-	-	-	KSW101
	ER-16A	ER-16	Cyl-Shaft Ø22	Cutting Head
RPM Max	5.000	5.000	4.000	5.000
	1:1	1:1	1.5:1	1:1

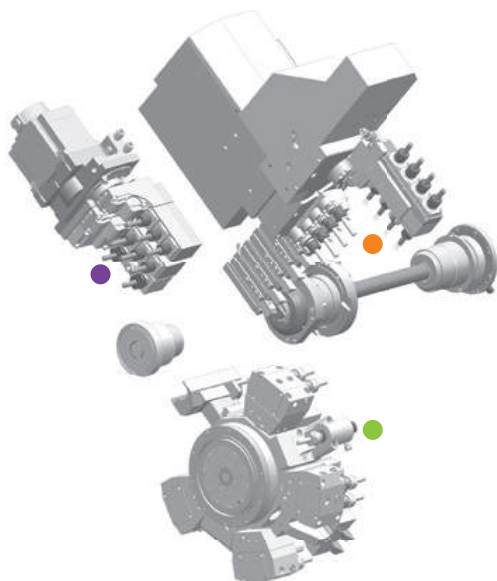


Type	Thread Whirling $\pm 32^\circ$	Gear Hobbing $\pm 30^\circ$ Reducer	Gear Hobbing $\pm 30^\circ$ Reducer	Axial Saw-Mill	Axial Saw-Mill Reducer	Radial Y-Axis $\pm 90^\circ$	Radial Y-Axis $\pm 90^\circ$ Speeder
Code	CZ.035.M20/M32T-32	CZ.036.M20/M32T-3	CZ.036.M20/M32T-8	CZ.038.M20/M32T	CZ.038.M20/M32T	CZ.051.M20/M32T	CZ.051.M20/M32T-S
Citizen Ref.	-	KSS660	-	-	KSS760 / 763 / 860 / 863	-	-
	Cutting Head	Cyl-Shaft Ø16	Cyl-Shaft Ø16	Cyl-Shaft Ø16	Cyl-Shaft Ø8	ER-16A	ER-16A
RPM Max	5.000	1.600	625	5.000	2.500	5.000	10.000
	1:1	3:1	8:1	1:1	2:1	1:1	1:2



Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



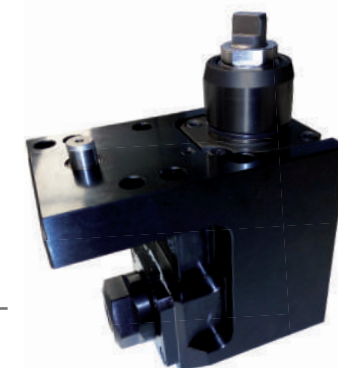
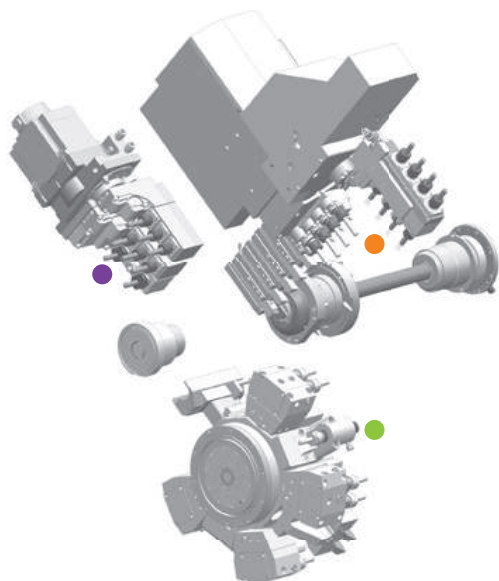
Type	Axial	Axial	Axial Speeder	Radial Set-Back
Code	CZ.000.M532T-113	CZ.000.M532T-213	CZ.002.M532T	CZ.011.M532T
Citizen Ref.	KSC113	KSC213	-	-
ER	ER-20	ER-20	ER-20A	ER-16
RPM Max	6.000	6.000	18.000	6.000
Gear	1:1	1:1	1:3	1:1



Type	Radial Set-Back	Radial Set-Back	Radial Set-Back Speeder	Radial Set-Back Speeder	Radial Set-Back Speeder	Radial Adjust. 0-30°
Code	CZ.011.M532T-113	CZ.011.M532T-213	CZ.013.M532T-3	CZ.013.M532T-4	CZ.013.M532T-ER16	CZ.021.M532T-507
Citizen Ref.	KSE113	KSE213	-	-	-	KSA507
ER	ER-20	ER-20	ER-11	ER-11	ER-16	ER-11
RPM Max	6.000	6.000	18.000	24.000	18.000	6.000
Gear	1:1	1:1	1:3	1:4	1:3	1:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



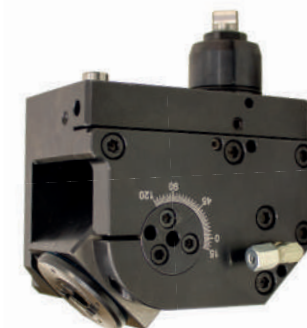
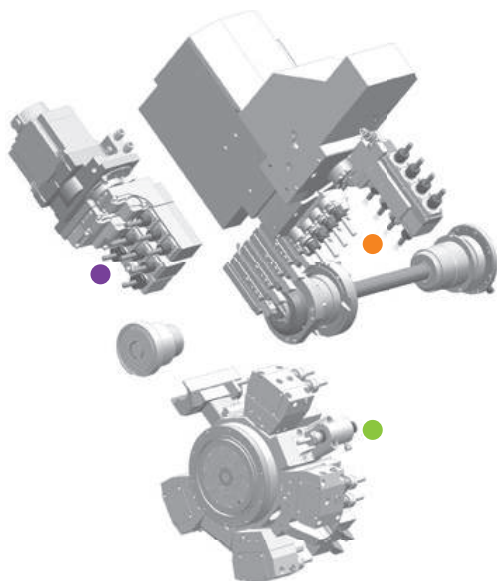
Type	Radial Adjust. 30-90°	Radial Adjustable -15°/+30° Speeder	Axial Double Output	Axial Double Output
Code	CZ.021.M532T-607	CZ.021.M532T-S	CZ.023.M532T-ER16	CZ.023.M532T-ER20
Citizen Ref.	KSA607	-	KSE1210	KSC313
ER	ER-11	ER-16	ER-16	ER-20
RPM Max	6.000	18.000	6.000	6.000
Gear	1:1	1:3	1:1	1:1



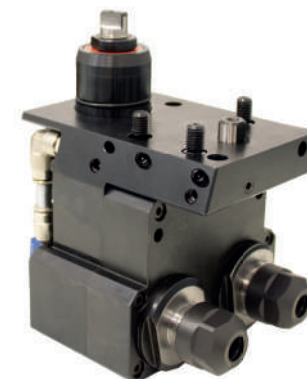
Type	Axial Double Output Speeder	Radial 2 Outputs	Radial 2 Outputs	Radial 2 Outputs Speeder	Radial Saw-Mill Reducer	Radial Saw-Mill Reducer
Code	CZ.023.M532T-S	CZ.029.M532T-ER16	CZ.029.M532T-ER20	CZ.029.M532T-S	CZ.030.M532T-15	CZ.030.M532T-16
Citizen Ref.	-	KSE1510	KSC313	KSE1410	KSS960	KSS963
ER	ER-20	ER-16	ER-20	ER-16	Cyl-Shaft Ø15	Cyl-Shaft Ø16
RPM Max	12.000	6.000	6.000	18.000	800	800
Gear	1:2	1:1	1:1	1:3	8:1	8:1

Symbology

- Adjustable
- High Speed
- Speeder
- Reducer / Higher torque



Type	Polygon Maker Reducer	Polygon Maker	Polygon Maker	Thread Whirling $\pm 15^\circ$
Code	CZ.034.M532T-15R	CZ.034.M532T-15	CZ.034.M532T-22	CZ.035.M532T-15
Citizen Ref.	KSP580	KSP680	KSF163	-
	Cyl-Shaft Ø15	Cyl-Shaft Ø15	Cyl-Shaft Ø22	Cutting Head
	2.000	6.000	6.000	6.000
	3:1	1:1	1:1	1:1



Type	Thread Whirling $\pm 32^\circ$	Gear Hobbing	Gear Hobbing Reducer	Axial Saw-Mill	Axial Saw-Mill	Radial Y-Axis $\pm 90^\circ$
Code	CZ.035.M532T-32	CZ.036.M532T	CZ.036.M532T-R	CZ.038.M532T-15	CZ.038.M532T-16	CZ.051.M532T
Citizen Ref.	-	KSH432	KSH332	KSS1060	KSS1063	-
	Cutting Head	Cyl-Shaft Ø10	Cyl-Shaft Ø10	Cyl-Shaft Ø15.875	Cyl-Shaft Ø16	ER-16A
	6.000	6.000	2.000	6.000	6.000	5.000
	1:1	1:1	3:1	1:1	1:1	1:1

Symbology



Adjustable



High Speed



Speeder



Reducer / Higher torque



TOHP

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

MADAULA
creative solutions

100 % Du travail avec la haute pression grâce à nos portes outils permettant un **coupe amélioré** sur tous types d'opérations.
LAVORAZIONI AD ALTA PRESSIONE COMPLETO con i nostri portautensili. **Taglio migliorato** per diverse operazioni.



Pressure up to
150 bar

**NO LEAKS INSIDE
THE TOOLHOLDER**

Pas de fuite à l'intérieur du PO.

Nessuna perdita all'interno del Portautensile

Slip-Off Proof Clamping Nut Optional

Écrou de Serrage Antidérapant Optionnel

Ghiere Antiscivolo Opzionale



Specially designed to keep
the original tool length

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

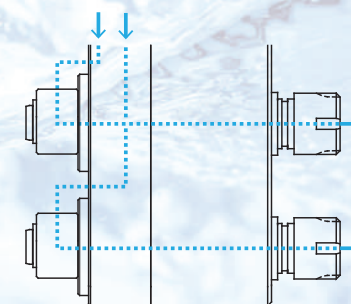
Système reculé du bout de la pince pour prévenir des collisions contre
le canon et protégé contre la projection des copeaux.

Applicable sur tout type de sortie de broche et ne pas seulement avec pinces ER.

Sistema protetto per evitare collisioni con la macchina e urti di trucioli.

Applicabile a tutti i tipi di mandrini, non solo ai morsetti.

MIC Multiple
Independent Channels



Right flow and pressure for every tool.

Pas de perte de débit ou pression
grâce des canaux directs.

Stesso flusso e pressione per ogni
utensile.

High Pressure

Coolant pressures up to 150 bar.
Coolant directed straight to the cutting area.
For emulsion and oil coolants.
Available for all spindles types.

Haute Pression

Pression jusqu'à 150 bar.
Arrosage au plus près de l'arête de coupe.
Pour huile entière ou émulsion.
Valable pour tous type de broches.

Alta pressione

Pressioni del liquido di raffreddamento fino a 150 bar.
Liquido refrigerante indirizzato direttamente alla zona di taglio.
Per refrigeranti a emulsioni e olio.
Disponibile per tutti i tipi di mandrini.

No more chip problems

Improved chip control.
It remove the chips from the holes.
Small chip production.

Plus de problème copeaux

Amélioration de la formation des copeaux.
Évacuation des copeaux des cavités.
Réduction de la taille des copeaux.

Niente più problemi di trucioli

Migliore controllo del truciolo.
Rimuove i trucioli dai fori.
Produzione di trucioli piccoli.

Big savings on tooling and enhanced tool life

Improves the quality and life of the tool at the cutting edge.
Longer tool change period.
Less tool wear.
Faster and cheaper maintenance.

Gains sur les outils coupants

Améliore la qualité et la durée de vis des arêtes de coupe.
Durée de vie accrue.
Fréquence de changement outils abaissée.
Maintenance plus rapide et plus économique.

Grandi risparmi sugli utensili e maggiore durata dell'utensile

Migliora la qualità e la durata dell'utensile.
Periodo di cambio utensile più aumentato.
Minore usura degli utensili.
Manutenzione più rapida ed economica.

Écologique

Économies d'énergie.
Durée de vie outils accrue.
Environnement préservé.

Eco-friendly

Energy saving.
Longer tool life.
Environmentally friendly.

Ecologico

Risparmio energetico.
Maggiore durata dell'utensile.
Rispetta l'ambiente.

Minimum loss of flow and pressure

Same pressure and flow for every output.
No leaks inside the toolholder.
Right flow and pressure for every tool.

Minimum e perte de débit et pression

Pression et débit identique pour chaque sortie.
Pas de fuites dans notre porte-outils.
Le bon débit et la bonne pression pour chacun des différents outils.

Minima perdita di flusso e pressione

Stessa pressione e portata per ogni uscita.
Nessuna perdita all'interno del portautensile.
Flusso e pressione corretta per ogni utensile.

Improved surface quality

Better finish quality in the pieces.
Improvement of the surface finish.
There is not high temperature while working.

Amélioration des états des surface

Meilleure qualité de finition des pièces.
États de surface accrus.
Plus de haute température pendant la coupe.

Migliore qualità della superficie

Migliore grado di finitura dei pezzi.
Miglioramento della finitura superficiale.
Non c'è alta temperatura durante il lavoro.

Savings on cycle time

Reduced process cycle times.
Reduced number of processes.
Cutting speed increased, less time using the cutting tool, higher savings.
Savings increased by 25-30%

Réduction des temps d'usinage

Réduction des temps de cycles existants.
Diminution du nombre de passes et de process différents.
Vitesse de coupe accrue, diminution de l'usure des outils apportant d'importantes économies.
Optimisation de 25 à 30%.

Risparmio sul tempo ciclo

Tempi ciclo ridotti.
Numero di processi ridotti.
Velocità di taglio aumentata, minor tempo di utilizzo dell'utensile da taglio, maggiore risparmio.
Risparmio aumentato del 25-30%.

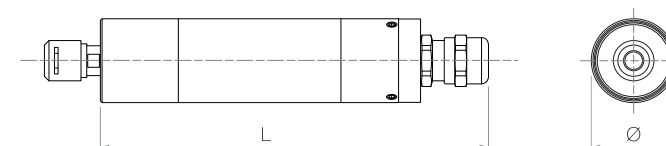
High Frequency Spindles



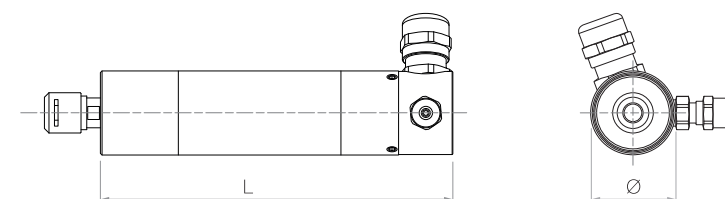
Technical Data

Product	DS-19.05 DS-20 / DS-22		DS-25 / DS-25.4 DS-28 / DS-30 / DS-33		DS-42 DS-45	
Ø mm	19 / 20 / 22		25 / 25.4 / 28 / 30 / 33		42 / 45	
	D6-UP		ER-8UP		ER-11UP	
W S1-100%	165		225		320	
Ncm max	1.5		2.5		4.8	
	Grease	Oil Mist	Grease	Oil Mist	Grease	Oil Mist
RPM - u/min	60.000	80.000	60.000	80.000	35.000	50.000
	Axial	Radial	Axial	Radial	Axial	Radial
L mm	107	90	114.5	104	180	175

Axial dimensions



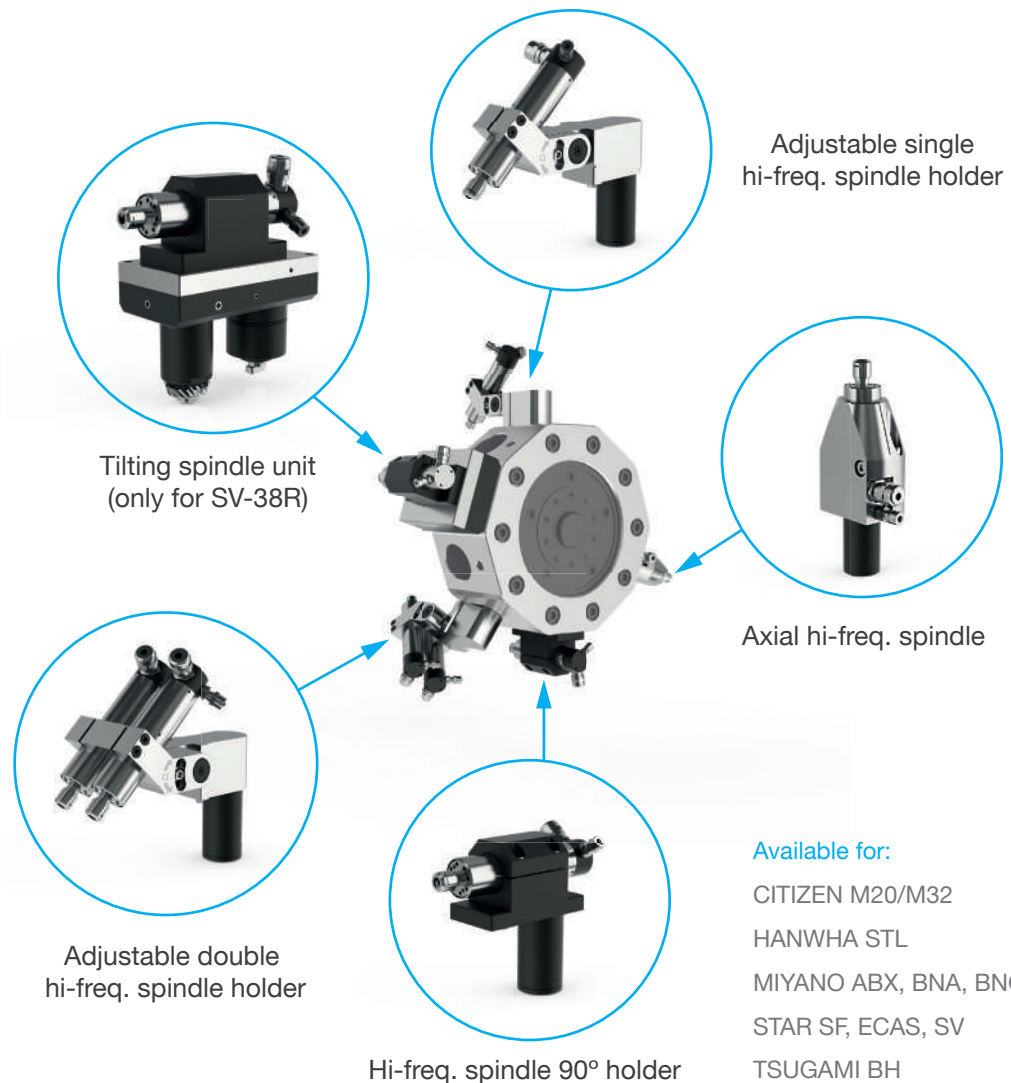
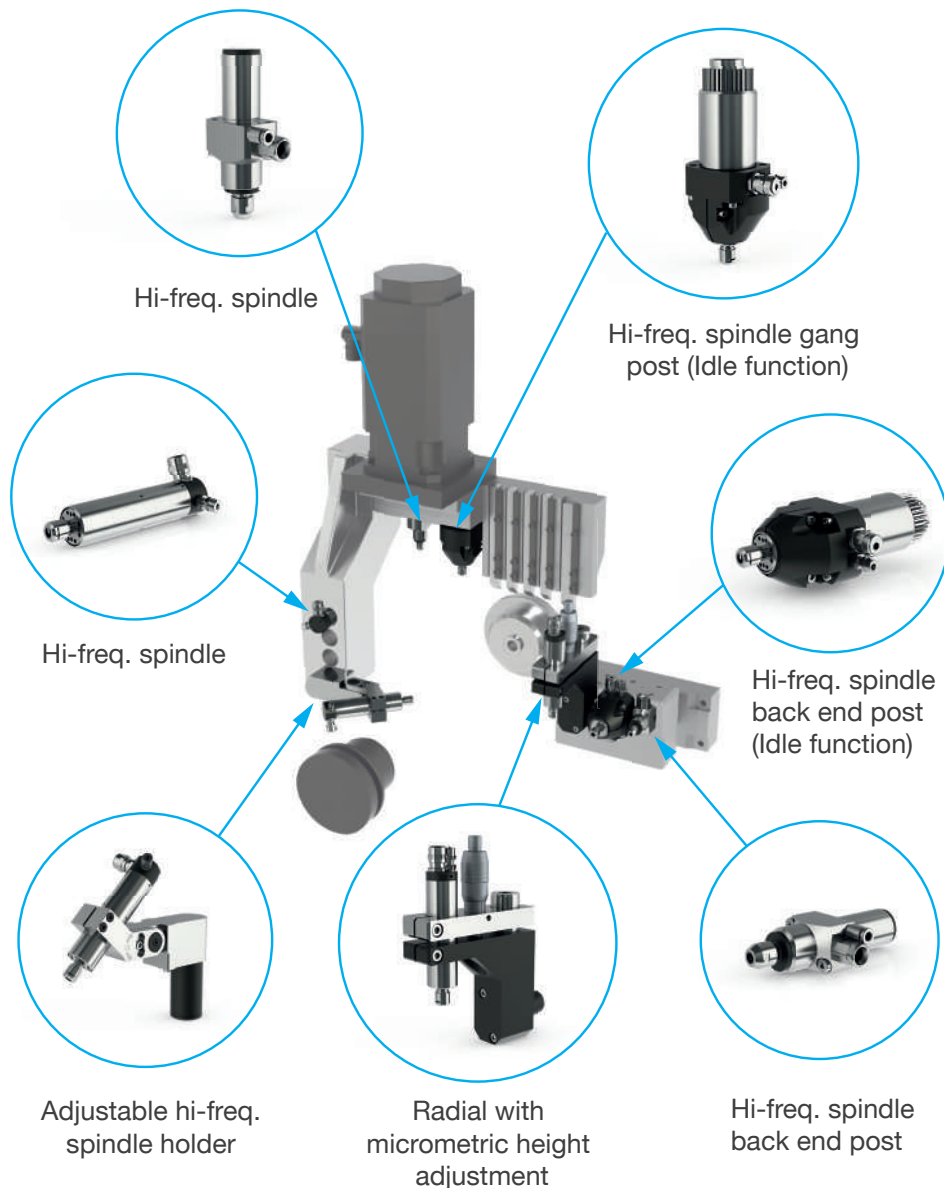
Radial dimensions



High Frequency Spindles & Accessories

for Gang & Back End Posts

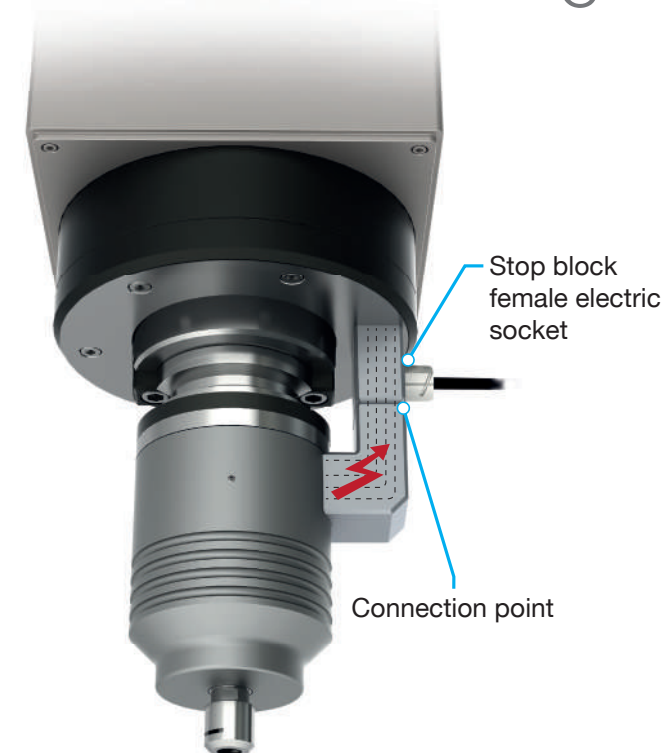
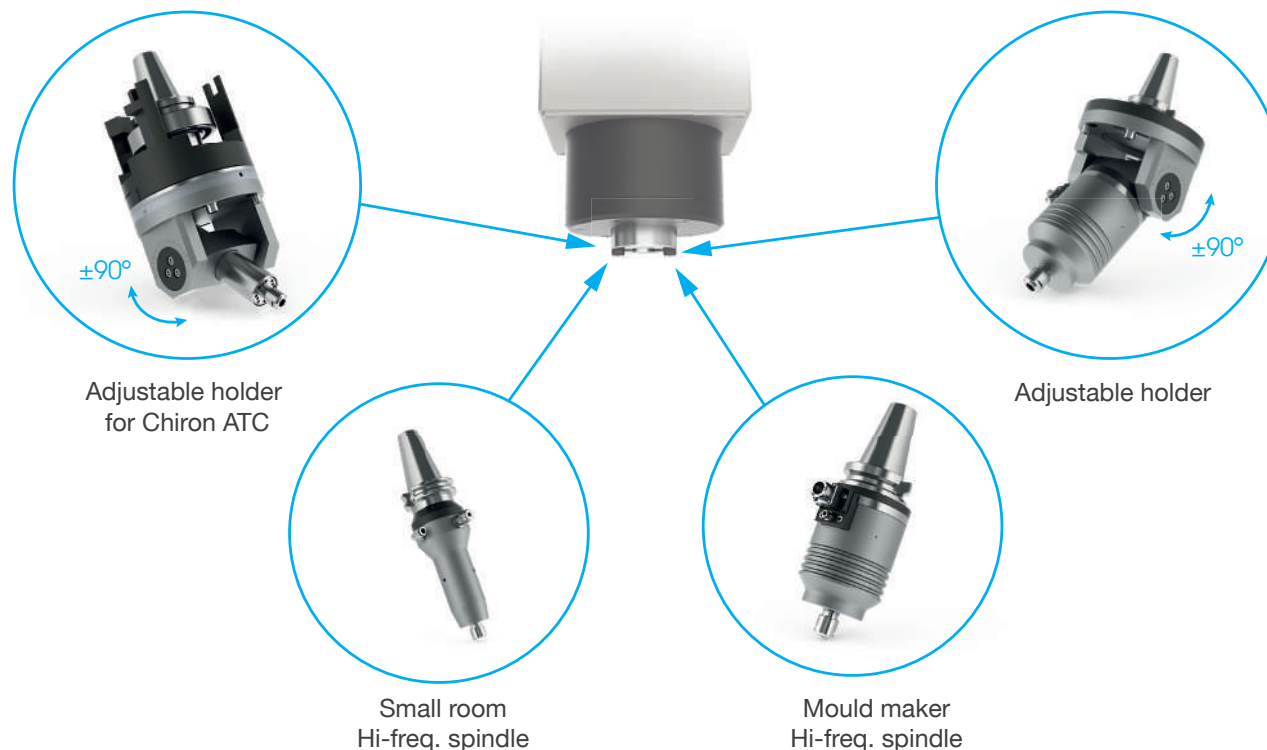
for Turrets



High Frequency Spindles for Machining centers

MADAULA
creative solutions

Automatic change



Equipment



Frequency converter



Power cord



Lubrication unit



UP Collets



Wrenches



Repair Service

Specialized repair team with extensive experience, at your disposal to overhaul all kind of high frequency spindles.

A votre service, une équipe spécialisée, expérimentée dans la remise en état de tous types de broches à hautes fréquences.

Reparto specializzato di assistenza tecnica con grande esperienza, alla vostra disposizione per dare servizio a tutti i tipi di mandrini ad alta frequenza.

Quality procedures

Progressive increasing to full speed

temperature, speed, noise, leakage and vibration control.

Accélération progressive jusqu'à la vitesse maximale, contrôle de température, vitesse, bruit, fuites et vibrations.

Progressivo aumento a tutta velocità:

Controllo di temperatura, velocità, rumorosità, perdite e vibrazioni.

100% Tested: main dimensional control

with Coordinate Measuring Machine for all products.

Contrôle des principales dimensions avec machine à mesurer CNC.

Controllo dimensione su tutti i prodotti con macchina per misure a coordinate.

Quality certificate

on delivery.

Livraison du certificat de qualité.

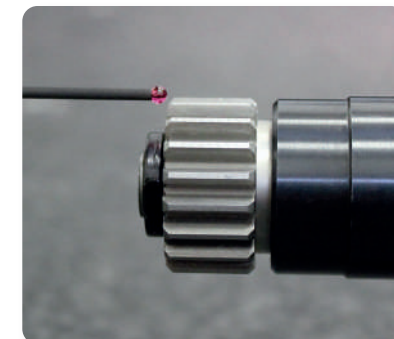
Certificato di qualità sulla consegna.



Certificate ISO 9001: 2015 since 1999

Certificat ISO 9001: 2015 depuis le 1999

Certificato ISO 9001: 2015 da 1999

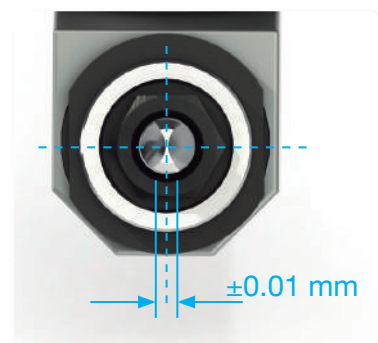


100% Tested

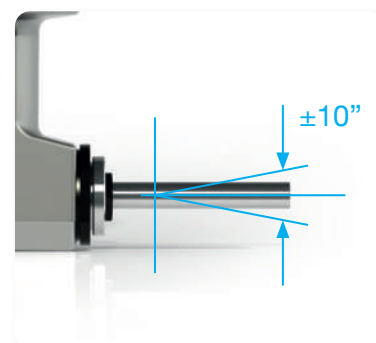


Precision

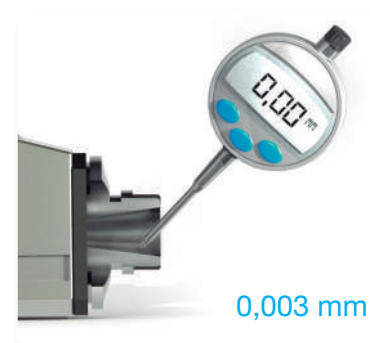
Maximum misalignment



Angle tolerance



Max. runout inside the spindle



Global services



Specialized technical assistance team with extensive experience at your disposal.

Une équipe spécialisée en assistance technique et avec une vaste expérience est mis à votre disposition.

Servizio de assistenza tecnica con team specializzato con una vasta esperienza a vostra disposizione.

MADAULA
creative solutions



Repair service

We are proud of offering to our customers a repair service for all their products, no matter how old they are.

All products of our fabrication range can be repaired, even if they have not been originally manufactured by Madaula.

Nous assurons pour nos clients un service réparation pour tous nos produits de notre marque ou de nos concurrents et de toutes générations.

Tous les produits de notre gamme de production peuvent être réparés, même s'ils n'ont pas de notre fabrication.

Siamo orgogliosi di offrire ai nostri clienti un servizio di riparazione per tutti i prodotti, anche per i più datati.

Tutti i prodotti della nostra gamma possono essere riparati, anche se non di nostra produzione.



EXPRESS service

Express repair service
on demand.
Repair of worn or
damaged parts.
Reduction of
downtimes.

Réparation express
sur demande.
Réparation des
éléments abîmés ou
cassés en minimisant
les temps d'arrêt.

servizio di riparazione
espresso su richiesta.
Riparazione di parti
usurate o danneggiate.
Riduzione dei tempi di
fermo macchina.

Preventive maintenance

Process efficiency
optimization through
our preventive
maintenance plan.

Nous optimisons
l'efficacité du processus
grâce à notre plan de
maintenauce préventive.

Ottimizzazione
dell'efficienza dei
processi mediante
il nostro piano di
manutenzione
preventiva.



Everything is possible

Customized products for Innovative solutions: We match the tool to the part and the machine.

Our team of engineers and technicians are working to create new products.
which enhance the machine capability and increase the productivity of our customers.

65 years of experience

in the development of special products.

65 ans d'expérience dans le développement de produits spéciaux.

65 anni di esperienza nello sviluppo di prodotti speciali.

Successful technical experience

and market knowledge.

Réussi savoir-faire technique et connaissance du marché.

Esperienza tecnica e successo di mercato.

Engineers and technicians

working together.

Ingénieurs et techniciens qui travaillent ensemble.

Ingenieri e tecnici che lavorano assieme.

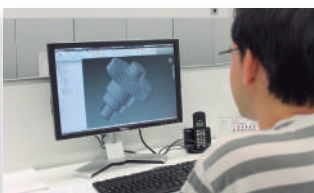
Ingenuity and open mind

to find the best solutions.

Ingéniosité et l'esprit ouvert pour trouver les meilleures solutions.

L'ingegno e la mente aperta per trovare le migliori soluzioni.

Continuous innovation: We ensure close cooperation with our customers worldwide.

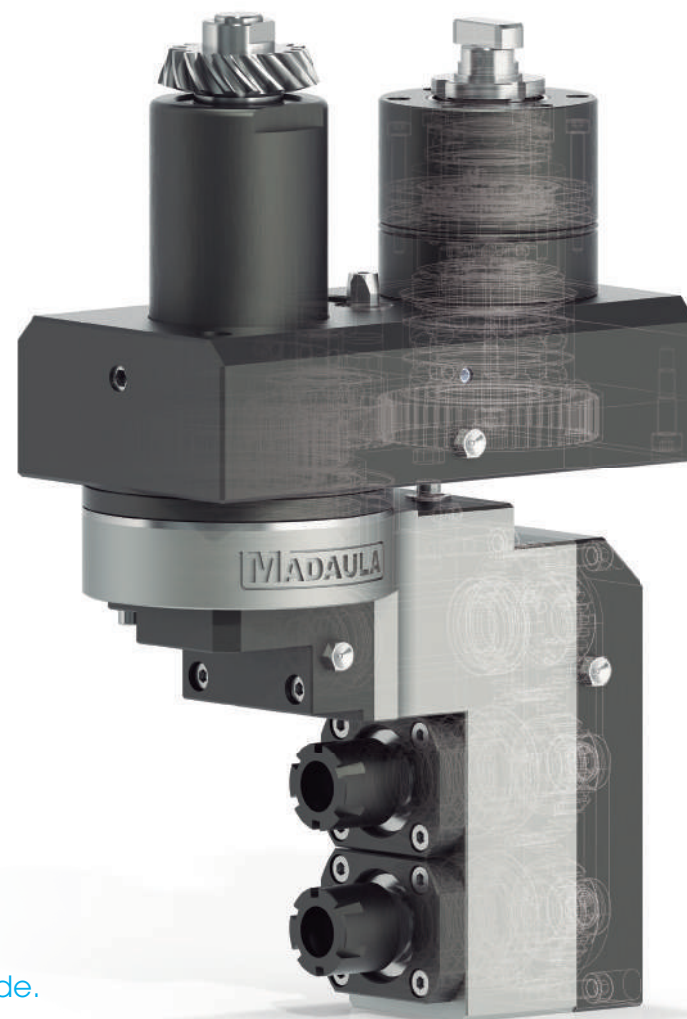


Innovation non-stop:

Nous assurons une étroite coopération avec nos clients dans le monde entier.

Innovazione continua:

Garantiamo una stretta collaborazione con i nostri clienti in tutto il mondo.



Live tooling available for:

Citizen, DMG, Doosan, Hanwha, Maier, Manurhin, Miyano, Nexturn, Nomura, Star, Tornos, Tsugami



Axial



Axial offset



Axial speeder



Axial reducer



Axial IC



Axial offset IC



Radial double
output



Radial 90°



Fixed angle



Radial 90°
speeder



Radial 90°
reducer



Radial
set back IC



Radial
adjustable



Axial multiple
spindles



Axial offset
reducer



Radial multiple
outputs



Saw-mill



Axial multiple
spindles IC



Polygon
maker



Thread whirling



Gear hobbing



Axial saw-mill



Radial
"Y" axis