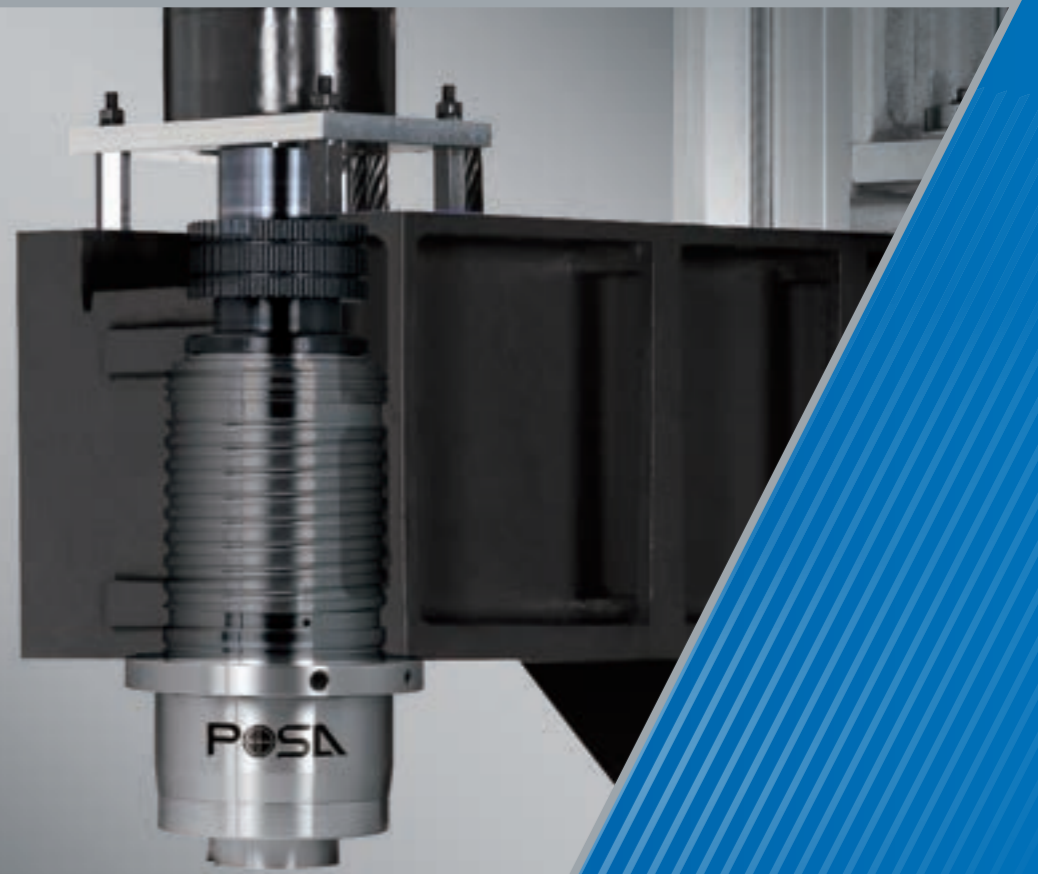




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The Professional



Spindles Manufacturer

www.posa-spindle.com

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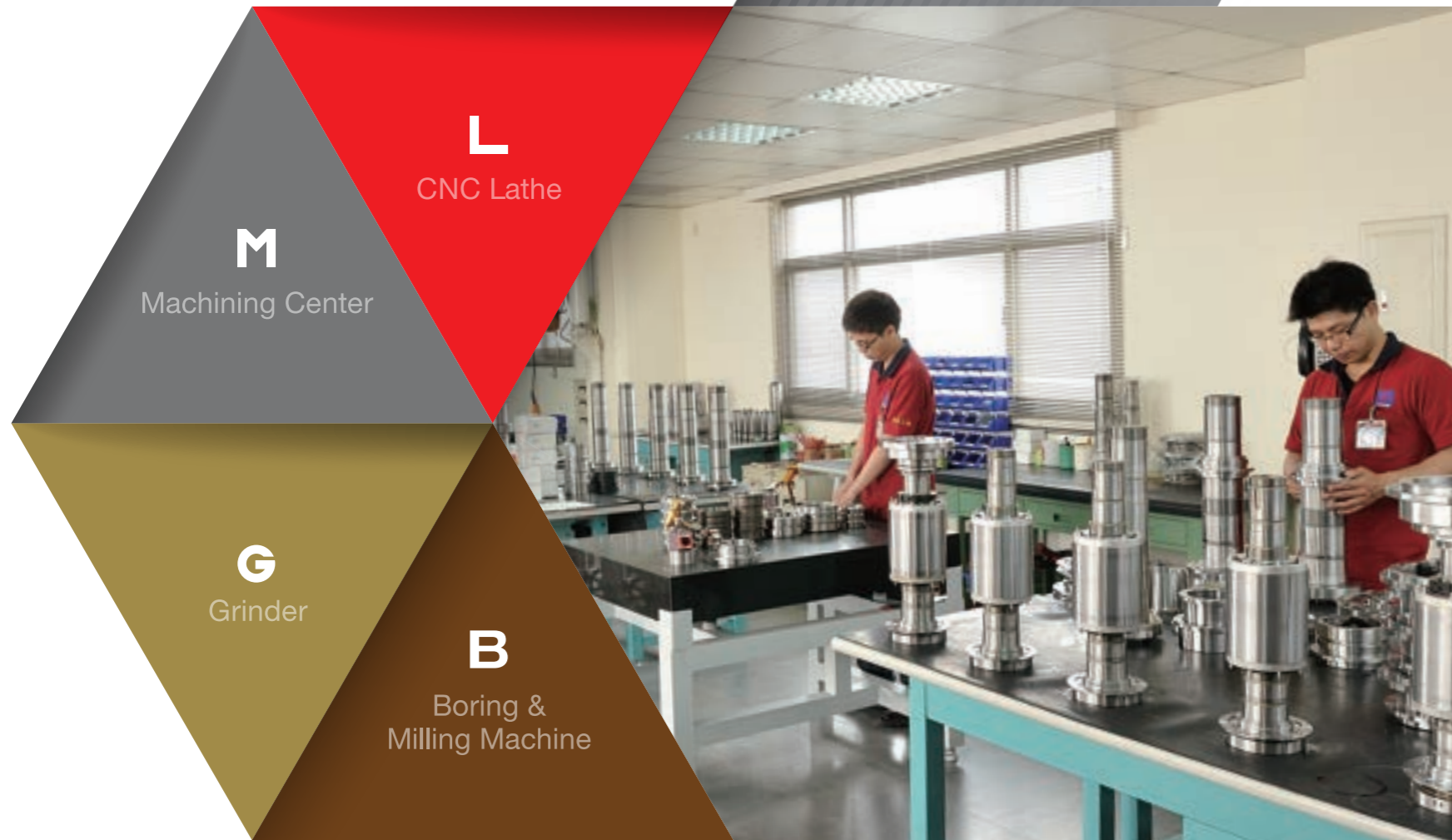
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Absolute Perfection



Technology

With in-depth knowledge of spindle design and engineering, Posa is perfectly placed to deliver the ideal solution for your unique requirements. Decades of accumulated experience and an extensive product range enable us to provide world-class spindles for a range of applications. With international certification (SGS ISO9001-2015), rigorous testing procedures, and a total commitment to quality, we guarantee the performance and reliability of our products.





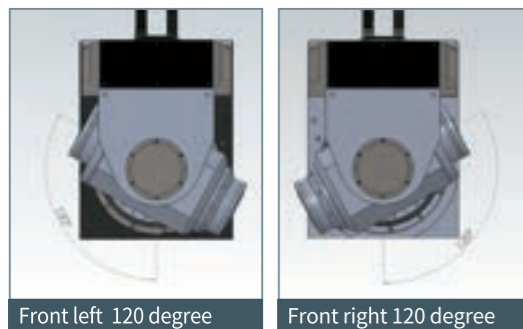
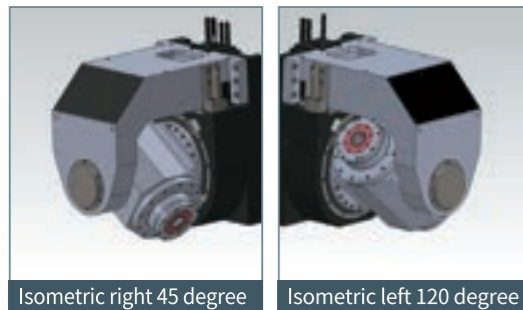
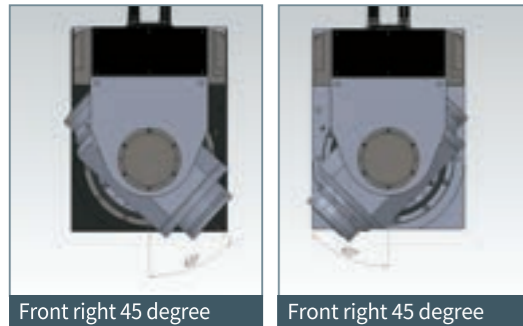
Innovative R&D Quality Control

Innovation

Applying the most advanced systems and technologies to continuously improve our products has been at the core of Posa's business philosophy since our founding in 1994. The expertise of our General Manager Mr. Peng Sen-rong and our partnership with a leading Japanese company ensure our continued dedication to development, innovation, and product quality.



Swivel Head Spindle



Features

- Equipped with turntable bearing, torque motor, and encoder, ensuring table accuracy.
- Optimal component rigidity and finite element analysis.
- Thermal displacement analysis ensures sturdy structural change.
- We can meet customers' installation requests; interfaces for box rails and screws can be customized.
- Broaching device is of HSK-T63 type, ensuring high speed and high precision.
- Turning positioning adopts 3-piece structure to ensure positioning accuracy and stability.
- Double supports enhance rigidity.
- Suitable for turn-mill spindles.

High Speed Built-in Spindle		Swivel Axis		
Broaching Mechanism	HSK-T63	Rotation Angle	±120 Degree	
Clamping Force	1800 kgf±10%	Max. Speed (rpm)	50	
Maximum Speed (rpm)	15000	Torque Motor	Continuous Torque (Nm)(Air Cooling)	117
Encoder	Square Wave-1024-PPR-TTL		Continuous Torque (Nm)(Water Cooling)	260
Surround Coolant System	Yes		Momentary Torque (Nm)	490
Cooling Method	Oil		Continuous Current (Arms)(Air Cooling)	6
Min. Requests for Spindle Cooling (BTU/H)	7500		Continuous Current (Arms)(Water Cooling)	15
Motor Voltages (V)	380		Torque Constant (Nm/Arms)	19.57
Motor Powers (Continual)(kW)	18.5		Max. Voltages (Vdc)	750
Motor Powers (Max.) (kW)	21.5		Number of Poles	66
Motor Torque (Continual) (N.m)	61.6		Encoder	Absolute Loop Type Optical Ruler
Motor Torque (Max.) (N.m)	71.5			Accuracy ±3 arc-sec

Built-in Spindles

LMS-A2-4



LMS-A2-5



	LMS-S20	LMS-A2-4	LMS-A2-5	LMS-A2-6
Spindle Nose	Collet	A2-4	A2-5	A2-6
Max. Speed	8,000 RPM	6,000/8,000 RPM	6,000 RPM	4,500 RPM
Chuck Spec.	Collet	5"	6"	8"
Motor Power	2.2/3.7 kW	3.7/5.5 kW	11/15 kW	22/30 kW
Through Hole	Ø21mm	Ø43 mm	Ø56 mm	Ø62 mm
Coolant	Oil	Oil	Oil	Oil

Built-in Spindles

SJ-20D (A2-5)



TAC-20 (A2-6)

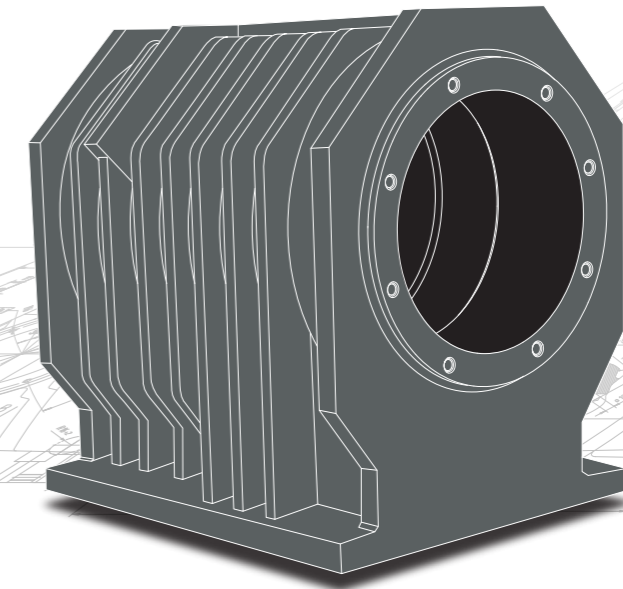


	TAC-10 (A2-4)	SJ-20D (A2-5)	TAC-20 (A2-6)
Spindle Nose	A2-4	A2-5	A2-6
Max. Speed	6,000/8,000 RPM	5,000/6,000 RPM	4,200 RPM
Chuck Spec.	5"	6"	8"
Sleeve OD	Ø120/Ø150 mm	Ø170 mm	Ø200 mm
Through Hole	Ø36/Ø45 mm	Ø56 mm	Ø66 mm
Accuracy (In Spindle Nose)	Runout 3µ	Runout 3µ	Runout 3µ
Temperature	Room Temperature +15°C	Room Temperature +15°C	Room Temperature +15°C

	TAC-22/TAC-35 (A2-8)	TAC-170 (A2-11)	TAC-220 (A2-15)
Spindle Nose	A2-8	A2-11	A2-15
Max. Speed	3,200/2,800 RPM	2,000 RPM	1,600 RPM
Chuck Spec.	10"	15"	18"
Sleeve OD	Ø230/Ø270 mm	Ø340 mm	Ø440 mm
Through Hole	Ø80/Ø86 mm	Ø100 mm	Ø100 mm
Accuracy (In Spindle Nose)	Runout 3µ	Runout 3µ	Runout 3µ
Temperature	Room Temperature +20°C	Room Temperature +20°C	Room Temperature +20°C

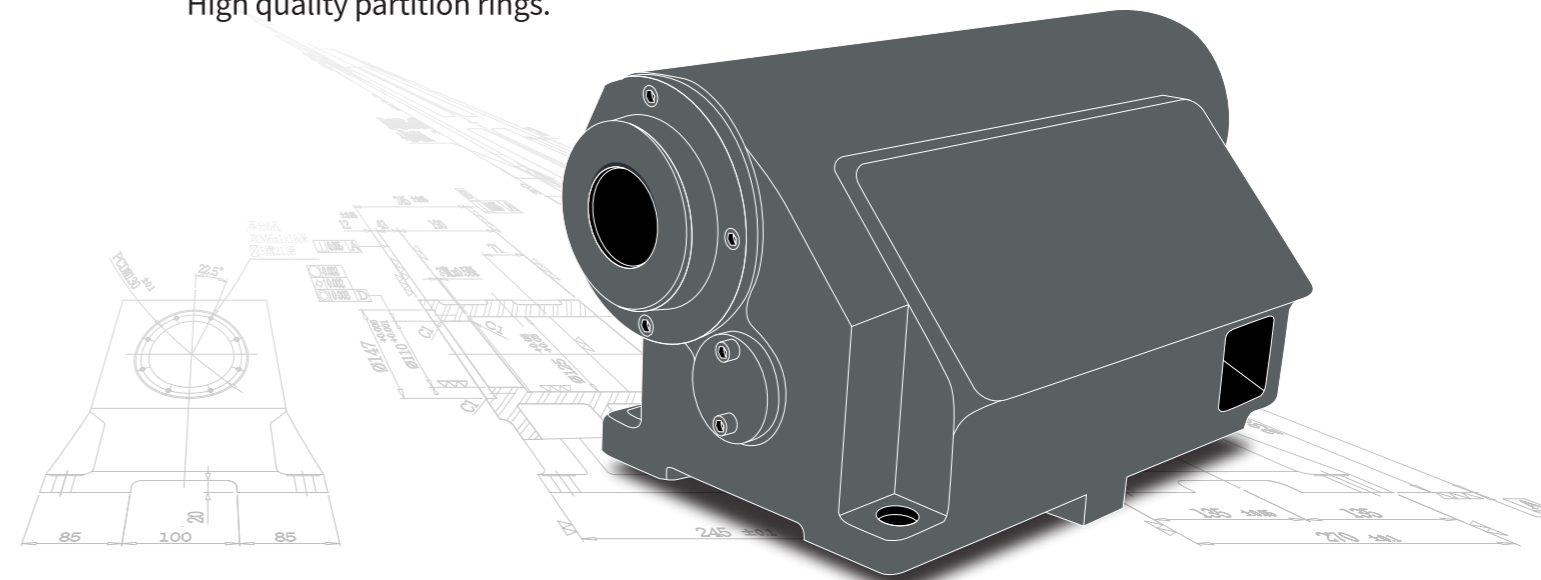
Headstock & Tailstock

Type 1 ▶ Headstock Customization



Headstock & Tailstock for CNC Turning Machines

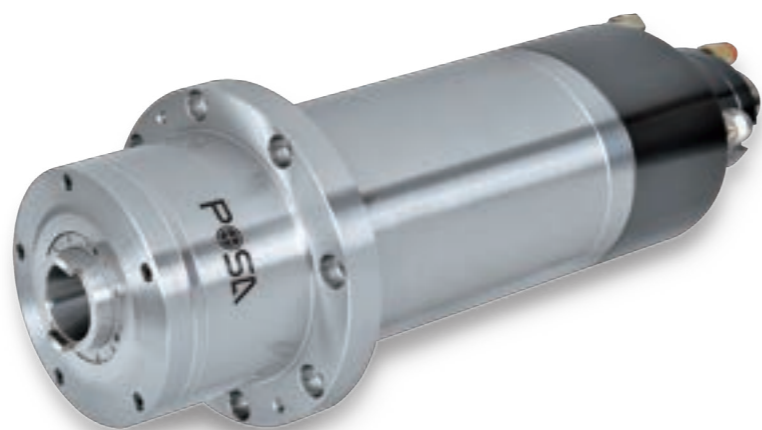
- High rigidity, high accuracy die-cast FC-30 case, various specifications made to order.
- Every set of spindles is checked for accuracy & running temperature.
- Partition ring with flatness of 1µm.
- Suitable for high-speed and precision spinning spindles.
- Accessories, including front and rear spindle covers, partition rings, seals, etc., can be made according to customer specifications. High quality partition rings.



Type 2 ▶ Tailstock Customization

Built-in Spindles

BMS-40



BMS-50



EMS-30		BMS-40	
Taper	#30 (BT/CAT/DIN)/BBT30/HSK-40/ER-32/ISO25	Taper	#40 (BT/CAT/DIN)/BBT40/HSK-63
Max. Speed	24,000/30,000 RPM	Max. Speed	18,000 RPM
Motor Power	7.5 kW	Motor Power	24 kW
Clamping Force	250kg ±10%	Clamping Force	750kg±10%
Lubrication	Grease	Lubrication	Grease
Voltage	220/380V	Voltage	220/380V

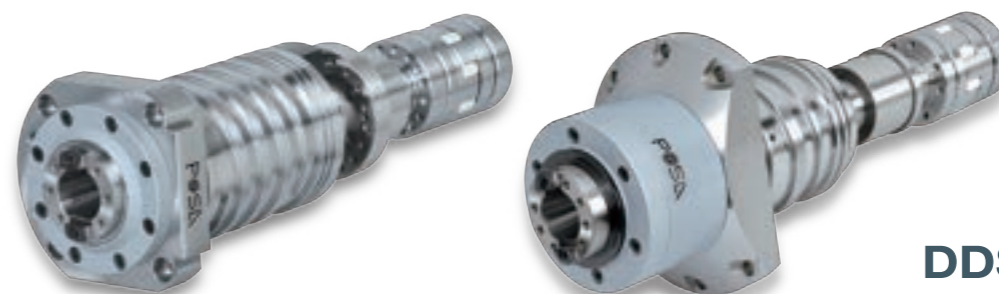
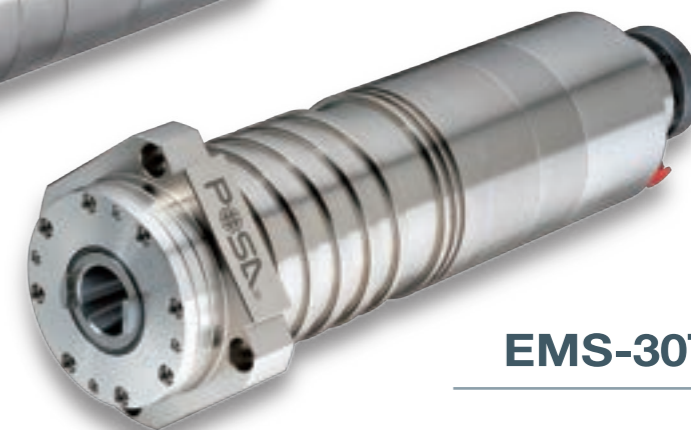
BMS-50	
Taper	#50 (BT/CAT/DIN)/BBT50/HSK-100
Max. Speed	8,000 RPM
Motor Power	25/30 kW
Sleeve OD	Ø310 mm
Clamping Force	1,500kg ±10%
Front Bearing ID	Ø100 mm
Lubrication	Grease

Tapping Center Spindles

EMS-30T



EMS-30T-B



DDS-BT30

EMS-30T/EMS-30T-B	
Spindles Max. Speed	30,000 RPM
Taper	#30(BT/CAT/DIN)
Clamping System	Gripper
Sleeve OD	Ø100 mm
Motor Power	8.5kW
Torque	6.8N-m
Voltage	220/380V

DDS-BT30			
Max. Speed	12,000/15,000/20,000/24,000 RPM	Lubrication	Grease
Taper	#30 (BT/CAT/DIN)	Coolant	Oil
Clamping System	Gripper	Unclamping	Cam Type
Sleeve OD	Ø95 mm/Ø100 mm	Accuracy	Under 0.008 mm (Test Bar 300 mm)

Direct-drive Spindles

PDD34-BT30



**PDS46E /
PDD47E-BT40**



	PDD34-BT30	PDS46E/PDD47E-BT40	PDD59E-BT50
Max. Speed	8,000/10,000/12,000/15,000 RPM	8,000/10,000/12,000/15,000 RPM	6,000/8,000/10,000 RPM
Taper	#30 (BT/CAT/DIN)	#40 (BT/CAT/DIN)	#50 (BT/CAT/DIN)
Clamping System	Gripper	Gripper	Gripper
Sleeve OD	Ø100 mm	Ø120/150 mm	Ø190 mm
Lubrication	Grease	Grease	Grease
Coolant	Oil	Oil	Oil
Temperature	Room Temperature +15°C	Room Temperature +18°C	Room Temperature +25°C
Accuracy	Under 0.008 mm (Test Bar 300 mm)	Under 0.008 mm (Test Bar 300 mm)	Under 0.008 mm (Test Bar 300 mm)

Belt-drive Spindles

DS-BT30



**ES-BT40 /
AS-BT40**



	DS-BT30	ES-BT40/AS-BT40	BS-BT50
Max. Speed	8,000/10,000/12,000/15,000 RPM	8,000/10,000/12,000 RPM	5,000/6,000/8,000 RPM
Taper	#30 (BT/CAT/DIN)	#40 (BT/CAT/DIN)	#50 (BT/CAT/DIN)
Clamping System	Gripper	Gripper	Gripper
Sleeve OD	Ø95 mm	Ø120/150 mm	Ø190 mm
Lubrication	Grease	Grease	Grease
Coolant	Oil	Oil	Oil
Temperature	Room Temperature +15°C	Room Temperature +18°C	Room Temperature +25°C
Accuracy	Under 0.008 mm (Test Bar 300 mm)	Under 0.008 mm (Test Bar 300 mm)	Under 0.008 mm (Test Bar 300 mm)

Gearbox Spindle



Features

- With flow field analysis, water-proof & protection of spindle nose is enhanced.
- Equipped with fast loosening and broaching systems to improve tool change speed.
- Equipped with floating threading mechanism to improve bearing lifespan and reduce axial shift.
- The product does not need additional hydraulic units.
- Analyzed by finite element analysis, component rigidity is improved and structure is optimized.
- Thermal displacement analysis ensures sturdy structural change.
- We can meet customers' installation requests; interfaces for structure, box rails, and screws can be customized.

	MGB-50-1	MGB-50-GS-1	MGB-50-GS-2	MGB-50S-1
Taper	#50	#50	#50	#50
Max. Speed	6000 RPM	6000 RPM	6000 RPM	6000 RPM
Max. power of spindle motor	11 kW	22 kW	22 kW	15 kW
Two speed ratio (High/ low speed)	1:1 / 1:3.647	1:1 / 1:4.213	1:1 / 1:4.213	1:1 / 1:4.213
Spindle bearing	7016	7020	7020	7016
Spindle lubrication	Grease	Grease	Grease	Grease
Clamping Force	1750 Kgf ±10%	1750 Kgf ±10%	1750 Kgf ±10%	1750 Kgf ±10%
Broaching cylinder	Super-charged	Super-charged	Super-charged	Super-charged
Coolant	Oil	Oil	Oil	Oil
Min. requests for spindle cooling	6500 BTU/H	6500 BTU/H	6500 BTU/H	6500 BTU/H
Weight (cooling lubricants not included)	around 585 Kgf	around 1000 Kgf	around 1060 Kgf	around 1000 Kgf
Encoder (provided by customers)	opt.	opt.	opt.	opt.
Through spindle coolant	opt.	opt.	opt.	opt.

Built-In Grinding Spindle

HT-500



POSA-62



POSA-80



	HT-500	POSA-62	POSA-80
Sleeve OD	Ø210 mm	Ø61.9 mm	Ø80 mm
Max. Speed	4,500 RPM	60,000 RPM	36,000 RPM
Motor Power	11 kW	1.2 kW	2.2 kW
Lubrication	Grease	Grease	Grease
Tool Holder	-	Collet	Collet ER16 (Ø10)
Taper	1:5	-	-

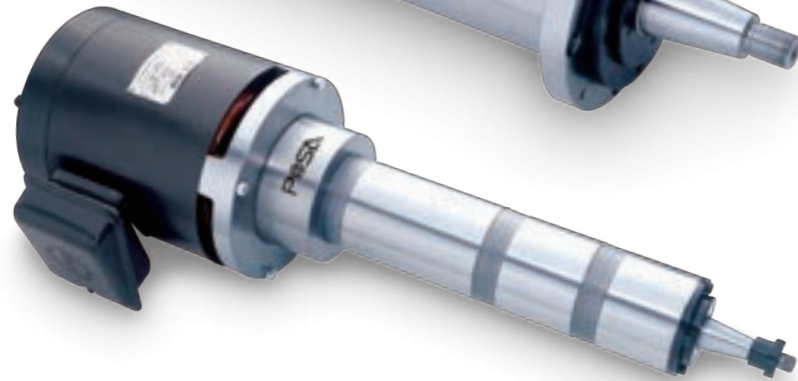
Grinder

Surface Grinder Spindles

PF-400 / 500 / 600



PB-618



Internal Grinder Spindle

JMI-50/70/90



	PF-200/300	PF-400/500/600	KE-200	PB-618	PW-50L/60L/80L	JMI-50/70/90
Grinder Spindle	Surface Grinder	Surface Grinder	Surface Grinder	Surface Grinder	Gantry Type CNC Grinder	Internal Grinder
Standard Speed	3,600 RPM	1,800 RPM	3,600 RPM	3,600 RPM	960 RPM	12,000/18,000/24,000 RPM
Taper	1/4 or 1/5	1/5	1/5	1/4	1/7.5	-
Sleeve OD	Ø80/Ø100 mm	Ø120 mm	Ø80 mm	Ø76.2 mm	Ø170 mm	Ø50/Ø70/Ø90 mm
Accuracy	2μ (Runout In Taper)	2μ (Runout In Taper)	2μ (Runout In Taper)	-	-	-
Motor	-	-	-	1.5/2 HP	-	-
Temperature	Room Temperature +15°C	Room Temperature +15°C	Room Temperature +15°C	Room Temperature +15°C	Room Temperature +15°C	Room Temperature +15°C

Grinder

Tool Cutter Grinder Spindles

HF-60



DM-40



	HF-60	DM-40
Standard Speed	8,000 RPM	800 ~ 8,000 RPM
Sleeve OD	Ø60 mm	Ø80 mm
Taper	-	10°30'
Accuracy	3μ	2μ (Runout In Taper)
Temperature	Room Temperature +12°C	Room Temperature +12°C

Boring & Milling Machine



Taiwan Patent No.
M401499
M365809



PHB-110 / 130 / 160

	PHB-110	PHB-130	PHB-160
Taper	#50 (BT/CAT/DIN)	#50 (BT/CAT/DIN)	#50 (BT/CAT/DIN)
W-Axis OD	Ø110 mm	Ø130 mm	Ø160 mm
W-Axis Stroke	500 mm	700 mm	1000 mm
Max. Speed	3,000 RPM	2,500 RPM	1,500 RPM
Motor Power	22 kW	37 kW	45 kW
Clamping Force	1,500 kgf ±10%	1,800 kgf ±10%	2,500 kgf ±10%
Lubrication	Grease	Grease	Grease



Service

We value our customers' business and understand the importance of excellence in service and support, as well as the products customers purchased from us. All of our employees have an individual quality responsibility in both product and service to make sure that we not only satisfy, but delight our customers in every aspect of our interaction.

When a technical or service issues arises, this affects your profitability, so we understand the importance of rapid, effective service and always make every effort to support and assist our customers in this.