

YBK25II / YBK35II / PM25 / PM35



PM25 SHOWN

BUILT FOR COMPACT PRECISION

Choose between 25 mm and 35 mm bar capacity, with model-specific spindle and travel configurations.

- Up to 5,000 rpm PM25 / PM35 models; YBK25II / YBK35II models are rated at 3,500 rpm.
- Servo-driven feed X/Z rapid traverse reaches 15 m/min.
- Precision spindle Imported angular-contact bearings; spindle runout ≤ 0.002 mm.
- Automation ready Optional bar feeder or custom loading/unloading robot.

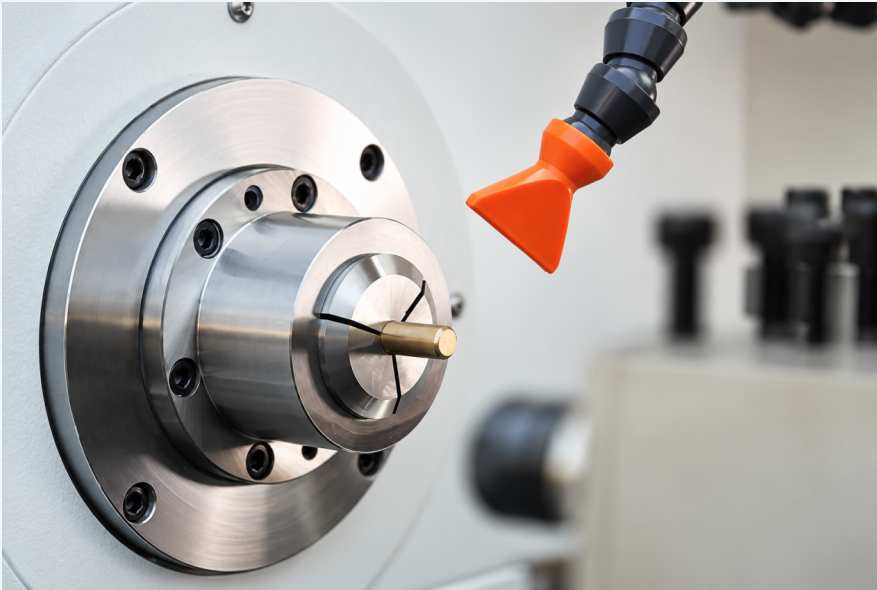
KEY PERFORMANCE

Spindle runout ≤ 0.002 mm

Repeat positioning ≤ 0.003 mm

Bar capacity $\varnothing 25 / \varnothing 35$ mm

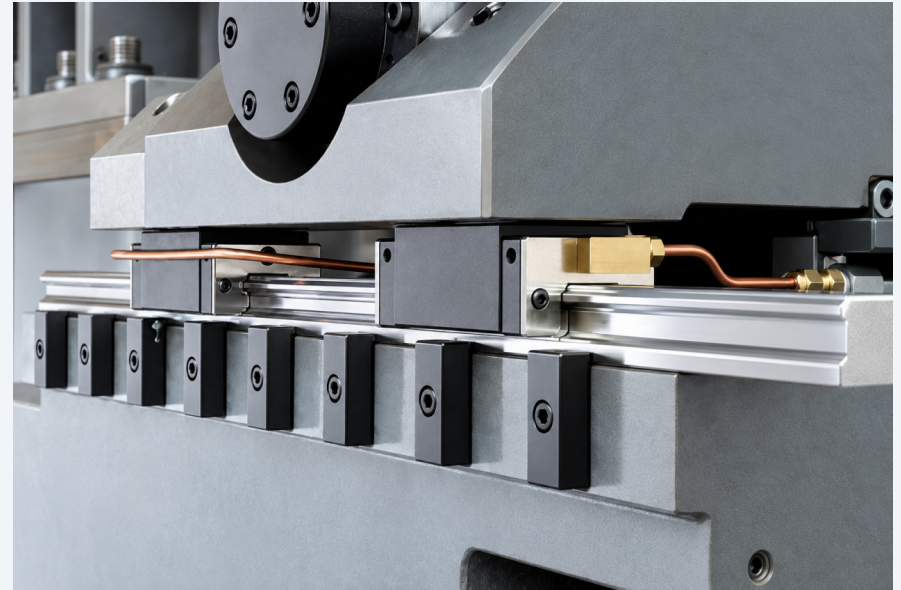
Spindle, workholding and tool-post design



Precision spindle and workholding detail

HIGH-PRECISION SPINDLE

Imported angular-contact bearings in a three-front / two-rear arrangement are specified to support spindle rigidity and long-term accuracy.



Z-axis carriage and dovetail tool-post layout

FAST, ACCURATE TOOL CHANGES

The dovetail tool-post arrangement enables quick, accurate tool changes and helps reduce machining time.

Stable structure, efficient production

CONTROL SYSTEM

Taiwan Syntec CNC is specified for the YBK25II, YBK35II, PM25 and PM35 models.

RIGID MACHINE BED

A stable structural design and high-quality Meehanite cast-iron bed support rigidity during machining.

SERVO FEED & GUIDEWAYS

All feed axes are servo-driven. Taiwan precision ball screws and linear guides support accuracy and high-speed travel.

Z-AXIS DRIVE

The Z-axis carriage uses a centrally driven layout to support machining accuracy and efficiency.

AUTOMATIC LUBRICATION

Automatic lubrication helps maintain reliable high-speed axis feed over extended operation.

AUTOMATION & APPLICATIONS

Add a bar feeder or custom loading/unloading robot for continuous production. Applications include communications, electronics, automotive, pneumatic and hydraulic equipment, medical devices, instrumentation and aerospace, especially small, precise and compact components.

MODEL SELECTION

YBK25II / PM25: Ø25 mm maximum bar diameter. YBK35II / PM35: Ø35 mm. YBK models use variable-frequency spindle motors; PM models use servo spindle motors.

Four-model specification comparison

SPECIFICATION	YBK25II	YBK35II	PM25	PM35
Maximum swing over bed	Ø330 mm	Ø330 mm	Ø300 mm	Ø300 mm
Maximum swing over cross slide	Ø120 mm	Ø120 mm	Ø130 mm	Ø130 mm
Maximum bar stock diameter	Ø25 mm	Ø35 mm	Ø25 mm	Ø35 mm
Main spindle through-hole diameter	Ø26 mm	Ø36 mm	Ø26 mm	Ø36 mm
Maximum machining length	100 mm	100 mm	100 mm	100 mm
Main spindle motor	2.2 kW (VFD)	3.0 kW (VFD)	3.7 kW (servo)	3.7 kW (servo)
Maximum spindle speed	3,500 rpm	3,500 rpm	5,000 rpm	5,000 rpm
Main spindle runout	≤ 0.002 mm	≤ 0.002 mm	≤ 0.002 mm	≤ 0.002 mm
Spindle center height	1,050 mm	1,050 mm	1,050 mm	1,050 mm
Maximum drilling diameter	Ø10 mm	Ø10 mm	Ø10 mm	Ø10 mm
Maximum tapping size	M8	M10	M8	M10
Turning tool holder size	□16 mm	□16 mm	□16 mm	□16 mm
Maximum boring bar diameter	Ø25 mm	Ø25 mm	Ø25 mm	Ø25 mm
X-axis travel	220 mm	220 mm	300 mm	300 mm
Z-axis travel	180 mm	180 mm	200 mm	200 mm
X / Z rapid traverse	15 m/min	15 m/min	15 m/min	15 m/min
X-axis motor torque	3.5 N·m	3.5 N·m	3.5 N·m	3.5 N·m
Z-axis motor torque	3.5 N·m	3.5 N·m	3.5 N·m	3.5 N·m
Repeat positioning accuracy	≤ 0.003 mm	≤ 0.003 mm	≤ 0.003 mm	≤ 0.003 mm
Machine weight	850 kg	900 kg	1,050 kg	1,080 kg
Overall dimensions (L × W × H)	1,390 × 1,080 × 1,650 mm	1,390 × 1,080 × 1,650 mm	1,550 × 1,250 × 1,780 mm	1,550 × 1,250 × 1,780 mm

VFD = variable-frequency drive. Specifications may be changed without notice. □ denotes a square tool shank.