

CNC HI-SPEED MACHINING CENTER

Accuracy ! Reliability ! Gracious ! Opportunity !



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STANDS FOR QUALITY

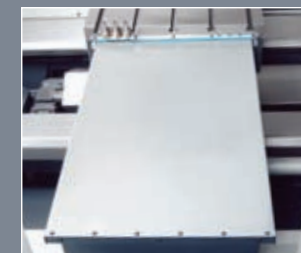
LIH CHANG MACHINERY CO., LTD.

A-80

CNC Hi-Speed Machining Center

OUTSTANDING FEATURES:

- Direct-drive spindle provides efficient transmission and fast CW/CCW revolution.
- Fixed type Y-axis cover assures low noise at 48m/min. rapid traverse.
- Spring & scissor type Z-axis cover assures very smooth movement.
- All pneumatic, lubricating and cabling circuits are built-in located separately by two tubes which do not affect 3-axes motion and not occur scratching.
- Powerful chip flushing system and screw type chip conveyor can remove chip from base to rear side tank efficiently.
- Low gravity & strong base guarantees the best rigidity and stability.



- Patented X-axis single piece cover performs only 1.9M machine front size.



Double pneumatic cylinder + pressure accumulator of balancer (optional)

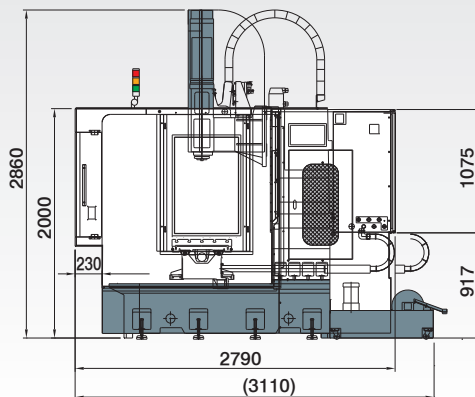
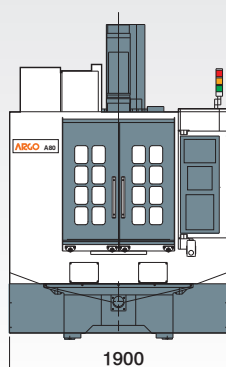
Excellent micro-movement, keep Z-axis steady and flexibility while at high speed traverse.

Expertise Research in High Efficiency

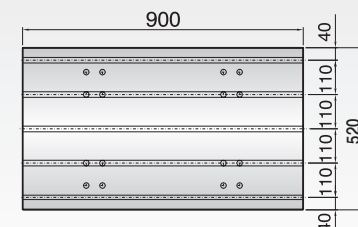


Dimensional Drawing...

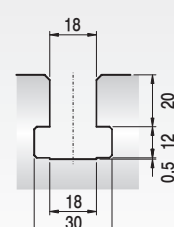
Unit: mm



TABLE



T-SLOT



A-56plus / A-72plus

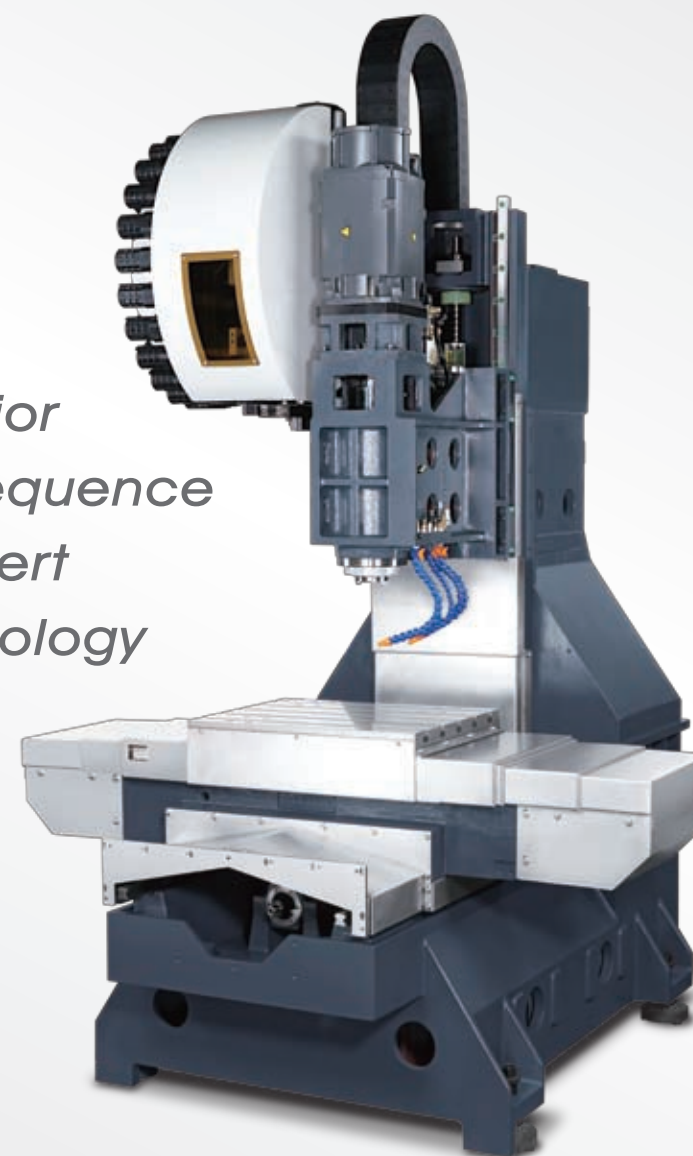
CNC Hi-Speed Machining Center

OUTSTANDING FEATURES:

- The structural parts are manufactured from meehanite cast iron with stress relieved to ensure the material stability. The structural parts are stress relieved and analyzed by the finite element analysis combined with rib reinforcement, that assures high accuracy in high speed machining.
- Three axes are mounted with high precision linear guideways for stable and smooth movement, making the machine ideal for high speed and high precision machining.
- The machine employs a pressure-release type lubrication oil distributor which ensures stable feed system.
- Specially designed double back sides chip removing system allows chips to be exhausted out of the machine in a short time. This will prevent problem caused by deposit of hot chips.
- Optimal structure proportion is achieved through a equiangular triangle construction, allowing the machine to exhibit a solid support and force flow.

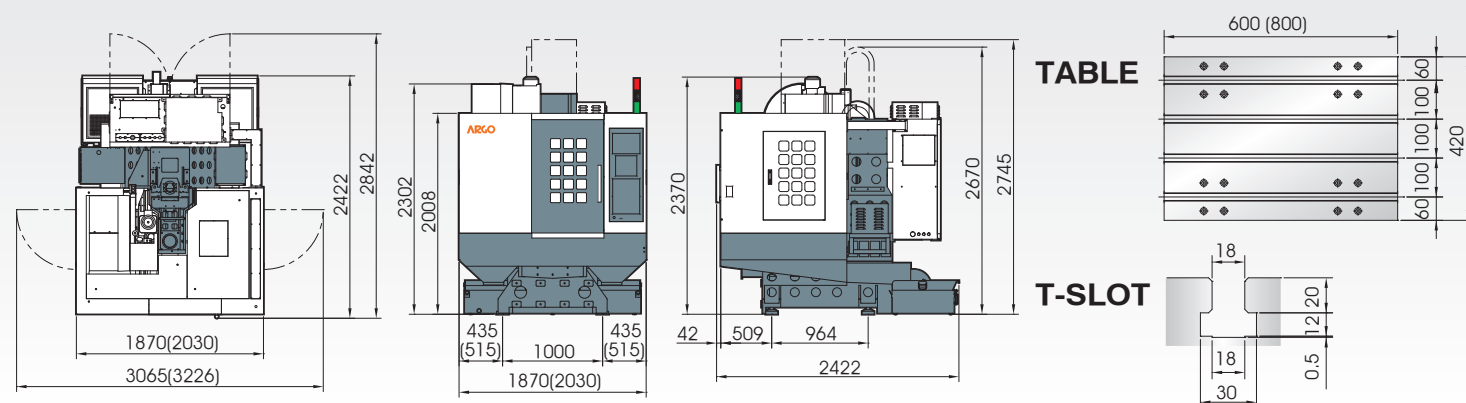


*Superior
Consequence
of Expert
Technology*



Dimensional Drawing...

Unit: mm



Integrated Bearing Support



The Integrated bearing support provides rigid transmission effect, resulting in higher performance.

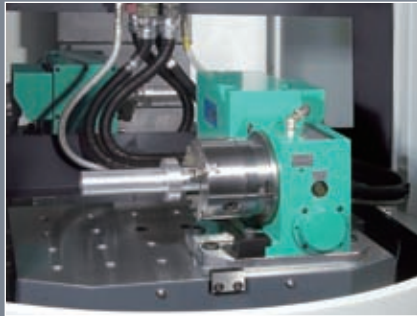
A-56plus+APC / A-56T+APC

CNC Hi-Speed Machining Center

OUTSTANDING FEATURES:

- Direct-drive spindle provides efficient transmission and fast CW/CCW revolution.
- Patented X axis gull-wing shaped cover assures long time and less noise at 48m/min rapid traverse.
- Automatic pallet changer offers fast pallets changing with accurate and stable positioning and boosts production efficiency.
- Pallet changer opens for convenient tooling adjustment.
- Specially designed double back sides chip removing system allows chips to be exhausted out of the machine in a short time. This will prevent problem caused by deposit of hot chips.
- Expert and precision scraping on binding surface reach the best stability
- Low gravity & strong base guarantees the best rigidity and stability.

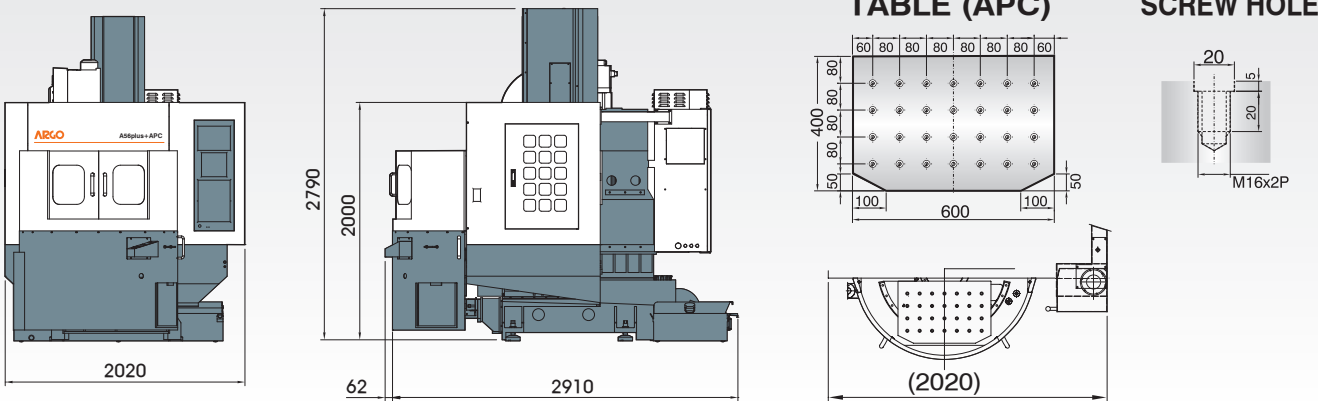
Unique Technique



APC W/TWO ROTARY TABLE (optional)

Dimensional Drawing...

Unit: mm



AUTOMATIC PALLET CHANGER A-56plus+APC A-56T+APC

Spindle nose to pallet	150 - 650 mm	150 - 510 mm
Pallet	Length x width	600 x 400 mm
	Screw holes counter bore	28 holes (M16 x P2 x 20 mm Depth)
	Max. loading	100 kgs (one side)
Exchange method	Pallet lift ±180° rotary	
Changing time	6 ± 2 sec.	
L x W x H (Floor)	2020 x 2972 x 2790 mm	
L x W x H (Packing)	2120 x 3154 x 2540 mm	
N.W. / G.W.	4000 / 4500 kgs	3800 / 4300 kgs

A-56plus+APC / A-56T+APC CNC Hi-speed machining center

A-56T / A-72T

CNC Hi-Speed Machining Center

OUTSTANDING FEATURES:

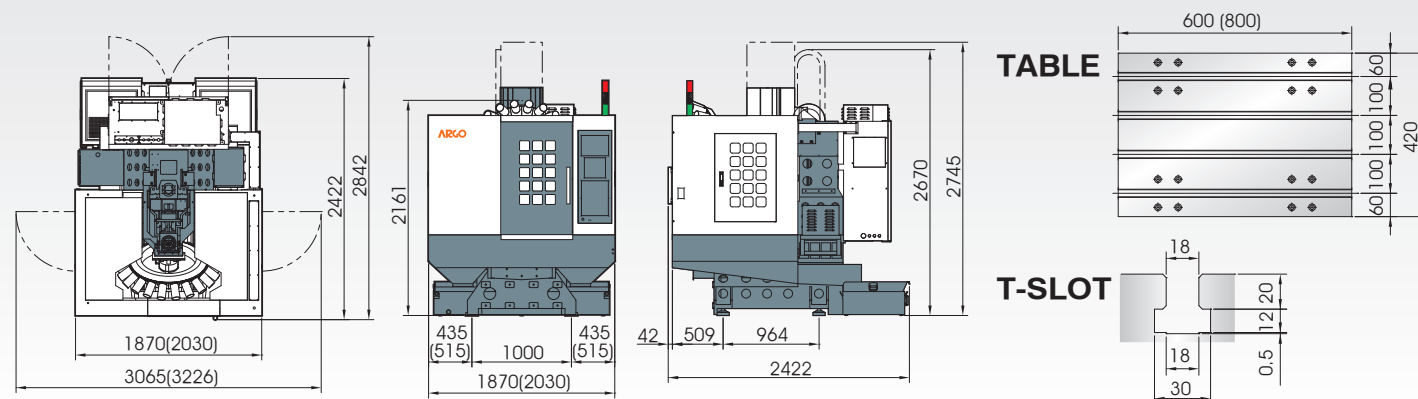
- The structural parts are manufactured from meehanite cast iron with stress relieved to ensure the material stability. The structural parts are stress relieved and analyzed by the finite element analysis combined with rib reinforcement, that assures high accuracy in high speed machining.
- Turret type (armless) magazine with 14 tools capacity (optional 21 tools) offers fast tool changing and low broken ratio. With the shortest route tool selection, T – T time is 1.7 sec. approx.
- Three axes are mounted with high precision linear guideways for stable and smooth movement, making the machine ideal for high speed and high precision machining.
- The machine employs a pressure-release type lubrication oil distributor which ensures stable feed system.
- Specially designed double back sides chip removing system allows chips to be exhausted out of the machine in a short time. This will prevent problem caused by deposit of hot chips.
- Optimal structure proportion is achieved through a equiangular triangle construction, allowing the machine to exhibit a solid support and force flow.

A-56T/A-72T CNC Hi-speed machining center



Dimensional Drawing...

Unit: mm



Integrated Bearing Support

The Integrated bearing support provides rigid transmission effect, resulting in higher performance.

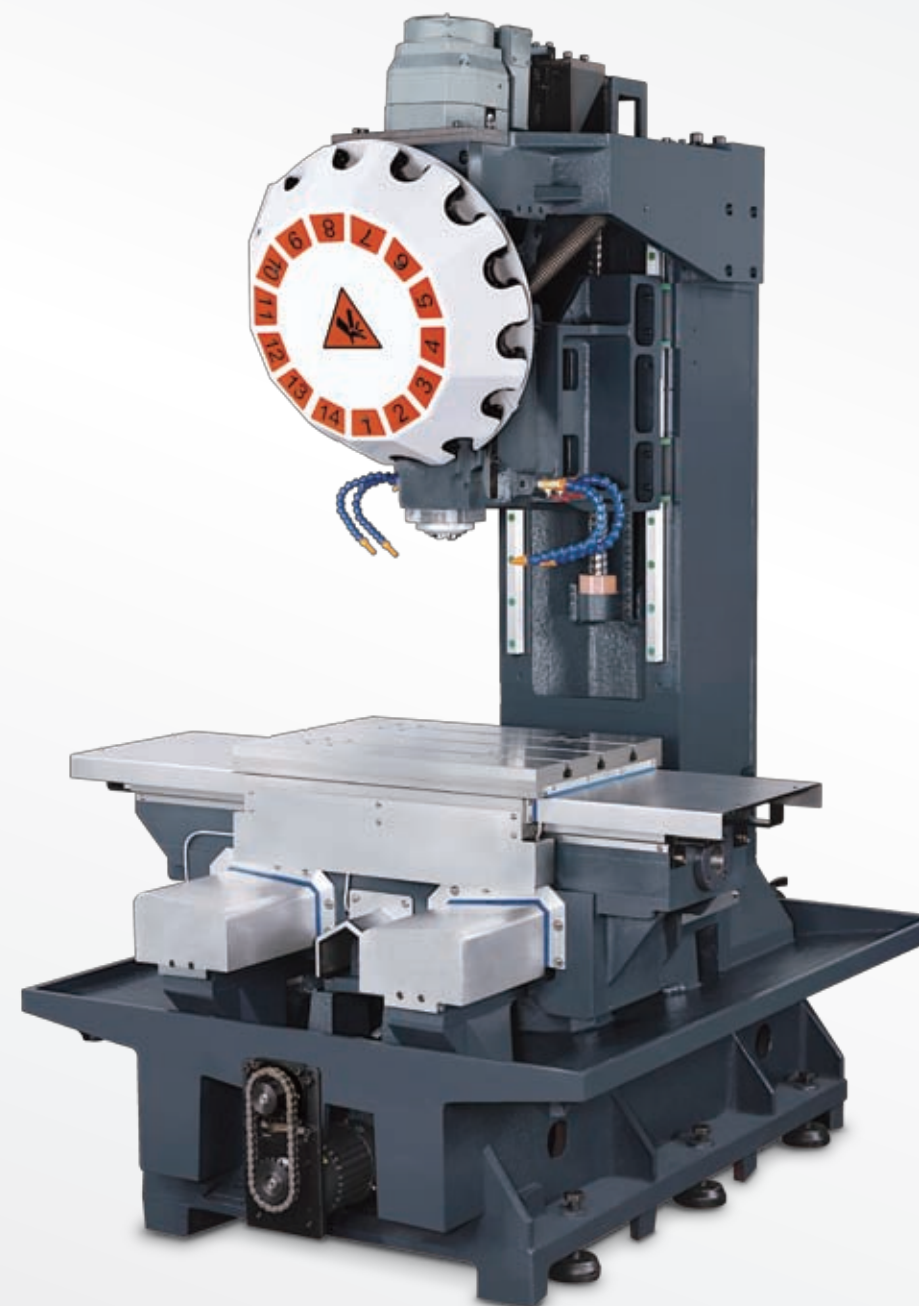
A-60T

CNC Hi-Speed Machining Center

OUTSTANDING FEATURES:

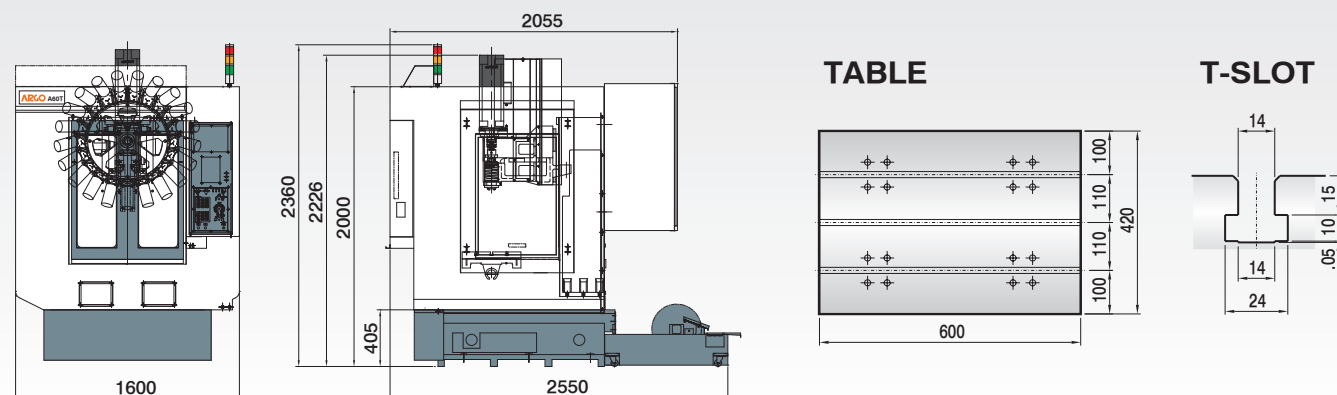
- Direct-drive spindle provides efficient transmission and fast CW/CCW revolution.
- Turret type (armless) magazine with 14 tools capacity (optional 21 tools) offers fast tool changing and low broken ratio. With the shortest route tool selection, T – T time is 1.7 sec. approx.
- Patented X-axis single piece cover performs only 1.6M machine front size.
- Fixed type Y-axis cover assures low noise and very smooth movement at 48m/min rapid traverse.
- Three axes are mounted with high precision linear guideways for stable and smooth movement, making the machine ideal for high speed and high precision machining.
- Powerful chip flushing system and screw type chip conveyor can remove chip from base to rear side tank efficiently.
- Low gravity & strong base guarantees the best rigidity and stability.

Hard and Sharp Productivity



Dimensional Drawing...

Unit: mm



Becoming a Pioneer of Success

Superior Component

Foremost Accessories & Application!

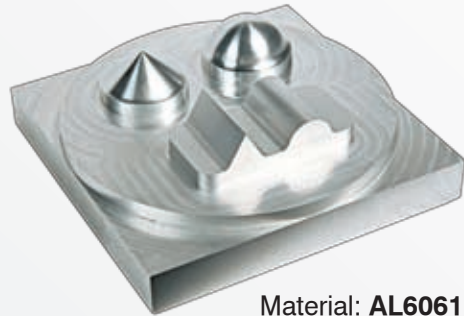
Optimal Quality, Swift Service

ARGO®
STANDS FOR QUALITY

Superior Component



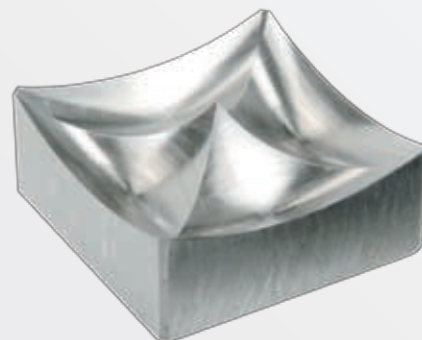
Material: **AL6061**
Hardness: **HRB 14°**



Material: **AL6061**
Hardness: **HRB 14°**



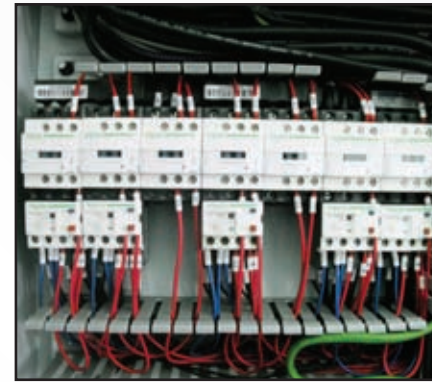
Material: **AL6061**
Hardness: **HRB 14°**



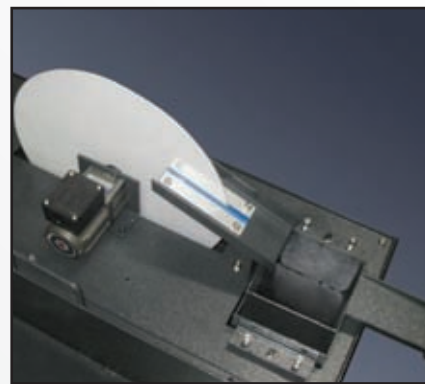
Material: **NAK80**
Hardness: **HRB 38°~40°**



INVERTER (APC/OPTIONAL)
Adopts European Brand Inverter



ELECTRICAL CABINET



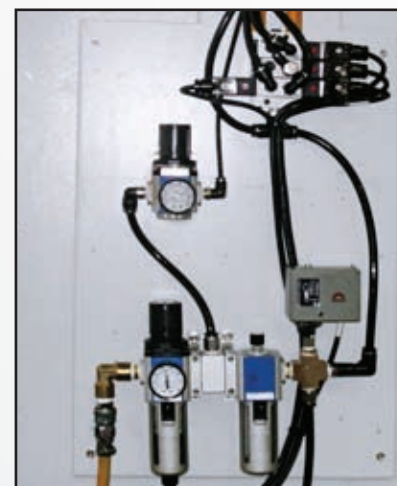
OIL SKIMMER (OPTIONAL)



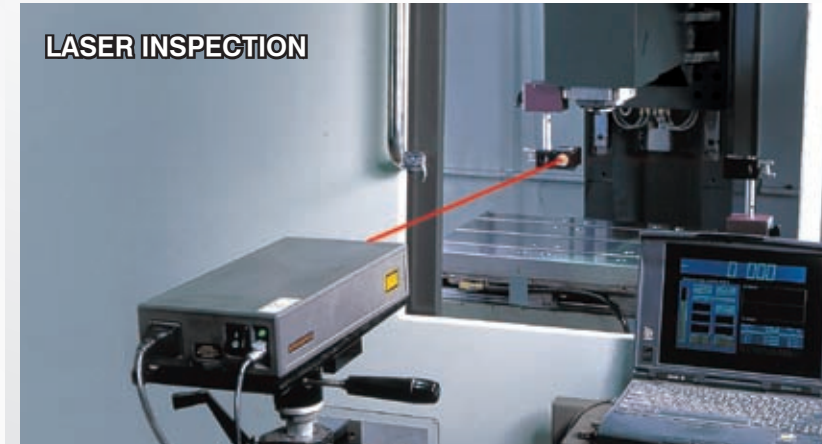
OIL SEPARATOR



AIR CONDITIONER (OPTIONAL)



PNEUMATIC COMPONENTS



LASER INSPECTION



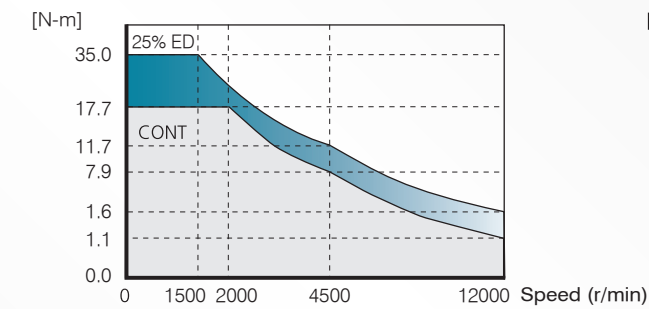
BALL-BAR INSPECTION



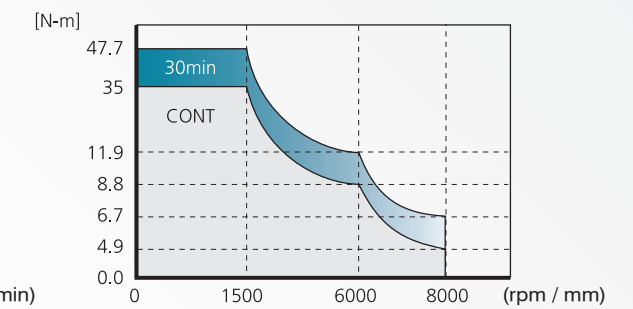
SPINDLE BALANCE INSPECTION

Mitsubishi Controller / Spindle Motor Torque Chart

5.5kw/12000rpm

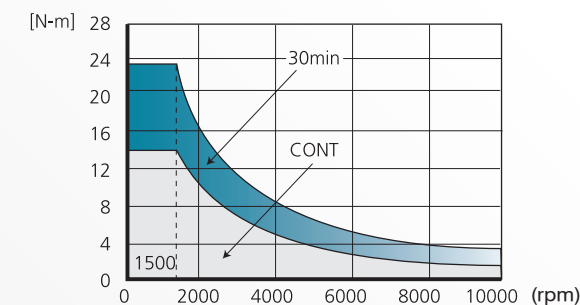


7.5kw/8000rpm

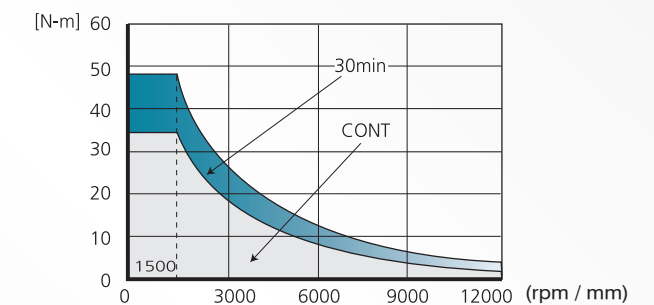


Fanuc Controller / Spindle Motor Torque Chart

3.7kw/10000rpm



7.5kw/12000rpm



* Op. : Machine with double pneumatic cylinder + pressure accumulator of balancer and synchronous tool unclamping motion.

- Design and specification are subject to change without prior notice.

- Enclosed splash guard
- Work lamp & alarm light
- Heat exchanger (cabinet)
- Auto. lubrication system
- Coolant system
- Flush system
- Chip bucket & coolant tank
- Screw type chip conveyor (A-80/A-60T)
- Oil separator
- Rigid tapping
- Tool kit & tools
- Leveling pads & bolt
- Operation manual

- Spindle speeds
12000/15000rpm
- Spindle oil chiller device
- Coolant through spindle
- Auto power off M30
- Transformer
- Air gun
- Water gun
- Oil skimmer
- Auto chip conveyor & cart
- CNC 4th rotary table
- Data Server (Fanuc controller)
- Automatic pallet changer
(A-56T/A-56plus)

