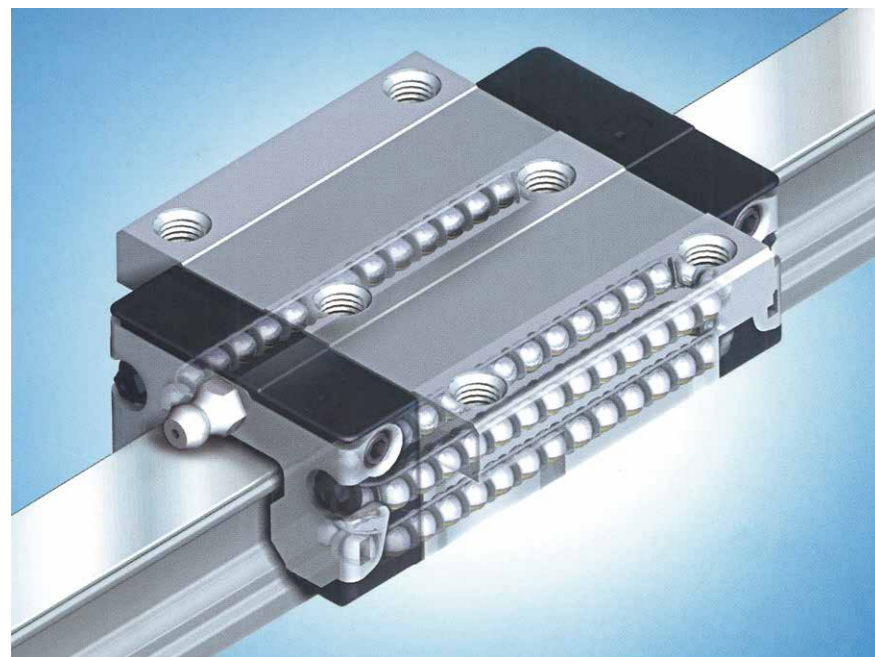


Strengthens the rigidity of joint dynamic characteristics for outstanding machining stability

The most crucial part in the moving column system is the rigidity of joint dynamic characteristics. Tongtai adopts Germany made REXROTH guideway for perfectly presenting outstanding machining accuracy in workpiece fixing and tool moving.



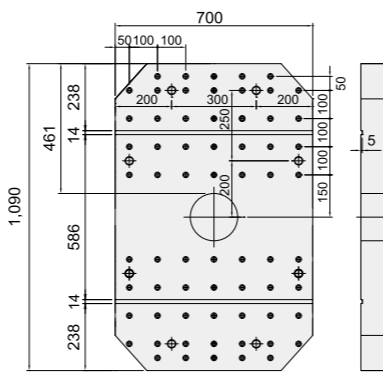
Standard / Optional

	Standard	Optional
Chip conveyor tank	●	
Separated manual pulser	●	
Inner workpiece counter	●	
Tri-colors warning light	●	
Tool magazine	●	
Machine bed flushing system	●	
Spindle taper air blow	●	
Door security switch	●	
Spindle external coolan	●	
Disc type oil skimmer		○
Air gun		○
Coolant gun		○

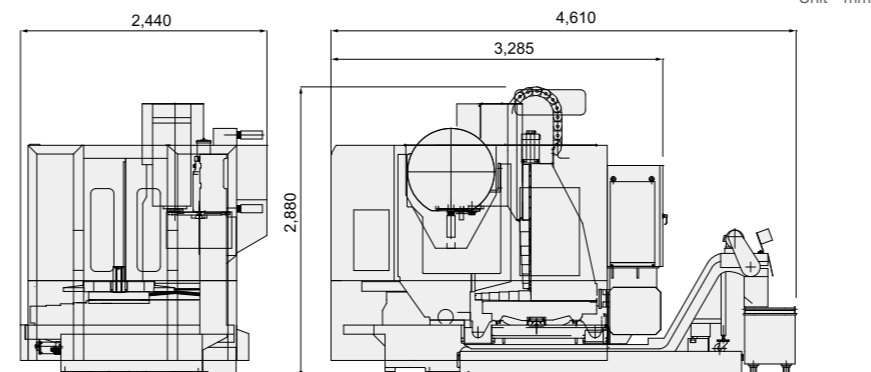
	Standard	Optional
Automatic door		○
Oil-mist collector		○
Oil-pressure device and interface		○
Spindle cooling device		○
Tool breakage/measurement		○
Standard 4th axis		○
A/C for electrical cabinet		○
CE marking		○
Automatic power-off system		○
Transformer/ Stabilizer		○
Coolant through spindle (C.T.S.)		○

Item	Specification	Unit	QVM-610All
Pallet	Pallet size (L×W)	mm	700×460
	Max. loading capacity	kg	400×2
	Pallet height from floor	mm	950
	T-slot (size×No.)	mm	1716×66+8PIN
Spindle	Spindle taper		7/24 Taper No.40
	Spindle speed	rpm	8,000 (Opt. 10,000)
Stroke	X/Y/Z axis stroke	mm	610/410/510
	Spindle nose to table	mm	180-690
Feed	X/Y/Z axis rapid traverse	m/min	36/36/30
	Cutting feedrate	mm/min	1-10,000
ATC	Tool shank		BT-40
	Tool capacity	pc	24
	Max. tool diameter	mm	Ø89
	Max. tool diameter (w/o adjacent tool)	mm	Ø135
	Max. tool length	mm	250
Motor	Max. tool weight	kg	7
	Spindle motor	kW	7.5/5.5 (Opt. 9.0/7.5)
Machine size	X/Y/Z axis servo motor	kW	3.0/3.0/4.0
	Coolant motor	kW	0.37/0.55
	Width×Depth×Height	mm	2,440x4,610x2,880
	Weight	kg	7,500

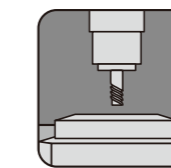
Pallet



Machine dimensions



Unit : mm



Vertical Machining Center

QVM-610All



Tongtai Tongtai Machine & Tool Co., Ltd.

Headquarters

No.3, Luke 3rd Rd., Luzhu Dist., Kaohsiung City 82151, Taiwan
TEL : 886-7-9761588 FAX : 886-7-9761589
www.tongtai.com.tw

Taoyuan Branch	TEL : 886-3-4551399	FAX : 886-3-4559730
Taichung Branch	TEL : 886-4-23589600	FAX : 886-4-23589993
Japan Branch	TEL : 81-4-71438355	FAX : 81-4-71438360
Europe Branch	TEL : 31-161-454639	FAX : 31-161-454768
Romania Branch	TEL : 40-264-415273	FAX : 40-264-403983
Malaysia Branch	TEL : 603-78597113	FAX : 603-78597115
Vietnam Branch	TEL : 84-4-62766090	
Thailand Branch	TEL : 66-2-7443440	FAX : 66-2-3986518
Indonesia Office	TEL : 62-21-45850875	FAX : 62-21-45850876

Affiliates

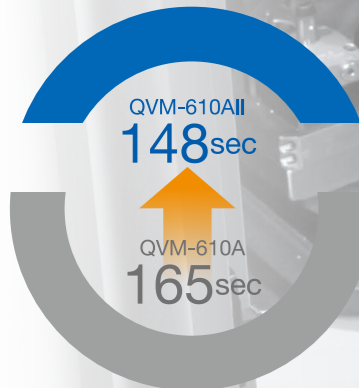
Honor Seiki Co., Ltd. TEL : 886-7-9759888 FAX : 886-7-9759999 www.honorseiki.com.tw	Asia Pacific Elite Corp. TEL : 886-4-23589313 FAX : 886-4-23588913 www.apecnc.com	Quick-Tech Machinery Co., Ltd TEL : 886-6-3841155 FAX : 886-6-3841177 www.quicktech.com.tw	PCI-SCEMM - rue Copernic TEL : 33-4-77426161 FAX : 33-4-77426023 www.pci.fr	ANGER Machining GmbH TEL : 43-7229-71041-0 FAX : 43-7229-71041-199 www.anger-machining.com
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QVM-610All

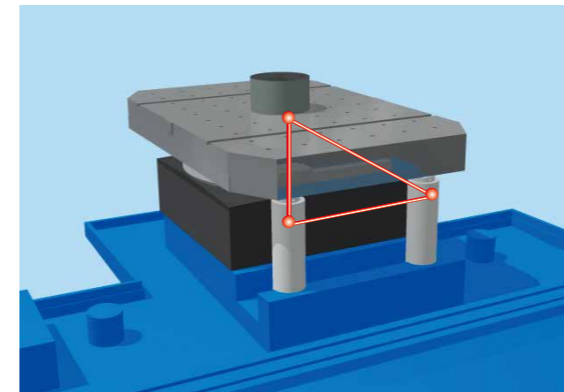


Workpiece : Pump cover
(diesel engine parts)
Materials : FC300
Amount of tools : 6



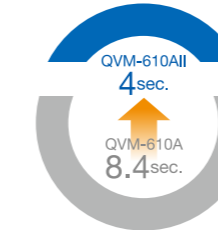
Shorten the APC time

Mechanism patent M448348

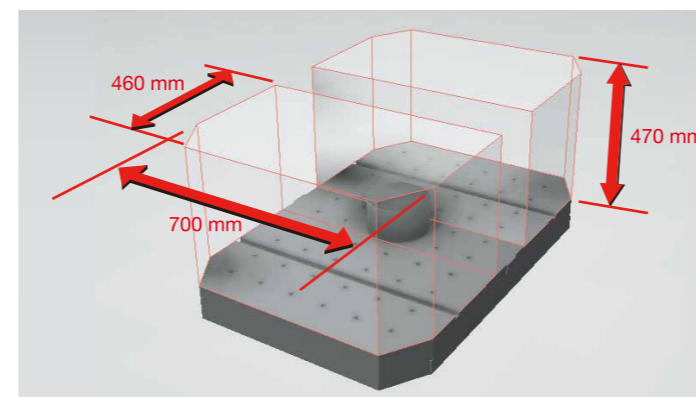


1. Triple-point clamping and supporting device is used to ensure the stability of pallet and improve the surface roughness.
2. Roller gear mechanism of APC device allows lower. The requirement torque is less while launching because roller gear mechanism is used in APC device.
3. Instead of hydraulic system, electric motor is used in APC device for energy saving and easy maintenance.

APC time (Loading: 200kgf)



Improve loading capacity of table



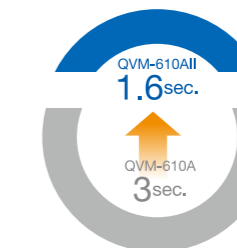
Loading capacity of table



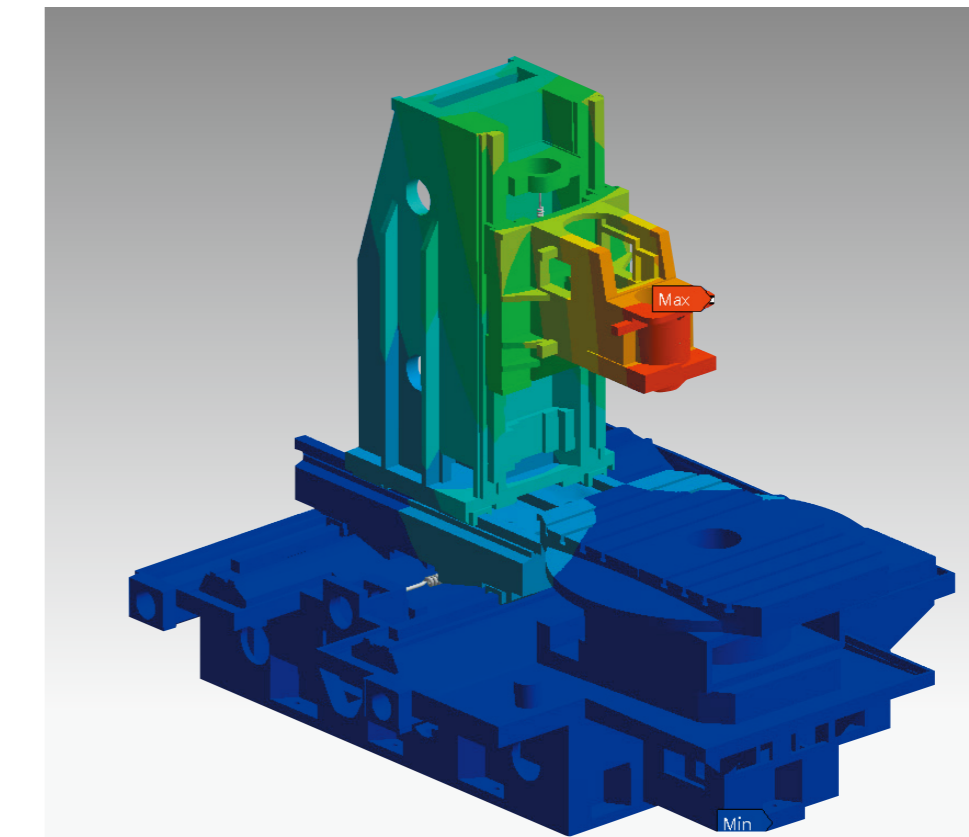
Shorten the ATC time

1. The ATC system is equipped with angular encoder to improve efficiency.
2. The deceleration ratio of ATC arm is changed from 1:10 to 1:7. Furthermore, higher output driven motor is used to increase rotating speed.
3. The more than million times endurance test has been performed in house.

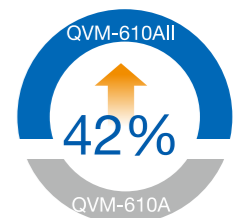
ATC time



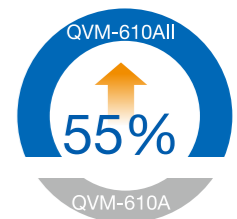
Considering every detail for obtaining extraordinary machining stability



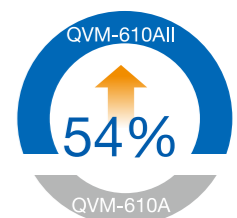
The rigidity of the X axis



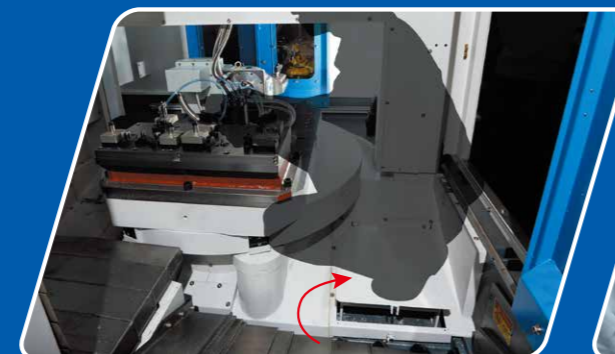
The rigidity of the Y axis



The rigidity of the Z axis



1. Through the finite element analysis (FEA), structure has higher rigidity and stability in high speed motion than previous model.
2. The Z axis stroke is increased by 50 mm to facilitate machining applications with 4th axis and higher workpiece.
3. High quality accessories are used to keep long-term stability and life such as high rigidity spindle and German-made linear guide way.



Raised concealed pedal



Collection cabinet



Daily maintenance

Vertical Machining Center
QVM-610AII

