

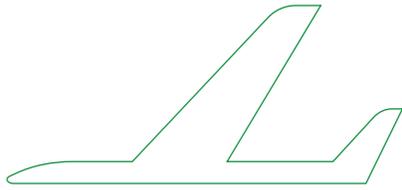
專注航太·品質·創造未來
Aiming At Aerospace Solutions

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MEMBER OF
TI GROUP
2025/05

MMT


AERO Series
Aluminium

AIMING AT AEROSPACE SOLUTIONS



ASIA PACIFIC ELITE CORP. (APEC) IS A SUBSIDIARY OF **TTGroup**, THE **BIGGEST MACHINE TOOLS GROUP** IN TAIWAN

APEC aims at "Aerospace manufacturing process" and defines ourselves as a resources integrator, solutions provider and customers' best strategic partner of OEM, Tier1 to Tier3.

APEC has the world's most complete medium and large aerospace structure and engine parts processing solutions.

Besides, we also have 20 years of professional practical experience in die & mold and precision machining.

Our clients are all over the world, like Canada, the USA, Germany, Japan, Mainland China and Taiwan, etc. Furthermore, we offer comprehensive customer services including factory planning, intelligent manufacturing, technical training, process upgrades and Turnkey solutions.

CORE VALUES



AIMING AT
AEROSPACE
SOLUTIONS



TIMS

Production management
Intelligent monitoring
RFID tool management
Workpiece management
Order management



TLM

Machine status
Utilization analysis
Alarm history
Operation history
Program upload/download



AGA key components

- Spindle
- Milling Head
- Trunnion Table



Aerospace Gebert APEC is a premium brand for aerospace manufacturing components. Developed by APEC and Dr. Gebert's team from Germany, AGA offers high-power, high-speed spindles, milling heads, and trunnion tables, all engineered for APEC machines. This ensures after-sales service with maximum efficiency and precision.

CUSTOMER SUPPORT



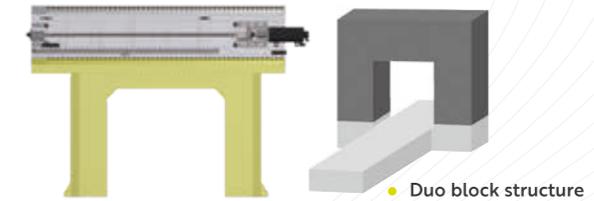
MT AERO Series

5-Axis High Speed Double Column Machining Center

(MT15 model shown for reference.)



- **Duo block structure design**
Machine rigidity and working stability could be enhanced via duo block structure design.



- **Larger machining area**
Despite the smallest footprint in its class, this compact model features a wide machining area and complete functions.

- **Suitable workpieces**

Wing structure



Wing rib(S/M)

Fuselage structure



Spar



Cross beam



Pylon



Machine configuration for aerospace machining

Cross beam flushing system

High pressure pump with groups of powerful nozzles can quickly remove the chips.

Complex chip removal system

Large water tank equipped provides stable coolant fluid and helps removing chip efficiently.

Fully enclosed splash guard

Lower noise and prevent spreading of chips and coolant liquid.

Special spindle for aluminium alloy processing

High speed and power spindle with the best material removal rate.

Unequal thickness of Ram

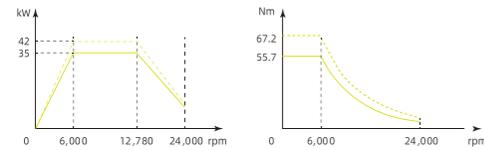
Special structure design of ram helps remain light and rigidity.

High dynamics

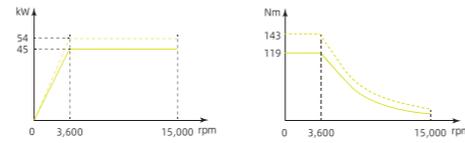
3-axis with high acceleration and deceleration, especially suitable for multiple bulkheads of aluminium alloy material processing.

24,000rpm				15,000rpm			
Spindle taper	HSK-63A			Spindle taper	HSK-100A		
Lubrication	Oil air			Lubrication	Oil air		
Power(kW)	S1	35	60	Power(kW)	S1	45	
	S6	42	75		S6	54	
Torque(Nm)	S1	55.7	48.2	Torque(Nm)	S1	119	
	S6	67.2	60.5		S6	143	

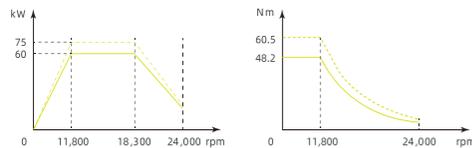
24,000rpm, HSK63A



15,000rpm, HSK100A



24,000rpm, HSK63A



Mono Support Milling Head
(Std.)



Fork Type Milling Head

Spindle Taper	HSK63A/HSK100A	HSK63A/HSK100A
Swivel/Rotation Torque	A=529/869Nm C=783/1,300Nm	B=1,192/1,980Nm C=1,050/1,740Nm
Swivel/Rotation Speed	A=C=30(cont)rpm A=C=60(max)rpm	B=C=30(cont)rpm B=C=60(max)rpm
Swivel/Rotation Angle	A=±125° C=±360°	HSK63A:B=±120° C=±360° HSK100A:B=±115° C=±360°
Clamping Torque	A=4,000Nm C=4,000Nm	B=4,000Nm C=4,000Nm

Specification	Unit	MT15		MT24	
		MT1520-5S	MT1530-5S	MT2432-5S	MT2442-5S
Travel					
X-axis	mm	2,000	3,000	3,200	4,200
Y-axis	mm	2,000		3,000	
Z-axis	mm	850(1,000 opt.)		1,000	
Distance from spindle end to table	mm	-100-750		30-1,030(-25-975 opt.)	
Table					
T-slot size	mm	20x125			
Length	mm	2,100	3,100	3,000	4,000
Width	mm	1,200		2,060	
Max. table load	tons.	3	5	14	
Feedrate					
Rapid traverse	m/min	X/Y/Z=30		X/Y/Z=20	
X,Y,Z axis acceleration	m/sec ²	5			
Accuracy					
Positioning(VDI3441)	mm	X=0.030, Y=0.010, Z=0.008		X=0.035, Y=0.012, Z=0.008	
Repeatability(VDI3441)	mm	X=0.025, Y=0.008, Z=0.005		X=0.028, Y=0.008, Z=0.005	
Spindle(Standard)					
Spindle taper		HSK63A			
Spindle speed	rpm	24,000			
Spindle power(S1/S6)	kW	60/75		35/42	
Spindle torque(S1/S6)	Nm	48/60		56/67	
Automatic tool changer					
Tool shank	pcs	32T			
Max. tool length	mm	300			
Max. tool diameter with adjacent tool	mm	Ø75			
Max. tool diameter without adjacent tool	mm	Ø130			
Max. tool weight	kg	8			

● Standard accessories ○ Optional accessories

Item	Specification		Item	Specification		
Controller	HEIDENHAIN TNC640 MPG HR510	●	Smart factory	TIMSystem	○	
	HEIDENHAIN TNC640 MPG HR520	○		TLMsystem	○	
	HEIDENHAIN TNC640 MPG HR550	○	Security door interlocks	●		
	SIEMENS SINUMERIK ONE	○	Air dryer	●		
Spindle	AGA HSK63A 24,000rpm 60/75 kw	●	Isolation transformer	●		
	AGA HSK100A 15,000rpm 45/54 kw	○	Spindle oil/air lubrication system	●		
	AGA HSK63A 24,000rpm 35/42 kw	○	Oil mist collecting system	●		
Drive System	XYZ with high speed ball screw driving	●	Others	5 axis with Heidenhain optical scale	●	
		●		Waterproof working lamps	●	
Automatic tool changer	32T	●		Fully enclosure Splash Guard	●	
	40T	○		Automatic Kinematics measuring and calibration system	○	
	60T	○		Stabilizer	○	
Cutting coolant	Coolant around spindle	●				
	Coolant through spindle 20bar	●				
	Coolant through spindle 70bar	○				
System coolant	Chiller for spindle	●				
	Air conditioner for electrical cabinet	●				
Chip removal system	Complex chip conveyer	●				
	Enlarged coolant tank	●				
Workpiece measurement system	BLUM workpiece measurement system(TC60-RC66)	○				
	Renishaw workpiece measurement system(RMP600)	○				
Tool measurement system	BLUM tool measurement system(NT-A4)	○				
	Renishaw tool measurement system(NC4-F230)	○				



- Please contact with our sales if you have special requirement.
- All specifications and design are subject to change without notice.