



KIHEUNG MACHINERY CO., LTD
MILLING MACHINE / MACHINING CENTER / COLUMN TRAVEL

MACHINE TOOLS LINE UP



www.kiheung.com



KIHEUNG MACHINERY CO., LTD
MILLING MACHINE / MACHINING CENTER / COLUMN TRAVEL

KIHEUNG ENDEAVOURS TO OFFER THE ULTIMATE TO CUSTOMERS THROUGHOUT THE WORLD.

Since founded in 1968, KIHEUNG has become one of the most advanced and leading machine tool manufacturers with an effort to supply high quality product to customers.

KIHEUNG specialized in CNC bed type milling machine, travelling column boring and milling center, Double column machining center, Double column 5 axis and vertical turning machine, is determined to enhance the quality by respecting the customer's requirements with the philosophy of supplying the most advanced products.

"FULL SATISFACTION TO THE CUSTOMER AND ENDLESS SERVICE TO THE CUSTOMER"

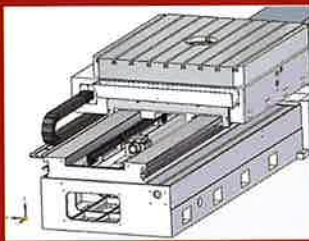
Through the spirit of mutual co-operation, KIHEUNG is able to ensure the continuous distribution with high quality machine tools designed to satisfy customer's requirements all over the world.

KIHEUNG History

- 1968** KIHEUNG machinery works founded
- 1978** Developed conventional bed type milling machine
- 1989** KIHEUNG foundry Co. established
Start to exhibit EMO exhibition
- 1990** Developed CNC bed type milling machine
- 1995** The current plant (20,000m²) established in Daejeon, Korea
- 1996** CE certicate from TUV, Germany
- 2002** KIHEUNG USA established
- 2003** Awarded ISO 9001 certificate
- 2004** Developed double column machining center, MiMAX
- 2005** Developed simultaneous 5 axis machining center, FTV 500
- 2006** Developed column travel boring and milling center, HiTRAX
- 2007** Developed double column 5 axis and vertical turning machine, FTU 1200
- 2008** KIHEUNG German established
Developed fixed bed column travel boring and milling center, RiGiTRAX
- 2009** Awarded 20 million dollar export prize from Korea government
- 2010** Developed column travel boring and milling center, WINGTRAX
New ultra-modern foundry with double induction furnaces on 15,000m² established
- 2012** Developed Orthogonal Head (2.5°x2.5°, 1°x1°)
- 2014** Developed Continuous universal head
- 2015** Developed Linear guide type U1050N and U1250N, and traveling milling machine TRAX
- 2016** Developed Universal Head K5, K6 and T4 with the spindle rpm 5000/6000
- 2017** Developed Universal Head S5 and S6 (0.001°x0.001°)
- 2019** New start strategy to Global Market

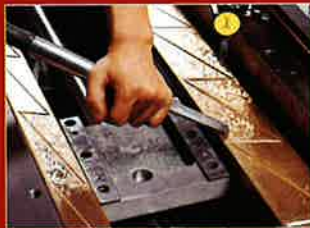


Characteristics of KIHEUNG machine



HIGH RIGIDITY

- High stiffness spindle with large-size bearings, well designed gear box and large sectional ram structure gurantee high torque transmission and powerful cutting capacity.
- KIHEUNG's all major and critical parts, Such as bed, column, saddle, table, ram and head are made by kiheung foundry shop.



HIGH ACCURACY

Due to strong structural parts, oversized ball screw & guide way, and standardized linear scales for all axes, kiheung machine tools provides superior accuracy.



HIGH RELIABILITY

The key technologies are originated from Europe-Germany and Italy, Spain and the main market is located in Europe. The reliability of technologies and product is very high.

- KIHEUNG uses the high quality proven component such as spindle bearing, ball screw, linear scale, spiral bevel gear, LMG, hydraulic componet, lubrication component etc.



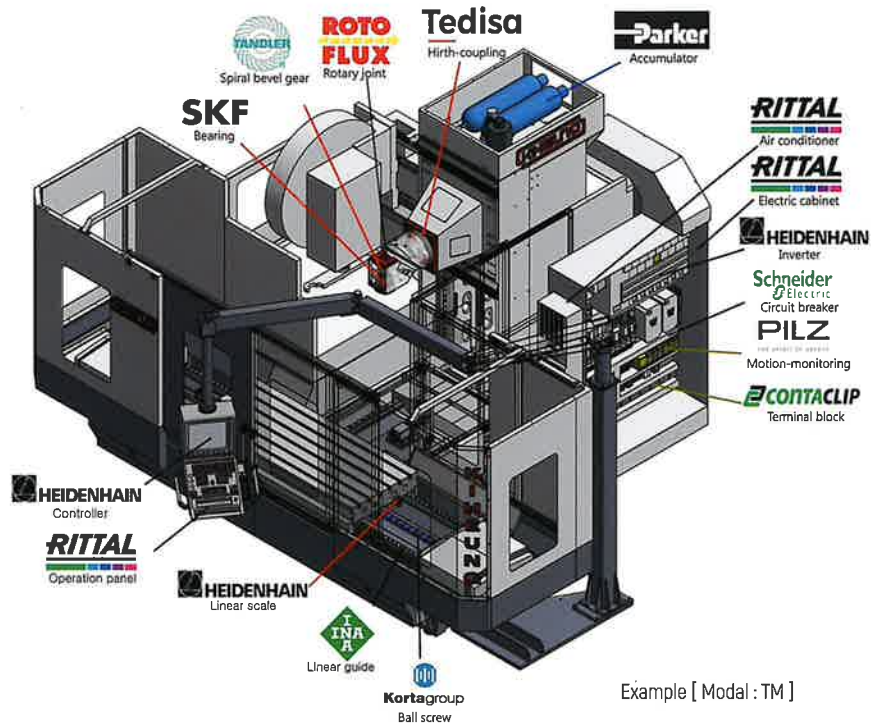
VARIATY OF SPINDLE HEAD

KIHEUNG Machinery mainly produces milling machines or machining center equipped with universal milling head. The universal milling head has spindle posture changing mechanism, it can change the direction of spindle between vertical and horizontal position as well as more smaller angle of up to 2.5 degree or 1 degree. And KIHEUNG also supplies Several different kind head, 0.001 deg continuous universal head, orthogonal head, horizontal head, Vertical head and boring spindle with Ram.

HIGH QUALITY PROVEN COMPONENT

■ Standard specifications

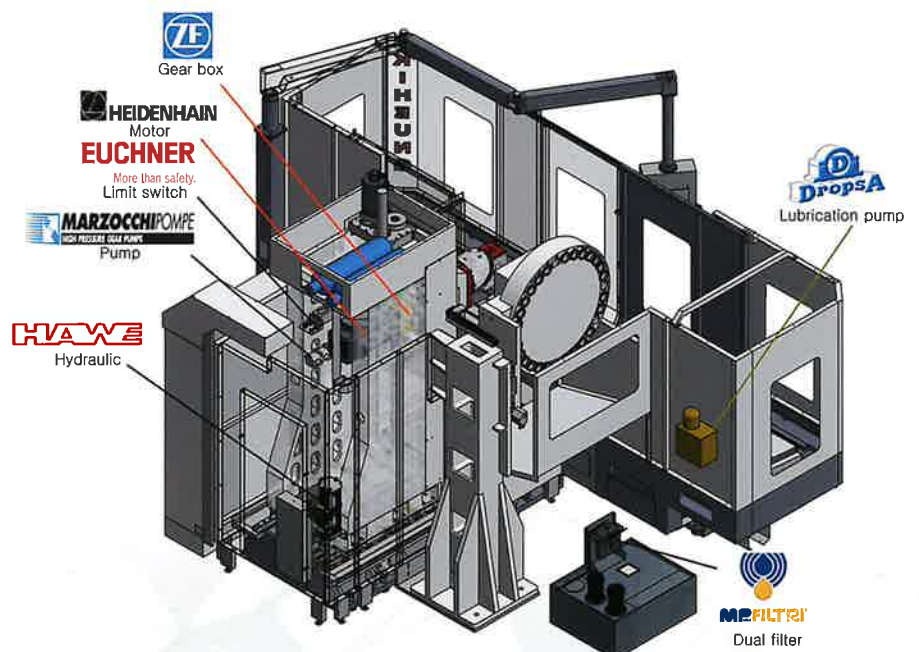
- Controller : Fanuc or Heidenhain or Siemens
- Linear scale
- MPG
- Universal Head : 4000rpm
 - A2 (Automatic V/H positioning) or
 - A4 (Automatic(2.5°(1°) x 2.5°(1°)))
- ATC : 24tool Vertical
- Spindle orientation for rigid tapping
- Hydraulic balancer for vertical Z axis
- Automatic centralized lubrication system with pressure switch
- Oil cooler for cooling the head and ZF gear box
- Full splash guard
- Flood coolant system
- Automatic power off with M function
- Air through spindle, Air through nozzle
- Air blow, Spindle air blast during automatic tool change
- Chip screw inside machine



Example [Modal : TM]

■ Option specifications

- CTS (Coolant through spindle - 16bar, 30bar and 50bar)
- Universal Head
 - K5 (5000rpm, 2.5°×2.5°, 2.5°×1°, 1°×1°) or
 - S5 (4000rpm, 0.001°×0.001° indax)
- Coolant washing gun with separate pump
- ATC - 30/40/60/90 tool Horizontal type or Horizontal / Vertical type
- Link lift up chip conveyor
- Preparation of the continuous 4th axis
- Tool touch probe
- Work piece touch probe
- Rotary table
- Oil skimmer
- Sub Angle table
- Floor Plate



Example [Modal : TM]

U1050N / U1250N / U1350 / U1500



U1050N



U1250N

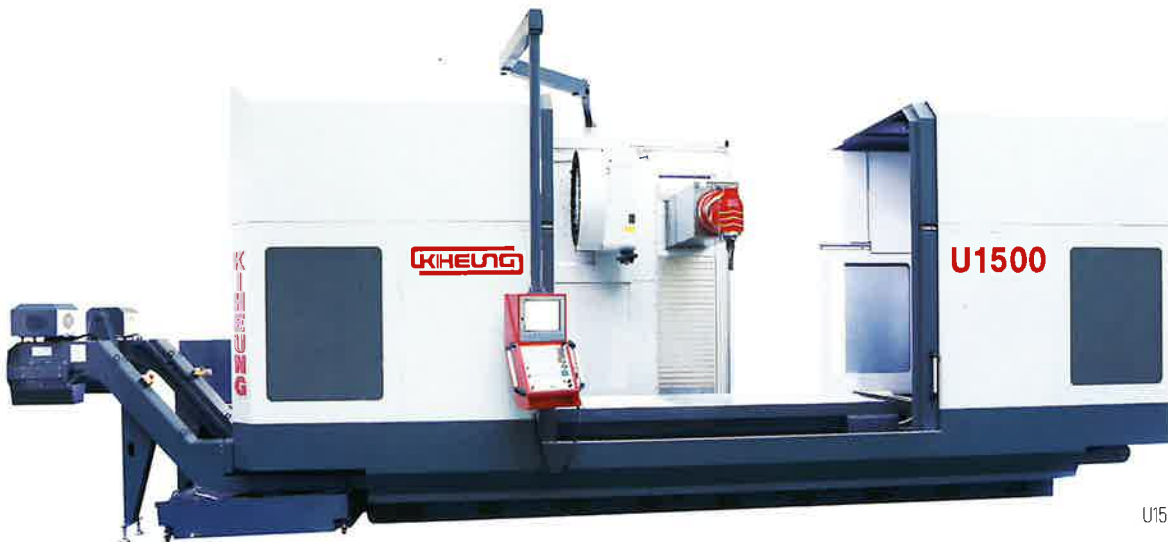
(*:STD)

DESCRIPTION		U1050N	U1250N
TABLE	Surface	2200* / 2700 / 3200 × 900mm	3200* / 4200 / 5200 × 1100mm
	T-slot	No.7 × 22mm	No.8 × 22mm
	Distance between T-slot	125mm	
	Max. permissible load	8000* / 9000 / 10000kg	12000* / 14000 / 16000kg
TRAVEL	Longitudinal (X)	2000* / 2500 / 3000mm	3000* / 4000 / 5000mm
	Cross (Y)	1050mm	1250mm
	Vertical (Z)	1300* / 1600mm	1600* / 2000mm
FEED	Axis feed rate	10000mm/min	8000mm/min
	Rapid feed rate	16000mm/min	
SPINDLE	Taper	ISO#50, DIN69871	
	Speed	4000rpm, 2steps (0 ~ 1000, 1001 ~ 4000)	
MOTOR	Spindle drive motor	22 / 26kW	
	Feed drive motor	X: 30, Y: 22, Z: 30Nm	X: 53, Y: 30, Z: 30Nm
WEIGHT	Approx. machine net weight	19 / 21 / 23ton	29 / 32 / 33ton

※ Spindle Motor, Servo Motor : Fanuc Base



U1350



U1500 (Opt. Top Cover)

(*:STD)

DESCRIPTION		U1350	U1500
TABLE	Surface	3200* / 4200 / 5200 × 1150mm	3200 / 4200 / 5200 × 1300mm
	T-slot	No.8 × 22mm	No.10 × 22mm
	Distance between T-slot	125mm	
	Max. permissible load	12000* / 14000 / 16000kg	
TRAVEL	Longitudinal (X)	3000* / 4000 / 5000mm	
	Cross (Y)	1350mm	1500mm
	Vertical (Z)	1600* / 2000mm	
FEED	Axis feed rate	8000mm/min	
	Rapid feed rate	16000mm/min	
SPINDLE	Taper	ISO#50, DIN69871	
	Speed	4000rpm, 2steps (0 ~ 1000, 1001 ~ 4000)	
MOTOR	Spindle drive motor	22 / 26kW, 30 / 37kW (Opt.)	
	Feed drive motor	X: 53, Y: 30, Z: 53Nm	
WEIGHT	Approx. machine net weight	33 / 35 / 37ton	

U1000LT / U1200LT / U1350LT



U1000LT (Opt. Top Cover)



U1200LT (Opt. Top Cover)



U1350LT (Opt. Top Cover)

(*:STD)

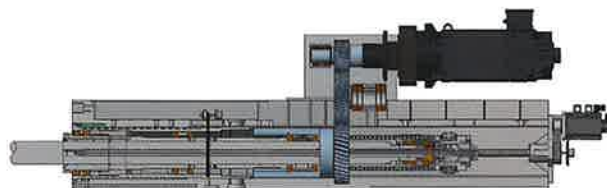
DESCRIPTION		U1000LT	U1200LT	U1350LT
TABLE	Surface (long)	2200* / 2700 / 3200mm	3200* / 4200mm	4200* / 5200mm
	Surface (width)	950mm	1100mm	1150 / 1300mm
	T-slot, distance	No.7 × 22, 125mm	No.8 × 22, 125mm	No. 8 × 22, 125mm
	Max. permissible load	8000~12000kg	12000 ~ 14000kg	14000* / 16000kg
TRAVEL	Longitudinal (X)	2000* / 2500 / 3000mm	3000* / 4000mm	4000* / 5000mm
	Cross (Y)	1000mm	1200mm	1350* (Opt. 1500)
	Vertical (Z)	1300* / 1600mm	1600* / 2000mm	2000* / 2500mm
FEED	Axis feed rate	10000mm/min		
	Rapid feed rate	25000mm/min		
SPINDLE	Taper	ISO#50, DIN69871		
	Speed	4000rpm, 2steps (0 ~ 1000, 1001 ~ 4000)		4000rpm, 2steps
MOTOR	Spindle drive motor	22 / 26kW		30 / 37kW
	Feed drive motor	X: 40, Y: 30, Z: 40Nm	X: 40/53, Y: 30, Z: 40Nm	X: 40/53, Y: 30, Z: 53Nm
WEIGHT	Approx. machine net weight	19 / 21 / 23ton	33 / 35ton	37 / 39ton

RT1050N / RT1250N

Boring spindle (Quill) / Option

RT model can be equipped with $\varnothing 130\text{mm}$ boring spindle with 700mm travel.
Ram 1250mm+Boring spindle 700mm=1950mm travel.

In the Ram of 2800mm, the quill / spindle is installed with the 12 sets of bearing, with the front bearing 190mm!



Spindle orientation via Heidenhain ROD480 Encoder and Quill moving via Heidenhain ROQ 425 Encoder.

Ram Cooling system via combination of oil and water cooling.



RT1050N

(*:STD)

DESCRIPTION		RT1050N	RT1250N
TABLE	Surface (L x W)	1400 x 1200mm	1800 x 1400mm
	T-slot	No.9 x 22mm	No.11 x 22mm
	Distance between T-slot	125mm	
	Max. permissible load	8000kg	
	Table auto indexing, Continuous	0.001° (C : 4rpm)	
TRAVEL	Longitudinal (X)	2500* / 3000mm	3000* / 4000mm
	Cross (Y)	1050mm	1250mm
	Vertical (Z)	1450 / 1850mm	
FEED	Axis feed rate	5000mm/min C : 6rpm	
	Rapid feed rate	16000mm/min	
SPINDLE	Taper	ISO#50, DIN69871	
	Speed	4000rpm, 2steps (0 ~ 1000, 1001 ~ 4000)	
MOTOR	Spindle drive motor	22 / 26kW	
	Feed drive motor	X:53, Y:30, C:53Nm	X:75, Y:30, C:75Nm
WEIGHT	Approx. machine net weight	25 / 28ton	31 / 34ton

RT1000LT / RT1200LT



RT1200LT [Opt. Top Cover]

(*:STD)

DESCRIPTION		RT1000LT	RT1200LT
TABLE	Surface (L × W)	1400 × 1200mm	1800 × 1400mm
	T-slot	No.8 × 22mm	No.9 × 22mm
	Distance between T-slot	125mm	125mm
	Max. permissible load	8000kg	8000kg
	Table auto indexing, Continuous	0.001° (C: 4rpm)	
TRAVEL	Longitudinal (X)	2500* / 3000mm	3000* / 4000mm
	Cross (Y)	1000mm	1200mm
	Vertical (Z)	1600mm / 2000mm	
FEED	Axis feed rate	10000mm/min	10000mm/min
	Rapid feed rate	25000mm/min	25000mm/min
SPINDLE	Taper	ISO#50, DIN69871	
	Speed	4000rpm, 2steps (0 ~ 1000, 1001 ~ 4000)	
MOTOR	Spindle drive motor	22 / 26kW	
	Feed drive motor	X:53, Y:30, Z:53Nm	X:75, Y:30, Z:75Nm
WEIGHT	Approx. machine net weight	25 / 28ton	31 / 34ton

RTW1350 / 1500



Boring Spindle Ø130-700(V軸) - Option



RTW [No Cover]

(*:STD)

DESCRIPTION		RTW1350	RTW1500
TABLE	Surface (L × W)	2000 × 2000mm* (OPT. 3000 × 2000)	
	T-slot	No.8 × 22mm H12, 1 × 22mm H7	
	Distance between T-slot	200mm	
	Max. permissible load	15* / 20 ton	
	Table auto indexing, Continuous	0.001° (C: 4rpm)	
TRAVEL	Longitudinal (X)	3000 / 4000 / 5000mm	
	Cross (Y-Ram)	1350 / 1500mm	
	Cross (W-Columm)	1500 / 2000mm	
	Vertical (Z)	1600 / 2000 / 2500mm	
FEED	Axis feed rate	X, Y, Z: 8000, W: 5000mm/min	
	Rapid feed rate	X, Y, Z: 16000, W: 10000mm/min	
SPINDLE	Taper	ISO#50, DIN69871	
	Speed	4000rpm, 2steps (0~1000, 1001~4000)	
MOTOR	Spindle drive motor	22 / 26, 30 / 37kW (OPT.)	
	Feed drive motor	X: 75, Y: 30, Z: 53, C: 75, W: 53 / 75Nm	
WEIGHT	Approx. machine net weight	40 ~ 60ton	

TRAX / HiTRAX-U / HiTRAX-H

LMG

Box Way

Box Way



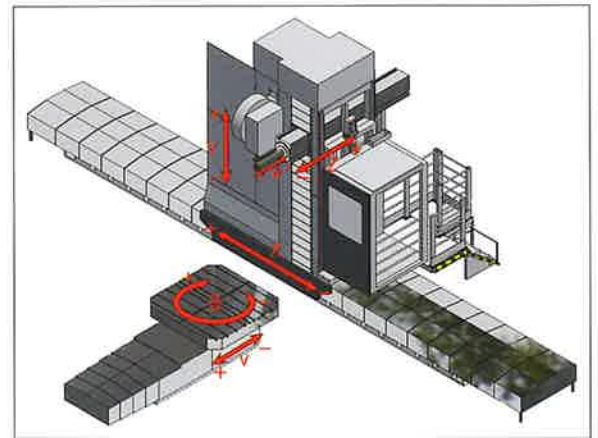
TRAX

(*:STD)

DESCRIPTION		TRAX	HITRAX-U	HITRAX-H
TRAVEL	Longitudinal (X)	4000 / 5000 ~ 10000mm	6000 / 8000 / 10000 / 12000 ~ 20000mm (X)	
	Cross (Y-Ram)	1000 / 1200 / 1350mm	U : 1350 / 1500(Y) / H : 1250mm(Z)	
	Vertical (Z)	1300 / 1600 / 2000mm	2500 / 3000 / 3500mm	2500 / 3000 / 3500mm (Y)
	Cross (W-Boring)	-	-	700(Ø130)mm (W)
FEED	Axis feed rate	10000mm/min		
	Rapid feed rate	25000mm/min	18000mm/min	
SPINDLE	Taper	ISO#50, DIN69871		
	Speed	4000 / 5000rpm	4000rpm, 2steps (0 ~ 1000, 1001 ~ 4000)	2500rpm
MOTOR	Spindle drive motor	22 / 26*, 30 / 37kW		37 / 45, 45 / 55kw
	Feed drive motor	X : 2×30, Y : 30, Z : 40Nm	X : 2×53, Y : 30, Z : 53, W : 30Nm	
WEIGHT	Approx. machine net weight	1000LT : 22 / 25 / 28 ~ 43ton 1200LT : 25 / 28 / 31 ~ 46ton	40 ~ 90ton	



HITRAX - U



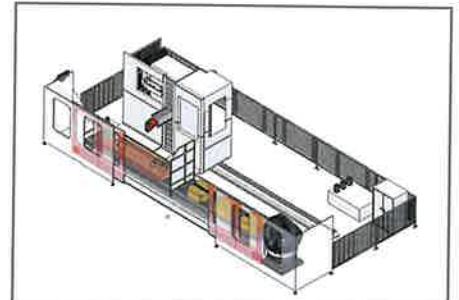
STD : Boring Spindle \varnothing 130-700(W)
OPT : Boring Spindle \varnothing 160-800(W)

HITRAX - H

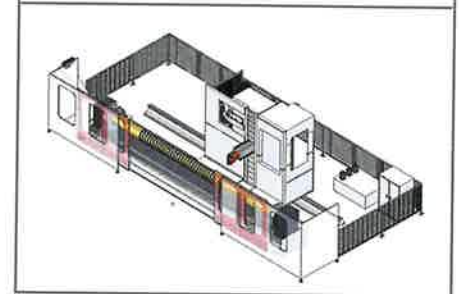
RiGiTRAX

Moving column design for shuttle operation

Moving column performs 2(two) work-spaces. One work-space for machining, the other work-space for setting. Using the quickly installed work-space partition, the work piece can be divided easily for shuttle operation.



Moving column design for long work piece



(*:STD)

DESCRIPTION		RiGiTRAX
TABLE	Surface (L × W)	6000 / 8000 / 10000 / 12000 × 1150* / 1300mm
	Height	1050mm
	T-slot	No.9 / 10 × 22mm
	Distance between T-slot	125mm
	Max. permissible load	15000kg
TRAVEL	Longitudinal (X)	4000 / 6000 / 8000 / 10000mm
	Cross (Y-Ram)	1350* / 1500mm
	Vertical (Z)	1600* / 2000mm
FEED	Axis feed rate	8000mm/min
	Rapid feed rate	16000mm/min
SPINDLE	Taper	ISO#50, DIN69871
	Speed	4000rpm, 2steps (0 ~ 1000, 1001 ~ 4000)
	Spindle drive Motor	22 / 26kW, 30 / 37kW (Opt)
WEIGHT	Approx. machine weight	46 / 50 / 54 / 58 ton

WINGTRAX

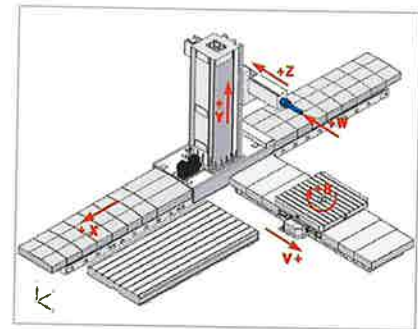
Milling and boring center

Column Travel Milling and Boring Center
X=6000~20000mm, Y=4000~6500mm, Z=1250~1600mm,
W=800mm/1000mm



Boring spindle

WINGTRAX is equipped with $\varnothing 160$ / $\varnothing 180$ mm boring spindle with 800 / 1000mm travel.
Ram 1250mm(※ 1600mm, OPT) + Boring spindle 800 / 1000mm = 2050 / 2600mm travel.
High milling and boring performance can be achieved with the excellent ram geometry and elaborately guided boring spindle.

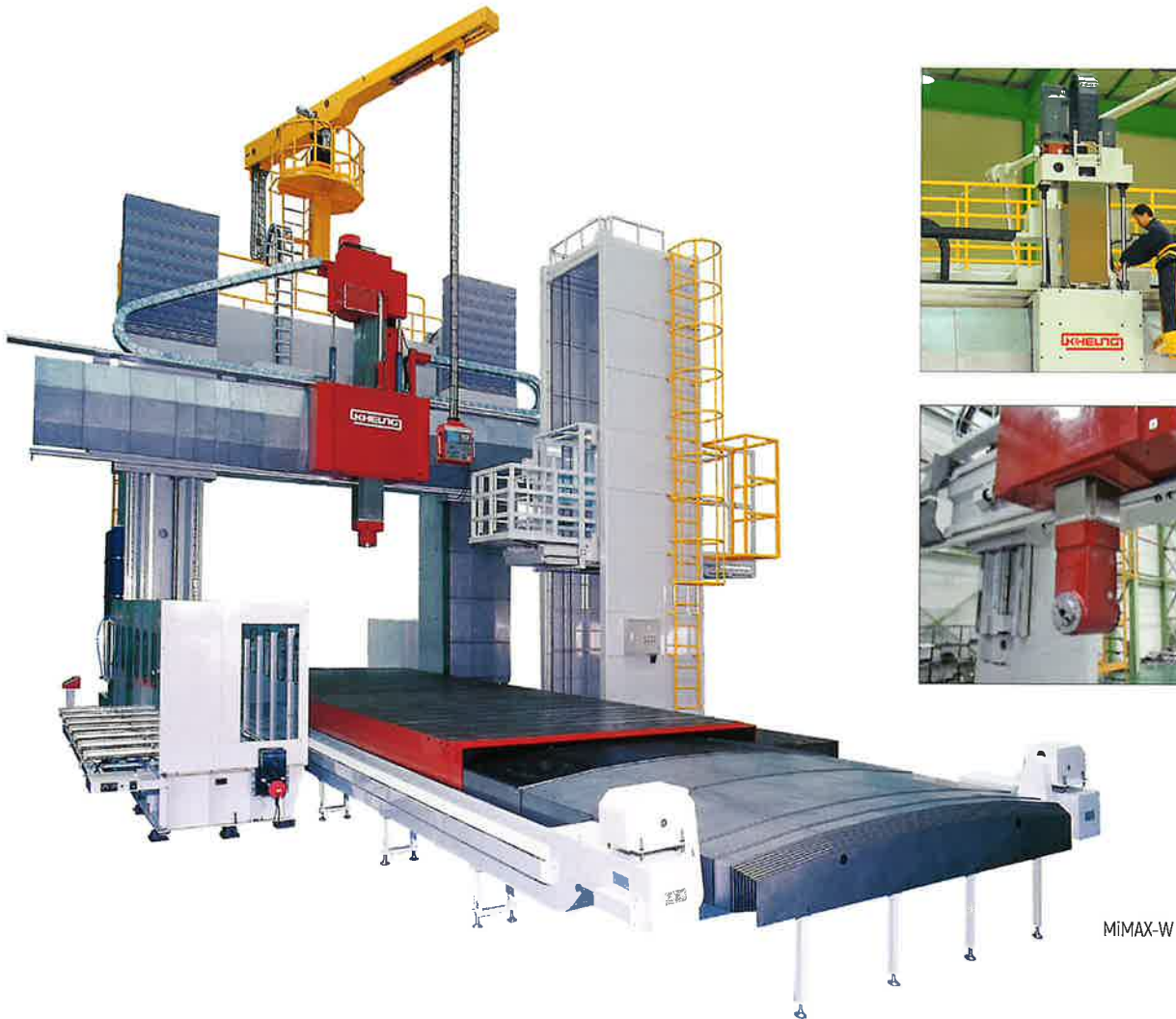


WINGTRAX
(Opt : Head Change Station)

DESCRIPTION		WINGTRAX
TRAVEL	Longitudinal (X)	6000 / 8000 / 10000 / 12000 ~ 20000mm
	Vertical (Y-Head)	4000 ~ 6500mm
	Cross (Z-Ram)	1250mm (※ 1600mm. OPT)
	Cross (W-Bor)	800 / 1000 ($\varnothing 160$ / $\varnothing 180$)mm
FEED	Axis feed rate	10000mm/min
	Rapid feed rate	16000mm/min
SPINDLE	Taper	ISO#50, DIN69871
	Speed	2000rpm (1 ~ 750, 751 ~ 2000)
	Spindle drive Motor	45 / 55, 60 / 84kW (Opt)
WEIGHT	Approx. machine weight	40 ~ 90ton

※ Special Requiement : Incase of Z1600, desch spindle motor (built-in type)

MiMAX-W / MiMAX-V / -U



MiMAX-W

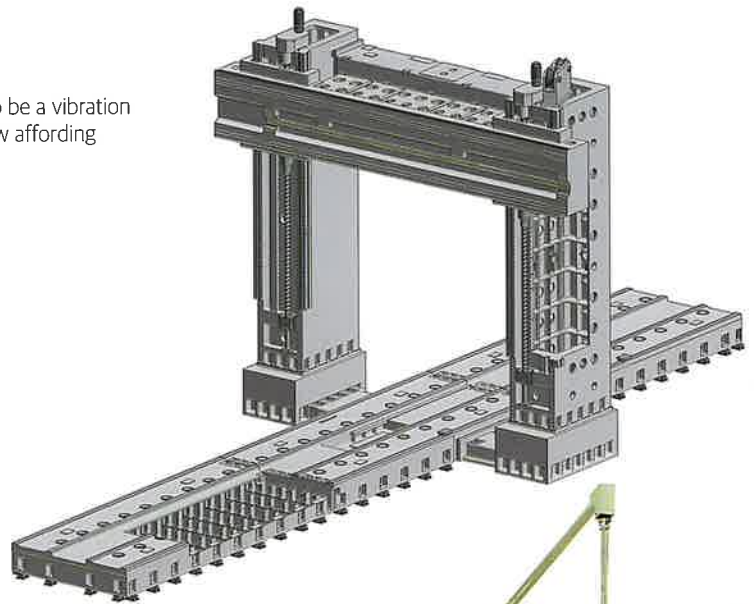
DESCRIPTION		MiMAX-W	MiMAX-V / -U
Distance between columns		2500 / 3000 / 3500 / 4000 / 4500 / 5000mm	3500 / 4500mm
Distance between table and vertical spindle		2000 / 2500 / 3000 / 3500 / 4000 / 4500 / 5000mm	1200 / 1600mm
TRAVEL	Longitudinal (X)	3000 ~ 25000mm	6300 / 8300 / 10300mm
	Cross (Y)	3000 / 3500 / 4000 / 4500 / 5000 / 5500 / 6000mm	4500 / 5500mm
	Ram (Z)	1000 / 1200 / 1600 / 2000mm	1200 / 1600mm
	Crossrail (W)	1500 / 2000 / 2500 / 3000 / 3500 / 4000 / 4500mm	-
Table size (Width × Length)		(2000 ~ 4500) × (3000 ~ 25000)mm	(2700 / 3500) × (6000 / 8000 / 10000)mm
Max. permissible load		30 ~ 300ton	15 ~ 30ton
Spindle speed		2000 / 3000 / 6000 / 10000rpm	V: 6000 / U: 3000rpm
Spindle drive motor		22 / 26, 30 / 37, 60 / 80kW	22 / 26, 30 / 37kW
Rapid feedrate	X axis	10000 / 15000 / 20000mm/min	20000mm/min
	Y axis	10000 / 15000 / 20000mm/min	20000mm/min
	Z axis	5000mm/min	20000mm/min
	W axis	5000mm/min	-
Feedrate	X, Y, Z, W axis	5000mm/min	
ATC (ea)		40 / 60 / 90 / 120	40 / 60 / 90
Machine weight		35 ~ 350ton	60 ~ 110ton

Accuracy/Rigidity

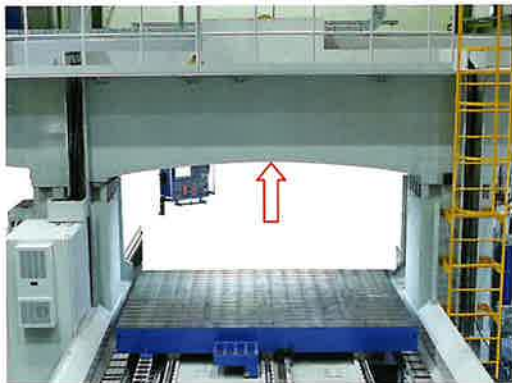
Kiheung has our own powerful rigidity structure of cast iron which is to be a vibration damping system and precisely grounded-hardened Column which allow affording either heavy duty rough operation as well as accurate finishing.



Longitudinal X-axis movement is with Rack and Pinion system for "Dynamic and smooth movement", and heavy workpiece without stick-slip.



Arch shaped cross rail prevents crossrail up/down according to the Ram/Saddle position (left, right, center).

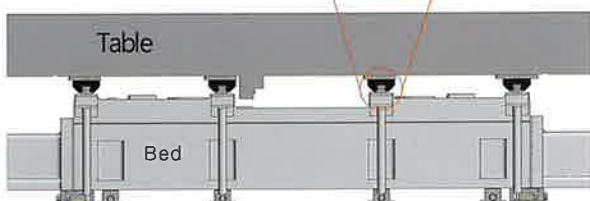


MiMAX-W

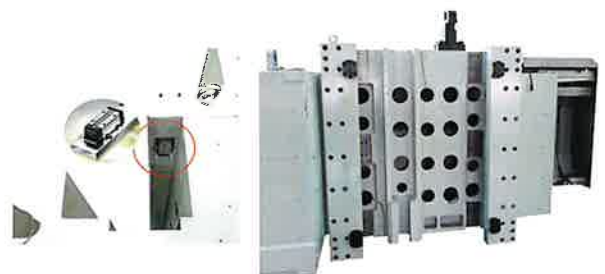
LM Block
LM Guide



Strong Bed and Table



High rigidity INA Roller LM Guide way



TM1400 / TRT1400 / UBM130

Universal milling machine

Milling / boring machine

Universal Head K5 (OPT.)



Universal head consisting of up head and low head can be turned to the desired angle, which is suitable for combined angle milling.

- Automatic 144x144 / 144x360 / 360x360 positioning indexing.
- Tool shank ISO50 DIN69871. Pull stud DIN69872 / BT CAT.
- Oil cooling (No grease) for rotating part inside of head.
- Head Clamp/Unclamp by mechanical (spring).
- Air purge to prevent chips and water.
- Spindle orientation and Air through spindle.



TM1400 : Plane table
TRT1400 : Rotary table



UBM130 Horizontal Boring Machine

(*:STD)

Machine Specification		TM1400	TRT1400	UBM130
TABLE	Surface (long)	2200* / 2700 / 3200mm		R1600 x 1400*mm
	Surface (width)	1000mm		R1800 x 1400mm
	T-slot, distance	No.6 x 22mm, 125mm		No.9 x 22, 125mm
	Max. permissible load	10000kg		8000kg
TRAVEL	Longitudinal (X)	2000* / 2500 / 3000mm		2500* / 3000mm
	Cross (Y)	1400mm		1500mm (Y, Vertical)
	Boring head (W)	-		500mm(Ø130 Boring)
	Vertical (Z)	1500mm		1400mm (Z, Cross)
FEED	Axis feed rate		10000mm/min	
	Rapid feed rate		25000mm/min	
ROTARY TABLE		-		0.001° (C: 4rpm)
SPIINDLE	Taper	ISO#50, DIN69871		
	Speed	4000rpm, 2steps (0~1000, 1001~4000)		2500rpm, 2steps(Ø130)
MOTOR	Spindle drive motor	22 / 26kW		30 / 37kW
	Feed drive motor	X: 30, Y: 40, Z: 30, B: 53Nm, W(Boring head) : 40Nm		
WEIGHT	Approx. machine net weight	22 / 24 / 26ton	24 / 26 / 28ton	27 / 30ton

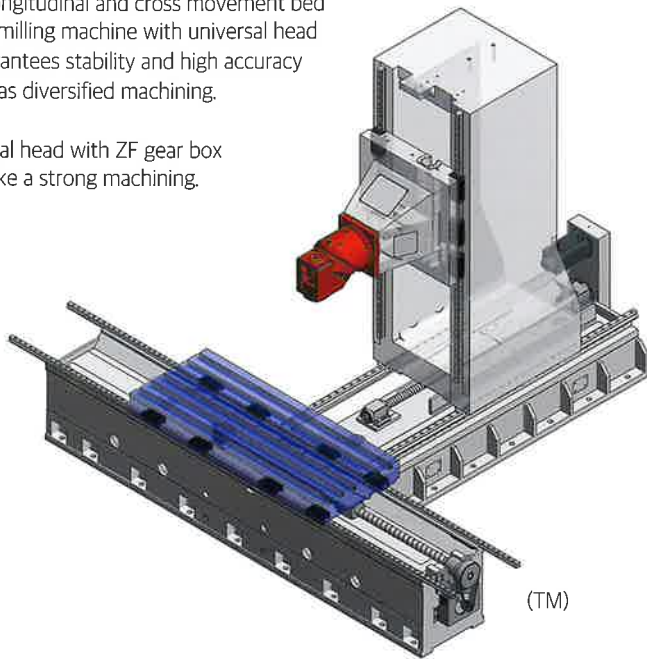


Rotary Table (TRT)

- Table longitudinal and cross movement bed type T-milling machine with universal head K5 guarantees stability and high accuracy as well as diversified machining.
- Universal head with ZF gear box can make a strong machining.



Boring Spindle $\varnothing 130-500(W)$
(UBM130)



BED for Table

Heavily ribbed GG30 cast iron BED for Table with Linear guide way distance 600mm and 8ea of 45mm roller shoes support the table strongly.

Bed for Column

Heavily ribbed GG30 cast iron BED for Column with Linear guide way distance 800mm and 8ea of 65mm roller shoes support the Column strongly.



- With the Universal head, Easy approach and Flexible work piece, this machine is reliable and suitable for a variety of applications.

Hydraulic balance



With cylinder and accumulator for high accuracy of Z axis.

UM 800 / 1050 / 1400 / 1700



UM 800 (Full Enclosure)

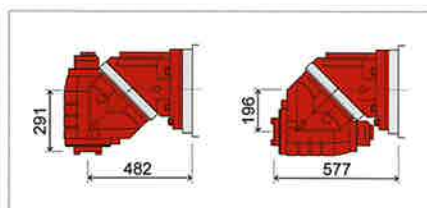
(*:STD)

DESCRIPTION		UM 800	UM 1050
TABLE	Surface	2000 × 750mm	2660* / 3140 × 1100mm
	Max. permissible load	3000kg	4000kg
TRAVEL	Longitudinal (X)	1800mm	2300* / 2800mm
	Cross (Y)	800mm	1050mm
	Vertical (Z)	900 mm	1000mm
FEED	Axis feed rate	10000mm/min	5000mm/min
	Rapid feed rate	X, Y: 16000, Z: 12000mm/min	10000mm/min
SPINDLE (STD : A2 Head)	Taper	ISO#50, DIN69871	
	Speed	4000rpm, 2steps (0~1000, 1001~4000)	
	Spindle drive motor	18.5 / 22kW	22 / 26kW
	Distance from column to vertical spindle center	805	1070
	Distance from column to horizontal spindle nose	900	1165
ATC	Vertical (ea)	24	
	Max. tool length	350mm	
	Max. tool when adjacent tool present	Ø110mm	
	Max. tool when adjacent tool absent	Ø200mm	
WEIGHT	Approx. machine net weight	15ton	19 / 21ton

• A2 Head



In-line Coupled Structure



(UM800/ UM1050 / UM1400 / UM1700)



Because of the movable ATC with 500mm the big workpiece can be setted.
(UM 1050 / 1400 / 1700)

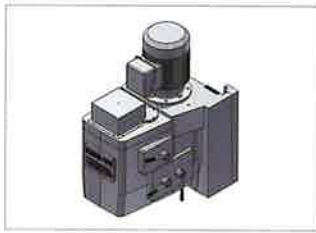


UM 1700 [Table Cover]

(*:STD)

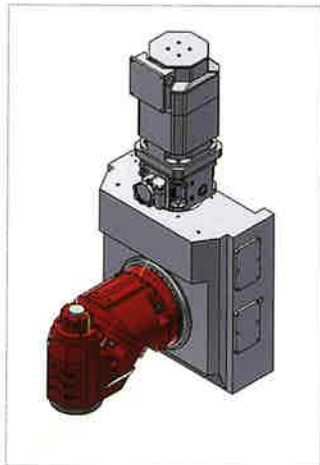
	DESCRIPTION	UM 1400	UM 1700
TABLE	Surface	3140* / 3600 × 1100mm	3800* / 4300 × 1400mm
	Max. permissible load	4000* / 5000kg	5000* / 6000kg
TRAVEL	Longitudinal (X)	2800* / 3400mm	3500* / 4000mm
	Cross (Y)	1400mm	1700mm
	Vertical (Z)	1200mm	1300mm
FEED	Axis feed rate	5000mm/min	
	Rapid feed rate	10000mm/min	
SPINDLE (STD : A2 Head)	Taper	ISO#50, DIN69871	
	Speed	4000rpm, 2steps (0~1000, 1001~4000)	
	Spindle drive motor	22 / 26kW	
	Distance from column to vertical spindle center	1310	1620
	Distance from column to horizontal spindle nose	1405	1715
ATC	Vertical (ea)	24* / 30 (UM 1700)	
	Max. tool length	350mm	
	Max. too when adjacent tool present	Ø110mm	
	Max. tool when adjacent tool absent	Ø200mm	
WEIGHT	Approx. machine net weight	26 / 30ton	38 / 42ton

COMBI-U50N / U60N / U80N / U100N



- STD. V-Head (OPT)

Table Cover



- Opt Spindle Motor / 2 step GB

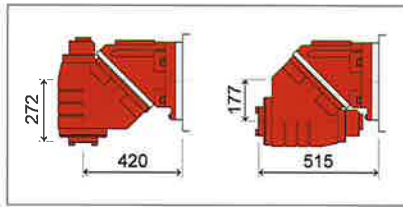
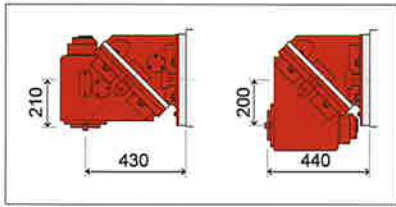


COMBI-U60N

COMBI-U Series are designed as economic CNC machine with 12step manual gear change for spindle and 3 axis separate movement with CNC.

• M Head (1600rpm)

• M Head (4000rpm)



(*:STD)

DESCRIPTION		COMBI-U50N	COMBI-U60N
TABLE	Working surface (length×width)	2000 × 530mm	2200 × 550mm
	T-slots (number×width)	5 × 20mm	5 × 20mm
	Distance between T-slots	80mm	80mm
	Max. permissible load	2000kg	3000kg
TRAVEL	Longitudinal travel (X)	1400mm	1600mm
	Cross travel (Y)	600mm	710mm
	Height from table to vertical spindle nose	650 (40 ~ 690)mm	700 (50 ~ 750)mm
FEED	Axes feedrate	4000mm/min	
	Rapid feed	8000mm/min	
SPINDLE (STD : M Head (1600rpm))	Taper	ISO#50	
	No. of spindle speeds (Manual)	12* (Opt. 2단 GB)	
	Speed	40 ~ 1600*rpm / 4000rpm	
	Distance from column to vertical spindle center	570mm	700mm
	Distance from column to horizontal spindle nose	580* / 665mm	710* / 795mm
MOTOR	Spindle drive motor	11kW* (15 / 18.5kW)	
	Coolant pump motor	180W	
	Lubrication pump motor	0.1kW	
	Hydraulic tool clamping motor	0.75kW	
Approx. machine net weight		6000kg	7500kg
Floor space (width × length × height)		4660 × 2525 × 2700mm	4760 × 2720 × 3050mm

DESCRIPTION		COMBI-U80N	COMBI-U100N
TABLE	Working surface (length×width)	2700 × 750mm	3300* / 3900 × 950mm
	T-slots (number×width)	5 × 22mm	6 × 22mm
	Distance between T-slots	120mm	
	Max. permissible load	4000kg	5000kg
TRAVEL	Longitudinal travel (X)	2000mm	2600* / 3200mm
	Cross travel (Y)	1000mm	1050mm
	Height from table to vertical spindle nose (Z)	870 (-20 ~ 850)mm	920 (-20 ~ 900)mm
FEED	Axes feedrate	4000mm/min	
	Rapid feed	8000mm/min	
SPINDLE (STD : M Head (1600rpm))	Taper	ISO#50	
	No. of spindle speeds	12* (Opt. 2단 GB)	
	Speed	40 ~ 1600rpm* / 4000rpm	
	Distance from column to vertical spindle center	900	950
	Distance from column to horizontal spindle nose	910* / 995	960* / 1045
MOTOR	Spindle drive motor	15kW*(18.5 / 22kW)	
	Coolant pump motor	180W	
	Lubrication pump motor	0.1kW	
	Hydraulic tool clamping motor	0.75kW	
Approx. machine net weight		15000kg	20000 / 25000kg
Floor space (width × length × height)		5900 × 3750 × 3400mm	7800 / 9300 × 4150 × 3450mm

KMB-U5 / U6 / U7 / U9



KMB-U5



KMB-U6

DESCRIPTION		KMB-U5	KMB-U6
TABLE	Table size (length×width)	2000 × 530mm	2200 × 550mm
	T-slots (number×width)	5 × 20mm	
	Distance between T-slots	80mm	
	Max. permissible load	2000kg	3000kg
TRAVEL	Longitudinal travel	1400mm	1600mm
	Cross travel	600mm	710mm
	Height from table to vertical spindle nose	40 ~ 690mm	50 ~ 750mm
	Height from table to horizontal spindle center	50 ~ 700mm	60 ~ 760mm
FEED	Axes feedrate	X, Y	2000mm/min
		Z	1000mm/min
	Rapid feedrate	X, Y	5000mm/min
		Z	2500mm/min
SPINDLE	Taper (7/24)	ISO#50	
	No. of spindle speeds	12	
	Speed	40 ~ 1600rpm	
	Distance from column to vertical spindle center	570mm	650mm
	Distance from column to horizontal spindle nose	580mm	660mm
MOTOR	Spindle drive motor	7.5kW	11kW
	Feed drive motor (Siemens)	3.3kW	
	Coolant pump motor	0.1kW	
	Hydraulic tool clamping motor	0.75kW	
Approx. machine net weight		7000kg	8000kg
Floor space (width × length × height)		4660 × 2525 × 2700mm	4760 × 2720 × 3050mm



KMB-U7

KMB-U9

DESCRIPTION		KMB-U7	KMB-U9
TABLE	Table size (length×width)	2700 / 3300 / 3900 × 750mm	2700 / 3300 / 3900 × 950mm
	T-slots (number×width)	5×22mm	6 × 22mm
	Distance between T-slots	120mm	
	Max. permissible load	4000kg	5000kg
TRAVEL	Longitudinal travel	2000 / 2600 / 3200mm	
	Cross travel	1000mm	1050mm
	Height from table to vertical spindle nose	-20 ~ 850mm	-20 ~ 900mm
	Height from table to horizontal spindle center	-10 ~ 860mm	-10 ~ 910mm
FEED	Axes feedrate	X, Y	2000mm/min
		Z	1000mm/min
	Rapid feedrate	X, Y	5000mm/min
		Z	2500mm/min
SPINDLE	Taper (7/24)	ISO#50	
	No. of spindle speeds	12	
	Speed	40 ~ 1600rpm	
	Distance from column to vertical spindle center	900mm	950mm
	Distance from column to horizontal spindle nose	910mm	960mm
MOTOR	Spindle drive motor	15kW	
	Feed drive motor (Siemens)	3.3kW	
	Coolant pump motor	0.18kW	
	Hydraulic tool clamping motor	0.75kW	
Approx. machine net weight		15000 / 16000 / 17000kg	17000 / 20000 / 22000kg
Floor space (width × length × height)		5900 / 7800 / 9300 × 3750 × 3400mm	6300 / 7800 / 9300 × 4150 × 3450mm

KIHEUNG machine Line-up

■ Bed type



UM800 (Opt. Top Cover)

X (Longitudinal)	Y (Cross/table)	Z (Vertical)
1800mm	800mm	900mm



UM1050 / 1400

X (Longitudinal)	Y (Cross/table)	Z (Vertical)
2300* / 2800 / 3400mm	1050 / 1400mm	1000 / 1200mm



TM1400 / TRT1400

X (Longitudinal)	Y (Cross/column)	Z (Vertical)
2000 / 2500 / 3000mm	1400mm	1500mm

TRT : RT*1600x1400 / RT1800x1400



U1050N

X (Longitudinal)	Y (Cross/ram)	Z (Vertical)
2000 ~ 3000mm	1050mm	1300 / 1600mm



U1250N

X (Longitudinal)	Y (Cross/ram)	Z (Vertical)
3000 ~ 5000mm	1250 mm	1600 / 2000mm



U1000LT / U1200LT (Opt. Top Cover)

X (Longitudinal)	Y (Cross/ram)	Z (Vertical)
2000 ~ 5000mm	1000 / 1200mm	1300 ~ 2000mm



RT1050N / RT1250N

X (Longitudinal)	Y (Cross/ram)	Z (Vertical)
2500~4000mm	1050 / 1250mm	1450 / 1850mm

RT 1400x1200 / RT 1800x1400



U1350 / U1500

X (Longitudinal)	Y (Cross/ram)	Z (Vertical)
3000 ~ 5000mm	1350 / 1500mm	1600 / 2000mm

■ Column travel



TRAX

X (Longitudinal)	Y (Cross/ram)	Z (Vertical)
4000~10000mm	1000 / 1200 / 1350mm	1300 / 1600 / 2000mm



RTW-LT / RTW

X (Longitudinal)	Y (Cross/ram)	W (Cross/column)	Z (Vertical)
3000~5000mm	1200 / 1350 / 1500mm	1200 / 1500 / 2000mm	1600 / 2000mm

RT 2000 x 2000* (Opt. 3000 x 2000)



HiTRAX-H / HiTRAX-U

X (Longitudinal)	Y (Cross/ram)	Z (Vertical)	W (Quill)
6000~20000mm	1200 / 1350 / 1500mm	2500~3500mm	700mm



RiGiTRAX

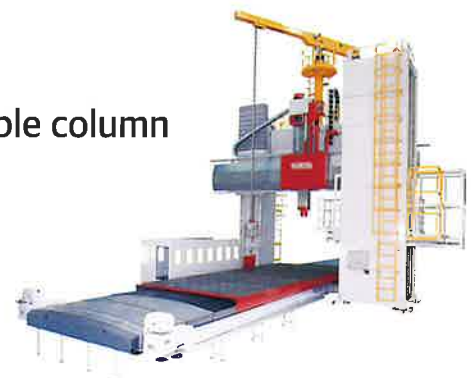
X (Longitudinal)	Y (Cross/ram)	Z (Vertical)
4000~10000mm	1350 / 1500mm	1600 / 2000mm



WiNGTRAX

X (Longitudinal)	Y (Vertical)	Y (Cross/ram)	W (Quill)
6000~20000mm	4000~6500mm	1250~1600mm	800 / 1000mm

■ Double column



MiMAX-W / MiMAX-U

X (Longitudinal)	Y (Cross)	Z (Vertical/ram)	W (Vertical/crossrail)
3000~25000mm	3000~6000mm	800~2000mm	1500~4500mm

■ Conventional maunal



KMB-U5 / U6 / U7 / U9

	(Unit : mm)			
	U5	U6	U8	U9
X (Longitudinal)	1400	1600	2000 / 2600 / 3200	
Y (Cross/table)	600	710	1000	1050
Z (Vertical)	650	700	870	920

※ The contents of the catalogue are subject to change without notice.



KIHEUNG MACHINERY CO.,LTD

11, Munpyeongseo-ro 17beon-gil, Daedeok-gu, Daejeon, Korea

TEL: 82-42-933-5500~4 | FAX:82-42-933-5505 | Web: www.kiheung.com