

# Centek 481-AE

**HOLYTEK**  
The Name in Creative Woodworking

## MOVING BRIDGE TYPE CNC MACHINING CENTER

### FEATURES

- ◆ One spindle, one tool magazine + 7 vertical 2 horizontal line boring head
- ◆ Working table: 1220x2440mm
- ◆ Drum type auto. tool change system. Tool magazine capacity 8 tools. Tool change time only 8 seconds. (12 tools is optional).
- ◆ Two guide ways ,double sides driving structure, features better overall economy .
- ◆ Laser light curtain system, provides safety protection.
- ◆ Vacuum table area can be divided into two vacuum zones. When one zone is machining, the other zone can be fed material simultaneously. (optional)
- ◆ Full sheet of board can be processed directly , not needing prior sawing. This saves making moulds.
- ◆ Suitable for machining complex parts of various types and in small quantities.
- ◆ Typical applications: cabinet doors, solid wood doors, computer desks and panel type furniture, etc.



### SPECIFICATIONS

Model	TABLE	Max. working stroke					
	Table size	X axis	Y axis	Z axis	Spindle elevation	Workpiece height	Pneumatic boring head lifting
481-AE	1220x2440mm (4x8ft)	2640mm (8.66ft)	2520mm (4.99ft)	250mm (0.82ft)	150mm (5.9ft)	Max.200mm (7.87")	150mm (5.9")
481-A	1220x2440mm (4x8ft)	2640mm (8.66ft)	2520mm (4.99ft)	250mm (0.82ft)	150mm (5.9ft)	Max.200mm (7.87")	150mm (5.9")



### FEATURES

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- ◆ Working table: 1220x2440mm
- ◆ Drum type auto. tool change system. Tool magazine capacity 8 tools. Tool change time only 8 seconds. (12 tools is optional).
- ◆ Three guide ways ,one side driving structure, features heavy duty cutting.
- ◆ Vacuum table area can be divided into two vacuum zones. When one zone is machining, the other zone can be fed material simultaneously. (optional)
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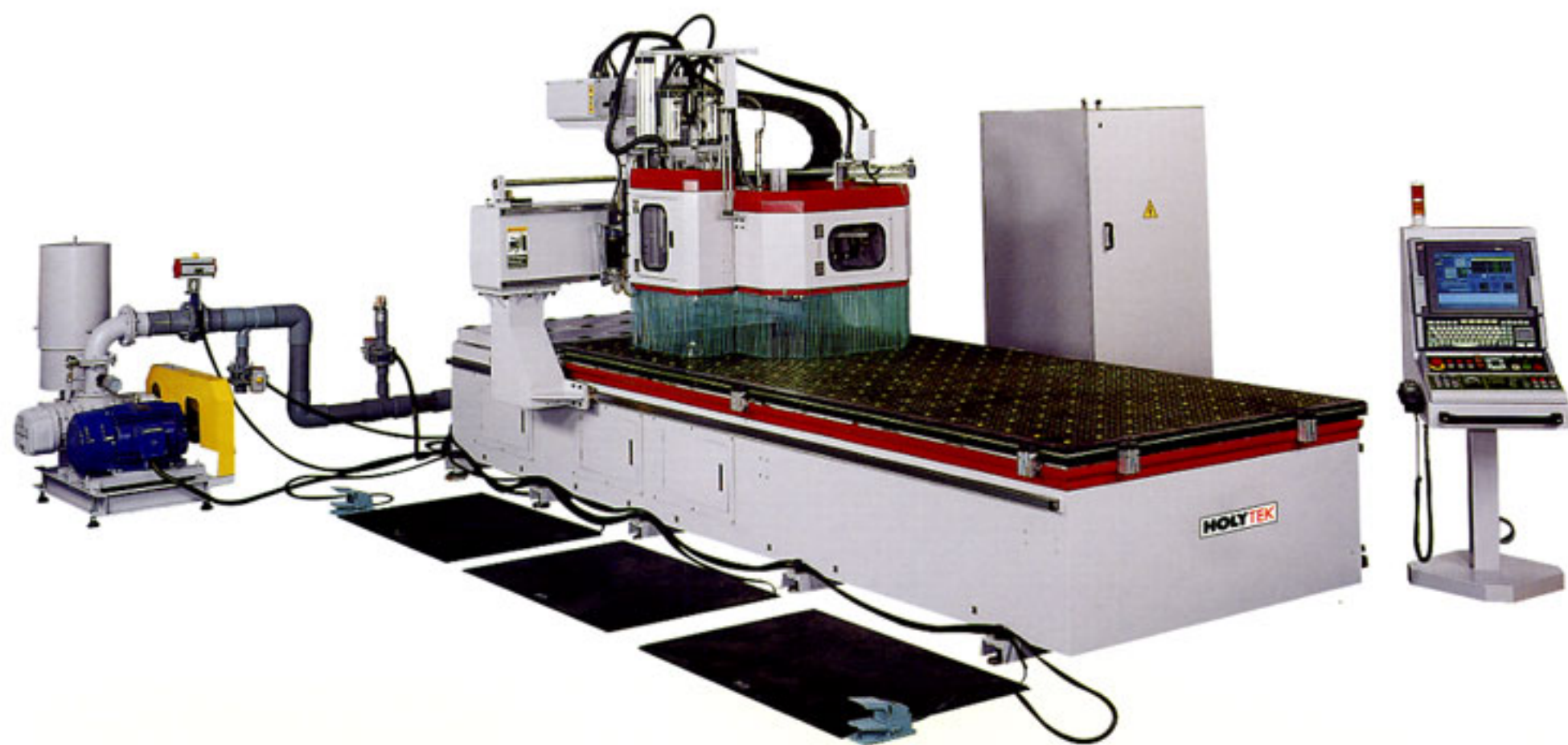


Rapid speed		Spindle	Main power		Dimensions
X, Y Axis	Z Axis	Spindle speed	Spindle motor	Vacuum pump	Overall dimensions of machine (L x W x H)
60M/min (196.85ft/min)	20M/min (65.62ft/min)	1000 ~ 24000rpm	11HP(8kw)x1 HSD	10HP (7.5kw)	3400x3000x2300mm (11.15x9.84x75.46ft)
60M/min (196.85ft/min)	20M/min (65.62ft/min)	1000 ~ 24000rpm	11HP(8kw)x1 HSD	10HP (7.5kw)	3500x1900x2300mm (11.48x6.23x75.46ft)



### FEATURES

- ◆ One spindle, one tool magazine + 7 vertical 2 horizontal line boring head
- ◆ Working table: 1550x3050mm
- ◆ Drum type auto. tool change system. Tool magazine capacity 8 tools. Tool change time only 8 seconds. (12 tools is optional).
- ◆ Three guide ways ,one side driving machine structure, features heavy duty cutting.
- ◆ Electronic Safety Mat equipment provides safety protection during machining.
- ◆ Vacuum table area can be divided into two vacuum zones. When one zone is machining, the other zone can be fed material simultaneously. (optional)
- ◆ Full sheet of board can be processed directly , not needing prior sawing by other machine. This saves making moulds.
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### SPECIFICATIONS

Model	TABLE Table size	Max. working stroke					
		X axis	Y axis	Z axis	Spindle elevation	Workpiece height	Pneumatic boring head lifting
5101-A	1550x3050mm (5.09x10ft)	3250mm (10.66ft)	1850mm (6.07ft)	250mm (0.82ft)	150mm (5.9ft)	Max.200mm (7.87")	Max.150mm (7.87")
5121-A	1550x3650mm (5.09x11.98ft)	3850mm (12.63ft)	1850mm (6.07ft)	250mm (0.82ft)	150mm (5.9ft)	Max.200mm (7.87")	Max.150mm (7.87")



### FEATURES

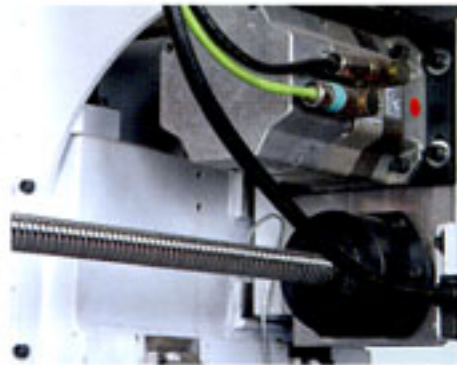
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Rapid speed		Spindle	Main power		Dimensions
X, Y Axis	Z Axis	Spindle speed	Spindle motor	Vacuum pump	Overall dimensions of machine (L x W x H)
60M/min (196.85ft/min)	20M/min (65.62ft/min)	1000 ~ 24000rpm	11HP(8kw)x1 HSD	15HP (11.25kw)	4050x2200x2300mm (13.29x7.22x7.55ft)
60M/min (196.85ft/min)	20M/min (65.62ft/min)	1000 ~ 24000rpm	11HP(8kw)x1 HSD	20HP (15kw)	4650x2200x2300mm (15.25x7.22x7.55ft)

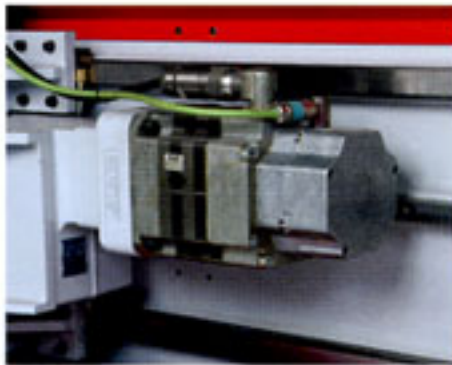


### MACHINE FEATURES



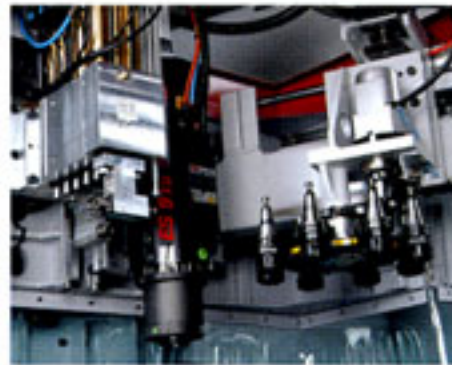
#### ROTATION TYPE BALL SCREW / NUT

- ◆ Repeatability accuracy  $\pm 0.05\text{mm/m}$
- ◆ Features maximum stability and no noise. Rapid traverse rate is up to 60m/min.



#### PRECISION BEVEL GEAR TRANSMISSION MECHANISM

- ◆ Positioning accuracy 0.02mm/m
- ◆ Features maximum stability and no noise. Rapid traverse rate of up to 60m/min.



#### PRECISION SPINDLE, TOOL MAGAZINE AND PNEUMATIC BORING UNIT

- ◆ The spindle runs in ceramic bearings featuring high temperature resistance, heavy duty machining, high speed and lubrication free.
- ◆ The drum type ATC is driven by a Genova wheel mechanism. Tool magazine carries 8 tools for selection.
- ◆ Various high speed line boring units for choice.



#### CNC CONTROLLER (Syntec-900)

- ◆ 10.4" TFT LED screen display
- ◆ Great memory capacity of 2GB
- ◆ Graphic display
- ◆ Chinese/English conversion
- ◆ RS-232 and DNC transmission function



#### VACUUM SUCTION SYSTEM

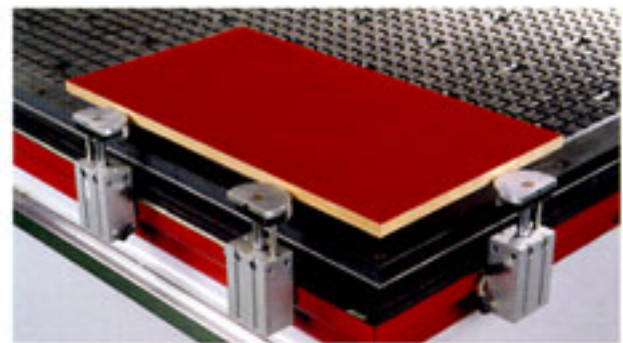
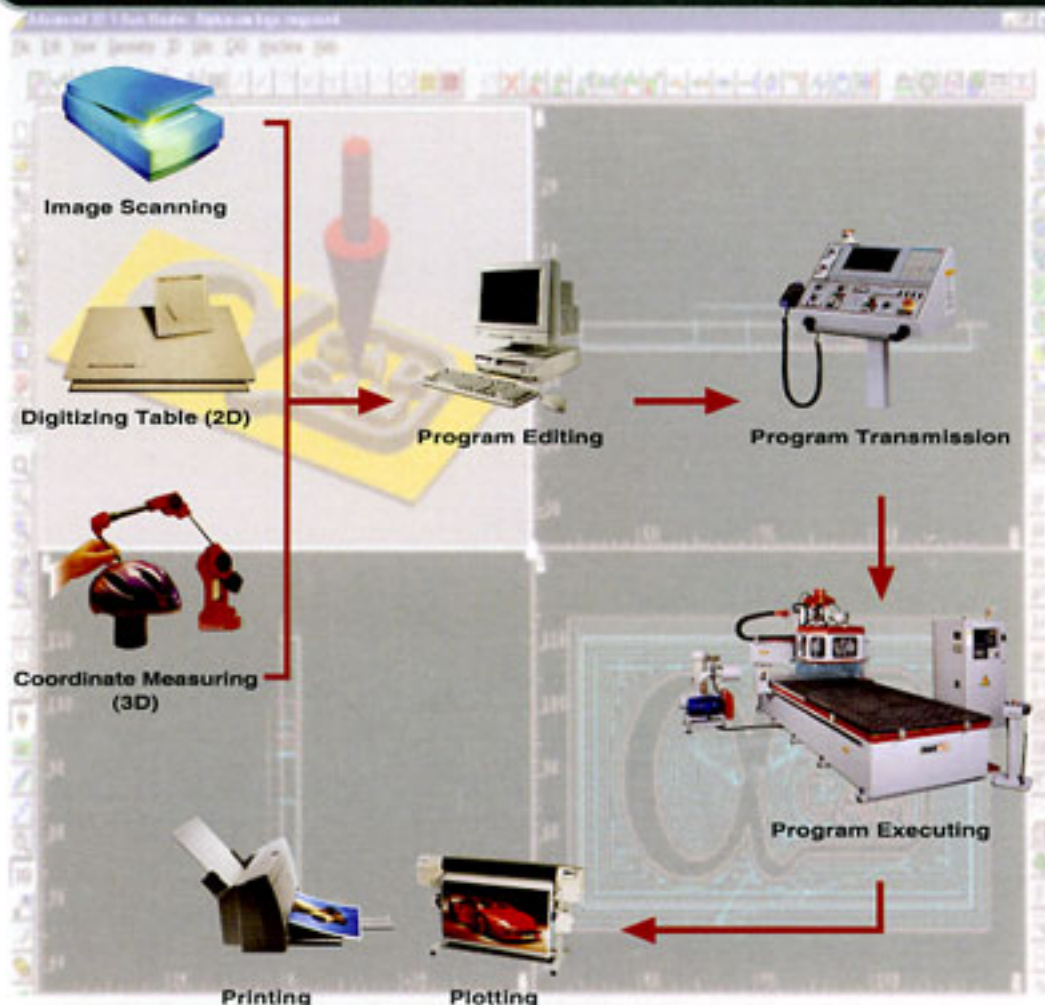
- ◆ Equipped with precision filter and check valve vacuum system ensuring long service life of pump.
- ◆ Great air exhaust capacity provides instant and secure suction on the workpiece.



#### PRECISION WATER REMOVAL DEVICE

- ◆ Outstanding water filtration efficiency up to 99.9% ensures long service life for all pneumatic components.

### PROGRAM EDITING PROCEDURES



#### WORKPIECE POSITION DEVICE

- ◆ The workpiece position device provides quick and precise workpiece positioning and lowers slanting amount of workpiece.



#### VACUUM SUCTION TABLE

- ◆ Special groove design vacuum table keeps stripes of foam rubber from falling off when board sheets move on the table. Also the fixing vacuum table may function by collocating moving vacuum pads.



## TYPICAL APPLICATIONS

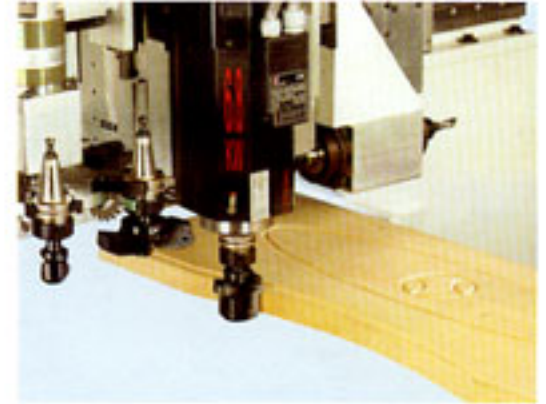
◆ kitchen and cabinet doors



◆ Pneumatic line boring



◆ Carving and milling



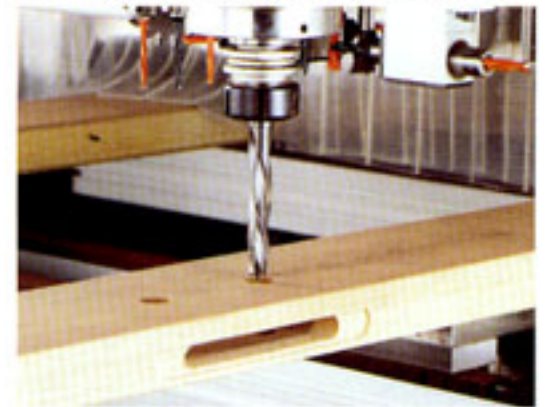
◆ SOLID WOOD DOORS



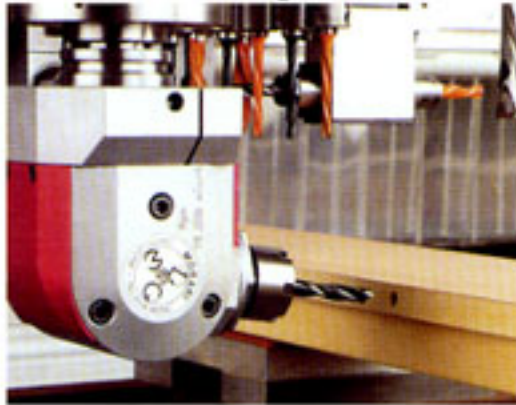
◆ Outside profile heavy machining



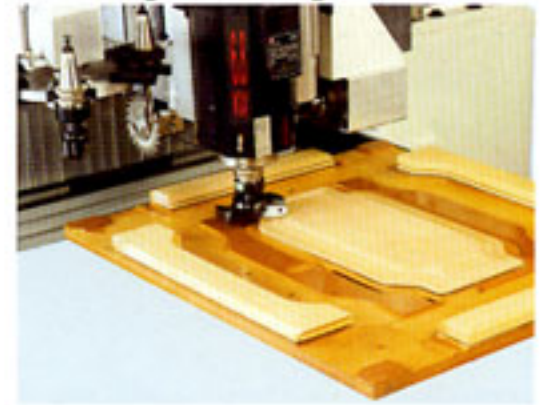
◆ Side milling and vertical boring



◆ Tilted side boring



◆ Sawing and milling



◆ SOLID WOOD STAIRS



◆ PROCESSING STAIR RAILING



◆ PROCESSING STAIR POST





## OPTIONAL ATTACHMENTS



**SIEMENS CNC Controller**  
◆ A German brand CNC control



**OSAI CNC Controller**  
◆ An Italian brand CNC control



**FANUC CNC Controller**  
◆ A Japanese brand CNC control



**C-Axis Rotation Mechanism**  
◆ May process any angle between 0° ~ 360° for side processing and saw cutting.



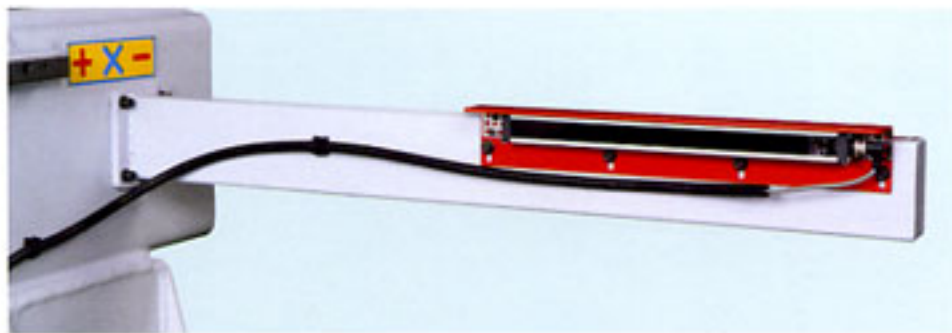
**B AXIS WORKPIECE ROTARY MACHINING DEVICE**  
◆ Suitable for revolving cylinder type workpieces and stair handrails.



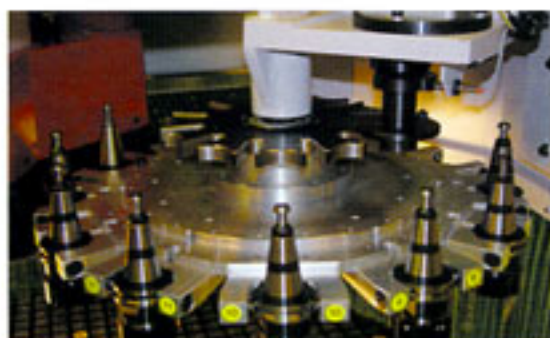
**MOVING VACUUM PAD**  
◆ It may fix on any position of the table to absorb workpiece, and prevents aggregates from colliding with working table.



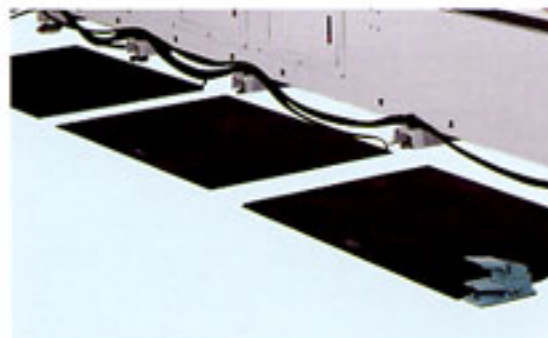
**ROLLER CONVEYOR TABLES IN FRONT AND BACK OF MACHINE AND FLOATING TABLE TOP SYSTEM**  
◆ This can eliminate downtime for parts changing and also full board sheets can move more easily.



**LASER LIGHT CURTAIN SAFETY SYSTEM**  
◆ It provides safety protection during operating.



**PRECISE ALUMINUM ALLOY TOOL MAGAZINE**  
◆ This can tightly and easily fix the configured aggregates for rapid moving.



**ELECTRONIC SAFETY MAT**  
◆ It provides safety protection during operating.



**SPINDLE COOLING SYSTEM & HIGH FREQUENCY SPINDLE**  
◆ The circulated forced cooling system permits the spindle running at a constant temperature at all times, ensuring long services life of bearings.



## VERSATILE SPINDLES



ATS Horizontal Side Sawing Spindle



ATRS Horizontal Side Milling and Sawing spindle



AT2R Double Sided Milling



AT4R 4-Side Horizontal Milling Spindle



OHR Universal Routing and Sawing Spindle



VFR Vertical Trimming Floating Spindle



LRT Square Saw Spindle



UTR Undersurface Trimming Head

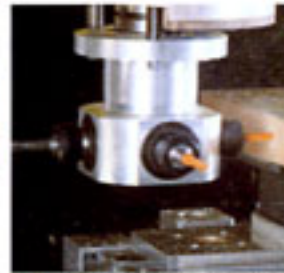
## VERSATILE MACHINING FUNCTIONS



◆ Profiled Planing  
◆ 曲線平刨加工



◆ Internal Square Angle Machining  
◆ 内部直角加工



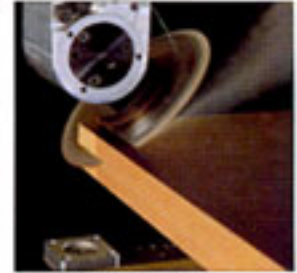
◆ Cross Side Boring  
◆ 十字側銼加工



◆ Bottom Milling  
◆ 倒立銼削加工



◆ Horizontal Side Milling  
◆ 橫向銼銑加工

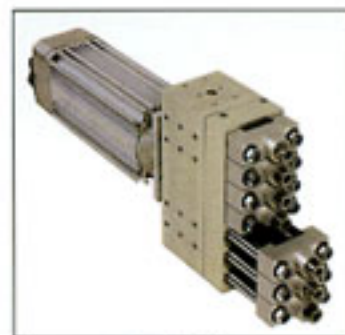


◆ Tilted Sawing  
◆ 傾斜鋸切加工

## PNEUMATIC LINE BORING AND SAWING ATTACHMENTS



Pneumatic Single Spindle Boring Head



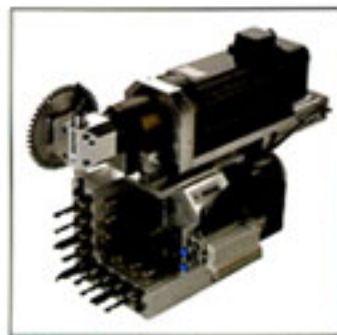
Pneumatic 7 Line Boring Head



Pneumatic Saw Head



Milling, Boring and Saw Combination Head



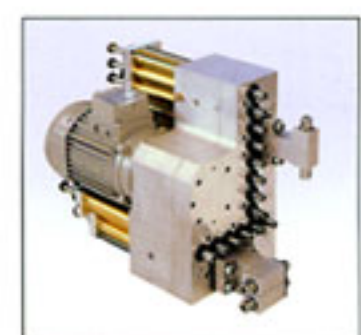
9 Vertical Boring and 1 Saw Combination Head



7 Vertical and 2 Horizontal Boring Head



9 Vertical and 4 Horizontal Boring Head



14 Vertical and 3 Horizontal Boring Head





# HOLYTEK

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