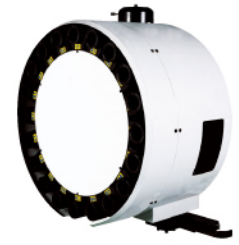


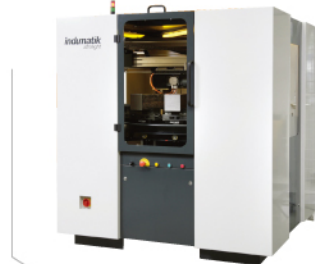
## OPTIONAL ACCESSORIES 可選配備



12000 rpm spindle  
12000轉高速主軸



Arm type ATC  
刀臂式換刀機構



Parts loader  
自動上下料裝置



Oil chiller  
油溫控制器



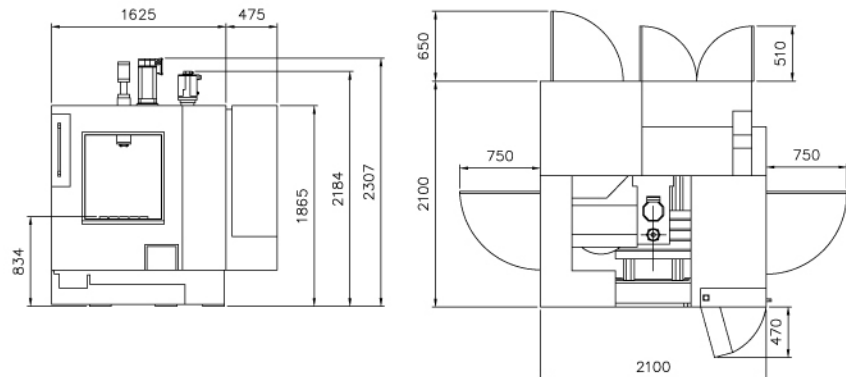
Chip conveyor with roller filter  
滾筒式鐵屑輸送機



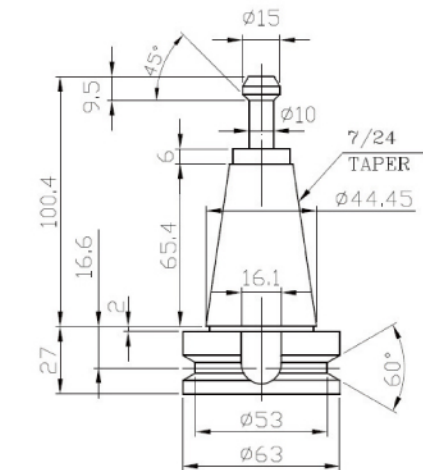
Chip conveyor  
鍊條式鐵屑輸送機

## MACHINE DIMENSIONS 機器外觀尺寸圖

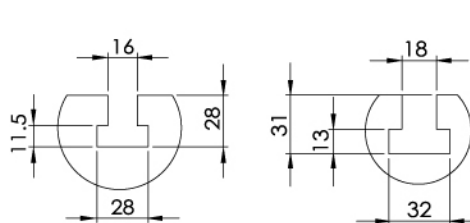
Machine Dimensions  
MBV-6



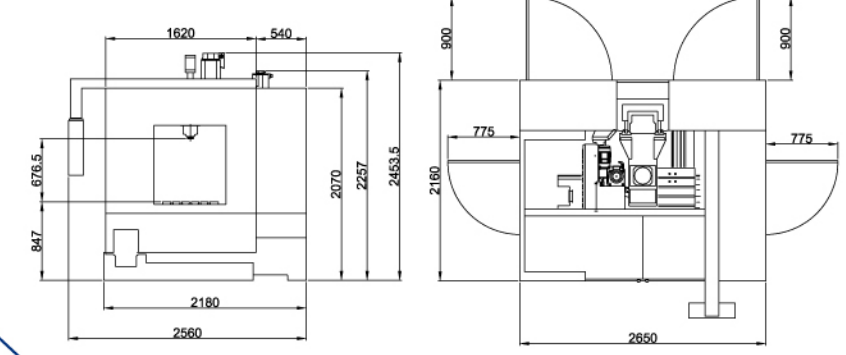
Tool holder



T-slot



MBV-10



## MACHINE SPECIFICATIONS 機器規格

MODEL 項目	UNIT 單位	MBV-6	MBV-8	MBV-10	MRV-10	MRV-12	
Travel 行程	X axis	mm	625	800	1040	1040	
	Y axis	mm	460	460	600	600	
	Z axis	mm	520	520	620	620	
	Spindle nose to table 主軸鼻端至工作台面	mm	100-620	100-620	80-700	80-700	80-700
Spindle 主軸	Type 型式		BT-40,belt 皮帶式	BT-40,belt 皮帶式	BT-40,belt 皮帶式	BT-40,belt 皮帶式	
	Max. Speed 最高轉速	rpm	10,000	10,000	10,000	12,000	12,000
	Bearing I.D. 軸承內徑	mm	60	60	60	70	70
	Center to Z cover 主軸中心線至Z軸護罩	mm	480	480	630	630	630
	Motor 馬達	kw	Fanuc 5.5/7.5	Fanuc 5.5/7.5	Fanuc 7.5/11	Fanuc 11/15	Fanuc 11/15
Axes 三軸	Rapid Feed X/Y/Z 快速移動速度	m/min	30/30/20	30/30/20	30/30/20	36/36/30	36/36/30
	Cutting Feed X/Y/Z 切削速度	m/min	10	10	10	10	10
	Rails X/Y/Z 滑軌		Ball Rails 滾珠	Ball Rails 滾珠	Ball Rails 滾珠	Roller Rails 滾柱	Roller Rails 滾柱
	Ballscrew X/Y/Z 螺桿		φ32x10,C3	φ32x10,C3	φ40x10,C3	φ40x10,C3	φ40x10,C3
	Motor torque X/Y/Z 馬達扭力	Nm	8/8/22	8/8/22	12/12/22	12/12/22	12/12/22
	Positioning accuracy 定位精度	μm	+/- 5	+/- 5	+/- 5	+/- 5	+/- 5
	Repeatability 重複性	μm	+/- 4	+/- 4	+/- 4	+/- 4	+/- 4
Table 工作台	Size 尺寸	mm	700x450	900x450	1120x600	1120x600	1370x600
	T-slot T槽	mm	16x4x95	16x4x95	18x5x100	18x5x100	18x5x100
	Max load 最大荷重	kg	350	350	500	500	800
	ATC & Magazine 換刀機構與刀庫	Type 型式		Carousel 斗笠式	Carousel 斗笠式	Carousel 斗笠式	Arm 刀臂式
Tool stations 容納刀數			20	20	20	24	30
Max. Tool diameter 最大刀徑		mm	90	90	90	90	90
Max. Tool length 最大刀長		mm	200	200	200	200	200
Controller 控制器				Fanuc 0iM	Fanuc 0iM	Fanuc 0iM	Fanuc 0iM
	Dimensions 機器尺寸	LxWxH 長x寬x高	cm	220x220x242	220x220x242	240x220x250	240x220x250
Weight 機器重	kg	3,300	3,500	5,500	5,500	5,700	

Design and specifications are subject to change without prior notice.  
設計如有變更，恕不另行通知。

## STANDARD ACCESSORIES 標準配備

- Full Chip Enclosure with Top Roof  
全密閉式鋸金倉上蓋
- Telescopic Covers on 3 Axes  
三軸伸縮鋸金護蓋
- Stainless Steel Base Plates on Chip Enclosure  
不銹鋼密閉鋸金底座
- Base Chip Flushing Function  
底座沖屑功能
- Spindle Air Blast  
主軸換刀吹氣功能
- Automatic Lubrication Functions on Slide Ways  
滑道自動潤滑裝置
- Heat Exchanger for Electrical Cabinet  
電氣箱熱交換器
- Work Lamp  
工作照明燈
- Pilot Lamp  
工作警示燈
- Coolant System  
切削液系統
- M30 Automatic Power  
M30自動斷電
- RS-232 Port  
RS-232 插座
- Rigid Tapping  
剛性攻牙
- CE Marking  
CE規格
- Transformer for 380/400/415  
Power Sourced Countries  
變壓器

# SYNTAK

SYNTAK ENTERPRISE, INC.  
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www.syntak.net

# VERTICAL MACHINING CENTER MBV.MRV

series  
立式綜合加工中心機 MBV MRV 系列

# SYNTAK

SYNTAK ENTERPRISE, INC.

Synergy of Techniques, Actions and Knowledge



# MBV & MRV SERIES

## MBV & MRV 系列

SYNTAK ENTERPRISE, INC.



Z axis servo motor with brake.

Robust casting and structure  
高剛性的鑄件及結構

With decades of experience in developing vertical machining centers, Syntak has unique expertise in maximizing machine's performance in accuracy, speed, cutting finishes. Furthermore, the machine's operation safety and ergonomics are basic concept on MBV and MRV series.

MBV series are designed for small-medium sized workpieces' production; while MRV are made for medium-large sized jobs. Both models are capable of machining various metals such as cast iron, steel, copper, aluminum, and of course including all kinds of non-metallic materials.

Strict quality control makes "Plug and Play" possible in the MBV & MRV series. High reliability and prompt service response reduces the machine downtime and increases profitability.

累積的數十年來在綜合加工機的資深經驗，心特股份有限公司的團隊掌握著各方面的專業技術，包含機器切削功能的最佳化、精度、速度、還有工件表面的粗糙度等等。而且，機器操作的安全性還有舒適性，符合人體工學原理設計的結構，都是MBV及MRV系列機種的特色。

MBV系列是針對中小型工件加工而設計的產品，而MRV系列則適合於中大型的加工應用。不論切削各類的金屬材質，例如鑄鐵、鋼材、銅、鋁等等，其他非金屬類的材料，如代木、塑膠等，更是輕而易舉。

嚴格的品質讓每一台心特的機器在安裝之後，就能馬上投入生產運轉，長時間加工。同時，我們在服務技術支援上的快速回應，能大幅減少機器因品質問題所造成的滯機時間，相對也能提高您對購買心特機器的投資報酬率。



Chip conveyor can be loaded from either side  
鐵屑輸送機能從機器之左邊或右邊安裝

### DESIGN 設計



Ergonomical control panel  
符合人體工學設計的操作面板



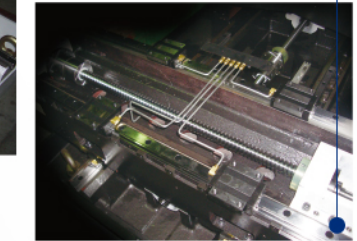
Full guarding enclosure with flat back  
全密封式版金 — 美背式設計

### MATERIAL 材質

High quality transmission components feature reliability and durability 採用高品質傳動元件，大幅提升機器之可靠度及使用壽命



Metal lubrication lines in difficult accessing area 關鍵運動磨合區域採用高級金屬油管，有效供應潤滑油到內部滑道面



Stainless and flexible metal covers on slide ways and guarding apron 各軸伸縮護罩及密封板金採用不鏽鋼材質



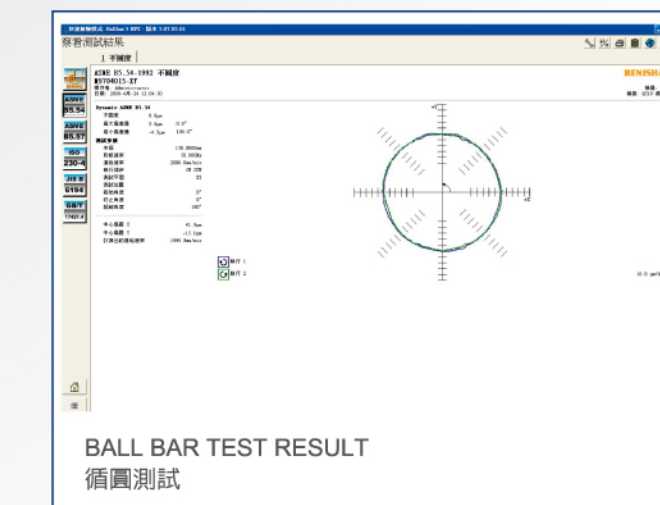
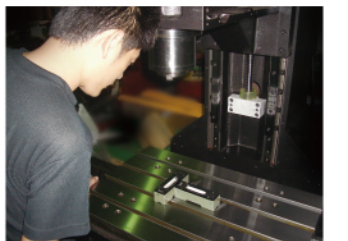
Clear polycarbonate boards are fitted on both front and side doors. 前門與側門皆採用耐衝擊透明 Polycarbonate板

### WORKMANSHIP 工藝

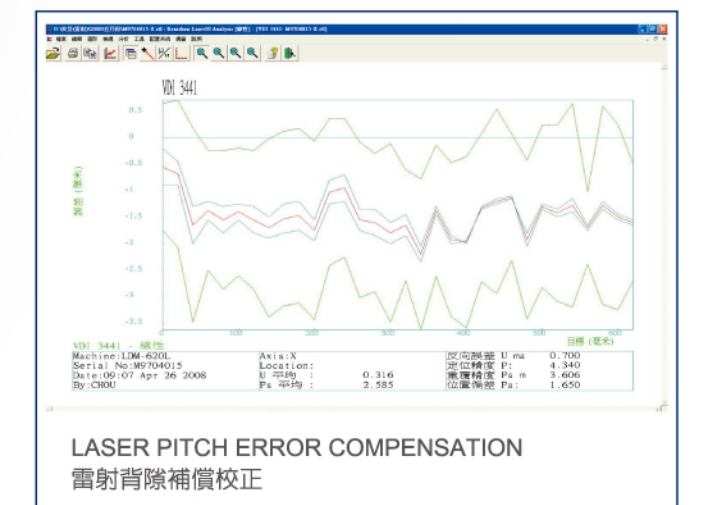
Strict geometrical tolerance, both in straightness and squareness 不論在真直度、直角度或其他等，都有嚴格的幾何精度控管



Carefully scraping on critical connection surfaces  
重要結合面部位都需經過嚴密的銼花處理



BALL BAR TEST RESULT  
循圓測試



LASER PITCH ERROR COMPENSATION  
雷射背隙補償校正