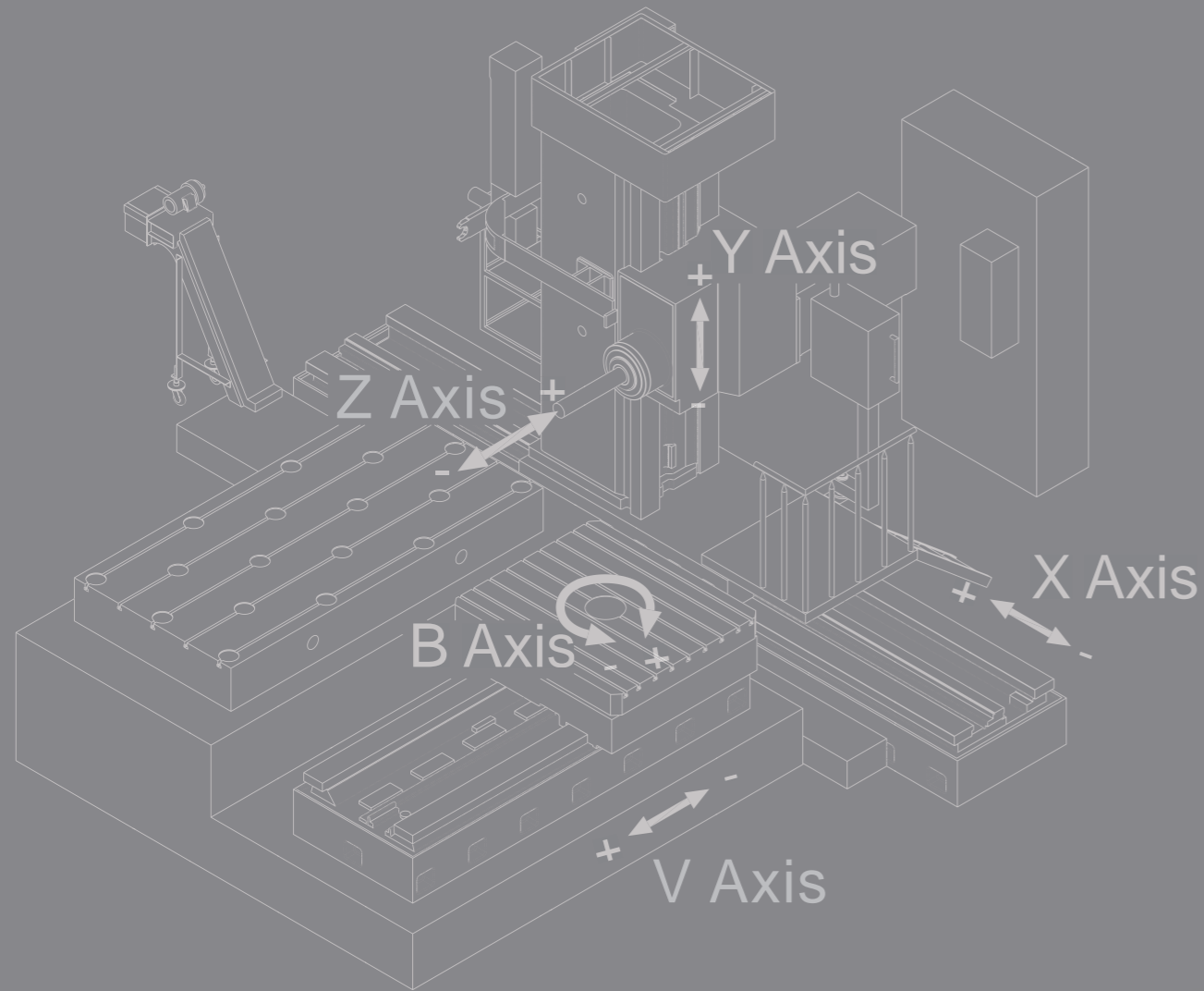




Floor Type Boring Machine CBM-110F



High Accuracy
High Quality
High Rigidity



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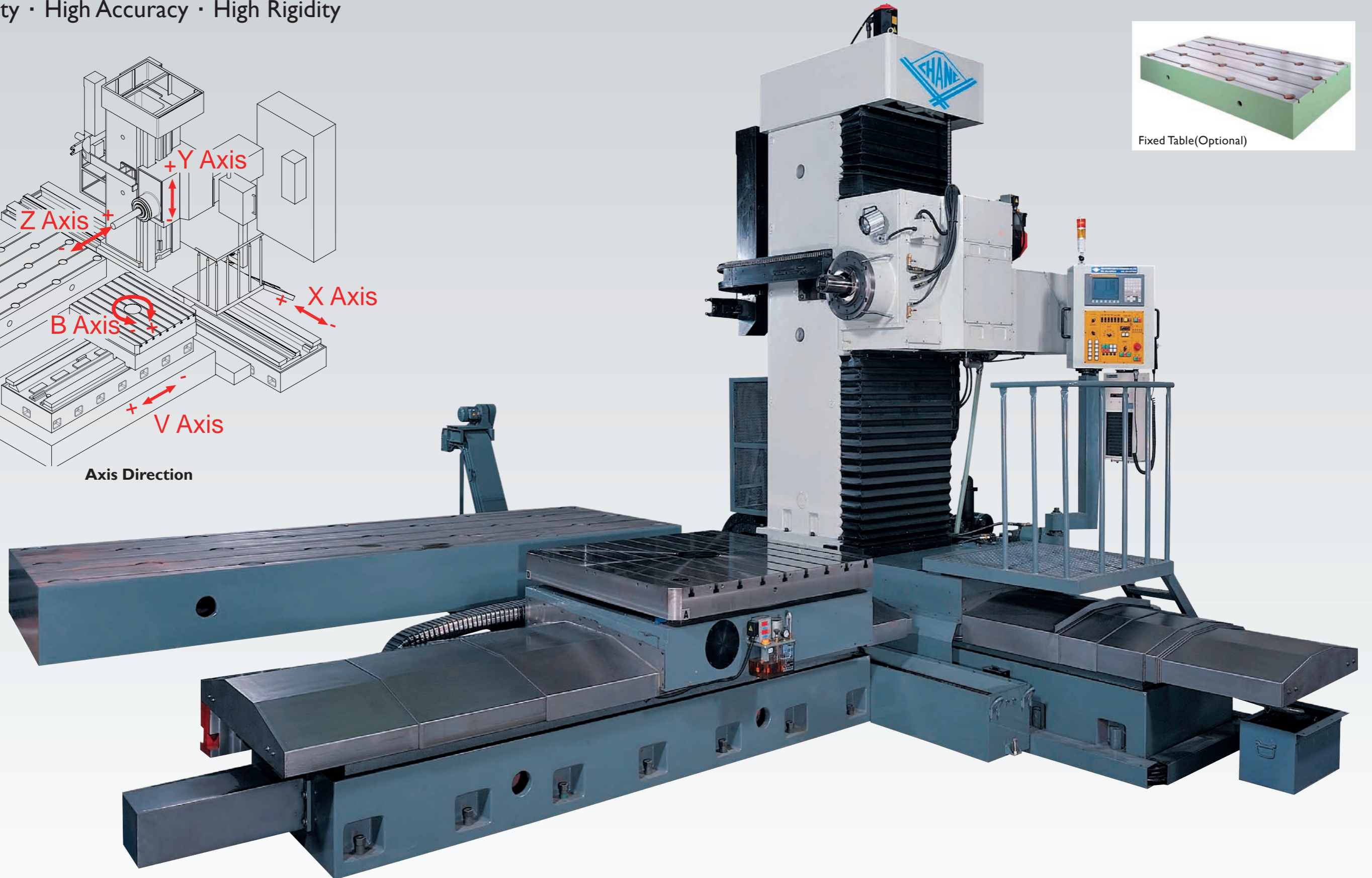
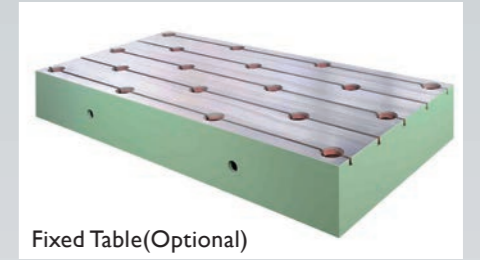
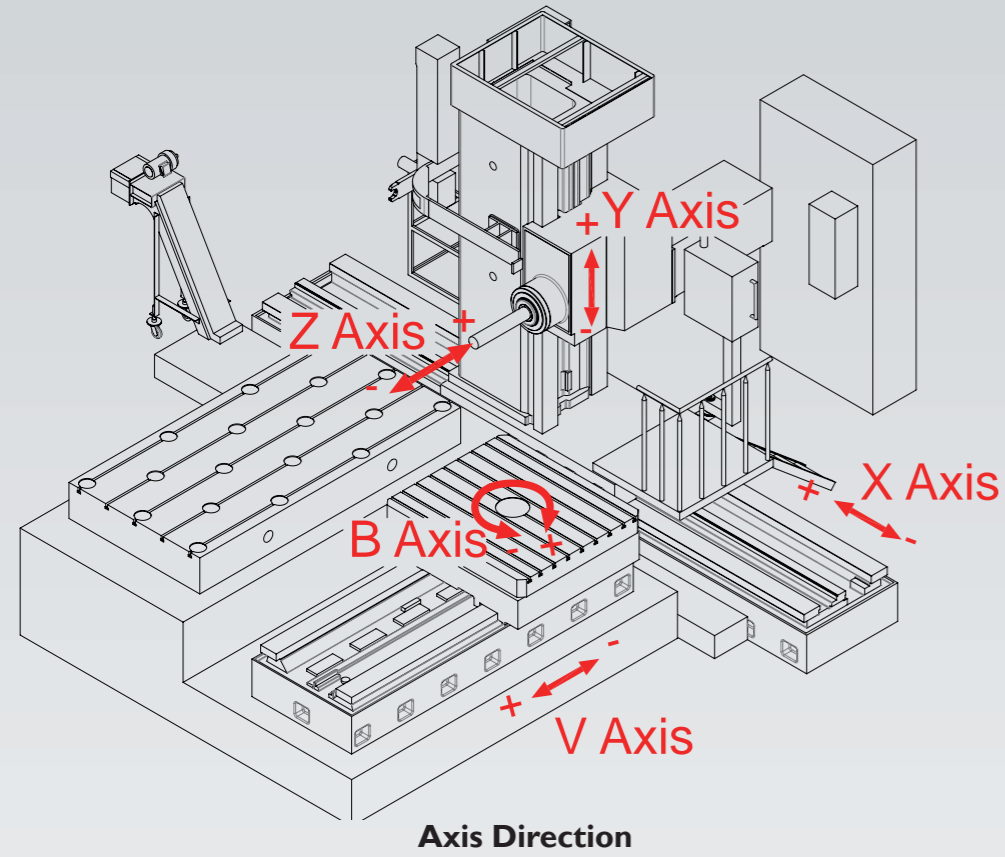
<http://www.cch1967.com>

高精度 · 高刚性 · 落地式搪床

Floor Type Boring Machine

High Quality · High Accuracy · High Rigidity

CBM-110F



特點 Features

高生產力

- AC馬達驅動主軸，可持續調整主軸轉速，即使在切削操作時，也可維持在最佳的切削狀態。
- 每一進給機構的馬達／軸多重驅動系統，均可提供最大的進給效率。

高動力主軸

- 主軸外環設計有冷卻系統，可保持軸承長時間使用時維持在標準溫升並穩定精度。
- 主軸全採用齒輪式高低檔可自動換檔，並採用強制潤滑系統可保持潤滑穩定。
- 主軸與鏜桿是採用特殊合金鋼材，並經氮化處理可保不變形，並維持剛性達HRC62~68度。
- 主軸軸承採用世界知名高品質SKF、NSK軸承，並經跑合測試溫升標準合格，可維持主軸精度及使用壽命。

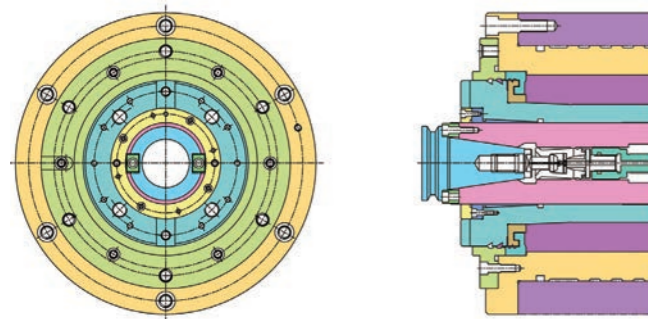
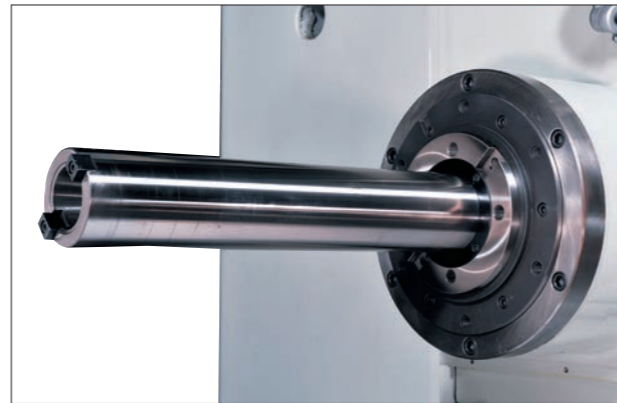
High Productivity

- Spindle continuously monitored to provide most efficient cutting conditions.
- Each axis is independently controlled to provide maximum feed as required.

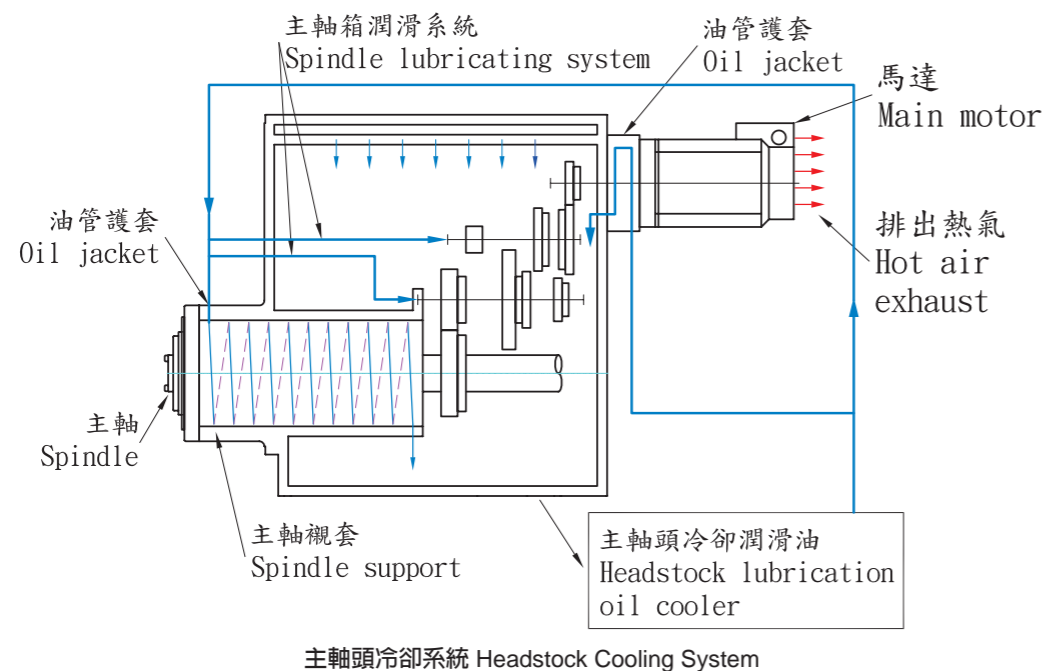
Powerful Spindle

- The specially designed spindle outer ring cooling system maintains constant bearing accuracy under normal operating conditions. This gear type auto-shift design and grease lubrication system also provides superior machine performance and reliability.
- The spindle and boring bar are made of SACM645 alloy. The spindle has been Nitrided to HRC62~68. This hardness maintains spindle form and insures high reliability. This increased rigidity increases the overall machine capability.
- We use the very highest quality spindle bearings from SKF and NSK. These high quality bearings insure machine consistency and a longer machine life.

搪孔主軸 Boring Spindle (CBM-110)



CBM-110



主結構高鋼性

- Y軸垂直行程、主軸行程採用滾珠螺桿傳動，加上滑動面的潤滑系統，可獲得高定位精度。
- Y軸垂直行程採用液壓配重系統。
- 主要結構採箱型結構設計，加上大橫斷面積，提供最高的穩固性，以確保長時間運轉精度準確性。

High Rigidity

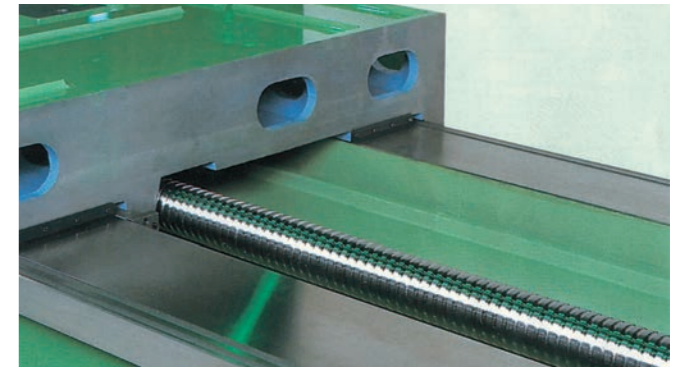
- For the vertical travel of headstock, the spindle travel, high quality ball screws are used. All sliding surfaces are automatically lubricated.
- The clamps for headstock vertical travel is hydraulic counterweight.
- The major structural members are box-shaped with best possible arrangements of ribs with a large cross-sectional area, providing highest rigidity long-term accuracy and precision.

高精度滑軌

- 立柱及底座滑軌具高剛性及穩固性，滑動面有鐵氟龍黏附並強制潤滑，使滑軌系統在長時間內保持高精確，即使在低速運轉時仍可順暢滑。

High Precision Slideways

- The column and bed slide ways are hardened and ground. The mating surfaces of the moving units are coated with a special fluorine resin, and forced-lubricated so that the system for slide ways offers minimum friction resulting in high precision which will be maintained over a long period of time, this ensures a very smooth feed stroke even at low speeds without stick/slip.



操作容易

- 懸吊式開關操控箱，分別為加工操作提供最有效率的設計，使操作更具有效率。
- 程式編輯及運用功能都陳列在CRT，可使程式編輯及確認更容易。

Easy Operation

- The switches on the pendant control box have the most efficient layouts for working respectively. This ensures improved operating efficiency.
- The contents of programs and the current positions are displayed on the CRT display. This enables to make preparation and checking of the programs easily.



迴轉工作台

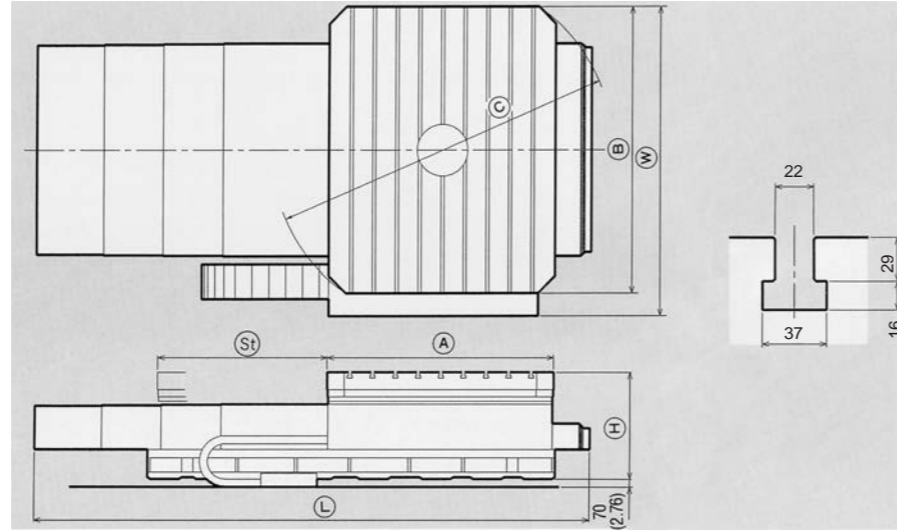
Rotary Table

迴轉工作台：CRT Series

- 迴轉工作台採用硬軌、滾柱軸承及傳動蝸輪強制潤滑。迴轉工作台中心軸裝設有海德漢環式回饋尺，絕對保證分度準確。迴轉工作台具有油壓鎖及定位銷，可用於任何角度切削及正角度0°、90°、180°、270°重切準確度。

Rotary Table

- This special combination of highly rigid box ways, ball screws, and worm gear automatic lubrication system provides a highly satisfying compact rotary table design. With the Heidenhain angle encoder installed in the rotary table center shaft, combined with our specially designed hydraulic clamping system and positioning index pins, our machines can achieve any cutting angle. Reinforced heavy cutting angles at 0°, 90°, 180°, and 270° are included features. Hence resulting in superior accuracy and cutting efficiency.



規格 Specification

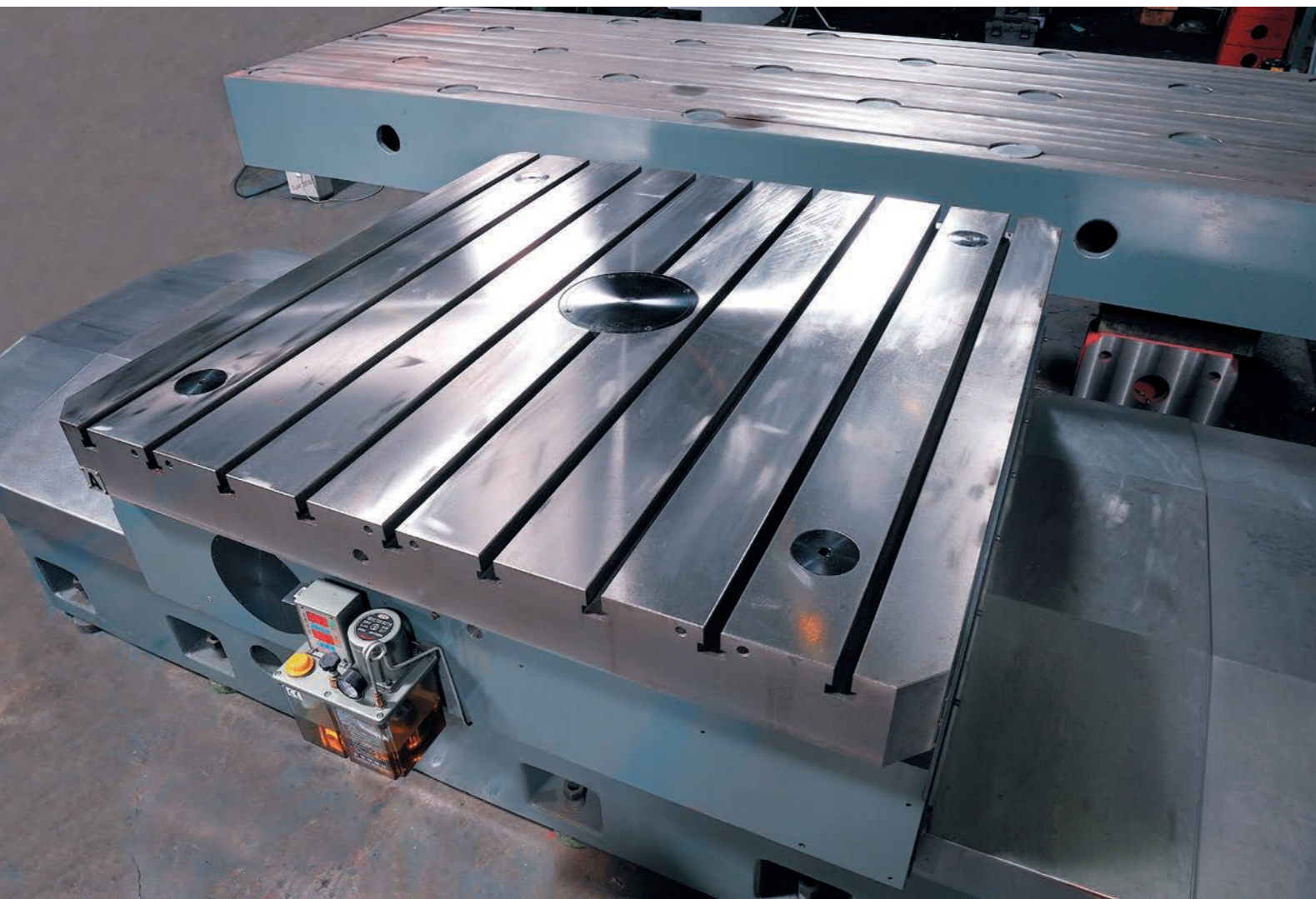
Item		CRT-18/20B	CRT-20/25B
工作台尺寸 Table Size	Ⓐ×Ⓑ mm (in)	1,800×2,000 (70×78)	2,000×2,500 (78×98)
工作台最大迴轉直徑 Table Rotating Maximum Dia	ψⒸ mm (in)	2,565 (101)	2,970 (117)
滑動行程 Saddle Traverse (V Axis)	Ⓓ mm (in)	1,000 (39)	1,500 (59)
工作台最大承載重量 Working Table Max. Loading Weight	Kg (lb)	12,000 (26,400)	20,000 (44,000)
工作台旋轉速度 Work Table Rotation Speed	min-1 (rpm)	0.8	0.8
滑動切削進給 Saddle Cutting Feed	mm/min (in/min)	1~3,000 (0.04~118)	1~3,000 (0.04~118)
滑動行程速度 Saddle Rapid Traverse	mm/min (in/min)	6,000 (236)	6,000 (236)
機械尺寸 Machine Size	Ⓔ×Ⓕ×Ⓖ mm (in)	3,860×2,790×1,160 (152×110×46)	5,080×3,300×1,260 (200×130×50)
淨重約 Work Table Weight (est.)	kg (lb)	8,500 (18,700)	15,000 (33,000)

標準附件

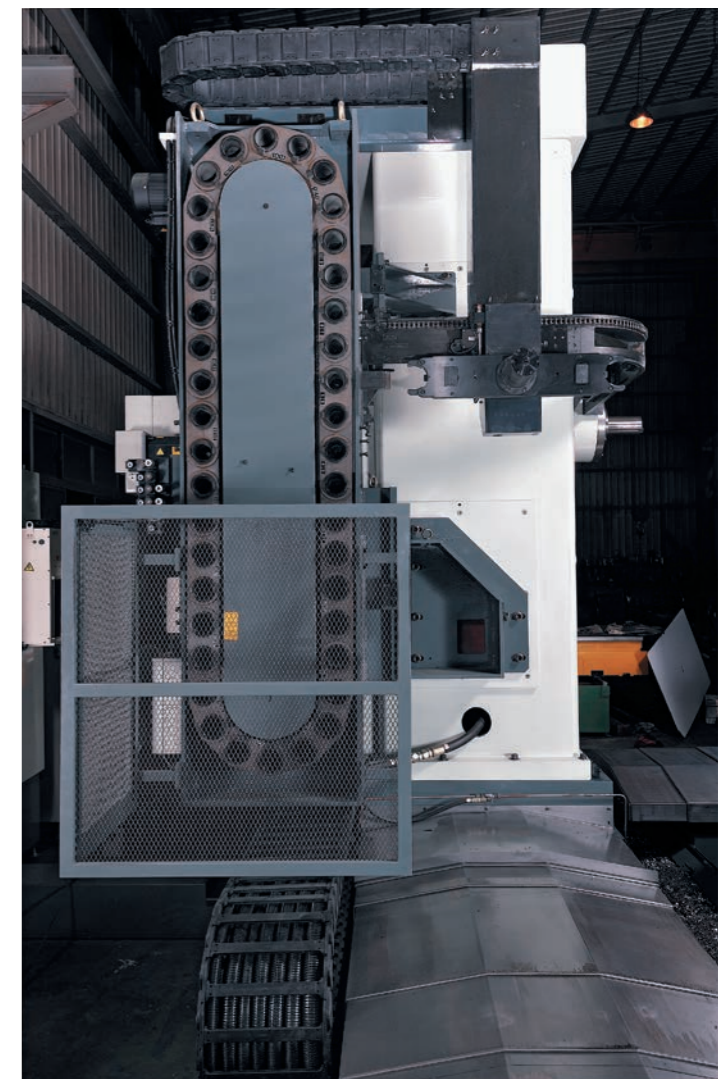
- 底座滑軌護蓋
- 液壓動力組

Standard accessories

- Telescopic steel cover for bed slideways
- Hydraulic power unit



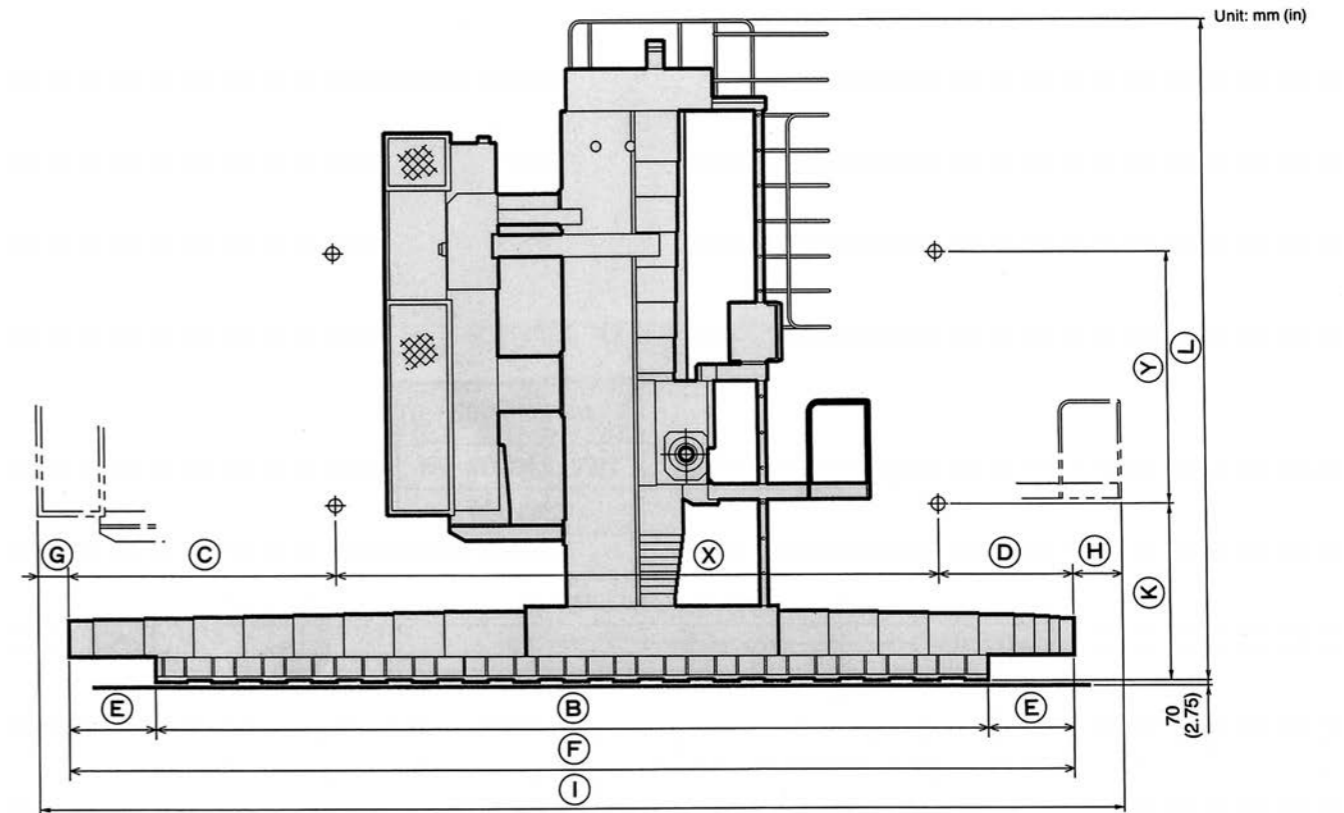
自動工具交換 Automatic Tool Changer (Optional Accessory)		
刀庫容量	ATC Capacity	40/60/90
刀柄	Tool Shank	MAS 403 BT-50
拉刀裝置	Pull Stud	MAS 403 P50T-1
刀具重量	Tool Weight	25kg
刀具最大長度	Max. Tool Length	300mm
刀具最大直徑	Max. Tool Diameter	Φ125mm(Φ250mm)



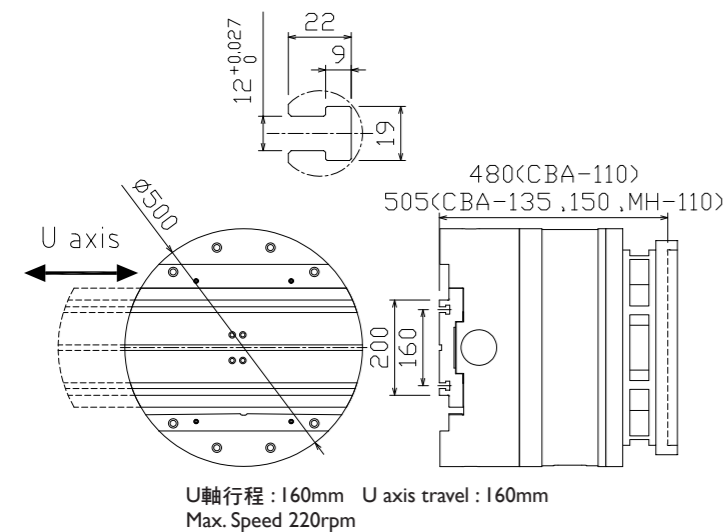
主要規格 & 特別附件 Specifications & Optional Accessories

Description			CBM-110F
主軸 Spindle	馬達 Main Motor (30min/cont.)	kw	AC 18/22 Opt.: AC 22/26
	主軸轉速 Spindle Speed	rpm	5-2000
	主軸錐度 Spindle Tapper		ISO 50/BT-50
	主軸直徑 Spindle Diameter	mm(in)	110(4.33)
	主軸最大扭矩 Max. Spindle Torque	Nm	860 Opt.: 1025
行程 Travel	X軸(立柱橫向行程) Column Travel X axis (Horizontal)	mm	2000-6000: Ball Screw Above 6000: Rack
	Y軸(主軸垂直行程) Spindle Vertical Travel Y axis	mm(in)	2000(79) 2500(98) 3000(118)
	Z軸(主軸行程) Spindle Travel Z axis	mm(in)	600(23.62)
進給 Feed Rate	X / Y axis	mm/min(in/min)	6000(236)
	Z axis	mm/min(in/min)	3000(118)

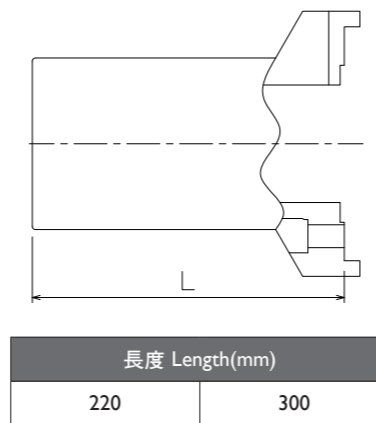
尺寸 Dimensions



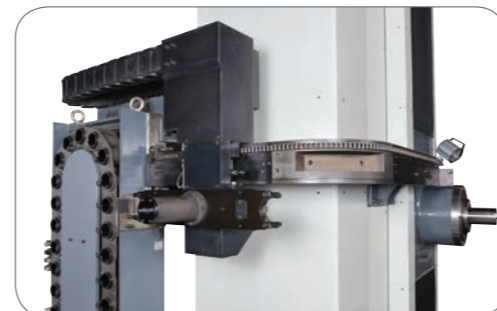
面板 Facing Head FH-500



主軸襯套 Spindle Support



刀庫 Automatic Tool Changer (Optional Accessories)		
刀具容量	Tool Capacity	24 / 32 / 40 / 60
刀柄	Tool Shank	MAS 403 BT-50
拉刀裝置	Pull Stud	MAS 403 P50T-I
刀具重量	Tool Weight	25 kg
刀具最大長度	Max. Tool Length	300 mm
刀具最大直徑	Max. Tool Diameter	Ø 125 mm (Ø250mm)



CBM-110F

單位Unit : mm (in)

(X)	4,000(157)	5,000(196)	6,000(236)	7,000(275)	8,000(314)	9,000(354)	10,000(393)
(B)	6,300(248)	7,300(287)	8,300(327)	9,800(386)	10,800(425)	11,800(465)	12,800(504)
(C)	2,670(105)	2,670(105)	2,670(105)	2,590(102)	2,590(102)	2,660(104)	2,600(102)
(D)	1,330(52)	1,330(52)	1,330(52)	1,710(67)	1,710(67)	1,780(70)	1,780(70)
(E)	850(33.5)	850(33.5)	850(33.5)	750(29.5)	750(29.5)	820(32.3)	820(32.3)
(F)	8,000(315)	9,000(354)	10,000(394)	11,300(445)	12,300(484)	13,440(529)	14,400(569)
(G)	130(5.1)	130(5.1)	130(5.1)	210(8.3)	210(8.3)	140(5.5)	140(5.5)
(H)	490(19.3)	490(19.3)	490(19.3)	110(4.3)	110(4.3)	40(1.57)	40(1.57)
(I)	8,620(339)	9,620(379)	10,620(418)	11,620(457)	12,620(497)	13,620(537)	14,620(576)
(M)	11,000(443)	12,000(472)	13,000(512)	14,300(563)	15,300(602)	16,440(647)	17,440(687)

(Y)	主軸垂直行程 Spindle Vertical Travel	2,000(78)	2,500(98)	3,000(118)
(K)	標準 Standard	1,405(55)	1,405(55)	1,405(55)
	滑軌防塵蓋 Slideway Dust Cover	1,635(64)	1,635(64)	1,635(64)
(L)	標準 Standard	6,000(236)	6,000(236)	6,500(256)
	滑軌防塵蓋 Slideway Dust Cover	6,000(236)	6,650(262)	7,250(285)

機械淨重 Machine Weight

單位Unit : kg (lb)

ITEM		CBM-110F						
立柱橫向行程 Column Cross Travel	(X) mm(in)	4000 (157)	5000 (196)	6000 (236)	7000 (275)	8000 (314)	9000 (354)	10000 (393)
	主軸垂直行程 Spindle Vertical Travel	2000 (78)	24300 (53571)	25550 (56327)	26800 (59080)	28100 (61950)	29350 (64700)	30610 (67480)
(Y) mm (in)	2500 (98)	25200 (55556)	26400 (58200)	27650 (60957)	28950 (63820)	30200 (66578)	31460 (69356)	32720 (72134)
	3000 (118)	26200 (57760)	27250 (60075)	28500 (62830)	29800 (65697)	31050 (68450)	32310 (71230)	33570 (74000)

安裝圖 Installation Plan

Model:CBM-135QF
Model:CBM-135QF

