# TOTAL SOLUTION

Exceeding Expectations at Every Opportunity







### **Exceeding Expectations at Every Opportunity**

Since 1954, YCM machine tools have been recognized worldwide for superior precision, outstanding reliability and exceptional rigidity. Today there are more than 70 makes and models fulfilling the industry's diverse requirements.



GPS 🛯 24°17'12.3" 🔳 120°38'32.1"





YCM in-house foundry



Assembly factory



Quality control



Research and development



Comprehensive aging process



Flexible manufacturing system



Indoor temperature strictly controlled



Latest advanced research and development technical center



#### **Company Profile**

Year Founded	Since 1954	1
President	Bryan Chen	
Capital Registered	NT\$566,780,000	
Factory Area	158,400m <sup>2</sup>	
Employees	800	
Main Facilities	Foundry, Machining Shop & Assembly Factories	
Main Products	Vertical Machining Centers,	
	Double Column Vertical Machining Centers,	
	Horizontal Machining Centers,	
	CNC Lathes	
Awards & Certificates	ISO 9001, ISO 14001,	
	CE, MD MIL-I-45208,	
	Symbol of Excellence, etc.	

- YEONG CHIN Iron Works, our forerunner, was founded to manufacture packing machines.
- 175. Further expanded facility and acquired new production equipment; capital increased to NT\$70,000,000; P.C.-Controlled YCM-PU5 produced; market expanded to America, Europe, and South Africa.
- 931. Phase II construction of the new manufacturing facility completed; acquired DIXI Precision Jig Boring Machine from Switzerland and Three-coordinate measuring machine from England; YCM-VMC-86A bed type machining center successfully developed; IBM System 34 computers installed in the computer Center; Multifunctional Milling awarded symbol of distinction by the National Bureau of Standards.
- YCM-30 and YCM-60 knee-type milling machines produced; YCM-VMC-60A vertical milling machine began its production; digital controlled knee-type vertical milling machine and knee-type vertical-horizontal milling machine awarded symbol of distinction by the National Bureau of Standards; "Main Spindle Cooling System" patented in Taiwan (#17572) and in the United States (#4422498).
- 1984. Received "Outstanding Product Design Award" from China External Trade Development Council, Republic of China; began production and marketing of YCM-VMC-72A machining centers.
- 985-1986. Received "Outstanding Product Design Award" for NCL-8 from China External Trade Development Council; received "New Product R & D Award" from National Association for Industries.
  - 1988. At the First New Products of R&D and Innovation Competition,YCM-4VS received the highest ranking for non-NC milling machine category, YCM-180U received the highest ranking for NC milling machine category, and YCM-180HVA received "Honorable Mention".
  - 1989. Received "Outstanding Products of Original Award" in the 1989 Taipei International Machine Tools Show.
  - 1990. Received "Honorable Mention" in the Non-NC milling machines category.
  - 1991. YCM-79HVA and 90HVAR developed; received the honor of being an "Excellent Company" in the 1991 Taipei International Machine Tools Show; 70HVA developed as a new product; new five-face CNC milling machine and Flexible Manufacturing System(FMS)installed.
  - 1992. YCM-180HV received "Superior Award" at the Third Products R&D and Innovation Contest.
  - 1993. YCM-90HVAR awarded "Product Excellence" in the National Image Competition; Aviation Department inaugurated; YCM-VMC-1100A successfully developed.



- 1994. YEONG CHIN became the first machine tools company in Taiwan to pass the ISO-9001 audition conducted by the Bureau of Commodity Inspection & Quarantine, Ministry of Economics, thus assuring international quality standard; with the assistance of PMC, YEONG CHIN applied for CE-MARK.
- 1995. Received various awards at the Fourth New Product of R&D and Innovation Competition:YCM-VMC-1100A ranked "Superior" for the CNC machine category, YCM-CNC-50 received "Honorable Mention" for the NC milling machines category.YCM-VMC-1100A awarded "Superior Product Design Award" from the China External Trade Development Council, Ministry of Economic Affairs. YCM-V96A awarded "New Product Development Award" by the National Association for Industries. Successfully developed YCM-H800 and V96A.
- 1996. Developed the YCM-V168A, YCM-TC-26 and launched into production. Started spherical design of sheet-metal covers on the YCM-V168A, V135A Series. Developed the PC-Based PC-NC control and exhibited the prototype at the IMTS '96.
- 1997. The 1st Yeong Chin Overseas Dealers Conference was held in Taipei, while participated in TIMTOS '97 and announced new developed products, V105A/10000rpm/Gear Box, TC-26 and 70HVA...,etc. Started introducing the Environmental Management System, and leading ahead all the other Taiwanese machine tools builders, awarded ISO 14001 Certificate by TUV Rheinland. Established YCM Technical Center in Malaysia.
- 1998. Large travel vertical machining center developed. FV56T/12,000rpm prototype and V218B were exhibited at the Taipei Int'l Mold & Die Show, as well as at IMTS '98.New assembly shop was under constructing. Launched official website to start connecting the world with internet.
- High Speed, High Power serial vertical machining centers developed, FV56T, FV56A, FV85A and FV102A with unique Isolated Direct Drive(IDD)spindle. Developed and announced the TCR-26 CNC turning center with C-axis and milling tools turret, TC-36W, H500A with B axis, HV2610B, V105A with 20,000rpm motorized spindle. All these machines were exhibited at TIMTOS '99. The 2nd Yeong Chin Overseas Dealers Conference was held at Taichung, while the new assembly shop was inaugurated just before the TIMTOS. Participated in EMO '99-Paris, V146B, FV85A, FV56A/APC TC-26L, TC-36 and H500A with B-axis were exhibited. Founder, Mr. C. S. Chen passed away of heart attack, Mr. J. H. Chen succeeded Chairman.
- 2000. Largely deployed high speed motorized spindle up to 30,000rpm on the FV series high speed high power machining centers, which helps step into a Total Solution era for mold & die industries and machining applications.H500B with BT50 IDD spindle of 10,000rpm was developed and launched to production. The FP series High Speed Gantry Type machining centers were developed, prototypes FV100A and FP120A exhibited at the Taipei Int'l Mold & Die Show and IMTS respectively.
- 2001. New developed products, FP100A, V158B and FV56A/T awarded "Certificate of Excellence", and "Good Design Product ", V105A, H500A, FV56A/T, FP100A. High Speed Travel Column vertical machining center -TCV41A and Powerful High Performance turning center TCR25A developed, and made their worldwide debut at the EMO '01.
  - YCM Technical Center was fully facilitated in house, and the first YEONG

CHIN Solution Day event was held successfully in early March; then, the newly developed V106A vertical machining center,AI NANO HPCC on the FP100A with FANUC 18i-M and other High Speed advanced mold & die machining functions were announced.

Start renewal project of manufacturing facilities. Re-define and integrate the updated products lineup, and complete new products development; FP66A, MV66A, MV76A, TCV51A, and RV105A are officially introduced to the market, and exhibited in the TIMTOS 2003, and the relevant international exhibitions.

Launch campaign to celebrate the 50th anniversary with new vision, mottos, and a series of events.

- Launched new GT series CNC lathe, and High Speed High Precision mold & die vertical machining center FP55A with advanced linear motor drive technology, together with new version machining solution package, i-OPERATION plus; exhibited in TIMTOS '05, and relevant international show fairs. FP55A received "Award of Excellence" of NC machine tool category in TIMTOS '05 "Innovative R&D Products Forum".
- Officially launched DCV Series of large size double column machining centers and exhibited at relevant international shows. Participating the JIMTOF '06 held in Tokyo. Launched new edition of internet services, URL http://www. YCMCNC.com.
- 07. The brand new High Speed, High Precision horizontal machining center, H630B, equipped the Dual Drive Technology made its great debut in EMO '07. Meanwhile, the new developed products, NSV66A, NT-2000SY, FX350A are also officially introduced to the Int'l market. YCM Engineer Center was facilitated in house to integrate resources of R&D, after service, and manufacturing.
- <sup>30.</sup> YCM keeps making progress by going through YCMPS. In 2008, YCM honorably got two patents, "Three-In-One Assembly Wagon" and "Dust Collector for Modeling Machine."
- YCM happily celebrated her 55th anniversary with the opening of her solar energy powered Corporate Building.
- As part of YCM' s globalization path, YCM opened YCM Americas, Inc. in the United States to further improve customer satisfaction and provide better support to customers throughout the North America, Central America and South America.
- 011. YCM achieved the qualification and was awarded 「TPM (Total Productive Management) Excellence, Category A J certified by the JIPM (Japan Institute of Plant Maintenance), the very first Taiwan machine tool manufacturer to ever receive such an award. Assembly Plant III construction completed.

Hosted the 2011 M-Team 2nd Annual Achievement Conference.

- 12. Hosted "Open House" YCM factory tour at YCM Headquarters to display new technologies.
- Hosted YCM Dealer Meeting in America to provide U.S. agents with a platform for services and information exchange.

Foundry Expansion Project.





6

7

8

9

11

12

13

14

15

16

XV/NXV Series XV560A, XV1250A, NXV1020A/AM, NXV1680A

**FP Series** FP55LX, FP66A, FP100A

**FV Series** FV56T, FV56A, FV125A/FV50T

**NTV** Series NTV 158A, NTV 158B

**TV Series** TV116B, TV146A/B, TV158A/B,TV188B, TV2110B, TV2610B

**MV/NMV Series** MV66A, MV76A, NMV106A

**NSV** Series NSV66A, NSV85A, NSV102A, NSV156A

**NDV Series** NDV66A, NDV85A, NDV102A

WV Series WV108A/B **TCV Series** TCV2000A, TCV3000A-5AF/5AX

**5-Axis Vertical Machining Centers FX Series** 

FX380A

#### **Double Column Vertical** 14 **Machining Centers**

NDC Series NDC2016B, DCV3016B, DCV4016B, DCV3018B-AHC

**DCV** Series DCV2012A/B, DCV3016B, DCV4016B, DCV3021B, DCV4021B, DCV3025B, DCV4025B, DCV4035B, DCV4035B-5AX

#### **Horizontal Machining Centers**

**NH/H Series** NH450A, NH800B, H500A/B, H630B, H800B, H2612B

**Horizontal Boring Milling Machining Center BMP Series** BMP1416B



**NT Series** NT-2000Y/SY, NT-2500Y/SY

**TC Series** 

TC-46/M

8

19

5

**GT Series** GT-200A/B/MA, GT-250A/B/MA, GT-300A/B/MA/LB,GT-380A/B/LA/LB

TC-16A/B/LA/LB, TC-26, TC-26L, TC-36, TC-36W,







































# Vertical Machining Centers

• XV/ NXV Series

AT



XV 560A

NXV 1020A/AM



XV 1250A

NXV 1680A

	XV560A	XV1250A	NXV1020A NXV1020AM	NXV1680A
Table Size	700 x 420mm 27.6" x 16.5"	1350 x 520mm 53.1" x 20.5"	1,120 x 520mm 44.1" x 20.5"	1,730 x 760mm 68.1" x 29.9"
X-axis Travel	560mm 22.0"	1270mm 50.0"	1,020mm 40.2"	1,630mm 64.2"
Y-axis Travel	410mm 16.1"	520mm 20.5"	520mm 20.5"	762mm 30"
Z-axis Travel	450mm 17.7"	540mm 21.3"	540mm 21.3"	700mm 27.6"
Spindle Speed	10,000 rpm		12,000 rpm (15,0	00 rpm)
Spindle Taper			BBT40	
Max. Spindle Power (opt.)	11kW 15HP	11kW (22kW) 15HP (30HP)	18.5kW (18.5kW)	18.5kW (30kW) 25HP (40HP)
Tool Magazine Capacity (opt.)	20T	24T (30T)	24T (30/40/60T)	24T (30T)
Machine Weight	3,000kg 6,614 lb	6,700kg 14,770 lb	5,350kg 11,795 lb	11,000kg 24,251 lb

# Vertical Machining Centers

• FP Series





FP55LX

7



FP66A



**FP100**A

	FP55LX	FP66A	FP100A
Table Size (APC)	700 x 510mm 27.56" x 20.08"	800 x 510mm 31.5" x 20.08"	1,200 x 700mm 47.24" x 27.56"
X-axis Travel	510mm 20.08"	660mm 25.98"	1,020mm 40.16"
Y-axis Travel	510mm 20.08"	510mm 20.08"	710mm 27.95"
Z-axis Travel	260mm 10.24"	400mm 15.75"	460mm 18.11"
Spindle Speed (opt.)	30,000rpm	16,000rpm (20,000/30,000rpm)	16,000rpm (20,000rpm)
Spindle Taper	BBT30	BBT40 (BBT40/BBT30)	BBT40
Max. Spindle Power (opt.)	11kW 15HP	22kW (22/11kW) 30HP (30/15HP)	22kW 30HP
Tool Magazine Capacity (opt.)	16T	24T	
Machine Weight (APC)	9,000kg 19,841 lb	8,000kg 17,637 lb	10,500kg 23,148 lb











FV50T



FV125A

	FV50T	FV56T	FV56A	FV125A	
Table Size (APC)	650 x 400mm 25.59" x 15.75"	700 x 420mm 27.56" x 16.53"	· /	1,350 x 520mm 53.15" x 20.47"	
X-axis Travel	500mm 19.69"	560mm	1 22.05"	1,270mm 50"	
Y-axis Travel	400mm 15.75"	410mm	16.14"	520mm 20.47"	
Z-axis Travel	300mm 11.81"	450mm 17.72"		540mm 21.26"	
Spindle Speed (opt.)	10,000rpm (15,000rpm)	15,000rpm	10,000rpm (12	2,000/15,000rpm)	
Spindle Taper	BT	30	BE	ST40	
Max. Spindle Power (opt.)	5.5kW (3.7kW) 7.4HP	3.7kW 5HP	15kW 20HP	15kW 20HP	
Tool Magazine Capacity (opt.)	16T (21T)	16T (20T)	20T	24T (30T)	
Machine Weight (APC)	2,400kg 5,280 lb	2,800kg (3,630kg) 6,173 lb (8,003 lb)	3,000kg (3,850kg) 6,614 lb (8,488 lb)	6,700kg 14771 lb	

# Vertical Machining Centers

• NTV Series • TV Series

1



NTV158A/B



TV116B (opt. APC)



**TV146A** 

	NTV158A	NTV158 <mark>3</mark>	TV146 <mark>A</mark>	TV146 <mark>B</mark>	TV116 <mark>E</mark>	
Table Size (APC)	1,650 × 760mm 64.96" x 29.92"		1,500 x 600mm 59.06" x 23.62"		1,200 x 600mm (1,200 x 560mm) 47.24" x 23.62" (47.24" x 22.05")	
X-axis Travel	1,530mr	n 60.24"	1,400mn	า 55.12"	1,100mm 43.31"	
Y-axis Travel	762m	m 30"	620mm	24.41"	600mm 23.62"	
Z-axis Travel	700mm	27.56"		630mm	24.8"	
Spindle Speed (opt.)	10,000rpm (12,000/15,000rpm)	10,000rpm (15,000rpm)	8,000rpm (10,000rpm)	6,000rpm (10,000rpm)		
Spindle Taper	BBT40	BBT50 (HSK A100)	BT40		BT50 (BBT50)	
Max. Spindle Power (opt.)	15kW (22kW) 20HP (30HP)	22kW (30kW) 30HP (40HP)	11kW (15kW) 15HP (20HP)	18.5kW (22kW) 25HP (30HP)		
Tool Magazine Capacity (opt.)	24T (30/48T)	24T (32/40T)	20T (24/30T)	24T (32/40T)		
Machine Weight (APC)	14,170kg 31,239 lb	15,500kg 34,171 lb	12,000kg 26,455 lb	12,300kg 11,200kg (12,050kg) 27,117 lb 24,692 lb (26,565 lb)		

9



TV158A/B

**TV188**B



TV2110B/2610B

	TV158 <mark>B</mark>	TV188 <mark>8</mark>	TV2110 <mark>3</mark>	TV2610	
Table Size	1,700 x 860mm 66.93" x 33.86"	2,000 x 860mm 78.74" x 33.86"	2,300 x 1,020mm 90.55" x 40.16"	2,800 x 1,020mm 110.24" x 40.16"	
X-axis Travel	1,500mm 59.06"	1,800mm 70.87"	2,100mm 82.68"	2,600mm 102.36"	
Y-axis Travel	860mm	n 33.86"	1,020mr	n 40.16"	
Z-axis Travel	750mm	1 29.53"	762mm 30"		
Spindle Speed (opt.)	6,000rpm (10,000rpm)				
Spindle Taper		BT50(	BBT50)	•	
Max. Spindle Power (opt.)	18.5kW (22kW) 22kW 30HP 22kW 30HP			30HP	
Tool Magazine Capacity (opt.)	24T (32/40T)				
Machine Weight	18,000kg 39,683 lb	20,500kg 45,194 lb	25,500kg 56,217 lb	26,000kg 57,320 lb	

# Vertical Machining Centers

• MV / NMVSeries

1





**MV66A** 

**MV76**A



**NMV106A** 

	MV66A	MV76 <u>A</u>	NMV106A
Table Size	840 x 560mm 33.07" x 22.05"	915 x 560mm 36.02" x 22.05"	1,120 x 600mm 44.09" x 23.62"
X-axis Travel	660mm 25.98"	762mm 30"	1,020mm 40.16"
Y-axis Travel	510mm	n 20.08"	600mm 23.62"
Z-axis Travel	560mm	n 22.05"	600mm 23.62"
Spindle Speed (opt.)	8,000rpm (	10,000rpm)	12,000rpm (8,000rpm/10,000rpm)
Spindle Taper	BT	-40	BBT40
Max. Spindle Power (opt.)	11kW (15kW)	15HP (20HP)	18.5kW (15/15kW) 15HP (20/20HP)
Tool Magazine Capacity (opt.)	24T (2	0/30T)	24T (30/40/60T)
Machine Weight	5,000kg 11,023 lb	5,100kg 11,243 lb	6,500kg 14,330 lb



NSV102A

#### NDV66A/NDV85A/NDV102A



	NSV664	NSV85A	NSV102A	NSV156A	NDV66A	NDV85A	NDV1024
Table Size	840 x 560mm 33.07 x 22.05"	1,000 x 650mm 39.37 x 25.59"	1,120 x 650mm 44.09 x 25.59"	1,630 x 650mm 64.17 x 25.59"	840 x 560mm 33.07 x 22.05"	: / · · · · · · · · · · · · · · · · · ·	1,120 x 650mm 44.09 x 25.59"
X-axis Travel	660mm 25.98"	850mm 33.46"	1,020mm 40.16"	1,530 60.24"	660mm 25.98"	850mm 33.46"	1,020mm 40.16"
Y-axis Travel	510mm 20.08"	600mm	1 23.62"	650 25.59"	510mm 20.08"	600mm	n 23.62"
Z-axis Travel	560mm 22.05"	600mm	ı 23.62"	610 24.02"	560mm 22.05"	600mm	า 23.62"
Spindle Speed (opt.)		12,000rpm	(15,000rpm)		12,000rpm (15,000/20,000rpm)		
Spindle Taper		BB	T40	•		BBT40	
Max. Spindle Power (opt.)		22kW	30HP	•	15kW (′	11/22kW) 20HP (1	5/30HP)
Tool Magazine Capacity (opt.)	30T (40T)		30T (48/60T)			30T	
Machine Weight	6,500kg 14,330 lb	6,800kg 14,991 lb	7,000kg 15,432 lb	10,000kg 22,046 lb	6,500kg 14,330 lb	6,800kg 14,991 lb	7,000kg 15,432 lb

## Vertical Machining Centers

• WV Series • TCV Series



WV108A/B

**TCV2000**A



±110° Swivel angle (B-axis)

- ø800mm Table Size (C-axis)
- 1,200kg Max. Load on Table (C-axis)
- 33.3/100rpm Max. speed (B/C axis)

TCV3000A-5AX / 5AF

	WV108A	WV108 <mark>B</mark>	TCV2000A	TCV3000A-5AX/5AF
Table Size	1,300 x 820mm 51.18" x 32.28"		2,500 x 520mm 98.43" x 20.47"	3,500 x 800mm 137.8" x 31.5"
X-axis Travel	1,120mn	n 44.09"	2,000mm 78.74"	3,000mm 118.11"
Y-axis Travel	762mi	m 30"	520mm 20.47"	800mm 31.5"
Z-axis Travel	700mm 27.56"		540mm 21.26"	800mm 31.5" (V)
Spindle Speed (opt.)	12,000rpm (15,000rpm)	10,000rpm (6,000rpm)	12,000rpr	n (15,000rpm)
Spindle Taper (opt.)	BBT40	BBT50 (BT50)	E	BT40
Max. Spindle Power (opt.)	15kW (22kW) 20HP (30HP)	22kW (18.5kW) 30HP (25HP)	22kW 30HP	
Tool Magazine Capacity (opt.)	24T (30T) 24T (32T)		30T (40T)	40T (80T)
Machine Weight	11,000kg 24,251 lb	13,000kg 28,660 lb	13,300kg 29,321 lb	24,700kg 54,454 lb

13

• FX Series



FX380A

FX380A
ø380/12mm ø14.96"/0.47"
700mm 27.56"
520mm 20.47"
480mm 18.9"
150° (+30°/ -120°)
360°
33.3rev/min.
28sec./28sec.
16sec./16sec.
12,000rpm (15,000rpm)
BBT40
22.5kW 30HP
30T (40/60T)
6,210kg 13,691 lb

 The manufacturer reserves the right to modify the design, specifications, mechanisms, etc. to improve the performance of the machine without notice. All the specifications shown above are just for reference.
The appearance of the machines will be diverse due to different model and selectivity of accessories.

Double Column Vertical Machining Center

• NDC Series





NDC 3018B-AHC

	NDC 2016	NDC 3016	NDC 4016	NDC 3018 <mark>B</mark> -AHC	
Table Size	2,000 x 1,500mm 78.74" x 59.06"	3,000 x 1,500mm 118.11" x 59.06"	4,000 x 1,500mm 157.48" x 59.06"	3,000 x 1,500mm 118.11" x 59.06"	
X-axis Travel	2,200mm 86.61"	3,200mm 125.98"	4,200mm 165.35"	3,200mm 125.98"	
Y-axis Travel		1,600mm 62.99"		2,200mm 86.61"	
Z-axis Travel	762mm 30"				
Spindle Speed (opt.)		6,000rpm (10,000rpm)			
Spindle Taper		BBT50			
Max. Spindle Power		26kW 35HP			
Tool Magazine Capacity (opt.)	32T (40/60T)			40T (60T)	
Machine Weight	23,000kg 50,706 lb	26,000kg 57,320 lb	29,000kg 63,933 lb	29,000kg 63,933 lb	

### Double Column ertical Machining Center





	DCV2012A	DCV2012	DCV30168	DCV4016 <mark>B</mark>	DCV3021	
Table Size	2,000 x 1,100m	m 78.74" x 43.31"	3,260 x 1,500mm 128.35" x 59.06"	4,260 x 1,500mm 167.72" x 59.06"	3,100 x 2,000mm 122.1" x 78.7"	
X-axis Travel	2,000m	וm 78.74"	3,060mm 120.47"	4,065mm 160.04"	3,060mm 78.74"	
Y-axis Travel	1,200m	וm 47.24"	1,600mr	n 62.99"	2,100mm 82.68"	
Z-axis Travel (opt.)	600mm 23.6"	762mm 30"	762mm 30" 762mm (1,016mm) 30"(40"			
Spindle Speed (opt.)	20,000rpm	10,000rpm	4,50	00rpm (6,000/10,000	lrpm)	
Spindle Taper (opt.)	BBT40		BBT	50	•	
Max. Spindle Power			22kW 30HP	•	•	
Tool Magazine Capacity (opt.)	24T (30T)	32T (40T)	40T (60T)		40T (60/120T)	
Machine Weight	16,000kg 35,242 lb	21,000kg 46,255 lb	31,000kg 68,280 lb	35,000kg 77,092 lb	43,000kg 94,798 lb	



±110°/360° Swivel/Rotary angle (B/C axis) 300°/sec.

Max. swivel/rotary speed



DCV4021 DCV3025 DCV4025 DCV4035 DCV40308-5AX 4,100 x 2,000mm 3,100 x 2,400mm 4,100 x 2,400mm 4,100 x 2,400mm 4,100 x 2,400mm Table Size 161.4" x 78.7" 122.1" x 94.5" 161.4" x 94.5" 161.4" x 94.5" 161.4" x 94.5" X-axis Travel 4,065mm 160.04" 3,060mm 120.47" 4,065mm 160.04" Y-axis Travel 2,100mm 82.68" 2,500mm 98.43" 3,500mm 137.8" Z-axis Travel (opt.) 762mm 30" (1,016mm 40") 1,016mm 40" 4,500rpm (6,000/10,000rpm) Spindle Speed (opt.) 10,000rpm Spindle Taper (opt.) **BT50** HSK A100 Max. Spindle 22kW 30HP 46kW 61.7HP Power Tool Magazine 40T (60/120T) Capacity (opt.) 47,000kg 103,616 lb 45,000kg 99,207 lb 49,000kg 108,025 lb 55,000kg 121,253 lb 58,000kg 127,867 lb Machine Weight

## **Horizontal Machining Center**

• NH Series • H Series





YCM

#### NH 450A

H 500A / B

	NH450A	NH800 <mark>B</mark>	H500A	H500 <mark>B</mark>	H630 <mark>=</mark>	H800 <mark>B</mark>	H2612
Table Size	400 x 400mm (500 x 500mm) 15.75" x 15.75" (19.69" x 19.69")	800 x 800mm 31.5" x 31.5"		500mm x 19.69"	630 x 630mm 24.8" x 24.8"	800 x 800mm 31.5" x 31.5"	2,800 x 1,400mm 110.24" x 55.12"
X-axis Travel	640mm 25.2"	1,300mm 51.18"	650mm 25.59"	700mm 27.56"	1,050mm 41.34"	1,300mm 51.18"	2,600mm 102.36"
Y-axis Travel	610mm 24.02"	1,100mm 43.31"	650mm	າ 25.59"	850mm 33.46"	1,050mm 41.34"	1,200mm 47.24"
Z-axis Travel	680mm 26.77"	1,100mm 43.31"	650mm	า 25.59"	850mm 33.46"	1,150mm 45.28"	1,200mm 47.24"
Spindle Speed (opt.)	15,000rpm	10,000rpm (8,000rpm)	8,000rpm (10,000rpm)	6,000rpm (10,000rpm)	10,000rpm	4,50	0rpm
Spindle Taper	BBT40 (CAT40)	BBT50	BT40	BT50	BBT50	B1	50
Max. Spindle Power	22kW 30HP	45kW (55kW) 60HP (74HP)	15kW 20HP	22kW 30HP	30kW 40HP	18.5kV	V 25HP
Tool Magazine Capacity	40T (60T)	40T (60/120T)	40T (60T)	40T (60/80T)	40T (60/120T)	40T (6	0/80T)
Machine Weight	10,945kg 24,129 lb	26,000kg 57,320 lb	15,700kg 34,612 lb	17,650kg 38,911 lb	22,500kg 49,604 lb	26,560kg 58,554 lb	27,000kg 59,524 lb

### Horizontal Boring Milling Machining Center

• BMP Series



	BMP1416
Table Size	1,400 x 1,600mm 55" x 63"
Table Index	45° (0.001° )
X-axis Travel	2,000mm 78.7"
Y-axis Travel	1,500mm 59.1"
Z-axis Travel	1,500mm 59.1"
W-axis Travel	500mm 19.7"
Spindle Speed (opt.)	2,500rpm (3,000rpm)
Spindle Taper	BBT50
Max. Spindle Power	22kW 30HP
Tool Magazine Capacity	60T
Machine Weight	30,000kg 66,138 lb

# **CNC** Lathe

NT Series

• TC Series





#### NT-2000Y/SY

		NT-2000Y	NT-2000 <mark>SY</mark>	NT-2500¥	NT-2500 <mark>S</mark> Y	
Swing Over Bed		ø1,000mm ø39.37" (ø700mm ø27.56" interference with cover)				
Swing Over Carriage		ø870mm ø	ø34.25" (ø700mm ø	27.56" interference w	ith cover)	
Max. Turning Diameter	er		ø350mm	ø13.78"		
X/Z-axis Travel		260/580mm1	0.24"/22.83"	260/780mm 1	0.24"/30.71"	
	Max. Spindle Power	15kW	20HP	22kW	30HP	
	Spindle Nose	A2	-6	A2	-8	
Main Spindle	Hole Through (Spindle/draw bar (opt.) )	ø77mm/ø52n ø3.03"/ø2.(		ø91/ø75mm (ø80mm) ø3.58"/ ø2.95" (ø3.15")		
	Spindle Speed	4,500	)rpm	3,500rpm		
	Max. Spindle Power	-	7.5kW 10.1HP	-	7.5kW 10.1HP	
	Spindle Nose	-	A2-5	-	A2-5	
Sub Spindle	Hole Through (Spindle/draw bar)	-	ø43/ø33mm ø1.69"/ø1.30"	-	ø43/ø33mm ø1.69"/ø1.30"	
	Spindle Speed	-	6,000rpm	-	6,000rpm	
Tail Stock Quill Diameter		ø90mm ø3.54"	-	ø90mm ø3.54"	-	
Tail Stock Quill Taper	Dead Center	MT-4, Fixed Type	-	MT-4, Fixed Type	-	
	Live Center (opt.)	MT-3, Rotary Type	-	MT-3, Rotary Type	-	
Turret Capacity		12T with BMT 65				
Machine Weight		6,400kg 14,109 lb	6,500kg 14,330 lb	7,350kg 16,203 lb	7,450kg 16,424 lb	

	TC-16A	TC-16LA	TC-16 <mark>=</mark>	TC-16LB	
Swing Over Bed		ø550mn	n 21.65"		
Swing Over Carriage		ø320m	m 12.6"		
Max. Turning Diameter		ø260mn	n 10.24"		
X/Z-axis Travel			150/370mm 5.91"/14.57"		
Max. Spindle Power		15kW	/ 20HP		
Spindle Nose	A2	-5	A2-6		
Hole Through (Spindle/draw bar)	ø62/ø52mm	2.44"/2.05"	ø77/ø66mm 3.03"/2.6"		
Spindle Speed	5,000	)rpm	4,500rpm		
Tail Stock Quill Taper		MT-4 (TC-1	6A/B: opt.)		
Tail Stock Quill Diameter	ø75mm 2.95" (		(TC-16A/B: opt.)		
Turret Capacity	12T		12T 10T		
Machine Weight	3,400kg 7,496 lb	3,700kg 8,157 lb	3,400kg 7,496 lb	3,700kg 8,157 lb	



• TC Series



	TC-46/1000	TC-46/1650	TC-46/2300	TC-46/3200	TC-46///1000	TC-46///1650	TC-46///2300	TC-46 ////3200
Swing Over Bed		ø850mr	n ø33.5"		ø850mm ø33.5"			
Swing Over Carriage		ø720mr	n ø28.4"			ø720mr	n ø28.4"	
Max. Turning Diameter		ø750mr	n ø29.5"			ø730mr	n ø28.7"	
X/Z-axis Travel	405/1,000mm 15.94"/39.4"	405/1,650mm 15.94"/65"	405/2,300mm 15.94"/90.6"	405/3,200mm 15.94"/126"	1	415/1,650mm 16.3"/65"	415/2,300mm 16.3"/90.6"	415/3,200mm 16.3"/126"
Max. Spindle Power		37kW 4	49.6HP		37kW 49.6HP			
Spindle Nose (opt.)		A2-11 (A2-15, Big Bore)						
Hole Through (opt.) (Spindle/draw bar)		ø130/ø117mm (ø182/ø165mm) ø5.1"/ø4.6" (ø7.2"/ø6.5")						
Spindle Speed (opt.)				2,000rpm	(1,200rpm)			
Tail Stock Quill Taper (opt.)	MT-8	5, Fixed Type (	MT-5, Rotary	Гуре)	MT-5, Fixed Type (MT-5, Rotary Type)			Гуре)
Turret Capacity (opt.)		1(	ОТ		12T with BMT85			
Max. Live Tool Motor		—			22kW 30HP			
Max. Live Tool Speed	—			3,000rpm				
Machine Weight	12,500kg 27,558 lb	13,500kg 29,762 lb	14,300kg 31,526 lb	15,500kg 34,171 lb	12,500kg 27,558 lb	13,500kg 29,762 lb	14,300kg 31,526 lb	15,500kg 34,171 lb





TC-36/36W

	TC-26 (10"/12")	TC-26L (10"/12")	TC-36 <mark>\//</mark> (12")	TC-36 (12")	
Swing Over Bed	ø500mn	n ø19.69"	ø690mm ø27.17"		
Swing Over Carriage	ø350mn	n ø13.78"	ø510mm	n ø20.08"	
Max. Turning Diameter	ø470m	m ø18.5"	ø590mm	ı ø23.23"	
X/Z-axis Travel	250/700mm 9.84"/27.56"	250/1,100mm 9.84"/43.31"	310/700mm 12.2"/27.56"	310/1,250mm 12.2"/49.21"	
Max. Spindle Power	15kW	/ 20HP	26kW 35HP		
Spindle Nose		A2	2-8	•	
Hole Through (Spindle/draw bar)	ø88/ø78mm	ø88/ø78mm ø3.46"/ø3.07"		ø4.13"/ø3.66"	
Spindle Speed (opt.)	10"- 4,000rpm (12"- 2,500rpm)		2,500rpm		
Tail Stock Quill Taper (opt.)	MT-5, Fixed Type (MT-4, Rotary Type)		MT-4, Rotary Type		
Turret Capacity (opt.)		12T	(8T)	•	
Machine Weight	4,400kg 9,700 lb	5,500kg 12,125 lb	5,450kg 12,015 lb	7,000kg 15,432 l	

### **CNC Lathe**

• GT Series



GT-200A/B/MA



GT-300 A/LA/MA/LMA/B/LB/MB/LMB



GT-250A/MA/B/MB



GT-380A/B/LA/LB

	GT-200A	GT-200MA	GT-200 <mark>B</mark>	GT-250A	GT-250 <mark>MA</mark>	GT-250	GT-250MB
Chuck Diameter	6	"		8"		10"	
Swing Over Bed		ø500mm <mark>ø19.6</mark>	9"		ø550mm	ø21.65"	•
Swing Over Carriage		ø330mm <mark>ø12</mark> .9	9"		ø420mn	า 16.54"	•
Max. Turning Diameter	ø260mm ø10.24"	ø230mm ø9.06"	ø260mm ø10.24"	ø350mm ø13.78"	ø270mm ø10.63"	ø350mm ø13.78"	ø270mm ø10.63"
X/Z-axis Travel	150/360mm 5.91"/14.17"	177/370mm 6.97"/14.57"	150/345mm 5.91"/13.58"	195/560mm 7.68"/22.05"	230/560mm 9.06"/22.05"	195/515mm 7.68"/20.28"	230/530mm 9.06"/20.87"
Max. Spindle Power		11kW 15HP		15kW 20HP			
Spindle Nose	A2	2-5	A2-6	A2-6		A2-8	
Hole Through Spindle/draw bar)	ø56/ø45mm ø2.2"/ø1.77"		ø62/ø52mm ø2.44"/ø2.05"	ø62/ø52mm ø2.44"/ø2.05"		ø88/ø75mm ø3.46"/ø2.95"	
Spindle Speed	6,000	Drpm	4,500rpm	4,500rpm		3,500rpm	
Tail Stock Quill Taper (opt.)		MT-4, Fixed Ty	pe	MT-5, Fixed Type (MT-4 Rotary Type)			ype)
Turret Capacity	12T V	'DI 30	10T	12T VDI 40		10T	12T VDI 40
VDI Live Tool Motor	—	3.7kW4.96HP	—	—	5.5kW7.38HP	—	5.5kW7.38HF
VDI Live Tool Speed	—	4,500rpm	—	—	3,000rpm	—	3,000rpm
Machine Weight	4,210kg 4,260kg 9,281 lb 9,392 lb		4,210kg 9,281 lb	6,000kg 13,228 lb		6,200kg 13,669 lb	

	GT-300A	GT-300LA	GT-300MA	GT-300LMA	
Chuck Diameter		1	0"		
Swing Over Bed		ø600mm	ו ø23.62"		
Swing Over Carriage		ø450mm	ו ø17.72"		
Max. Turning Diameter	ø440mm	ו ø17.32"	ø360mm	ו ø14.17"	
X/Z-axis Travel	245/712mm 9.65"/28.03"	245/1,262mm 9.65"/49.69"	275/742mm 10.83"/29.21"	275/1,292mm 10.83"/50.87"	
Max. Spindle Power		18.5kV	V 25HP		
Spindle Nose		A	2-8		
Hole Through (Spindle/draw bar)		ø88/ø75mm	ø3.46"/ø2.95"		
Spindle Speed		3,50	Orpm		
Tail Stock Quill Taper (opt.)		MT-5, Fixed Type	(MT-4 Rotary Type)	•	
Turret Capacity	10	ОТ	12T with VDI 40		
VDI Live Tool Motor	-	_	5.5kW 7.38HP		
VDI Live Tool Speed	-	—	3,000rpm		
Machine Weight	6,950kg 15,322 lb	7,850kg 17,306 lb	6,950kg 15,322 lb	7,850kg 17,306 lb	

20 110

20

	GT-300 <mark>8</mark>	GT-300LB	GT-300MB	GT-300LMB	
Chuck Diameter		1:	2"		
Swing Over Bed		ø600mm	n ø23.62"	•	
Swing Over Carriage		ø450mm	ו ø17.72"		
Max. Turning Diameter	ø440mm	ø17.32"	ø360mm	ı ø14.17"	
X/Z-axis Travel	245/700mm 9.65"/27.56"	245/1,250mm 9.65"/49.21"	275/733mm 10.83"/28.86"	275/1,283mm 10.83"/50.51"	
Max. Spindle Power	18.5kW 25HP				
Spindle Nose		A2	2-8	•	
Hole Through (Spindle/draw bar)		ø105/ø91mm	ø4.13"/ø3.58"	•	
Spindle Speed		3,00	Orpm		
Tail Stock Quill Taper (opt.)	MT-5, Fixed Type (MT-4 Rotary Type)				
Turret Capacity	8	Г	12T with VDI 40		
VDI Live Tool Motor	-	-	5.5kW 7.38HP		
VDI Live Tool Speed	-	-	3,000rpm		
Machine Weight	6,950kg 15,322 lb	7,850kg 17,306 lb	6,950kg 15,322 lb	7,850kg 17,306	

	GT-380A	GT-380 <mark>B</mark>	GT-380LA	GT-380L <mark>B</mark>	
Chuck Diameter	12"	15"	12"	15"	
Swing Over Bed		ø700mm	ø27.56"		
Swing Over Carriage		ø570mm	ø22.44"		
Max. Turning Diameter		ø560mm	ø22.05"		
X/Z-axis Travel	305/715mm 12.01"/28.15"	305/680mm 12.01"/26.77"	305/1,265mm 12.01"/49.8"	305/1,230mm 12.01"/48.43"	
Max. Spindle Power		18.5kW	/ 25HP		
Spindle Nose		A2	2-8		
Hole Through (Spindle/draw bar)		ø105/ø91mm	ø4.13"/ø3.58"		
Spindle Speed	3,000rpm	2,000rpm	3,000rpm	2,000rpm	
Tail Stock Quill Taper (opt.)	MT-5, Fixed Type (MT-4 Rotary Type)				
Turret Capacity	10T				
Machine Weight (approx.)	7,520kg 16,579 lb	7,570kg 16,689 lb	7,980kg 17,593 lb	8,030kg 17,703 lb	
Turret Capacity	10T				

The appearance of the machines will be diverse due to different model and selectivit

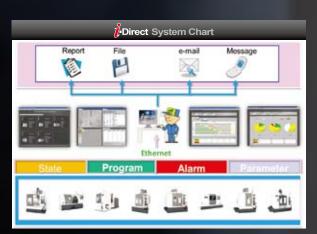




- High Response AC Digital Servo & Spindle Drives with High Definition
- AICC II High Speed High Accuracy with Auto Switching on/off Machining
- JERK Control Function (opt.)
- High Rigidity Tapping, Helical Interpolation
- Custom Marco B and Tool Path Graphics
- Manual Guide i with large Screen Display . (MXP-200FC, opt.)
- Program File Management for Easy Program Classifying
- USB Interface for Easy Parameters & CNC Programs Transfer
- 512KB Memory
- High Speed Positioning Function (MXP-200FC, opt.)
- Memory Card Program Edit & Operation (opt.)
- **3**D Interference Check (5-axis control as standard)
- NANO Smoothing Function (opt.)
- 400 pairs tool offset, 1,000 total registered programs
- 48 pairs of workpieces coordinate system
- Extended parts program editing (cut, copy, and paste. maximum 4,000 characters)

# Direct A remote monitoring system

The YCM Production Line Monitoring System i-Direct overcomes the limitations of time and distance. This software provides plant operators with instant production status, including production value, output, standby, alarm time, status display and malfunction records of the machine. These data could be browsed online and printed. When incidents occur, i-Direct will automatically warn plant operators through e-mail or MMS message. With i-Direct Production Line Monitoring System the plant operators can easily keep track of production statuses regardless of time and distance.





Single Machine Status Browsing Single Machine Status Browsing







Production Status Process Record

Overvees Monitoring System

**CM** CONTROL

by FANUC

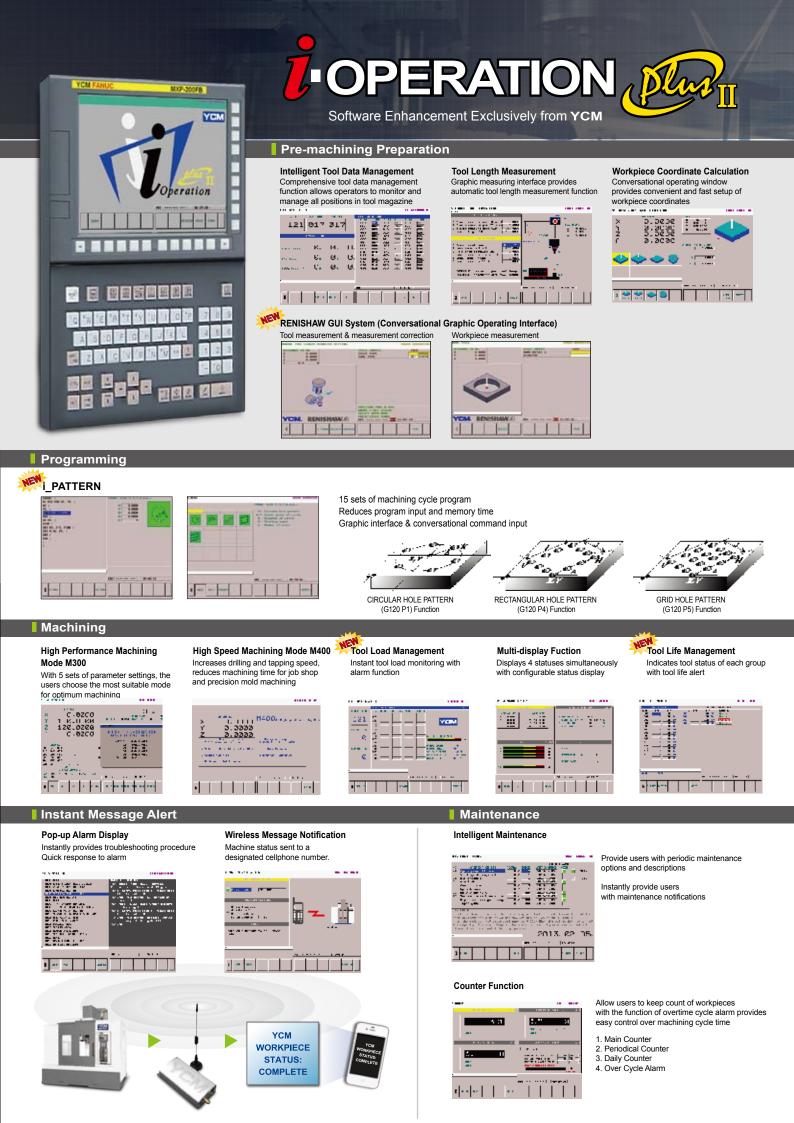
Plant Operation Status Monitoring

	A PROPERTY.	Recording 41s	THE TIME		
and all a	- Contractor			-	121.4
10000	11111172	and the second of the second s		1000	-
Don't.		And Deep	A.M		
1.0	and the second	A REAL PROPERTY.	ana1,1	14	-
100	1000112111	CONTRACTOR NOT COMPANY	#160.17116	14	-
100	100001-010-040	18160-80190 No.318-880	10101127-010	- 14	10.000
-	100001-010-000	10 March 10 10 (10 March	BURN 171-0	14	10.00
-	(man 1 - 1 - 1 - 1 - 1	In calculation we include	100012-00	14	1.00
-	1000124-01	In case of the local division of	4940349-0	- 14	
1	10000111000	1002-002-002-0030	016-11-E.B.	-14	
100	1000010100	part for all said	ADD TT D	14	10.000
100	10000-010000	100-100 To 100-100	1010 TT-10	14	-
-	100.00	248	Million 111-10.00	14	1.00
-	1000411-001	our have in	alertt-an	- 14	-
- 100	1000011100	and the all the local data	APRIL 11-107	-16	-
-	ALC: NO.	the safet are said under	ATTACT TO ALL	14	10.000
	100.00	and the second states in	minu Yeard	14	10.000
-	10000101040	and the second	ACCESS 11 1817	14	1.00
-	100.004 110.005	COLUMN DAY NAME	minut 14-0.0	14	1.00
-	100101-010-010	Intrast Britanita	-	14	
-	ACCOUNTS ON A	the state of the state of the state of the	atterres.	14	-
-			10100 T1-010	14	-
-	and the second	THE REPORT OF THE PARTY.			-

Machine Status Time Record



Production Management Statistics



### **ISOLATED DIRECT DRIVE SPINDLE**

#### IDD PLUS

------ Features

- Automatic Spindle Cooling System Effectively dissipates heat generated from long runtime through efficient oil cooled circulation.
- Micro Oil-air Lubrication System Consistently injects micro amount of lubricant to spindle bearings for maximizing spindle life.
- Highly Reliable Helical Disc Spring Design Ensures optimal spindle balance.
- Floating Cylinder Design of Tool Clamp/Unclamp System Eliminates unnecessary force on spindle bearings.
- Perpetual Pre-load Design Reduces the effect of spindle thermal growth under long spindle runtime.

IDD: 10,000rpm/12,000rpm/15,000rpm
IDD PLUS: 16,000rpm

Spindle thermal growth is minimized with effective isolation of the heat generated by spindle motor from the spindle cartridge.

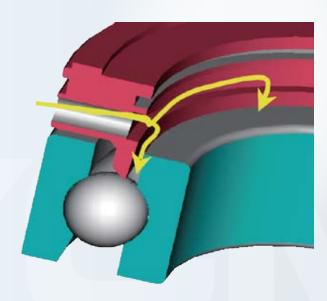
#### **YCM** Spindle Features

Micro Oil-air Lubrication System with Hi-lub Technology Directly injects micro amount of lubricant to each spindle bearing. Consistent lubrication prolongs spindle life.

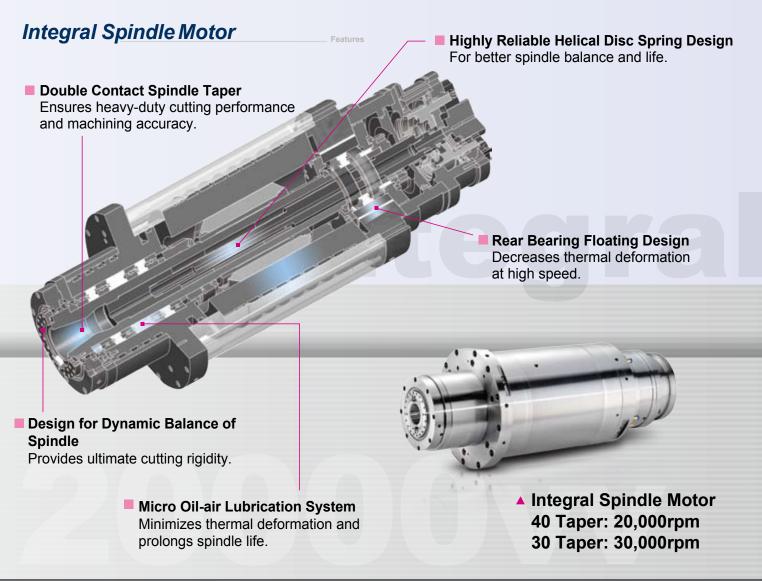
Normal Lube: 0.03~0.1cc/5~8min.

The hi-lub technology is 2.5 times more effective than normal lubrication system.





### **BUILT-IN MOTORIZED SPINDLE**



YCM integral spindle motor design reduces centrifugal force effect and results in low spindle vibration.

The spindle vibration is consistently controlled under 0.4G (ISO 1940), 5 times better than normal belt type spindle design.



Perpetual pre-load design reduces thermal deformation under long runtime.



Floating cylinder design of tool clamp/unclamp system eliminates unnecessary force on the spindle bearings during tool change and prolongs spindle bearing life.

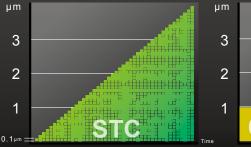
### **SPINDLE THERMAL COMPENSATION** THE NEXT GENERATION STC EXCLUSIVELY FROM YCM



- Resolution Improved, Reaching 0.1µm
- Reduce Machine Warm-Up Time
- Works in Non-Air Conditioning Environment
- Provides Total Compensation at Full Speed Range

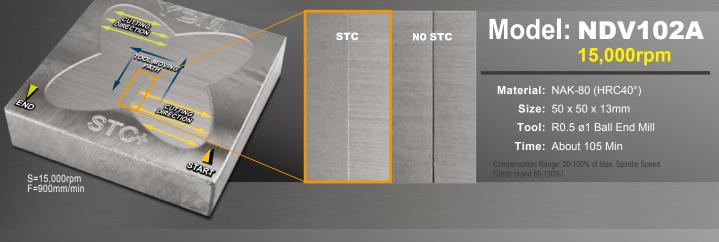


**High Resolution** 

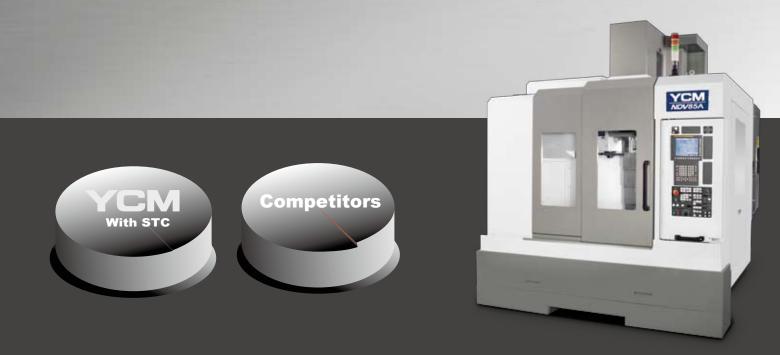




SPIND







#### Model: NDV85A 20,000rpm



Material: Aluminum Size: 80 x 80 x 25mm 3.15 x 3.15 x 0.98" Tool: R1 Ball End Mill Time: 6 Hours

NOTE: The test data in this brochure is provided as an example under specific guidelines. Results may be different due to variation in machine settings or environmental conditions during machining and measuring.

- STC Advantages Upgraded
- Provides Total Compensation from 0 to 100% rpm
- Continuously Works in Downtime



### Model: NDV85A 20,000rpm

Working Table:	1,000x650mm
Spindle Taper:	BBT40
X-axis Travel:	850mm
Y-axis Travel:	600mm
Z-axis Travel:	600mm

VMC	Vertical Machining Center
VES	FP Series   High Precision High Performance Die Mold Vertical Machining Center     FP55LX, FP66A, FP100A / FP66G     NXV Series   High Performance Vertical Machining Center
RODUCT LINES	NXV1020A/AM TV Series Heavy Duty Vertical Machining Center TV116B, TV146A/B, TV158B, TV188B, TV2110B, TV2610B
SOD(	NTV Seriles   High Efficiency T-base Vertical Machining Center     NTV158A/B     NMV Seriles     High Performance High Rigidity Vertical Machining Center
A	NMV106A WV Series Ultra Wide High Performance Vertical Machining Center
	WV108A/B FX Series High Performance 5-axis Vertical Machining Center FX380A
	NSV Series Ultra High Performance Vertical Machining Center NSV66A, NSV85A, NSV102A, NSV156A
	NDV Series High Precision Die Mold Vertical Machining Center NDV66A, NDV85A, NDV102A
	TCV2000A, TCV3000A, TCV3000A-5AF, TCV3000A-5AX
	<b>DCV</b> Series Advanced Double Column Vertical Machining Center DCV2012A/B, DCV3016B, DCV4016B, DCV3021B, DCV4021B, DCV5021B, DCV6021B, DCV3025B, DCV4025B, DCV5025B, DCV4030B, DCV5030B, DCV6030B, DCV4035B, DCV5035B, DCV6035B, DCV4030B-5AX, DCV5030B-5AX, DCV6030B-5AX, DCV4030B-5AF
	NDC Series High Performance Double Column Vertical Machining Center NDC2016B, NDC3016B, NDC4016B
НМС	Horizontal Machining Center
	H Series High Production Horizontal Machining Center H500A/B, H630B, H800B, H2612B NH Series High Speed High Precision Horizontal Machining Center
LIDIA	NH450A, NH630B, NH800B
НВМ	Horizontal Boring Milling Machining Center       BMP Series High Accuracy Heavy Duty Boring Machine
CNC	BMP1416B CNC Turning Center
LATHES	NT Series High Performance Mill-axis Mill/Turn Center NT-2000Y/SY, NT-2500Y/SY
	GT Series High Performance Geo Turning Center GT-200A/B/MA, GT-250A/B/MA/MB, GT-300A/B/LA/LB/MA/MB/LMA/LMB, GT-380A/B/LA/LB
	TC Series High Performance High Precision CNC Lathe TC-16A/B/LA/LB/MA/MB/LMA/LMB, TC-26, TC-26L, TC-36, TC-36W, TC-46, TC-46M
INTEGRATION AND SOLUTIONS	Integrated Operation Control System OPERATION OF Spindle Thermal Compensation System STCPLUS Remote Monitoring System Operation Automation Solutions



#### YEONG CHIN MACHINERY INDUSTRIES CO., LTD.



No. 888, Sec. 1, Homu Road, Shengang District, Taichung 42953, Taiwan Tel : +886-4-2562-3211 = Fax: +886-4-2562-6479 web Page: WWW.YCMCNC.com = Email: sales@YCMCNC.com