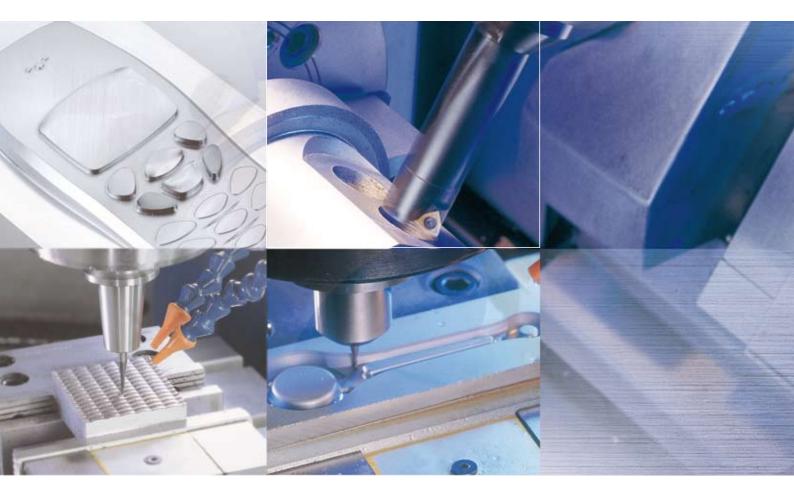
# TOTAL SOLUTION







# of Manufacturing Facilities, Taiwar Over 158,400 Square Meters (520,000 sq ft.) of Manufacturing F

Since 1954, YCM Machines have been recognized worldwide for superior precision, exceptional rigidity and outstanding reliability, YCM has a wide range of machine tools to meet today's manufacturing needs.



N 24°17'12.3" E 120°38'32.1"



XV Series EV Series FP Series FV Series TV Series



**MV Series** 

TCV Series

Healt

WV Series NSV Series NDV Series FX Series

STREET, MILLING LUULUULU. TERHER

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Serving The World Since 1954







Quality control



Complete manufacturing solutions



Comprehensive aging process



Flexible manufacturing system



Temperature controlled machining facility



Latest advance research and develop technical center



**H** Series

NT Series

TC Series

**GT** Series



#### Chen, Chih-Chung President

#### **Company Profile**

| Year Founded          | Since 1954                               |  |  |
|-----------------------|--|--|--|
| President             | Chen, Chih-Chung                         |  |  |
| Capital Registered    | NT\$533,280,000                          |  |  |
| Factory Area          | 158,400m <sup>2</sup>                    |  |  |
| Employees             | 650                                      |  |  |
| Main Facilities       | Foundry, Machining & Assembly Shops      |  |  |
| Main Products         | Vertical Machining Centers,              |  |  |
|                       | Double Column Vertical Machining Centers |  |  |
|                       | Horizontal Machining Centers,            |  |  |
|                       | CNC Lathes & Turning Centers             |  |  |
| Awards & Certificates | ISO 9001, ISO 14001,                     |  |  |
|                       | CE, MD MIL-1-45208,                      |  |  |
|                       |  |  |  |

Symbol of Excellence, etc.

#### YEONG CHIN Iron Works, our forerunner, was founded to manufacture packing machines.

- 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.
- 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.
- 1982. 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).
- Received "Outstanding Product Design Award" from China External Trade Development Council, Republic of China; began production and marketing of YCM-VMC-72A machining centers.
- 1985-1986. 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.
  - YCM-180HV received "Superior Award" at the Third Products 1992. 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.
- 1999. 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.

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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.

- 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.
- 2. 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.
- 33. 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.
- 1004. Launch campaign to celebrate the 50th anniversary with new vision, mottos, and a series of events.
- 05. 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".
- 006. 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.
- 107. 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.
  - 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."

<sup>00.</sup> Largely deployed high speed motorized spindle up to 30,000rpm on the FV series high speed high power machining centers, which

# - 111















| 6  | XV Series<br>XV560A, XV1020A, XV1250A  |
|----|--|
|    |  |
| 6  | EV Series<br>EV1020A   |
| 7  | FP Series<br>FP55A, FP66A, FP100A  |
| 8  | FV Series<br>FV56T,FV56A, FV85A, FV102A,<br>FV125A/FV50T   |
|    | FV123A/FV301   |
| 9  | TV Series<br>TV116 <mark>B, TV146A/B, TV158B,</mark><br>TV188 <mark>B, TV2110B,</mark> TV2610 <mark>B</mark> |
| 11 | MV Series<br>MV66A, MV76A, MV86A, MV106A   |
| 12 | TCV Series<br>TCV2000A   |

**Vertical Machining Centers** 

WV Series 12 NSV Series NSV66A, NSV85A, NSV102A 13 13

FX Series FX380A

NDV Series NDV66A, NDV85A, NDV102A

#### **5-Axis Vertical Machining Centers**

14

15

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

DCV Series DCV2012A/B, DCV3016B, DCV4016<sup>B</sup>, DCV4025<sup>B</sup>

#### **Horizontal Machining Centers**

H Series H500A/B, H630B, H800B, H2612B 16

#### **CNC** Lathes

| <b>GT</b> Series<br><b>GT-200A/B/MA, GT-250A/B/MA,</b><br><b>GT-300A/B/MA/LB,GT-380A/B/LA/</b> |       |
|--|-------|
| TC Series       TC-46/1650, TC-26, TC-26L, TC-36   | , тс- |
| 17 NT Series<br>NT-2000Y/SY, NT-2500Y/SY   |       |













# Vertical Machining Centers XV Series EV Series





XV560A



XV1020A



XV1250A

EV1020A

|                                  | XV560A                       | XV1020A                        | XV1250A                        | EV1020 <mark>A</mark>          |  |
|----------------------------------|------------------------------|--------------------------------|--------------------------------|--------------------------------|--|
| Table Size                       | 700 x 420mm<br>27.6" x 16.5" | 1,120 x 520mm<br>44.1" x 20.5" | 1,350 x 520mm<br>53.1" x 20.5" | 1,120 x 520mm<br>44.1" x 20.5" |  |
| X-axis Travel                    | 560mm 22.0"                  | 1,020mm 40.2"                  | 1,270mm 50.0"                  | 1,020mm 40.2"                  |  |
| Y-axis Travel                    | 410mm 16.1"                  | 520mm 20.5"                    | 520mm 20.5"                    | 520mm 20.5"                    |  |
| Z-axis Travel                    | 450mm 17.7"                  | 540mm 21.3"                    | 540mm 21.3"                    | 540mm 21.3"                    |  |
| Spindle Speed                    |                              | 45~10,000                      | Orpm                           |                                |  |
| Spindle Taper                    |                              | BT40                           | )                              |                                |  |
| Spindle Motor Power              | 11kW 15HP                    | 22kW 30HP                      |                                | 5.5/7.5kW 7.4/10HP             |  |
| Tool Magazine<br>Capacity (opt.) | 20T                          | 24T (30T)                      |                                |                                |  |
| Machine Weight                   | 3,000kg 6,614 lb             | 5,350kg 11,795 lb              | 6,700kg 14,770 lb              | 5,350kg 11,795 lb              |  |



|                           | FP55A                       | FP66A                         | FP100A                           |
|---------------------------|-----------------------------|-------------------------------|----------------------------------|
| Table Size                | 700 x 510mm 27.56" x 20.08" | 800 x 510mm 31.5" x 20.08"    | 1,200 x 700mm<br>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 (opt.)      | BT30                        | BBT40 (BBT40/BT30)            | BBT40                            |
| Spindle Motor Power       | 11kW 15HP                   | 22kW (22/11kW) 15HP (30/15HP) | 22kW 15HP                        |
| Tool Magazine<br>Capacity | 16T                         | 24T                           |                                  |
| Machine Weight            | 9,000kg 19,841 lb           | 8,000kg 17,637 lb             | 10,500kg 23,148 lb               |
|                           |                             |                               |                                  |



# Vertical Machining Centers **TV Series**



**TV116**: (opt. APC)



TV146 Y-axis 4-slideway Design

|                               | TV146A TV146B              |  | TV116 <mark>B</mark> |  |  |
|-------------------------------|----------------------------|--|----------------------|--|--|
| Table Size (APC)              | 1,500 x 600<br>59.06" x 23 | 1,200 x 600 (1,200 x 560)mm<br>47.24" x 23.62" (47.24" x 22.05") |                      |  |  |
| X-axis Travel                 | 1,400mm 5                  | 5.12"  | 1,100mm 43.31"       |  |  |
| Y-axis Travel                 | 620mm 24                   | .41"   | 600mm 23.62"         |  |  |
| Z-axis Travel                 |                            | 630mm 24.8"  |                      |  |  |
| Spindle Speed (opt.)          | 45~8,000rpm (10,000rpm)    | 45~6,000rpm (10,000rpm)  |                      |  |  |
| Spindle Taper                 | BT40                       | BT50   |                      |  |  |
| Spindle Motor Power (opt.)    | 11kW (15kW) 15HP (20HP)    | 18.5kW (22kW) 25HP (30HP)  |                      |  |  |
| Tool Magazine Capacity (opt.) | 20T (24/30/40T)            |  | 24T (32/40T)         |  |  |
| Machine Weight (APC)          | 9,800kg 21,605 lb          | 10,600kg (12,050k<br>23,369lb (26,565ll                          |                      |  |  |
| MALLE -                       |                            | 211  | here 1               |  |  |



TV158: Y-axis 4-slideway Design

TV188 Y-axis 4-slideway Design



TV2110<sup>B</sup>/TV2610<sup>B</sup> Y-axis 4-slideway Design

|                               | TV158 <mark>B</mark>                | TV188 <mark>B</mark> | TV2110 <mark>B</mark> | TV2610 <mark>B</mark> |  |
|-------------------------------|-------------------------------------|----------------------|-----------------------|-----------------------|--|
| Table Size                    | 1,700 x 860mm                       | 2,000 x 860mm        | 2,300 x 1,020mm       | 2,800 x 1,020mm       |  |
|                               | 66.93" x 33.86"                     | 78.74" x 33.86"      | 90.55" x 40.16"       | 110.24" x 40.16"      |  |
| X-axis Travel                 | 1,500mm <u>59.06</u> "              | 1,800mm 70.87"       | 2,100mm 82.68"        | 2,600mm 102.36"       |  |
| Y-axis Travel                 | 860mm                               | 33.86"               | 1,020mm 40.16"        |                       |  |
| Z-axis Travel                 | 750mm 29.53"                        |                      | 762mm 30"             |                       |  |
| Spindle Speed (opt.)          |                                     | 45~6,000rpm          | i (10,000rpm)         |                       |  |
| Spindle Taper                 | BT50                                |                      |                       |                       |  |
| Spindle Motor Power (opt.)    | 18.5kW (22kW) 25HP (30HP) 22kW 30HP |                      |                       | 30HP                  |  |
| Tool Magazine Capacity (opt.) | 24T (32/40T)                        |                      |                       |                       |  |
| Machine Weight                | 16,630kg 36,662 lb                  | 17,020kg 37,522 lb   | 25,000kg 55,115 lb    | 27,000kg 59,524 lb    |  |
|                               |                                     |                      |                       |                       |  |

# Vertical Machining Centers MV Series TCV Series WV Series

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MV66🙏



MV86



699

MV106

|                               | MV66A                          | MV76A                          | MV86 <mark>A</mark>            | MV106A                           |  |  |
|-------------------------------|--------------------------------|--------------------------------|--------------------------------|----------------------------------|--|--|
| Table Size                    | 840 x 560mm<br>33.07" x 22.05" | 915 x 560mm<br>36.02" x 22.05" | 950 x 600mm<br>37.40" x 23.62" | 1,120 x 600mm<br>44.09" x 23.62" |  |  |
| X-axis Travel                 | 660mm 25.98"                   | 762mm 30"                      | 850mm 33.46"                   | 1,020mm 40.16"                   |  |  |
| Y-axis Travel                 | 510mm                          | 1 20.08"                       | 600mm                          | 600mm 23.62"                     |  |  |
| Z-axis Travel                 | 560mm                          | ı 22.05"                       | 600mm 23.62"                   |                                  |  |  |
| Spindle Speed (opt.)          |                                | 45~8,000rpm                    | ו (10,000rpm)                  | -                                |  |  |
| Spindle Taper                 |                                | BT                             | F40                            |                                  |  |  |
| Spindle Motor Power           | 11kW (15kW) 15HP (20HP)        |                                |                                |                                  |  |  |
| Tool Magazine Capacity (opt.) | 20T (24/30T)                   | 24T (20/30T)                   | 20T (2                         | 4/30T)                           |  |  |
| Machine Weight                | 5,000kg 11,023 lb              | 5,100kg 11,243 lb              | 6,450kg 14,220 lb              | 6,500kg 14,330 lb                |  |  |





210

WV108A



12

WV108<mark>3</mark>

|                               | TCV2000A                      | WV108 <mark>A</mark>               | WV108 <mark>B</mark>      |  |
|-------------------------------|-------------------------------|------------------------------------|---------------------------|--|
| Table Size                    | 2,500 x 520mm 98.43" x 20.47" | 1,300 x 820mn                      | n 51.18" x 32.28"         |  |
| X-axis Travel                 | 2,000mm 78.74"                | 1,120m                             | m 44.09"                  |  |
| Y-axis Travel                 | 520mm 20.47"                  | 762m                               | וm 30"                    |  |
| Z-axis Travel                 | 540mm 21.26"                  | 700mm 27.56"                       |                           |  |
| Spindle Speed (opt.)          | 12,000rpm                     | 60~12,000rpm (15,000rpm)           | 60~10,000rpm (6,000rpm)   |  |
| Spindle Taper                 | BBT40                         | BBT40                              | BT50                      |  |
| Spindle Motor Power (opt.)    | 22kW 30HP                     | 15kW 20HP                          | 22kW (18.5kW) 30HP (25HP) |  |
| Tool Magazine Capacity (opt.) | 30T                           | 24T (30T) 24T (32T)                |                           |  |
| Machine Weight                | 13,000kg 28,660 lb            | 11,000kg 24,251 lb 13,000kg 28,660 |                           |  |

# Vertical Machility Centers NSV Series NDV Series FX Series



NSV66A/NSV85A/NSV102A



1000

NDV66A/NDV85A/NDV102A



|                                  | NSV66A                         | NSV85A                           | NSV102A                          | NSV156A                        | NDV66A                           | NDV85 <mark>A</mark>             | NDV102A              |
|----------------------------------|--------------------------------|----------------------------------|----------------------------------|--------------------------------|----------------------------------|----------------------------------|----------------------|
| Table Size                       | 840 x 560mm<br>33.07" x 22.05" | 1,000 x 650mm<br>39.37" x 25.59" | 1,120 x 650mm<br>44.09" x 25.59" | 1,630X650mm<br>64.17" x 25.59" |                                  | 1,000 x 650mm<br>39.37" 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                            | ו 23.62"                         | 650 25.59"                     | 510mm 20.08"                     | 600mm                            | ı 23.62"             |
| Z-axis Travel                    | 560mm 22.05"                   | 600mm                            | ו 23.62"                         | 610 24.02"                     | 560mm 22.05"                     | 600mm 23.62"                     |                      |
| Spindle Speed (opt.)             | 100~12,000rpm (15,000rpm)      |                                  |                                  |                                | 100~12,000rpm (15,000/20,000rpm) |                                  |                      |
| Spindle Taper                    |                                | BB.                              | T40                              |                                |                                  | BBT40                            |                      |
| Spindle Motor<br>Power (opt.)    | 22kW 30HP                      |                                  |                                  |                                | 15kW (1                          | 1/22kW) 20HP(14                  | .8/30HP)             |
| Tool Magazine<br>Capacity (opt.) | 30T (40T)                      | ) 30T (48T) 30T (48/60T)         |                                  |                                |                                  | 30T                              |                      |
| Machine Weight                   | 6,500kg<br>14,330 lb           | 7,000kg<br>15,432 lb             | 7,400kg<br>16,314 lb             | 10,000kg<br>22,046 lb          | 6,500kg<br>14,330 lb             | 7,000kg<br>14,991 lb             | 7,400kg<br>15,432 lb |





FX380

|                            | FX380A                  |
|----------------------------|-------------------------|
| Table Size/T Slots         | ø380/12mm ø14.96"/0.47" |
| X-axis Travel              | 700mm 27.56"            |
| Y-axis Travel              | 520mm 20.47"            |
| Z-axis Travel              | 480mm 18.9"             |
| A-axis (Tilt)              | 150°(+30°/ -120°)       |
| C-axis (Rotary)            | 360°                    |
| A/C-axis Feed Rate         | 33.3rev/min.            |
| A/C Positioning Accuracy   | 50sec./20sec.           |
| A/C Repeatability Accuracy | ±3sec./±2sec.           |
| Spindle Speed              | 45~12,000rpm            |
| Spindle Taper              | BBT40                   |
| Spindle Motor Power        | 22.5kW 30HP             |
| Tool Magazine Capacity     | 30T (40/60T)            |
| Machine Weight             | 5,860kg 12,919 lb       |





DCV4025

|                                  | DCV2012A                        | DCV2012B              | DCV3016 <mark>B</mark>                            | DCV4016B                  | DCV4025 <mark>B</mark> |
|----------------------------------|---------------------------------|-----------------------|---|---------------------------|------------------------|
| Table Size                       | 2.000 x 1.100mm 78.74" x 43.31" |                       | 3,260 x 1,500mm                                   | 4,260 x 1,500mm           | 4,100 x 2,400mm        |
|                                  | 2,000 x 1,1001                  | III 70.74 X 45.51     | 128.35" x 59.06"                                  | 167.72" x 59.06"          | 161.42" x 94.49"       |
| X-axis Travel                    | 2,000r                          | nm 78.74"             | 3,060mm 120.47"                                   | 4,065mm 160.04"           | 4,065mm 160.04"        |
| Y-axis Travel                    | 1,200r                          | nm 47.24"             | 1,600mr   | n 62.99"                  | 2,500mm 98.43"         |
| Z-axis Travel (opt.)             | 600mm 23.6"                     | 762mm 30"             | 762mm (1,016mm) 30"(40                            |                           | (40")                  |
| Spindle Speed (opt.)             | 20,000rpm                       | 10,000rpm (15,000rpm) | 45~4,500rpm (6,000/10,000/15,000rpm)              |                           | 5,000rpm)              |
| Spindle Taper (opt.)             | BBT40                           | BT50 (HSK A100)       | BT5   | BT50 (BT50/BT50/HSK A100) |                        |
| Spindle Motor                    | 22kW 30HP                       | 22kW (32kW)           | 18.5kW (18.5/22/32kW) 25HP (25/30/40HP)           |                           | 25/30/40HP)            |
| Power (opt.)                     | 22000 00111                     | 30HP (43HP)           | 10.3KW (10.3/22/32KW) 2311F (23/30/4011F)         |                           | 23/30/40111 )          |
| Tool Magazine<br>Capacity (opt.) | 24T (30T)                       | 32T (40T)             | 40T (   | 60T)                      | 40T (60T/120T)         |
| Machine Weight                   | 16,000kg 35,242 lb              | 21,000kg 46,255 lb    | 33,000kg 72,686 lb 38,000kg 83,700 lb 49,000kg 10 |                           | 49,000kg 108,025 lb    |







H500<u>A</u>∕B

H630<mark>B</mark>



H800B

H2612<mark>3</mark>

|                                  | H500 <mark>A</mark>         | H500 <mark>B</mark>        | H630 <mark>B</mark> | H800 <mark>B</mark> | H2612 <mark>B</mark> |
|----------------------------------|-----------------------------|----------------------------|---------------------|---------------------|----------------------|
| Table Size                       | 500 x 500mm 19.69" x 19.69" |                            | 630 x 630mm         | 800 x 800mm         | 2,800 x 1,400mm      |
|                                  |                             |                            | 24.8" x 24.8"       | 31.5" x 31.5"       | 110.24" x 55.12"     |
| X-axis Travel                    | 650mm 25.59"                | 700mm 27.56"               | 1,050mm 41.34"      | 1,300mm 51.18"      | 2,600mm 102.36"      |
| Y-axis Travel                    | 650mm                       | 25.59"                     | 850mm 33.46"        | 1,050mm 41.34"      | 1,200mm 47.24"       |
| Z-axis Travel                    | 650mm                       | 25.59"                     | 850mm 33.46"        | 1,150mm 45.28"      | 1,200mm 47.24"       |
| Spindle Speed (opt.)             | 45~8,000rpm<br>(10,000rpm)  | 45~6,000rpm<br>(10,000rpm) | 10,000rpm           | 45~4,500rpm         |                      |
| Spindle Taper                    | BT40                        | BT50                       | BBT50               | BT50                |                      |
| Spindle Motor<br>Power           | 15kW 20HP                   | 22kW 30HP                  | 30kW 40HP           | 18.5kV              | V 25HP               |
| Tool Magazine<br>Capacity (opt.) | 40T (6                      | 0/80T)                     | 40T (60/90/120T)    | 40T (60/80T)        | 40T (60T)            |
| Machine Weight                   | 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   |





#### NT-2000Y/SY





NT-2500Y/SY

|                         |   | NT-2000Y  | NT-2000 <mark>SY</mark>                                 | NT-2500Y          | NT-2500 <mark>SY</mark>                      |  |  |
|-------------------------|---|---|---|-------------------|--|--|--|
| Swing Over Bed          |   | ø1,000mm ø39.37" (ø700mm ø27.56" interference with cover) |   |                   |  |  |  |
| <mark>Swing</mark> O    | ver Carriage                              | ø870i   | ø870mm ø34.25" (ø700mm ø27.56" interference with cover) |                   |  |  |  |
| Max. Tur                | ning Diameter                             | ø350mm ø13.78"  |   |                   |  |  |  |
| <mark>X/Z-a</mark> xis  | Travel                                    | 260/580mm   | 10.24"/22.83"   | 260/780mm         | 10.24"/30.71"                                |  |  |
|                         | Spindle Motor                             | 11/15kW   | 14.8/20HP   | 15/22kW           | 20/29.5HP                                    |  |  |
|                         | Spindle Nose                              | A   | 2-6   | A                 | 2-8  |  |  |
| Main<br>Spindle         | Hole Through<br>(Spindle/draw bar (opt.)) |   | ø77mm/ø52mm (ø66mm)<br>ø3.03"/ø2.05" (ø2.6")            |                   | ø91/ø75mm (ø80mm)<br>ø3.58"/ ø2.95" (ø3.15") |  |  |
|                         | Spindle Speed                             | 4,50  | 4,500rpm  |                   | 3,500rpm                                     |  |  |
|                         | Spindle Motor                             |   | 5.5/7.5kW 7.4/10.1HP                                    |                   | 5.5/7.5kW 7.4/10.1HF                         |  |  |
| Sub                     | Spindle Nose                              |   | A2-5  |                   | A2-5   |  |  |
| Spindle                 | Hole Through<br>(Spindle/draw bar)        |   | ø43/ø33mm<br>ø1.69"/ø1.30"                              |                   | ø43/ø33mm<br>ø1.69"/ø1.30"                   |  |  |
|                         | Spindle Speed                             |   | 6,000rpm  |                   | 6,000rpm                                     |  |  |
| Tail Stoc               | k Quill Diameter                          | ø90mm ø3.54"  |   | ø90mm ø3.54"      |  |  |  |
| Tail                    | Dead Center                               | MT-4  |   | MT-4              |  |  |  |
| Stock<br>Quill<br>Taper | Live Center (opt.)                        | MT-3  |   | MT-3              |  |  |  |
| Turret Capacity         |   |   | 12  | Т                 |  |  |  |
| Machine Weight          |   | 6,400kg 14,109 lb   | 6,500kg 14,330 lb                                       | 6,660kg 14,683 lb | 6,760kg 14,903 lb                            |  |  |
|                         | 1×12                                      |   | 8/19  | No. 1             | 600  |  |  |



|                                    | TC-46/1000   | TC-46/1650                | TC-46/2300                  | TC-46/3200                 |  |
|------------------------------------|--|---------------------------|-----------------------------|----------------------------|--|
| Swing Over Bed                     | ø850mm ø33.5"  |                           |                             |                            |  |
| Swing Over Carriage                |  | ø720mm                    | ו ø28.4"                    |                            |  |
| Max. Turning Diameter              |  | ø750mm                    | ו ø29.5"                    |                            |  |
| X/Z-axis Travel                    | 405/1,000mm<br>15.94"/39.4"  | 405/1,650mm<br>15.94"/65" | 405/2,300mm<br>15.94"/90.6" | 405/3,200mm<br>15.94"/126" |  |
| Spindle Motor                      | 30/37kW 40.2/49.6HP  |                           |                             |                            |  |
| Spindle Nose                       | A2-11  |                           |                             |                            |  |
| Hole Through<br>(Spindle/draw bar) |  | ø130/ø117mm ø5.1"/ø4.6"   |                             |                            |  |
| Spindle Speed                      | 2,000rpm   |                           |                             |                            |  |
| Tail Stock Quill Taper (opt.)      | MT-5 (MT-5 Revolving Quill)  |                           |                             |                            |  |
| Turret Capacity (opt.)             | 10T (12T)  |                           |                             |                            |  |
| Machine Weight                     | 12,500kg 27,558 lb 13,500kg 29,762 lb 14,500kg 31,967 lb 15,500kg 34,171 |                           |                             | 15,500kg 34,171 lb         |  |



State Inc.



TC-26/26L

TC-36/36

|                                    | TC-26 (10"/12")             | TC-26L (10"/12")                       | TC-36W (12")             | TC-36 (12")       |  |  |
|------------------------------------|-----------------------------|--|--------------------------|-------------------|--|--|
| Swing Over Bed                     | ø500mm ø19.69"              |  | ø690mm ø27.17"           |                   |  |  |
| Swing Over Carriage                | ø350mm                      | ı ø13.78"                              | ø510mm ø20.08"           |                   |  |  |
| Max. Turning Diameter              | ø470mr                      | n ø18.5"                               | ø590mm ø23.23"           |                   |  |  |
| X/Z-axis Travel                    | 250/700mm                   | 250/1,100mm                            | 310/700mm                | 310/1,250mm       |  |  |
|                                    | 9.84"/27.56"                | 9.84"/43.31"                           | 12.2"/27.56"             | 12.2"/49.21"      |  |  |
| Spindle Motor                      | 15kW 20HP                   |  | 26kW 35HP                |                   |  |  |
| Spindle Nose                       | Až                          |  | -8                       |                   |  |  |
| Hole Through<br>(Spindle/draw bar) | ø88/ø78mm ø3.46"/ø3.07"     |  | ø105/ø93mm ø4.13"/ø3.66" |                   |  |  |
| Spindle Speed std.                 | 10" — L:8∼195~783,∣         | H:40~1,007~4,000rpm                    | 12" — L:7~180~719,       | H:30~751~2,500rpm |  |  |
| Spindle Speed opt.                 | 12" — L:8∼195~783,          | 12" — L:8~195~783, H:40~1,007~2,500rpm |                          | -                 |  |  |
| Tail Stock Quill Taper (opt.)      | MT-5 (MT-4 Revolving Quill) |  | MT-4 Revolving Quill     |                   |  |  |
| 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 lb |  |  |
|                                    |                             |  |                          |                   |  |  |



rcision Mold & Die Machining Cenh rformance Travel Column Series ned, Hi-Power Series





GT-200<u>A</u>/B/MA

GT-250A/B/MA





GT-300A/B/MA/LB

GT-380A/B/LA/LB

|                                 | GT-200A                   | GT-200MA                  | GT-200 <mark>B</mark>      | GT-250A                    | GT-250MA                   | GT-250 <mark>B</mark>      |
|---------------------------------|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Chuck Diameter                  | 6                         | )"                        |                            | 8"                         |                            | 10"                        |
| Swing Over Bed                  | ç                         | ø500mm ø19.69             | "                          | (                          | ø550mm <mark>ø21.65</mark> | "                          |
| Swing Over Carriage             | ç                         | ø330mm ø12.99             | "                          |                            | ø420mm 16.54"              |                            |
| Max. Turning Diameter           | ø260mm<br>ø10.24"         | ø230mm<br>ø9.06"          | ø260mm<br>ø10.24"          | ø350mm<br>ø13.78"          | ø270mm<br>ø10.63"          | ø350mm<br>ø13.78"          |
| X/Z-axis Travel                 | 150/360mm<br>5.91"/14.17" | 177/370mm<br>6.97"/14.57" | 150/345mm<br>5.91"/13.58"  | 195/560mm<br>7.68"/22.05"  | 230/560mm<br>9.06"/22.05"  | 195/515mm<br>7.68"/20.28"  |
| Spindle Motor                   | 11kW 15HP                 |                           |                            |                            | •                          |                            |
| Spindle Nose                    | A2-5                      |                           | A2-6                       | A2-6                       |                            | A2-8                       |
| Hole Through (Spindle/draw bar) | ø56/ø45mm<br>ø2.2"/ø1.77" |                           | ø62/ø52mm<br>ø2.44"/ø2.05" | ø62/ø52mm<br>ø2.44"/ø2.05" |                            | ø88/ø75mm<br>ø3.46"/ø2.95" |
| Spindle Speed                   | 6,00                      | Orpm                      | 4,500rpm                   | 4,500rpm                   |                            | 3,500rpm                   |
| Tail Stock Quill Taper (opt.)   | M                         | Γ-4 Stationary Q          | uill MT-5 (MT-4 Revolving  |                            | ı Quill)                   |                            |
| Turret Capacity                 | 12                        | 2T                        | 10T                        | 12T                        |                            | 10T                        |
| VDI Live Tool Motor             | —                         | 3.7kW 5HP                 | —                          | —                          | 5.5kW 7.4HP                | —                          |
| VDI Live Tool Speed             | —                         | 4,500rpm                  | —                          | —                          | 3,000rpm                   | —                          |
| Machine Weight                  | 4,210kg<br>9,281 lb       | 4,260kg<br>9,392 lb       | 4,210kg<br>9,281 lb        | 6,000kg                    | 13,228 lb                  | 6,200kg<br>13,669 lb       |

|                                 | GT-300A                     | GT-300MA                   | GT-300 <mark>B</mark>     | GT-300LB                    |  |  |
|---------------------------------|-----------------------------|----------------------------|---------------------------|-----------------------------|--|--|
| Chuck Diameter                  | 10"                         |                            | 12"                       |                             |  |  |
| Swing Over Bed                  |                             | ø600mm                     | ø23.62"                   | 023.62"                     |  |  |
| Swing Over Carriage             |                             | ø450mm                     | ø17.72"                   |                             |  |  |
| Max. Turning Diameter           | ø440mm ø17.32"              | ø360mm ø14.17"             | ø440mn                    | n ø17.32"                   |  |  |
| X/Z-axis Travel                 | 245/712mm<br>9.65"/28.03"   | 275/742mm<br>10.83"/29.21" | 245/700mm<br>9.65"/27.56" | 245/1,250mm<br>9.65"/49.21" |  |  |
| Spindle Motor                   | 18.5kW 25HP                 |                            |                           |                             |  |  |
| Spindle Nose                    | A2-8                        |                            |                           |                             |  |  |
| Hole Through (Spindle/draw bar) | ø88/ø75mm ø3.46"/ø2.95"     |                            | ø105/ø91mm ø4.13"/ø3.58"  |                             |  |  |
| Spindle Speed                   | 3,50                        | Orpm                       | 3,00                      | 3,000rpm                    |  |  |
| Tail Stock Quill Taper (opt.)   | MT-5 (MT-4 Revolving Quill) |                            |                           |                             |  |  |
| Turret Capacity                 | 10T                         | 12T 8T                     |                           | 3T                          |  |  |
| VDI Live Tool Motor             | — 5.5kW 7.4HP —             |                            | —                         |                             |  |  |
| VDI Live Tool Speed             | — 3,000rpm —                |                            | —                         |                             |  |  |
| Machine Weight                  | 6,950kg 15,322 lb           |                            |                           | 7,850kg 17,306 lb           |  |  |

|                                 | GT-380 <mark>A</mark>       | GT-380 <mark>B</mark>      | GT-380LA                    | GT-380 <mark>LB</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<br>12.01"/28.15"  | 305/680mm<br>12.01"/26.77" | 305/1,265mm<br>12.01"/49.8" | 305/1,230mm<br>12.01"/48.43" |  |
| Spindle Motor                   | 18.5kW 25HP                 |                            |                             |                              |  |
| Spindle Nose                    | A2-8                        |                            |                             |                              |  |
| 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 (MT-4 Revolving Quill) |                            |                             |                              |  |
| Turret Capacity                 | 10T                         |                            |                             |                              |  |
| Machine Weight (approx.)        | 7,250kg 15,983 lb           | 7,830kg 17,262 lb          | 8,150kg 17,967 lb           | 8,030kg 17,703 lb            |  |





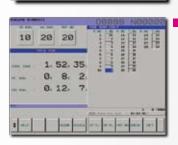


- High performance AC digital servo & spindle drives
- High responsive vector drives technology for high precision machining
- Powerful servo motors with super precision absolute positioning encoders
- High resolution 10.4 " LCD color display with dynamic graphic display
- Manual guide i conversational function greatly reduces programming and setup time
- Built-in AI nano CC and high-speed JERK function
- High speed rigid tapping, helical interpolation, custom macro B, and tool path graphics
- Large program capacity with 1,280 meters of memory
- Full alphanumeric keyboard allows easy program editing
- PCMCIA slot for easy file transfer and memory expansion
- **RS-232C** interface ready for fast program transfer
- Combined uses of many high performance microprocessors, high speed memory and the adoption of Multi-CPU system for super high speed control processing
- The most reliable CNC control in the world, with failure rate
- of under 0.01 per unit per month

programming steps.

G-menu Function









# Easy Shop-floor Programming Manual Guide *i*

User-friendly G-menu function

provides multiple machining

cycles that greatly simplifies

Easy to use conversational software offers convenience of part programming right on the shop-floor with 3-D graphical display and full simulation function.

#### Intelligent Tool Data Management

Comprehensive tool data management function allows operators to conveniently monitor and efficiently manages all position in tool magazine.

#### Pop-up Alarm Display

Detailed troubleshooting procedures are automatically displayed when machine alarm occurs that allows users to quickly restore machine status to minimize downtime.

#### Automatic Tool Length Measurement

Pre-set macros and graphical procedure are provided for operation of automatic tool length measurement function.





# Calculator Function

function provides fast calculation and setting of workpiece offsets.

#### Counter Function

Allows user to easily keep track on number of workpieces with:

- Main Counter
- Periodical Counter
- Daily Counter Over Cycle Alarm

#### High Performance Machining Mode: M300

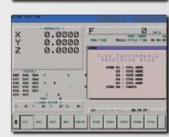
High performance mode with 5 settings that allows user to select for the best machining results.

#### Intelligent Maintenance Reminder

Pre-set maintenance schedules are programmed to remind operators to inspect periodically and to prolong machine life.

#### Manual Tool Length Measurement

Easy setup of tool length measurement provides convenient setting of tool offsets data from one tool to the other.









#### Multi-function Display

Easily select multiple windows from the following list of display for your monitoring needs.

Parts Count

- G-code Status Feedrate
- M-code Status Tool Data
- - Machining Hours Spindle Load
- Spindle Status Work Coordination Date and Time
- Function Display

Controller Running Hours

#### High Speed Machining Mode: M400

Artificially intelligent machining function that is developed from accumulation of all YCM knowledge and experience on high speed to achieve the fastest cycle time with best machining results. Machining efficiency improved by +25% without sacrificing machining accuracy.





#### Wireless Message Notification (opt.)

Integrating GSM communication and CNC technology, YCM developed the WMN system for wireless notification of machine and work status report.







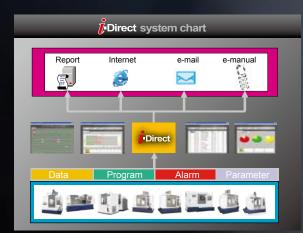






i-Direct, the latest YCM software enhancement innovation for remote factory production line monitoring system.

Its powerful features include complete machine operation status, record, history, and data analysis. During alarm generated events, instant messages can be sent thru email or short message to 3 sets of cellphones. All these are done remotely thru internet with our user friendly interface, truly making unman factory management at your finger tips.





User account administration





Individual machine status display



Machine model, number, email, sms and ip setup



Complete production, standby, and down time record



Over all machine status display Production data graphical analysis

## IDD PLUS Isolated Direct Drive

- 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 to assure maximum spindle life.
- Reliable Helical Disc Spring Used to assure 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 inside each spindle bearing and provides consistent lubrication to every ball bearing to prolong spindle life.

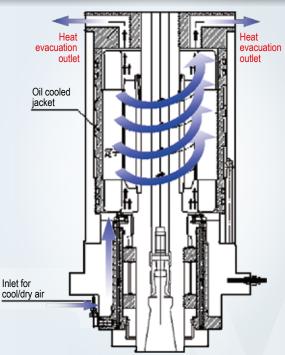
Normal lube:0.03-0.1cc/5-8min

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

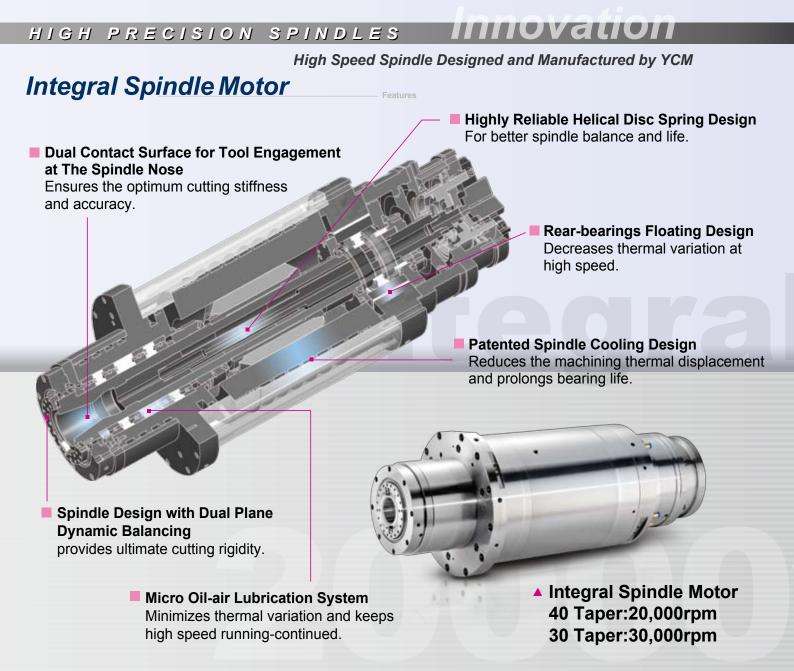


### Unique Patented Thermal Constraint Solutions Patented air-cooling system by circulated cooling air to effectively provide the provided cooling air to

effectively remove heat from running spindle. Improved thermal constraint provides high precision machining result.



Efficient spindle cooling design evacuates heat generated from spindle through continuous air circulation.



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) to achieve 5 times better result than standard belt type spindle design.



- Perpetual pre-load design reduces the effect of spindle thermal growth under long spindle runtime.
- Floating spindle clamp/unclamp design eliminates unnecessary force on the spindle bearings during tool change operation.
  Thus, it drastically improves the spindle bearing life.

# The next generation stc exclusively from ycm



## Model: NDV102A 15,000rpm

300

Z-axis

400

500

600

Y-axis

200

Material: Aluminum Size: 150 x 150mm 5.91 x 5.91" Tool: R3 ø6 Ball End Mill About 150 Minutes

100

-0.39



700

800

X-axis



900

1 000

1.100 min







## 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



| VMC                          | Vertical Machining Center   | FF 45        | A32A |
|------------------------------|---|--------------|------|
| S                            | FP Selfiles High Precision High Performance Die Mold Vertical Machining Center FP55A, FP66A, FP100A   |              |      |
| RODUCT LINES                 | High Speed High Performance Vertical Machining Center<br>/ High Speed High Performance Drilling & Tapping Center<br>FV56T, FV56A, FV85A, FV102A, FV125A / FV50T |              |      |
|                              | XV Serfles High Performance Vertical Machining Center<br>XV560A, XV1020A, XV1250A   |              |      |
| PROL                         | EV Series High Efficiency Vertical Machining Center   |              |      |
| 2                            | TV Selfies Heavy Duty Vertical Machining Center<br>TV116B, TV146A/B, TV158B, TV188B, TV2110B, TV2610B   | 158          |      |
|                              | MV Serfles High Performance High Rigidity Vertical Machining Center<br>MV66A, MV76A, MV86A, MV106A  |              |      |
|                              | WV Selfies Ultra Wide High Performance Vertical Machining Center  | 108          | - Up |
|                              | FX Serfles 5-axis Vertical Machining Center<br>FX380A   |              |      |
|                              | NSV Serfles Ultra High Performance Vertical Machining Center<br>NSV66A, NSV85A, NSV102A, NSV156A  |              |      |
|                              | NDV Serfles High Precision Die Mold Vertical Machining Center<br>NDV66A, NDV85A, NDV102A  |              |      |
|                              | DCV Serfles Advanced Double Column Vertical Machining Center<br>DCV2012A/B, DCV3016B, DCV4016B, DCV4025B  | 2            |      |
|                              | TCV Seriles High Performance Traveling Column Vertical Machining Center   |              |      |
| НМС                          | Horizontal Machining Center   |              |      |
|                              | H Serfles High Production Horizontal Machining Center<br>H500A/B, H630B, H800B, H2612B  |              |      |
| CNC<br>LATHES                | CNC Turning Center  |              |      |
|                              | NT Serfles High Performance Mill-turn Multi-tasking Center<br>NT-2000Y/SY, NT-2500Y/SY  |              |      |
|                              | GT Serfles High Performance Geo Turning Center<br>GT-200A/B/MA, GT-250A/B/MA, GT-300A/B/MA/LB, GT-380A/B/LA/LB  |              |      |
|                              | TC Series High Performance High Precision CNC Lathe<br>TC-26, TC-26L, TC-36, TC-36W, TC-46  | 1            |      |
| INTEGRATION<br>AND SOLUTIONS | Integrated Operation Control System   | on Solutions |      |



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