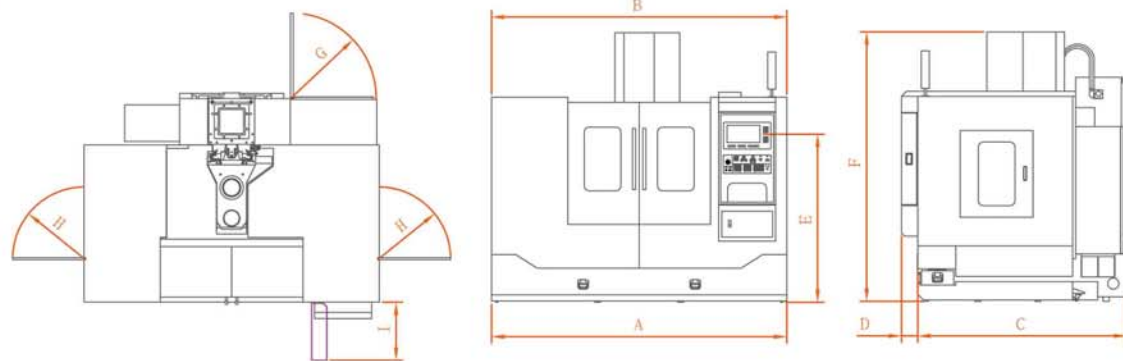


# EmL-850 - 1020



EmL-850 - 1020 machine dimension

|                 | A    | B    | C    | D   | E    | F    | G    | H    | I   |
|-----------------|------|------|------|-----|------|------|------|------|-----|
| <b>EmL-850</b>  | 2900 | 2900 | 2050 | 160 | 1650 | 2850 | R835 | R710 | 570 |
| <b>EmL-1020</b> | 2900 | 2900 | 2050 | 160 | 1650 | 2850 | R835 | R710 | 570 |

Manufacturer

**NCT**®

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Distributor

**NCT**®

# EmL-850 - 1020



HIGH SPEED AND ACCURACY

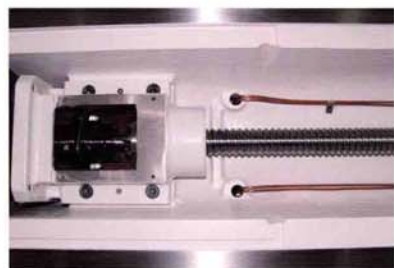
VERTICAL MACHINING CENTRE



# EmL-850 - 1020

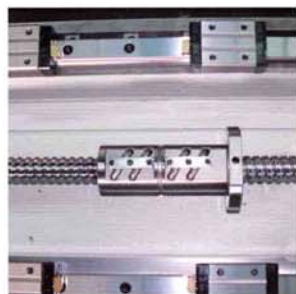
## RIGID MEEHANITE CASTING

- Main frame of meehanite casting is annealed & stress relieved
- Stability / heavy loading / high accuracy
- No vibration



## DIRECT DRIVE BETWEEN MOTOR AND BALLSCREWS

- Ballscrews supported and preloaded over high precision bearings
- Initial preload preservation
- Life Grease
- High stability security



## LINEAR GUIDE WAYS

- Telescoping steel XYZ way covers protect ways & ball screws from dust & coolant
- High accuracy linear guide ways recirculating ball bearing and guide way
- Digital HPSC drive control

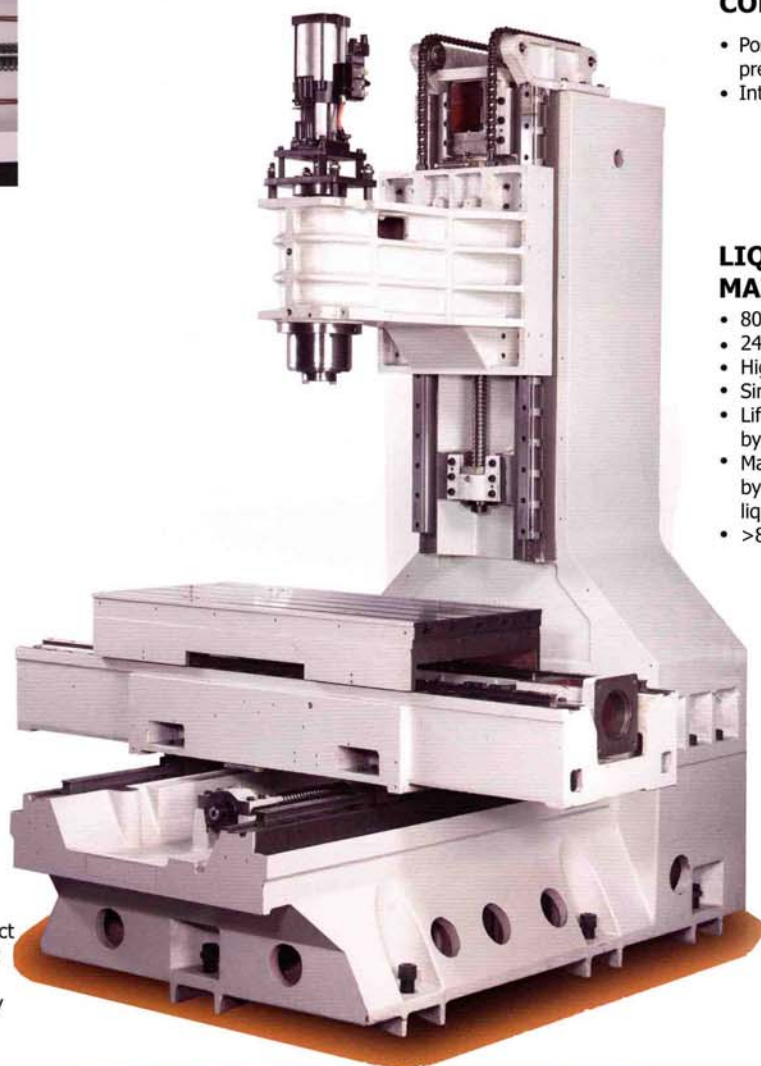


## CONTROL

- Positioning and repeatability precision control
- Interpolation precision control

## LIQUID COOLANT MAIN SPINDLE

- 8000 rpm, 12000 rpm with belt drive
- 24000rpm with built in spindle motor
- High torque and rigidity
- Simple cheap maintenance
- Life time lubrication, bearing protection by press air
- Main Spindle temperature control by 2 circuits digital controlled liquid cooler
- >8KN tool pulling force



| SPECIFICATION                                  | EmL-850                                                           | EmL-1020                                                          |
|------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|
| <b>TABLE</b>                                   |                                                                   |                                                                   |
| Table size [mm]                                | 1000 x 500 (39.4" x 19.7")                                        | 1200 x 500 (47.2" x 19.7")                                        |
| T-slot of table (Size x Q' ty x distance) [mm] | 18 x 5 x 100 (0.7" x 5 x 3.9")                                    | 18 x 5 x 100 (0.7" x 5 x 3.9")                                    |
| Max. load capacity [kg]                        | 500Kg (1100 lbs)                                                  | 500Kg (1100 lbs)                                                  |
| <b>TRAVEL</b>                                  |                                                                   |                                                                   |
| X Travel [mm]                                  | 850 (33.5")                                                       | 1020 (40")                                                        |
| Y Travel [mm]                                  | 510 (20")                                                         | 510 (20")                                                         |
| Z Travel [mm]                                  | 560 (22")                                                         | 560 (22")                                                         |
| Spindle nose to top of table [mm]              | 150 ~ 700 ( 5.9" ~ 27.9")                                         | 150 ~ 710 ( 5.9" ~ 27.9")                                         |
| Column surface to center of table              | 353 ~ 863 ( 13.89" ~ 33.98")                                      | 353 ~ 863 ( 13.89" ~ 33.98")                                      |
| <b>SPINDLE</b>                                 |                                                                   |                                                                   |
| Spindle taper                                  | SK40 (op. CAT40, BT40, HSK63)                                     | SK40 (op. CAT40, BT40, HSK63)                                     |
| Ranges of main spindle                         | 1 (op. 2)                                                         | 1 (op. 2)                                                         |
| Spindle speed                                  | 8000 (op-1. 12000 belt drive)<br>(op-2. 24000 motorspindle)       | 8000 (op-1. 12000 belt drive)<br>(op-2. 24000 motorspindle)       |
| Spindle power continuous/max. [KW]             | 7/10.5 (op-1. 10/15, op-2. 15)                                    | 7/10.5 (op-1. 10/15, op-2. 15)                                    |
| Spindle torque continuous/max. [Nm]            | 68/102 (op-1. 68/102, op-2. 15/18)<br>(op-3. 272/272 ZF Gear box) | 68/102 (op-1. 68/102, op-2. 15/18)<br>(op-3. 272/272 ZF Gear box) |
| Spindle center to column front surface [mm]    | 614 (24.2")                                                       | 614 (24.2")                                                       |
| <b>FEED RATE</b>                               |                                                                   |                                                                   |
| Rapide feed rate X/Y/Z [m/min]                 | 30/30/24                                                          | 30/30/24                                                          |
| Feed rate X/Y/Z [m/min]                        | 30/30/24                                                          | 30/30/24                                                          |
| <b>AUTOMATIC TOOL CHANGER</b>                  |                                                                   |                                                                   |
| No. of tools                                   | 16/genoa type (op. 24/arm)                                        | 16/genoa type (op. 24/arm)                                        |
| Max. tool diameter [mm]                        | 100 (3.94")                                                       | 100 (3.94")                                                       |
| Max. tool length [mm]                          | 300 ( 11.8")                                                      | 300 ( 11.8")                                                      |
| Max. tool weight [kg]                          | 6 (13.2 lbs )                                                     | 6 (13.2 lbs )                                                     |
| <b>ACCURACY</b>                                |                                                                   |                                                                   |
| Positioning accuracy [mm]                      | ± 0.008                                                           | ± 0.008                                                           |
| Repeatability [mm]                             | ± 0.005                                                           | ± 0.005                                                           |
| Resolution [mm]                                | ± 0.0005                                                          | ± 0.0005                                                          |
| <b>MACHINE DIMENSION</b>                       |                                                                   |                                                                   |
| Machine weight [kg]                            | 5000 (11440 lbs)                                                  | 5200 (12100 lbs)                                                  |
| Machine dimension (LxWxH) [mm]                 | 2800 x 2500 x 2600                                                | 3100 x 2500 x 2600                                                |
| Power requirement [KVA]                        | 15                                                                | 15                                                                |

Technical modifications reserved

## OPTIONS

- 12000 RPM / SK40
- 24000 RPM / ISO30 built-in motorspindle
- 2 steps ZF Gear box (for ranges of spindle)
- Cooling through tool (6BAR, 30BAR, 70BAR)
- 24 tools arm type tool changers
- Chip conveyor ( screw type, belt type )
- High Pressure water scour for chip removal
- Cooler liquid cleaning with paper filter
- Climate for electrical cabinet
- Tool and workpiece measuring in the working area
- 4. and 5. rotating shafts
- WINDOWS, HARD DISC, USB ETHERNET
- integrated in CNC
- Graphic way dialog programming
- VECTOR programing integrated in CNC
- 4D, 5D programing by EdgeCam software
- Extended long term accuracy by HEIDENHAIN linear scale

## NCT CONTROLLER

- 15" color LCD graphic display
- Selectable language
- 100% FANUC like programming and operating
- HSHP (High Speed high precision Contouring)
- Smoothing interpolation
- Rigid Taping
- By parameter selectable language of screen and dialogue
- Program memorised 16MB
- Max 20 memorysed programs
- High speed graphical test
- EnDat absolut scaling
- Event history and evaluation