# NC SPECIFICATIONS

| ITEM | SPECIFICATIONS | FANUC-0i Mate TD | FANUC-0i TD |
|---|---|---|---|
| **CONTROL AXIS** | | | |
| Control axis | | X,Z | X,Z,C |
| **FUNCTION** | | | |
| Feedrate override | 0-150%(10% unit) | ○ | |
| Reference position return | G27,G28,G30 | ○ | |
| Rapid traverse override | F0/25/50/100% | ○ | |
| **SPINDLE FUNCTION** | | | |
| Cs control | | - | ○ |
| **AXIS CONTROL FUNCTION** | | | |
| Simultaneously control axis expansion (Total) | Max.4axes | ○ | |
| Increment system 1/10 | 0.0001mm / 0.0001deg/0.00001" | ○ | |
| Polar coordinate interpolation | G21.1,G31.1 | ○ | |
| **TOOL FUNCTION** | | | |
| Tool number command | T4-digit | ○ | |
| Tool nose radius compensation | G40~G42 | ○ | |
| Number of tool offsets | | ○ | |
| Tool life management | | ○ | |
| Auto tool offset | | ○ | |
| **PROGRAM EDIT FUNCTION** | | | |
| Multi repetitive canned cycle | G70~G76 | ○ | |
| Circular interpolation | G01,G03 | ○ | |
| Sub program call | 10 folds Nested | ○ | |
| Work coordinate system selection | G52~G59 | ○ | |
| Maximum command dimension | +-99999.999mm/(+-9999.9999inch) | ○ | |
| Continuous thread cutting | | ○ | |
| Programmable data input | G10 | ○ | |
| **TAPE FUNCTION** | | | |
| I/O interface | RS-232C | ○ | |
| Part program storage length | 512kB | ○ | |
| No. of Registered programs | 400EA | ○ | |
| MDI/DISPLAY unit | 8.4" LCD | ○ | |
| **OTHER FUNCTION** | | | |
| Running time / parts number display | Auto running time & Parts No. display | ○ | |
| Optional block skip | 9 | ○ | |
| Ethernet function | Embedded ethernet function | - | ○ |


DMC MACHINE TOOLS

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※ Design and specifications are subject to change without prior notice.
※ We do not take responsibility for the difference between the information in catalogues and the actual machine.


DMC 2013_02_ver1

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## TURRET TYPE

# DL T SERIES

DMC MACHINE TOOLS

# DL T SERIES

## DL 6T / 6TH / 6TM / 6TMH / 8T / 8TH / 8TM / 8TMH

**Higher precision, greater speed, more variety**

Turret Type DL T Series is designed for flexibility and high productivity and reasonable price. The outstanding features such as wide LM guide and symmetrical headstock, DL T series will be a guide to your success.

## High rigidity headstock

MainSpindle Torque

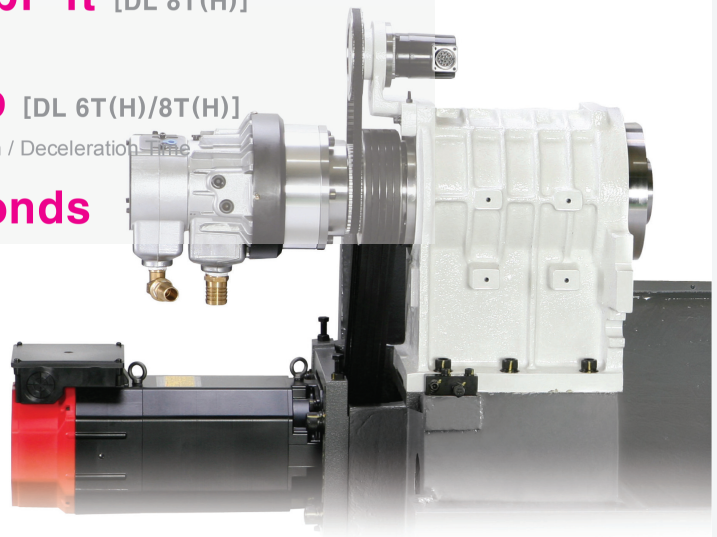
**109.51 lbf-ft** [DL 8T(H)]

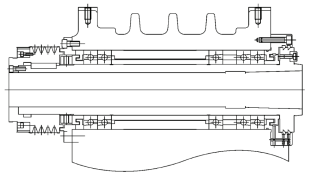
Main Spindle Motor

**15/20 hp** [DL 6T(H)/8T(H)]

Spindle Acceleration / Deceleration Time

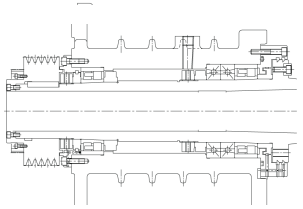
**2.3 Seconds**





### High precision & Great performance head-stock (6″)

Carefully machined high quality spindle and headstock Angular contact ball bearings at both ends for superb stability and high accuracy in fast machining.



### Strong and high precision headstock (8″)

The spindle is supported by a double-row cylindrical roller bearing and an angular thrust bearing for greater stability and highly accurate machining quality.
The special lubricating system and meehanite cast bed, are best to prevent thermal distortion of spindle.

# DL T series

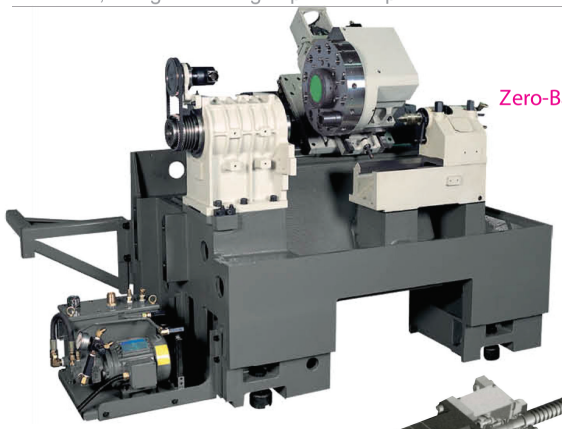
TURRET TYPE TURNING CENTER



## Bed construction

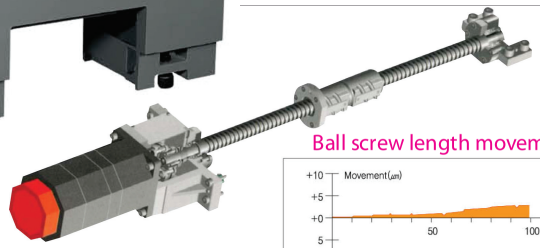
### RIGID Single body and Bed Casting.

Single 45 degree slant bed and body unit ensures high rigidity and out standing vibration absorption, designed for high speed and precision machining.

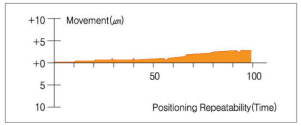


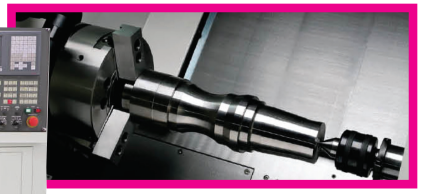
### Zero-Backlash & Zero-Vibration Mechanism

Each axis(X/Z) AC Servo motors are diretly connected to the ballscrews to addition “ZERO” Backlash and “ZERO” vibration. The double-anchored ball screws also prevent heat distortion and provide superb strength and high accuracy



### Ball screw length movement

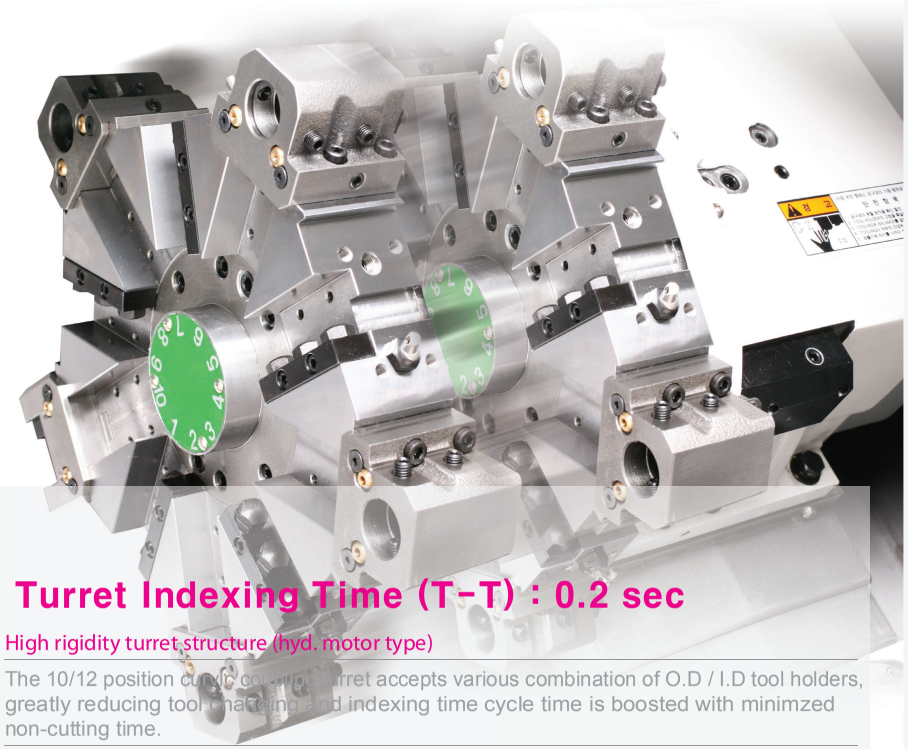




### TH(M) Models

TH(M) which is suitable for long turning processes and steady rest installation featurning a spacious cutting area for coolant and chip disposal.

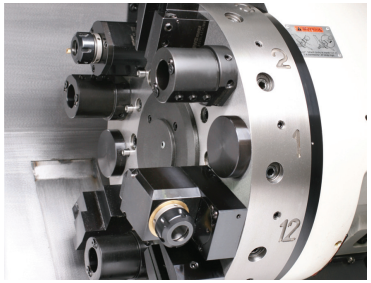
## TURRET



### Turret Indexing Time (T-T) : 0.2 sec

### High rigidity turret structure (hyd. motor type)

The 10/12 position curvic coupling turret accepts various combination of O.D / I.D tool holders, greatly reducing tool changing and indexing time cycle time is boosted with minimzed non-cutting time.



### VDI 30 Servo turret [TM, TMH]

The 12 station VDI Turret accepts standard VDI 30 Tools, including axial and radial live tools when combined with the live tooling option.

# DL T series

TURRET TYPE TURNING CENTER

Highly Efficient Economical Turning Center

## Standard & optional accessories

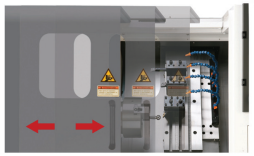
### Standard accessories

| | | | |
|---|---|---|---|
| Hydraulic chuck | Soft jaw | Tool and tool box | Coolant supply equipment |
| Door interlock | Tool and tool box | Tool holder & Sub plate | |

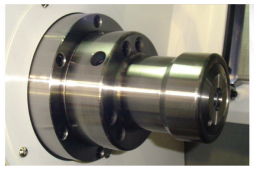
### Optional accessories

### Optional accessories

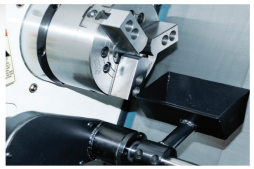
| | | |
|---|---|---|
| Auto door | Collet chuck | Parts catcher |
| Tool presetter | Chip air blow | C-axis |
| Chip conveyor (side) | Chip bucket | Barfeeder interface |
| Transformer | Oil Skimmer | Automatic power turn-off fuction |
| Special chuck | Tool counter | Additional tool holder & sleeve |
| Air gun | Oil mist collector | Coolant gun |



Auto door

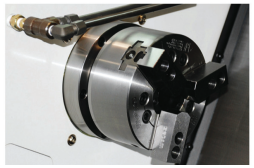


Collet chuck



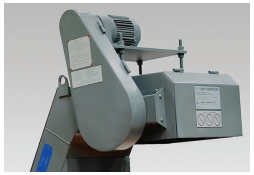
Part catcher

Tool pre-setter

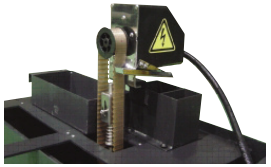


Chuck air(coolant) blower

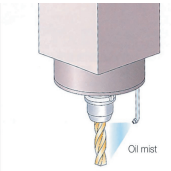
CS-brake



Chip conveyor

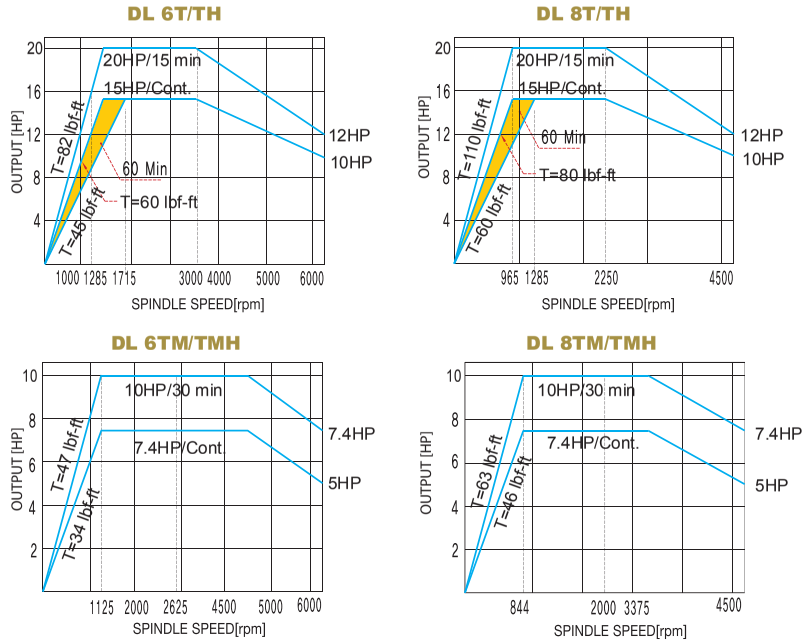


Oil skmmer



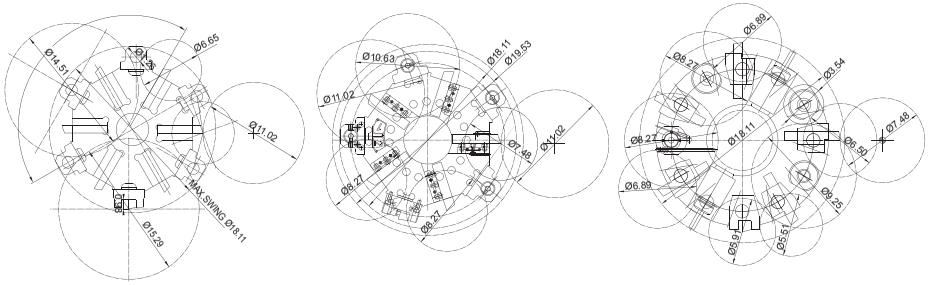

Oil mist system

## Main spindle power & torque diagram




## Tool Interference diagram

UNIT : inch



DL 6T/TH

DL 8T,TH

DL 6/8TM,TMH

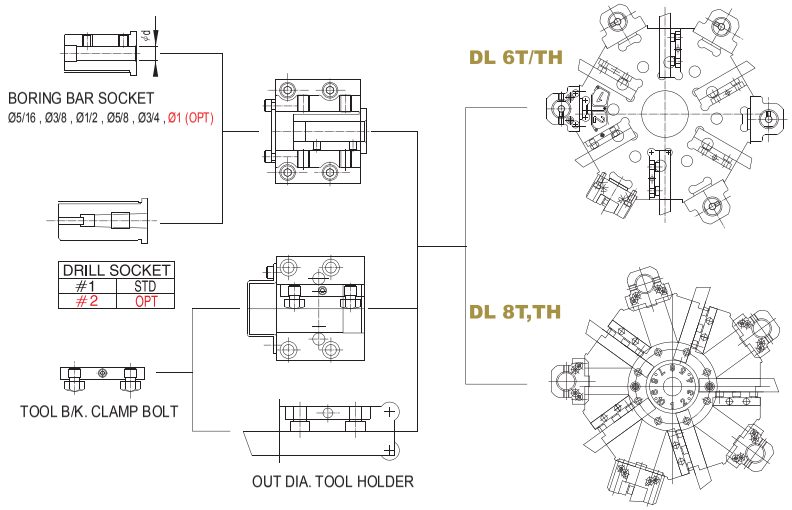
# DL T series

## TURRET TYPE TURNING CENTER

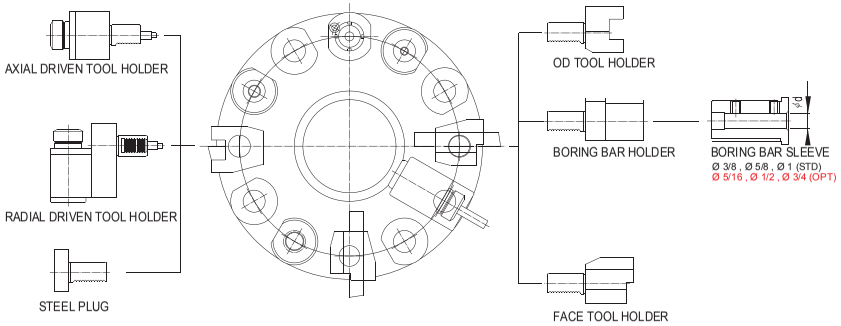
Highly Efficient Economical Turning Center

## Tooling system

UNIT : inch



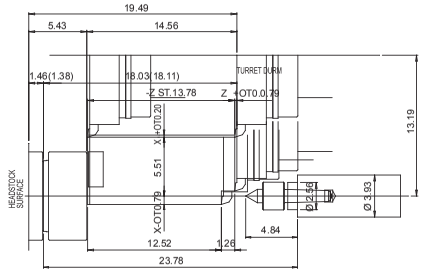

### DL 6/8TM,TMH



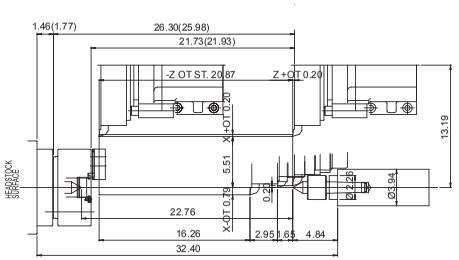

## Working range

UNIT : inch

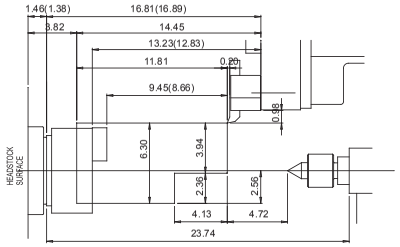
### DL 6T / (8T)



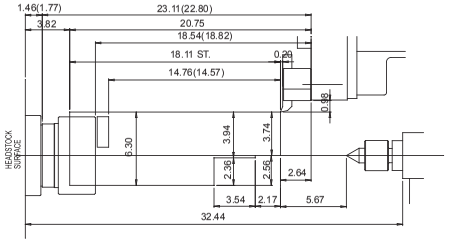

### DL 6TH / (8TH)




### DL 6TM / (8TM)




### DL 6TMH / (8TMH)



# DL T series

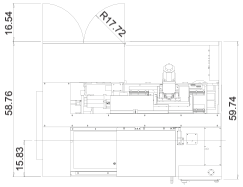
TURRET TYPE TURNING CENTER

Highly Efficient Economical Turning Center

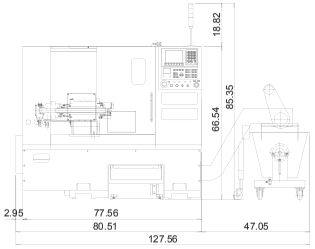
## Machine Lay out

UNIT : inch

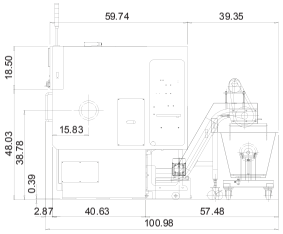
### DL 6/8T




▶Top view

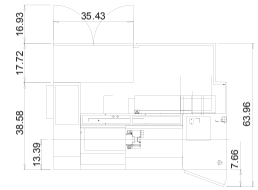



▶Front view

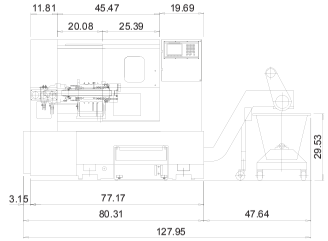



▶Side view

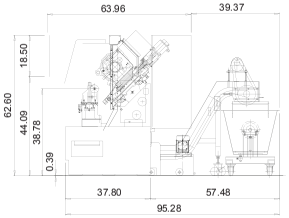
### DL 6/8TM




▶Top view

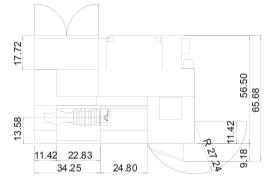



▶Front view

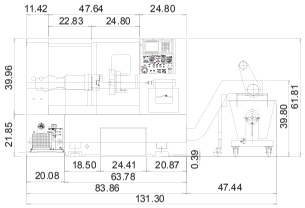



▶Side view

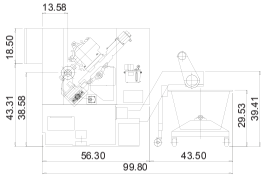
### DL 6/8TH , TMH




▶Top view




▶Front view




▶Side view

## Major Specifications

UNIT : inch

| Specifications | | | Unit | DL 6T | DL 6TH | DL 6TM | DL 6TMH | DL 8T | DL 8TH | DL 8TM | DL 8TMH |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity | Swing over bed(Max. swing dia.) | | inch | 18.90 | | | | | | | |
| | Swing over cross slide | | inch | 11.22 | | | | | | | |
| | Max. turning dia. | | inch | 11.02 | | 7.48 | | 11.02 | | 7.48 | |
| | Max. turning length | | inch | 12.60 | 20.47 | 9.45 | 15.35 | 11.81 | 20.08 | 8.66 | 14.96 |
| | Bar capacity | | inch | 1.73 | | | | 2.01 | | | |
| Main spindle | Standard chuck size | | inch | 6 | | | | 8 | | | |
| | Max. spindle speed | | rpm | 6,000 | | | | 4,500 | | | |
| | Spindle nose | | - | A2-5 | | | | A2-6 | | | |
| | Bearing diameter (Front) | | inch | 3.15 | | | | 3.94 | | | |
| | Spindle bore diameter | | inch | 2.17 | | | | 2.44 | | | |
| | Cs-axis spindle Index angle | | deg | - | | 0.001 | | - | | 0.001 | |
| | Spindle driven method | | - | Belt | | | | | | | |
| Motor | Main spindle motor(Cont./30min) | | hp | 15/20 | | 7.4/10.1 | | 15/20 | | 7.4/10.1 | |
| | X axis servo motor | | hp | 2.4 | | 2.1 | | 2.4 | | 2.1 | |
| | Z axis servo motor | | hp | 2.4 | | 2.1 | | 2.4 | | 2.1 | |
| | Mill spindle motor(Cont./30min) | | hp | - | | 4 | | - | | 4 | |
| | Turret index motor | | hp | HYD. | | 4 | | 2.4 | HYD. | 4 | |
| Bed Saddle Cross slide | X axis travel | | inch | 6.50 | | | | | | | |
| | Z axis travel | | inch | 13.78 | 20.87 | 11.81 | 18.11 | 13.78 | 20.87 | 11.81 | 18.11 |
| | Guideway type(X/Z) | | - | L.M Guide | | | | | | | |
| | X axis rapid traverse rate | | ipm | 1,181 | | | | | | | |
| | Z axis rapid traverse rate | | ipm | 1,417 | 1,181 | 1,417 | 1,181 | 1,417 | 1,181 | 1,417 | 1,181 |
| Turret | Turret index type | | - | Hyd | | Servo | | | | | |
| | Max. no. of tools | | ea | 12 | | | | 10 | | 12 | |
| | Turning tool shank size | | inch | 0.79 | | | | 0.98 | | 0.79 | |
| | Boring bar diameter | | inch | 1.26 | | | | | | | |
| | Turret indexing time (1st swivel) | | sec | 0.4 | | 0.2 | | 0.2 | 0.3 | 0.2 | |
| | Tool selection | | - | Bi-directional | | | | | | | |
| | Turret clamping force(at 35kgf/㎠) | | lbf | 4,409 | | 8,726 | | 7,055 | 4,409 | 8,726 | |
| | Rotating tool speed | | rpm | - | | 4,500 | | - | | 4,500 | |
| Tailstock | Tailstock quill diameter | | inch | 2.56 | | | | | | | |
| | Tailstock quill stroke | | inch | 3.15 | | | | | | | |
| | Tailstock quill taper | | MT | MT#4 | | | | | | | |
| General | Machine weight | | lbs | 5,798 | 6,614 | 5,798 | 6,724 | 6,019 | 7,055 | 6,019 | 7,165 |
| | Machine height | | inch | 64.37 | 61.81 | 62.60 | 61.81 | 64.37 | 61.81 | 62.60 | 61.81 |
| | Floor space | Length | inch | 80.51 | 83.86 | 80.51 | 83.86 | 80.51 | 83.86 | 80.51 | 83.86 |
| | | Width | inch | 63.98 | 65.75 | 63.98 | 65.75 | 63.98 | 65.75 | 63.98 | 65.75 |
| | Power capacity | | kVA | 21 | | 22 | | 21 | | 22 | |
| | Controller | | - | F0i-Mate TD | | F0i-TD | | F0i-Mate TD | | F0i-TD | |