

# LA-250YS 250YT

**TAKISAWA**<sup>®</sup>  
T A I W A N

**SUPERIOR FOR  
MULTIPLE AXIS TURNING**

**CNC  
LATHE**



More

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**TAKISAWA**<sup>®</sup>  
T A I W A N

Distributor



# LA-250YS

# LA 250YS/250YT

## NEW ! Next Generation ! Fully evolved CNC lathe.

[ Previous generation : EX-910 ]

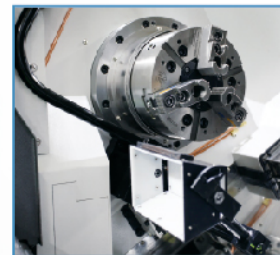
- 1. Precisely aligned spindles with speed synchronisation to automate rapid parts transfer between spindles for complex machining.
- 2. Servo turret upgrade from T12 to T15 and every turret position can be fitted with a driven tool for machining flexibility. **UP Spec.**
- 3. Servo motor specification upgrade: Maximum motor torque has been increased by 51%. **UP Effect**



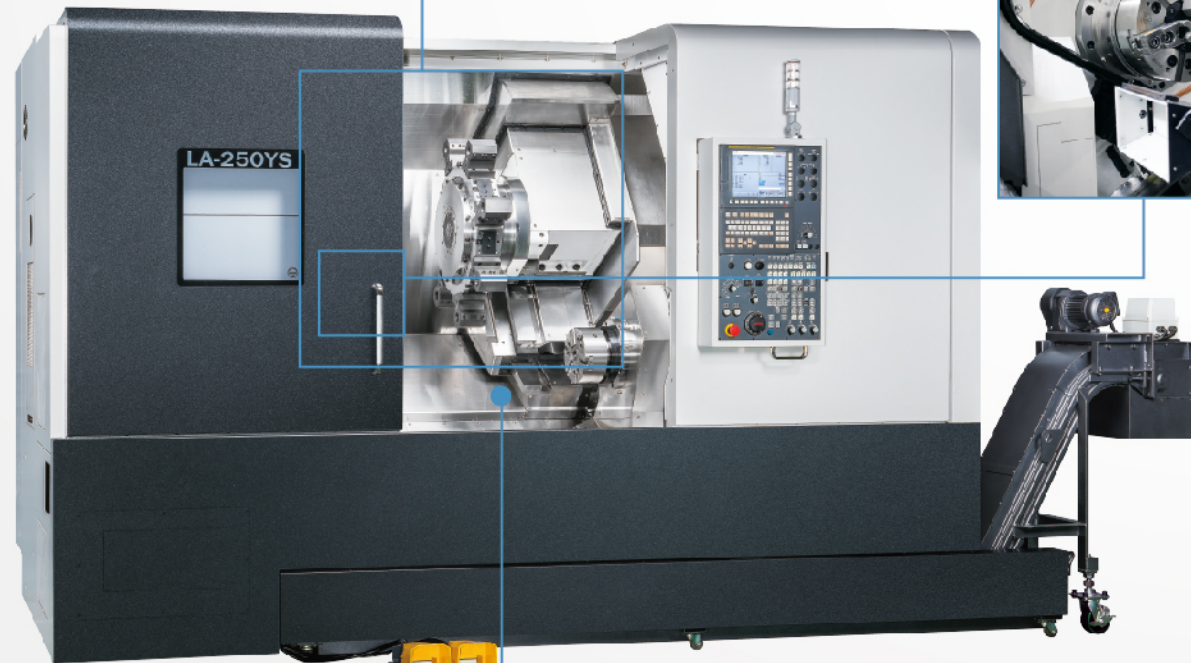
### Specifications

- Max. swing ————— 600 mm
- Max. turning length ——— 737 mm
- Max. turning diameter ——— 370 mm
- Spindle/Sub spindle
- Max. bar work capacity ——— 75/52 mm
- Spindle/Sub spindle speed — 3500 rpm
- Chuck size ————— 10"

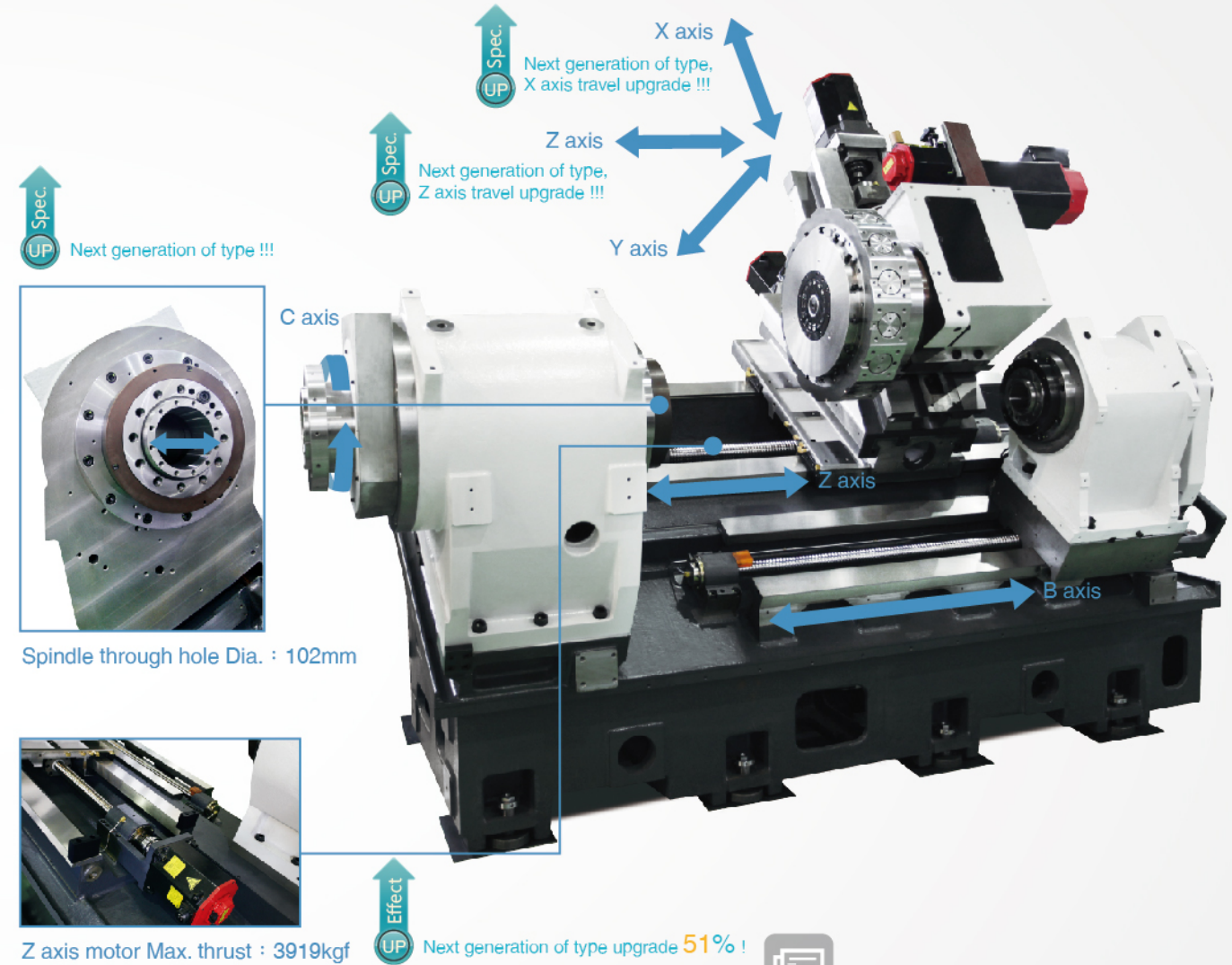
※ Specifications are subject to change without notice.



Spindle through hole Dia. : 102mm



**UP Spec.** Internal use of stainless steel sheet , texture upgrade !



## TWIN SPINDLES



### Travel & Feedrate

- X axis travel ————— 270 mm
- X axis rapid traverse rate - 20 m/min
- Z axis travel ————— 800 mm
- Z axis rapid traverse rate - 20 m/min
- Y axis travel ————— +65-50 mm
- Y axis rapid traverse rate - 10 m/min
- B axis travel ————— 735 mm
- B axis rapid traverse rate - 20 m/min

※ Specifications are subject to change without notice.



# LA-250YT

## SERVO TAILSTOCK

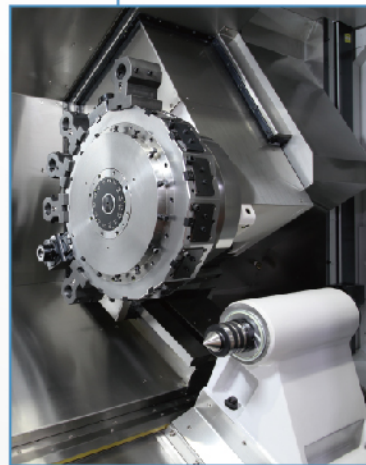
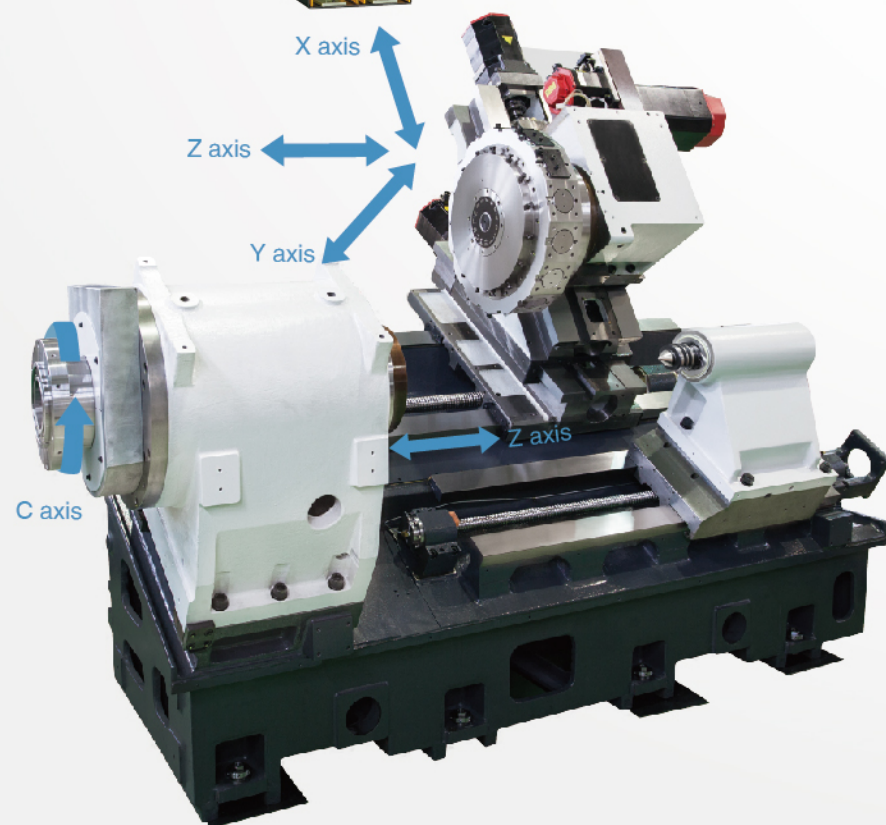
The LA-250YT has a servo driven tailstock with clamp to ensure rigidity in every position in its travelling range, so ensuring the most accurate machining for all but especially long workpieces.



### Specifications

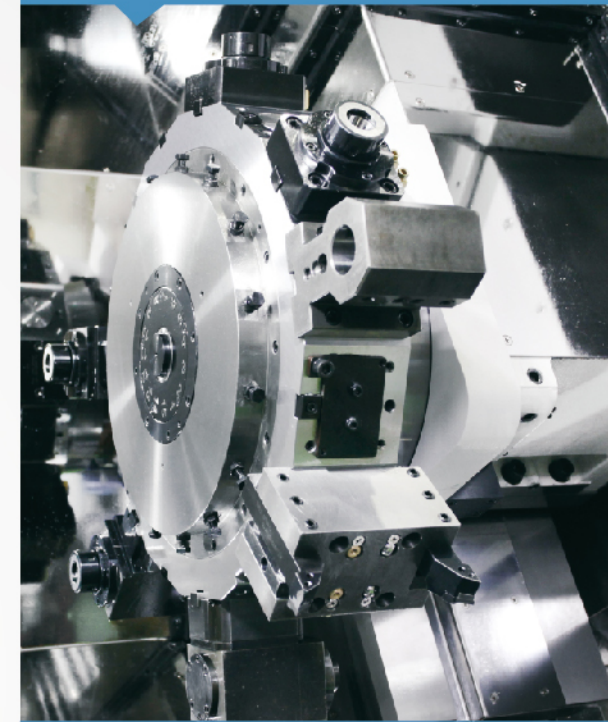
- Max. swing ————— 600 mm
- Max. turning length ——— 737 mm
- Max. turning diameter ——— 370 mm
- Max. bar work capacity ——— 75(81) mm
- Spindle speed ————— 3500 rpm
- Chuck size ————— 10"

※ Specifications are subject to change without notice.



# LA

## 250YS/250YT

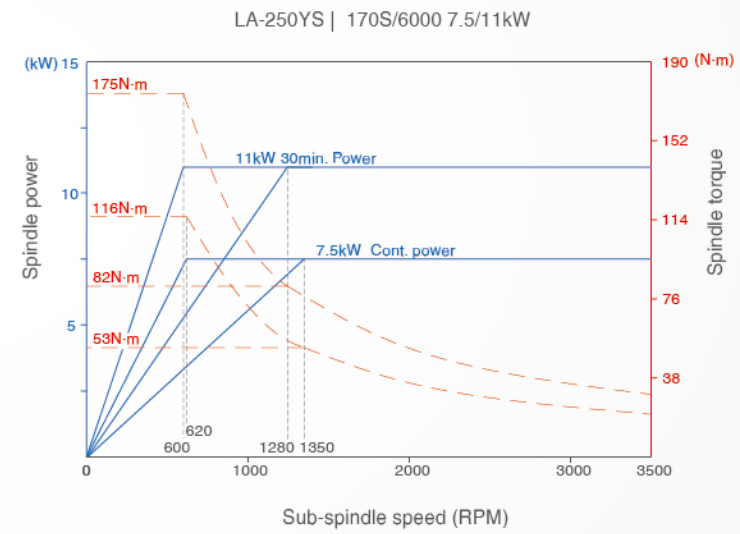
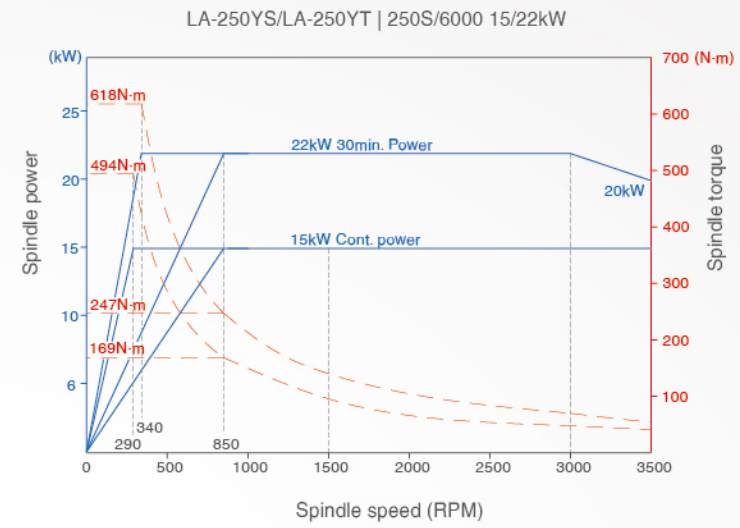


T15 turret

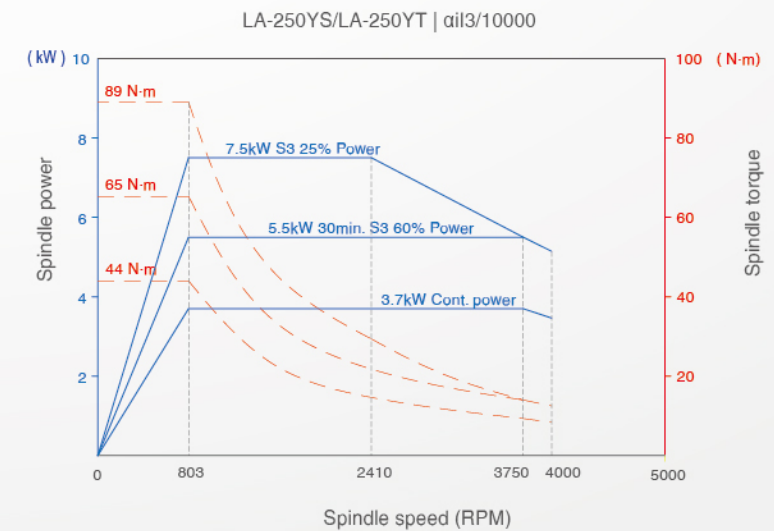


## Spindle output diagram

Powered by FANUC MOTOR for high stability & high accuracy.



## Power chart of milling tool





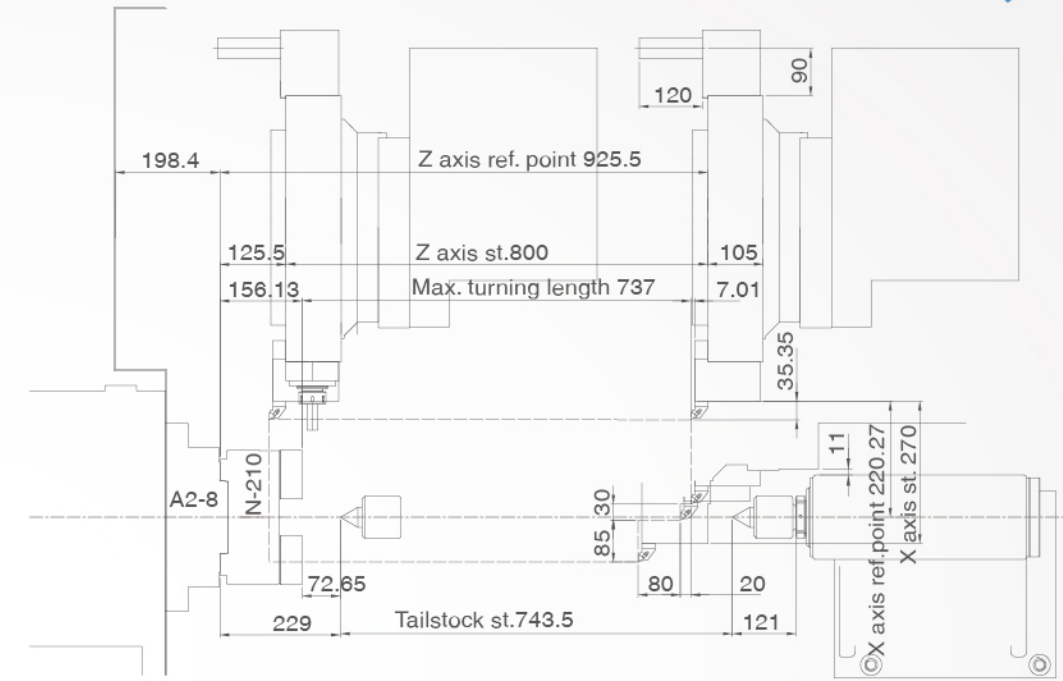
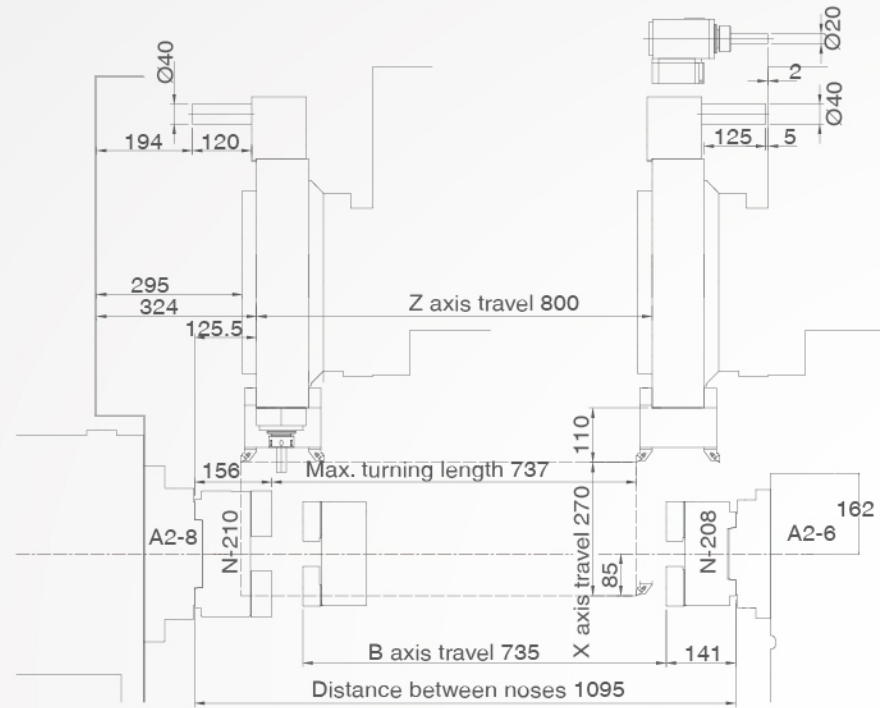
# Working range | Interference diagram

# LA

## 250YS/250YT

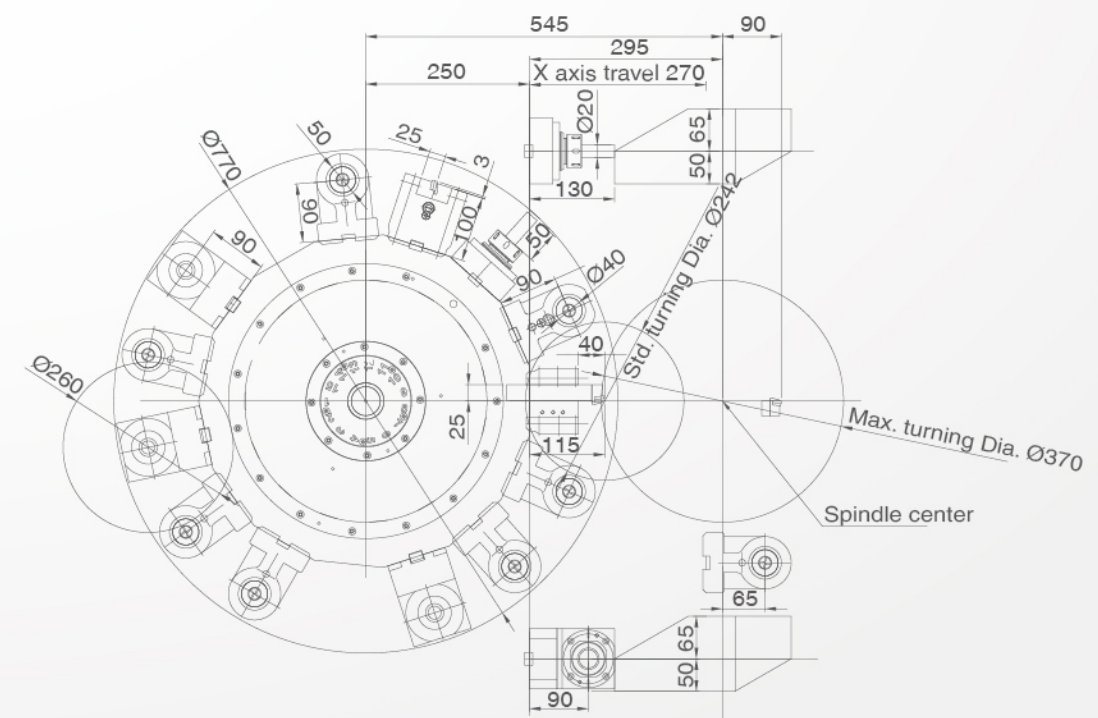
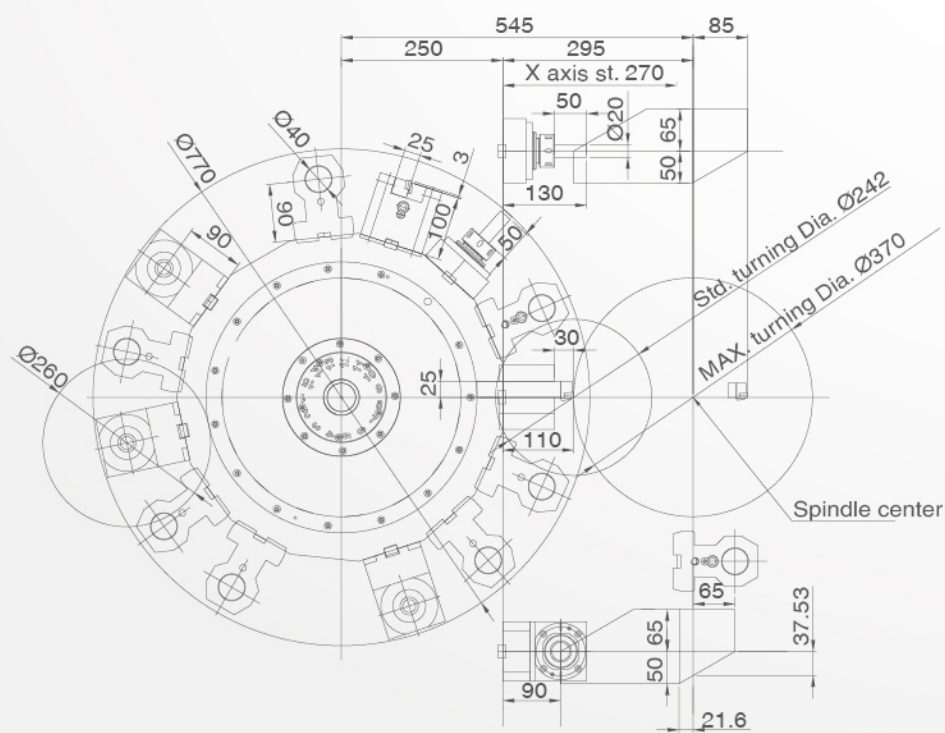
LA-250YS Working Range

LA-250YT Working Range



LA-250YS Interference Diagram (T15)

LA-250YT Interference Diagram (T15)



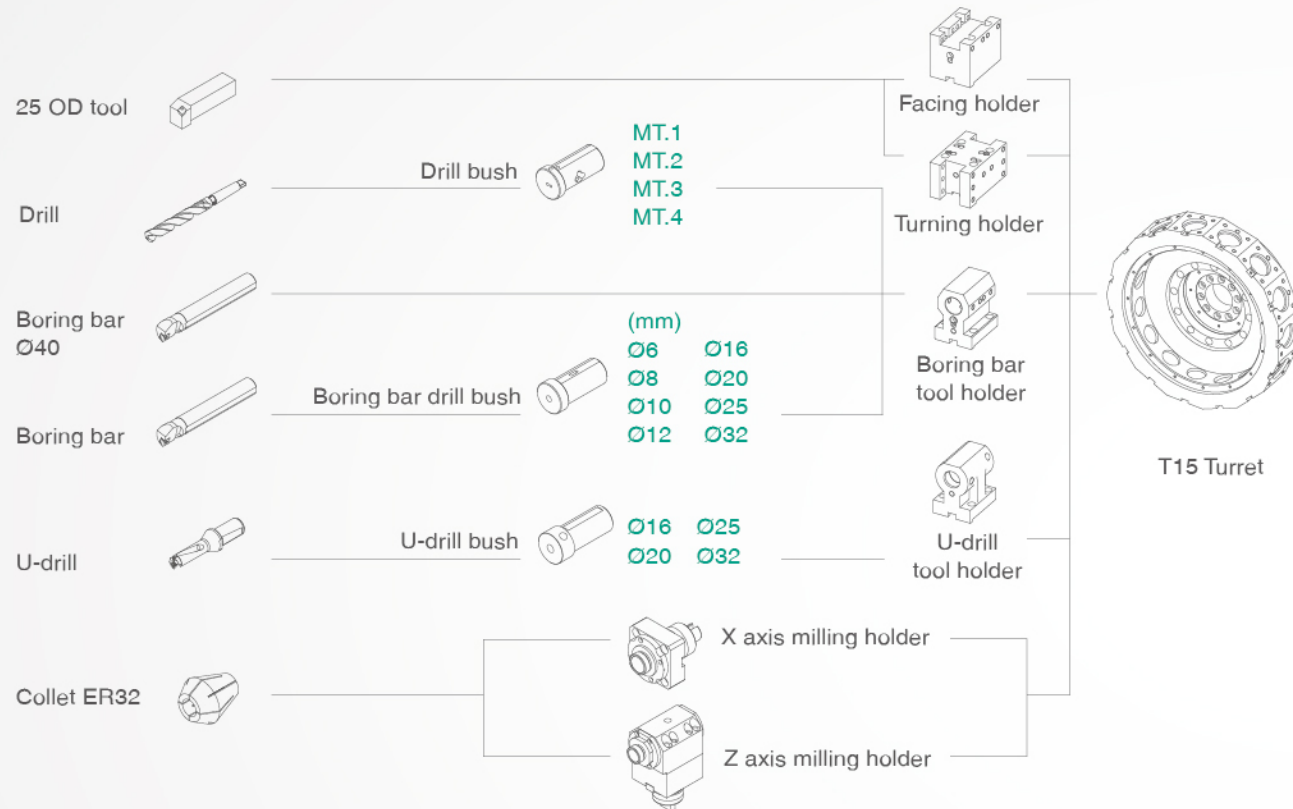


# Tooling system

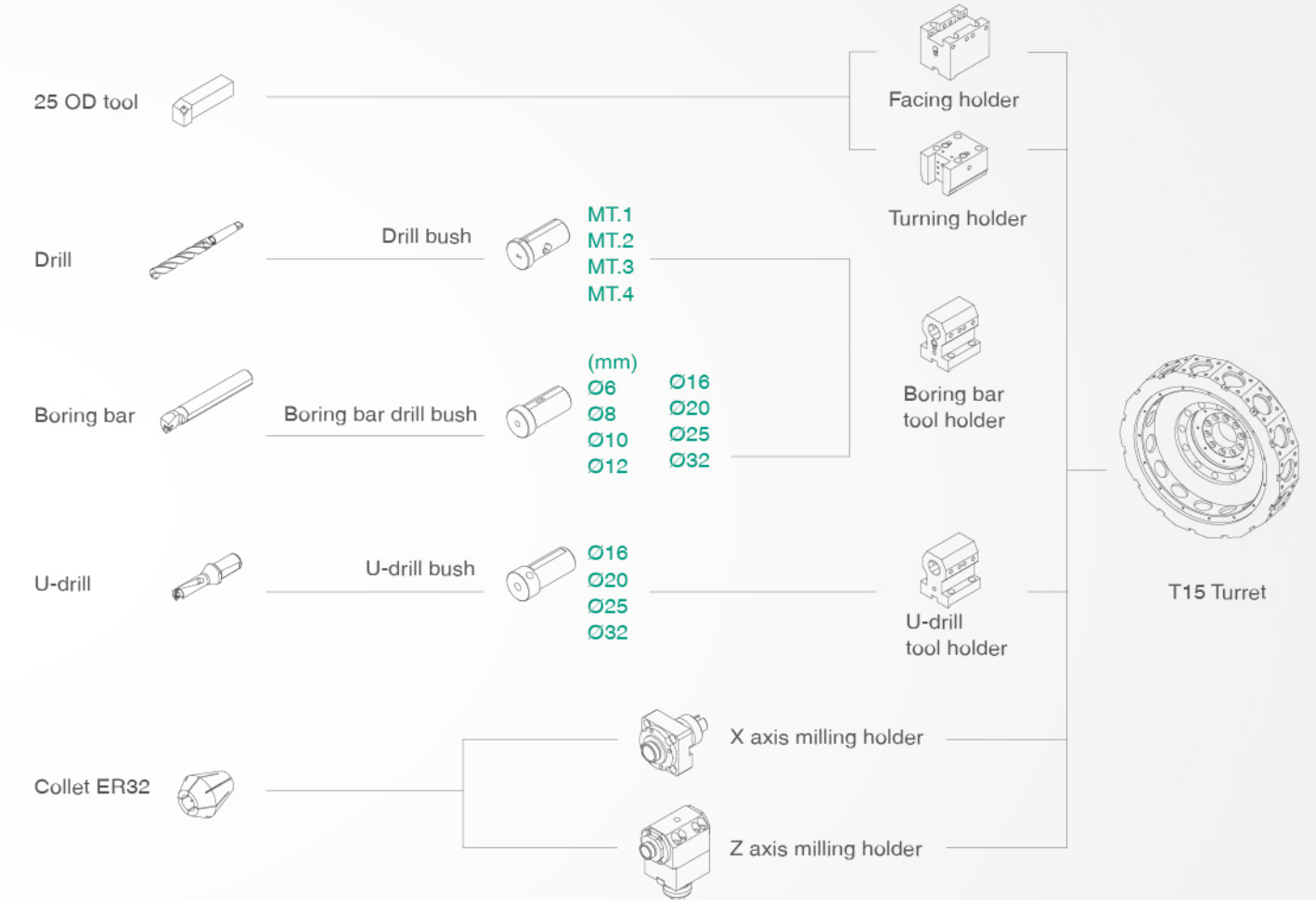
# LA

## 250YS/250YT

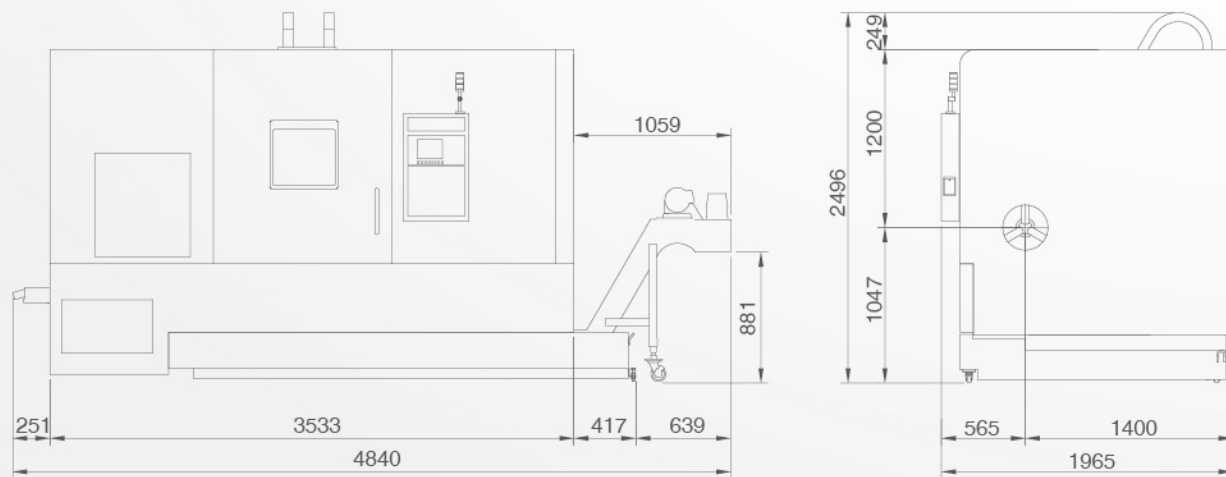
### LA-250YS



### LA-250YT



# Machine dimensions



Unit : mm



## Specifications

Item	Unit	LA-250YS	LA-250YT
<b>Capacity</b>			
Max. swing	mm	600	600
Std. turning diameter	mm	315(T12) / 242(T15)	315(T12) / 242(T15)
Max. turning diameter	mm	370	370
Max. turning length	mm	737	737
Between centers	mm	1095	---
<b>Travel</b>			
X axis travel	mm	270	270
Z axis travel	mm	800	800
Y axis travel	mm	+65-50	+65-50
B axis travel	mm	735	---
<b>Spindle</b>			
Spindle speed	rpm	3500	3500
Chuck size		10"	10"
Spindle nose		A2-8	A2-8
Max. bar work capacity	mm	75	75(81)
Through hole diameter	mm	102	102
Bearing diameter	mm	140	140
<b>Sub-spindle</b>			
Spindle speed	rpm	3500	---
Chuck size		8"	---
Spindle nose		A2-6	---
Max. bar work capacity	mm	52	---
Through hole diameter	mm	76	---
Bearing diameter	mm	110	---
<b>Tailstock</b>			
Tailstock travel	mm	---	743
Taper hole of tailstock spindle		---	MT.5

※ Specifications are subject to change without notice.



## Standard and optional accessories

### Standard accessories

- Built in spindle motor
- Hydraulic servo turret
- Hanger (2PCS)
- Leveling pad
- Wedges
- Working lamp
- Tool box
- Operation manual
- Hydraulic chuck
- Foot switch

### Optional accessories

- Chip conveyor & chip cart
- Tool setter
- Parts catcher
- Parts conveyor
- Barfeeder & Interface
- Air blow
- Automatic Power-off
- Parts counter
- Collet chuck
- Oil mist collector

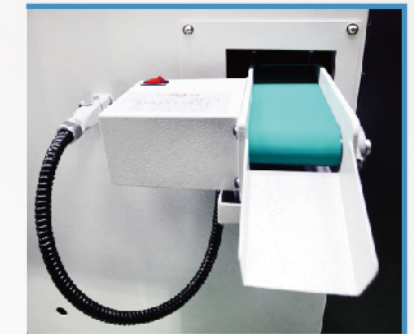
# LA

## 250YS/250YT

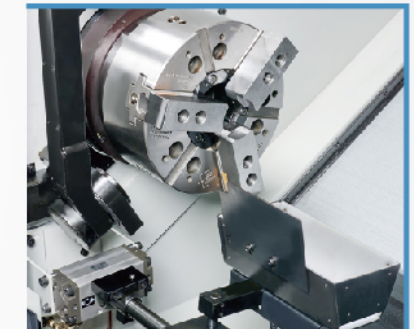
Item	Unit	LA-250YS	LA-250YT
<b>Turret</b>			
Number of tools		T15(T12)	T15(T12)
Turning tool shank	mm	25(32)	25(32)
Boring bar shank diameter	mm	40(50)	40(50)
Milling tool shank diameter	mm	20(26)	20(26)
<b>Feedrate</b>			
X axis rapid traverse rate	m/min	20	20
Z axis rapid traverse rate	m/min	20	20
Y axis rapid traverse rate	m/min	10	10
B axis rapid traverse rate	m/min	20	---
Tailstock rapid traverse rate	m/min	---	20
<b>Motor</b>			
Spindle drive motor	kW	15/22	15/22
Sub-spindle drive motor	kW	7.5/11	---
Milling motor	kW	3.7/5.5/7.5	3.7/5.5/7.5
Turret index motor	kW	1.2	1.2
X axis drive motor	kW	3	3
Z axis drive motor	kW	3	3
Y axis drive motor	kW	3	3
B axis drive motor	kW	2.5	---
Tailstock drive motor	kW	---	2.5
<b>Size</b>			
Width	mm	3533	3533
Height	mm	2247	2247
Depth	mm	1965	1965
Weight	kg	8000	8000

Remark1 : ( ) Option

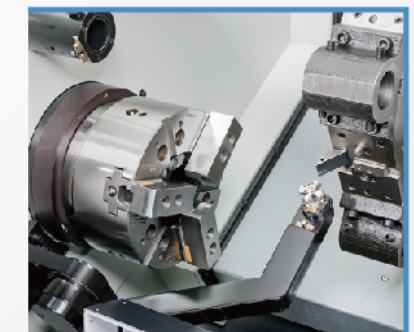
※ Specifications are subject to change without notice.



Parts conveyor



Parts catcher



Tool setter



# NC unit specifications

# LA

250YS/250YT

## Composition

☆ : Standard    ◎ : Optional    ⊕ : Special    --- : N/A    △ : Parameter setting is required

Specifications / Contents	LA-250YS	LA-250YT
<b>NC Unit</b>		
8.4" Color LCD	---	---
10.4" Color LCD	☆	☆
<b>Safety device</b>		
Front door interlock	◎	◎
Front door locking mechanism	◎	◎
Safety relay	◎	◎
Control panel breaker with tripper	◎	◎

## Main function list

☆ : Standard    ◎ : Optional    ⊕ : Special    --- : N/A    △ : Parameter setting is required

Specifications / Contents	LA-250YS	LA-250YS
<b>Controlled axes</b>		
Least input increment	☆	☆
Maximum programmable dimension(±999999.999)	☆	☆
Least Input increment C	◎	◎
Inch/metric selection	☆	☆
Interlock	☆	☆
Machine lock	◎	◎
Emergency stop	☆	☆
Stored stroke check 1	☆	☆
Stored stroke check 2,3	◎	◎
Stroke limit check before movement	◎	◎
Chuck tailstock barrier	◎	◎
Mirror image (each axis)	◎	◎
Chamfering ON/OFF	☆	☆
Overload detection	☆	☆
Position switch	◎	☆
<b>Operation</b>		
Auto run (memory)	☆	☆
MDI run	☆	☆
DNC run	◎	◎
DNC run with memory card	☆	☆
Program number search	☆	☆
Sequence number search	☆	☆
Sequence number collation and stop	◎	◎
Wrong operation prevention	△	△
Buffer register	☆	☆
Dry run	☆	☆
Single block	☆	☆
Jog feed	☆	☆
Manual reference point return	☆	☆
Dogless reference point setting	☆	☆
Manual handle feed, 1 unit	☆	☆

※ Specifications are subject to change without notice.

Specifications / Contents	LA-250YS	LA-250YT
<b>Interpolating functions</b>		
Positioning (G00)	☆	☆
Exact stop mode (G61)	☆	☆
Tapping mode (G63)	☆	☆
Cutting mode (G64)	☆	☆
Exact stop (G09)	☆	☆
Linear interpolation (G01)	☆	☆
Circular interpolation (G02/03)	☆	☆
Dwell (G04)	☆	☆
Polar coordinate interpolation	☆	☆
Cylindrical interpolation	☆	☆
Thread cutting	☆	☆
Multiple thread cutting	☆	☆
Thread cutting cycle and retraction	☆	☆
Continuous thread cutting	☆	☆
Variable lead thread cutting	☆	☆
Reference point return (G28)	☆	☆
Reference point return check (G27)	☆	☆
2nd reference point return (G30)	☆	☆
3rd, 4th reference point return	◎	◎
<b>Feed function</b>		
Rapid traverse override (F0,25%,50%,100%)	☆	☆
Feed per minute	☆	☆
Feed per revolution	☆	☆
Constant tangential speed control	☆	☆
Cutting feedrate clamp	☆	☆
Automatic acceleration/deceleration	☆	☆
Rapid traverse bell-shaped accel/decel	☆	☆
Linear accel/decel after feedrate interpolation	☆	☆
Feedrate override (15 steps)	☆	☆
Jog override (15 steps)	☆	☆
Override cancel	☆	☆
Manual feed per revolution	△	△
<b>Program input</b>		
Tape code (EIA/ISO auto recognition)	☆	☆
Label skip	☆	☆
Parity check	☆	☆
Control in/out	☆	☆
Optional block skip, 1 piece	☆	☆
Optional block skip (2 to 9 pieces)	⊕	⊕
Program number O4 digits	☆	☆
Program file name 32 characters	☆	☆
Sequence number N5 digits	---	---



# NC unit specifications

# LA

## 250YS/250YT

### Main function list

☆ : Standard    ◎ : Optional    ⊕ : Special    --- : N/A    △ : Parameter setting is required

Specifications / Contents	LA-250YS	LA-250YT
<b>Program input</b>		
Sequence number N8 digits	☆	☆
Absolute/incremental command	☆	☆
Decimal point input/Pocket calculator type decimal point input	☆	☆
diameter /radius programming (X-axis)	☆	☆
Auto coordinate /Coordinate system setting(G50)	☆	☆
Drawing dimension direct input	☆	☆
G-code system A	☆	☆
G-code system B/C	◎	◎
Chamfering/Corner R programming	☆	☆
Programmable data input	☆	☆
Sub program call (10 levels)	☆	☆
Custom macro	☆	☆
Additional custom macro common variables	◎	◎
Single canned cycle	☆	☆
Combined canned cycle I/II	☆	☆
Drilling canned cycle	☆	☆
Arc radius programming	☆	☆
Macro executor	◎	◎
Coordinate system shift/shift direct input	☆	☆
<b>Miscellaneous function/spindle functions</b>		
M function (M3 digits)	☆	☆
Second miscellaneous function (B function)	⊕	◎
Spindle functions (S4 digits)	☆	☆
Constant surface speed control	☆	☆
Spindle orientation	☆	☆
Rigid tap (spindle center) /(rotary tool)	☆	☆
<b>Tool functions/tool offset functions</b>		
T function (T2+2 digits)	☆	☆
Tool offsets, 64 pieces	☆	☆
Tool offsets, 99 pieces	◎	◎
Tool offsets, 200/400 pieces	◎	◎
Tool geometry size data, 100 pieces	◎	◎
Tool position offset	☆	☆
Tool diameter /nose R compensation	☆	☆
Tool geometry /wear compensation	☆	☆
Tool offset counter input	☆	☆
Tool offset measured value direct input	☆	☆
Tool offset measured value direct input B	◎	◎
Tool life management	◎	◎
<b>Accuracy offset functions</b>		
Backlash compensation/by rapid traverse/feedrate	☆	☆
<b>Editing</b>		

※ Specifications are subject to change without notice.

Specifications / Contents	LA-250YS	LA-250YT
Part program memory capacity 128Kbyte (320m)	---	---
Part program memory capacity 320Kbyte (800m)	---	---
Part program memory capacity 512Kbyte (1280m)	---	---
Part program memory capacity 1Mbyte/2Mbyte	☆/◎	☆/◎
Registrable programs, 63 programs	---	---
Registrable programs, 400 programs	---	---
Registrable programs, 1000 programs	☆	☆
Program editing/protection	☆	☆
Extended program editing	☆	☆
Background editing	☆	☆
<b>Setting/display</b>		
Status display	☆	☆
Clock function	☆	☆
Current position display	☆	☆
Program comment display (31 characters)	☆	☆
Parameter setting and display	☆	☆
Alarm display/Alarm log display	☆	☆
Operator/ operation message log display	☆	☆
Run hours and parts count display	☆	☆
Actual speed display	☆	☆
Actual spindle speed and T code display	☆	☆
Floppy cassette directory display	☆	☆
Grouped directory display and punching	☆	☆
Servo adjustment screen	☆	☆
Maintenance information screen	☆	☆
Data protection key, 1 kind	☆	☆
Help function	☆	☆
Self diagnostic function	☆	☆
Scheduled maintenance screen	☆	☆
Hardware & software system configuration display	☆	☆
Graphic display	☆	☆
Dynamic graphic display	◎	◎
<b>Display languages</b>		
English	☆	☆
Japanese (Kanji)	△	△
Other language	△	△
Display language dynamic switching	☆	☆
<b>Data I/O</b>		
RS-232C interface for 1 ch	☆	☆
Fast data server	⊕	⊕
External message	☆	☆
External workpiece number search	◎	◎
Memory card I/O	☆	☆