More

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TAKISAWA® TAIWAN

Distributor

2015.12

LA-350/450 SERIES

TAKISAWA® TAIWAN

LA-350 L8/L16/L22
LA-450 L8/L16/L22

CNC LATHE

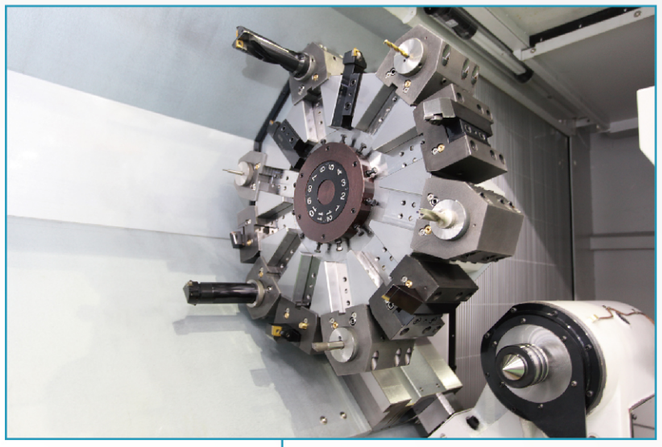
LA

350/450 SERIES

LA-350 | LA-450 Series

High Performance Model Range

- Modular series models, Bar stock diameter increased to Ø150.
- Box way design for all machining axes.
- Takisawa in-house turret and spindle featuring high rigidity and accuracy with easy maintenance.
- High productivity to investment cost ratio.



The turret is designed for extreme rigidity through its wide and heavy build, inclusion of heavy duty oversized couplings and enhanced clamping pressure.

User-friendly movable operation panel, you can turn 90 degrees left and right.

LA-350 L8/L16/L22 | LA-450 L8/L16/L22 Specifications

LA-350 L8/L16/L22	
Max. swing	780 mm
Max. turning length	800/1600/2240 mm
Max. turning diameter	550 mm
Max. bar work capacity	115 mm
Spindle speed	2500(2000) rpm
Chuck size	12”(15”)

LA-450 L8/L16/L22	
Max. swing	780 mm
Max. turning length	780/1580/2220 mm
Max. turning diameter	550 mm
Max. bar work capacity	150 mm
Spindle speed	1800(1500) rpm
Chuck size	18”(20”)

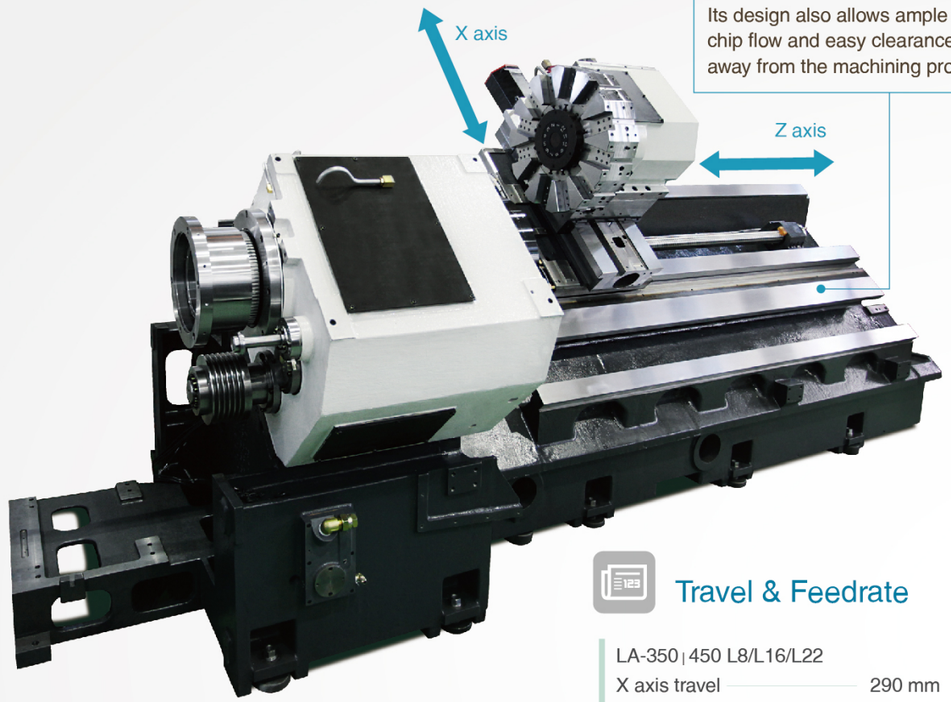
※ Specifications are subject to change without notice.

A space is supporting long boring bar to be used.

LA-350 | LA-450 Series

The heavy duty one-piece slant bed machine base is an extremely rigid structure and together with its heavy duty box way design promotes the highest machining accuracy.

Its design also allows ample space for chip flow and easy clearance of debris away from the machining process.



Travel & Feedrate

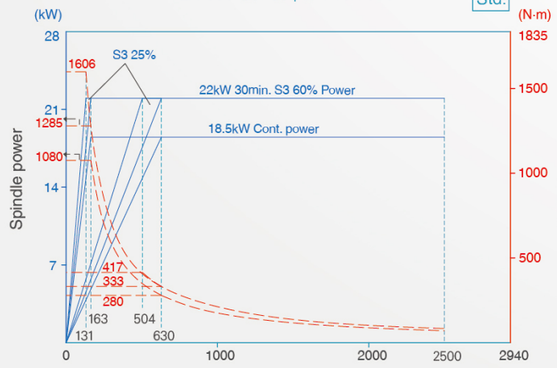
LA-350	450 L8/L16/L22	
X axis travel	290 mm
X axis rapid traverse rate	16 m/min
Z axis travel	850/1650/2290 mm
Z axis rapid traverse rate	20/20/16 m/min

※ Specifications are subject to change without notice.

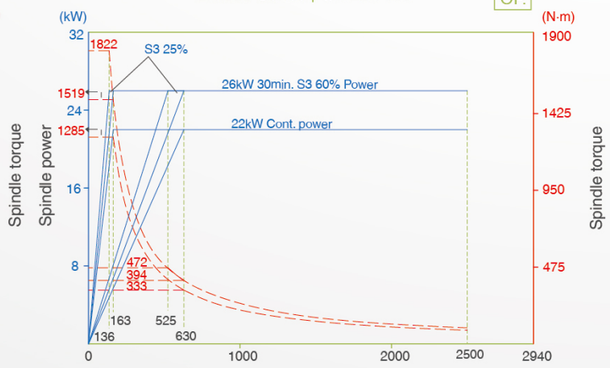
Spindle output diagram

Powered by FANUC MOTOR for high stability & high accuracy.

LA-350 Series | αil 18/7000 Std.



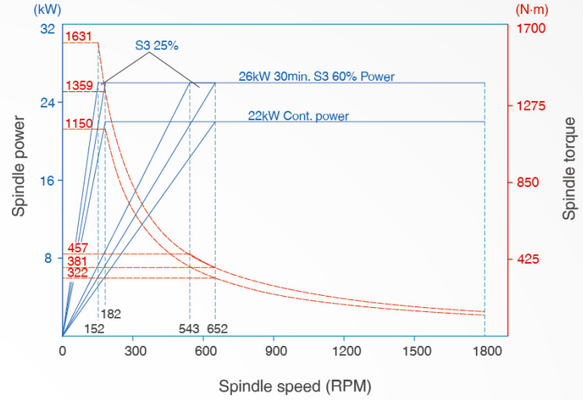
LA-350 Series | αil 22/7000 OP.



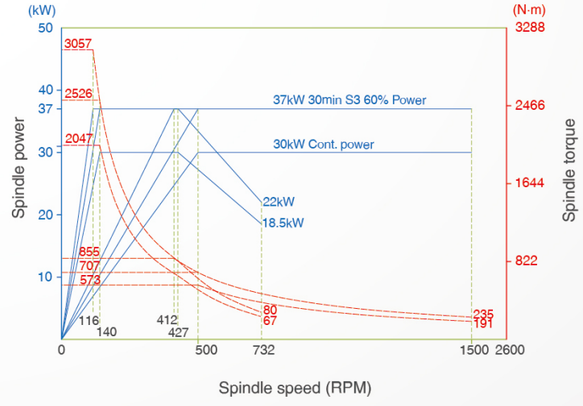
Spindle output diagram

Powered by FANUC MOTOR for high stability & high accuracy.

LA-450 Series | αil 22/7000 Std.

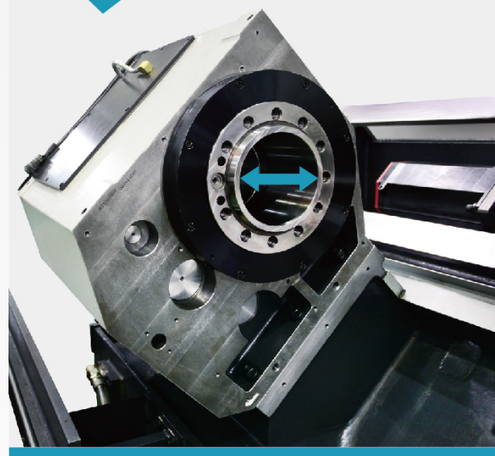


LA-450 Series | αil 30/6000 OP.

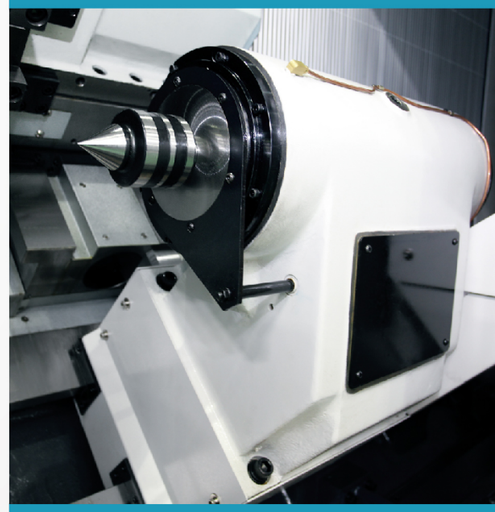


LA

350/450 SERIES



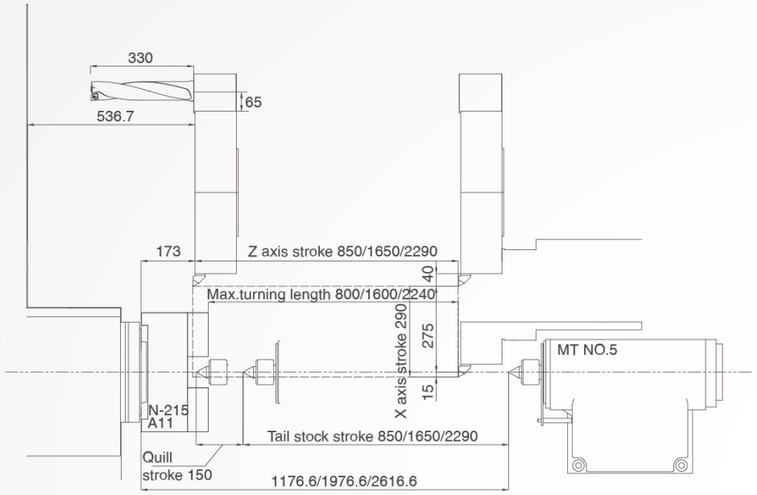
LA-350 through hole diameter: 126mm
LA-450 through hole diameter: 162mm



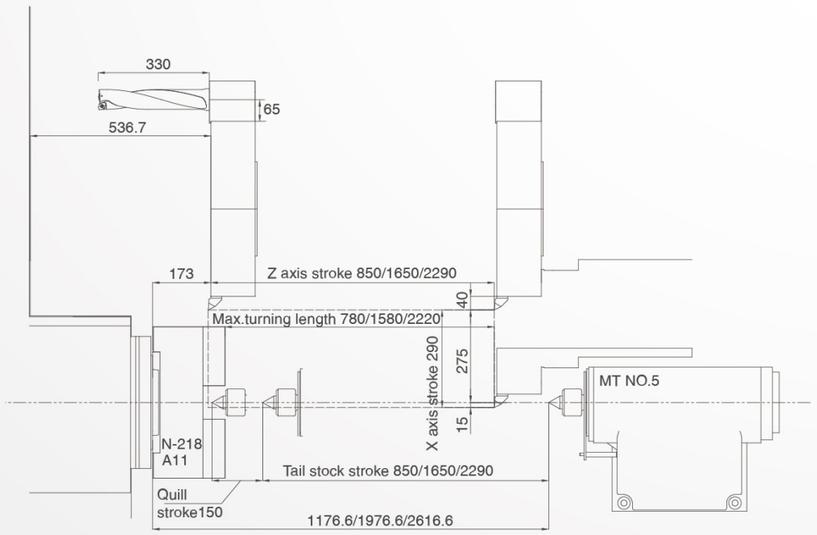
Hydraulic tailstock increase in the processing of long boring bar, can show high precision quality.

Working range

LA-350 Working Range

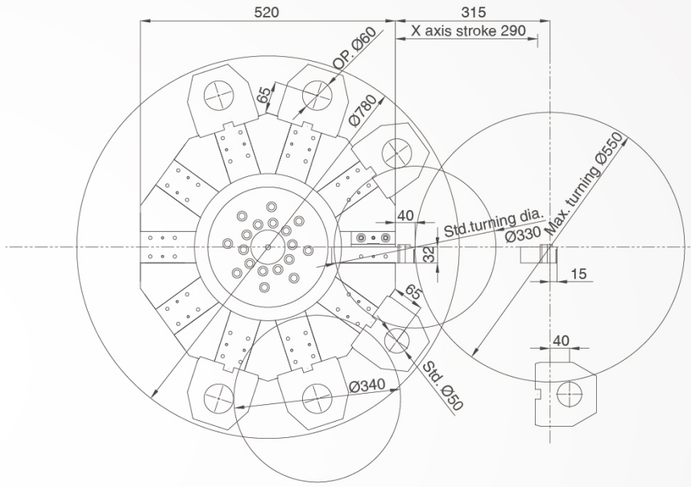


LA-450 Working Range

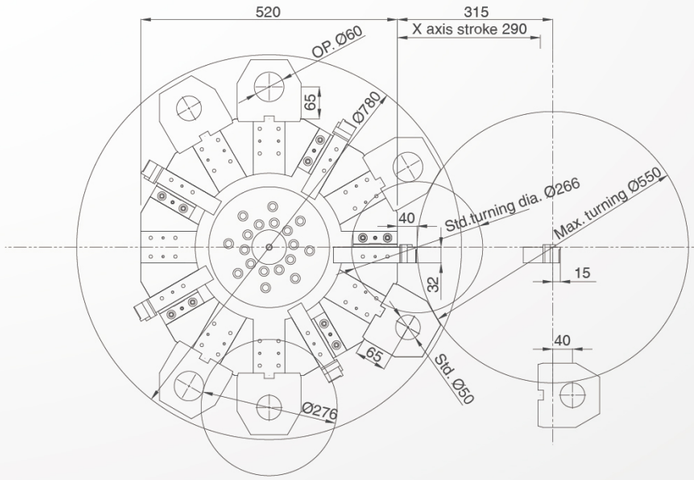


Interference diagram

LA-350/LA-450 Interference Diagram



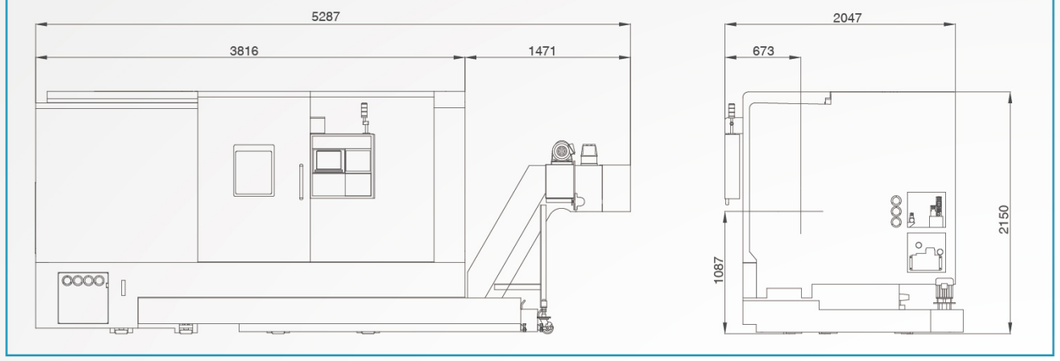
Interference Diagram (T10)



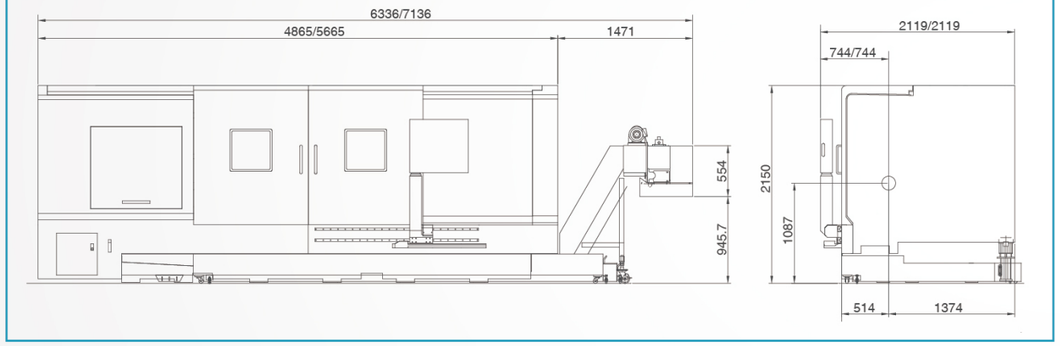
Interference Diagram (T12)

Machine dimensions

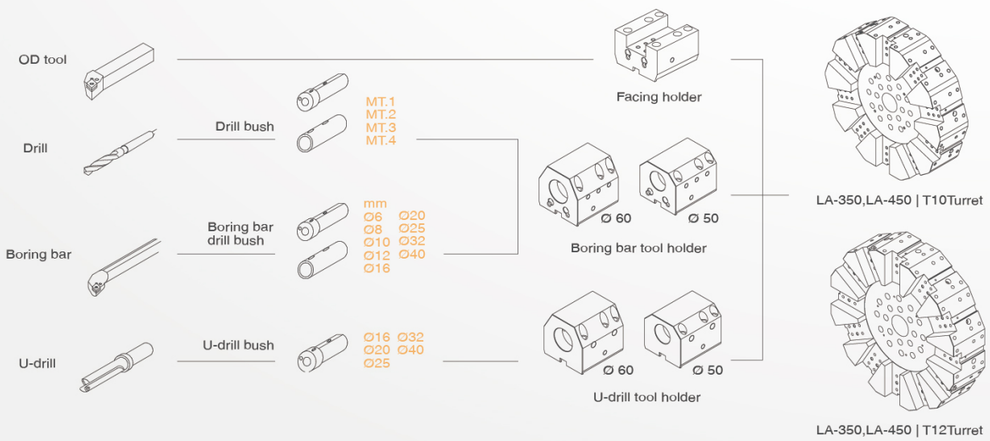
LA-350 L8 | LA-450 L8



LA-350 L16/L22 | LA-450 L16/L22



Tooling system



Specifications

LA

350/450 SERIES

Remark1 : ( ) Option

Item	Unit	LA-350 L8/L16/L22	LA-450 L8/L16/L22
Capacity			
Max. swing	mm	780	780
Std. turning diameter	mm	330 | 266(T12)	330 | 266(T12)
Max. turning diameter	mm	550	550
Max. turning length	mm	800/1600/2240	780/1580/2220
Bar capacity	mm	115	150
Travel			
X axis travel	mm	290	290
Z axis travel	mm	850/1650/2290	850/1650/2290
Spindle			
Gear change step		2 step	2 step
Spindle nose		A2-11	A2-11
Chuck size		12”(15”)	18”(20”)
Spindle speed	rpm	2500(2000)	1800(1500)
Through hole diameter	mm	126	162
Bearing diameter	mm	170	220
Turret			
Number of tools		T10(T12)	T10(T12)
Turning tool shank	mm	32	32
Boring bar shank diameter	mm	50	50/60
Tailstock			
Tailstock travel	mm	850/1650/2290	850/1650/2290
Tailstock spindle diameter	mm	150	150
Taper hole of tailstock spindle		MT.5	MT.5
Tailstock spindle travel	mm	150	150
Feedrate			
X axis rapid traverse rate	m/min	16	16
Z axis rapid traverse rate	m/min	20/20/16	20/20/16
Motor			
Spindle drive motor	kW	18.5/22(22/26)	22/26(30/37)
Turret index motor	kW	1.2	1.2
X axis drive motor	kW	3(4)	4
Z axis drive motor	kW	4(7)	7
Size			
Height	mm	2150	2150
Width	mm	5287/6336/7136	5287/6336/7136
Depth	mm	2047/2119/2119	2047/2119/2119
Weight	kg	8000/9000/11200	8100/9100/11300

※ Specifications are subject to change without notice.

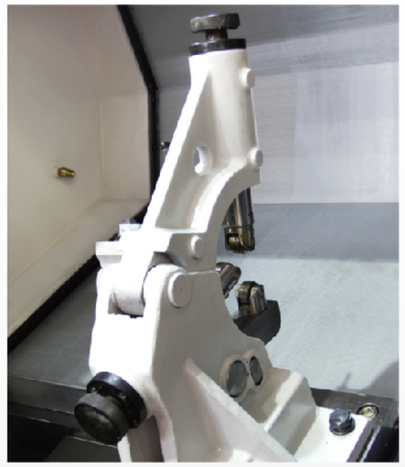
Standard and optional accessories

☆ : Standard accessories --- : NO ◎ : Optional accessories

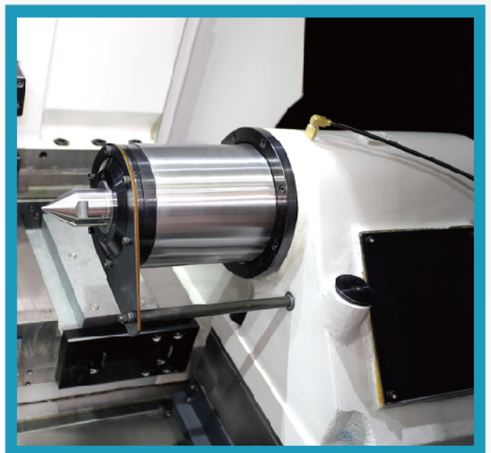
Item	LA-350	LA-450
Accessories		
Hi-low Gearbox Spindle	☆	☆
Hydraulic servo turret	☆	☆
Hydraulic tailstock	☆	☆
Automatic PIN tailstock base	☆	☆
Boring bar tool holder (4PCS)	☆	☆
U-drill tool holder (1PCS)	☆	☆
OD tool holder(1PCS)	☆	☆
Boring bar bush ø6,ø8,ø10,ø12,ø16	☆	☆
Boring bar bush ø20,ø25,ø32,ø40	☆	☆
U-drill bush ø16,ø20,ø25,ø32,ø40	☆	☆
Drill bush MT.1,MT.2,MT.3,MT.4	☆	☆
Hanger(2PCS)	◎	◎
Leveling pad	☆	☆
Wedge	☆	☆
Working lamp	☆	☆
Tool box	☆	☆
Operation manual	☆	☆
Hydraulic chuck	☆	☆
lubricant oil	☆	☆
Foot switch	☆	☆
Optional accessories		
Chip conveyor & chip cart	◎	◎
Tool setter	◎	◎
Barfeeder & Interface	◎	◎
Air blow	◎	◎
Automatic Power-off	◎	◎
Parts counter	◎	◎
Manual steady rest	◎	◎
Hydraulic steady rest	◎	◎
Rotating tail stock	◎	◎
Oil cooler	◎	◎
Oil mist collector	◎	◎

※ Specifications are subject to change without notice.

lubricant oil



Manual steady rest



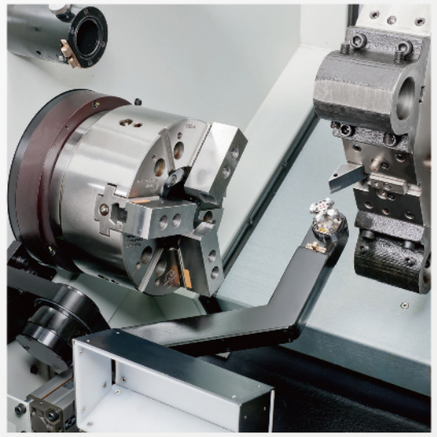
Rotating tail stock
High thrust and clamping forces provide maximum stability especially when working with long workpieces.

Chip conveyor

LA

350/450 SERIES

Oil cooler



Tool setter

NC unit specifications

LA

350/450 SERIES

Composition

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

Specifications / Contents	LA-350 / LA-450
NC Unit	
8.4" Color LCD	☆
10.4" Color LCD	◎
Safety device	
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-350 / LA-450
Controlled axes	
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	⊕
Operation	
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-350 / LA-450
Interpolating functions	
Poitioning (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	⊕
Feed function	
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	△
Program input	
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

350/450 SERIES

Composition

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

Specifications / Contents	LA-350 / LA-450
Program input	
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	☆
Miscellaneous function/spindle functions	
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)	---
Tool functions/tool offset functions	
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	△
Accuracy offset functions	
Backlash compensation/by rapid traverse/feedrate	☆
Editing	

※ Specifications are subject to change without notice.

Specifications / Contents	LA-350 / LA-450
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	☆
Setting/display	
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	◎
Display languages	
English	☆
Japanese (Kanji))	△
Other language	△
Display language dynamic switching	☆
Data I/O	
RS-232C interface for 1 ch	☆
Fast data server	⊕
External message	☆
External workpiece number search	⊕
Memory card I/O	☆