

LEADWELL
LEADWELL CNC MACHINES MFG., CORP.

LTC-25iSMY

MULTI-TASKING TURNING CENTER

LEADWELL CNC MACHINES MFG., CORP.



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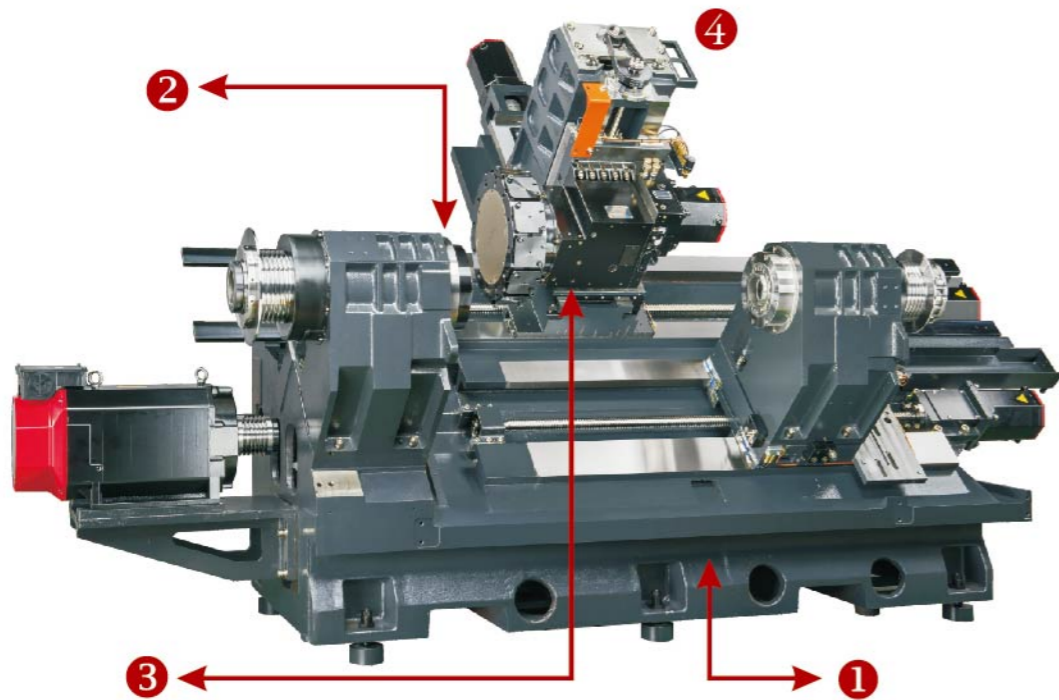
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※ All performance are based on 220V/3PH/60HZ. Specification are subject to change without notice.

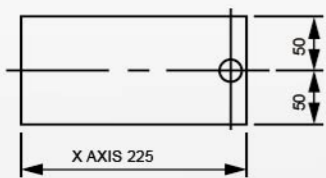


LTC-25iSMY STRUCTURE

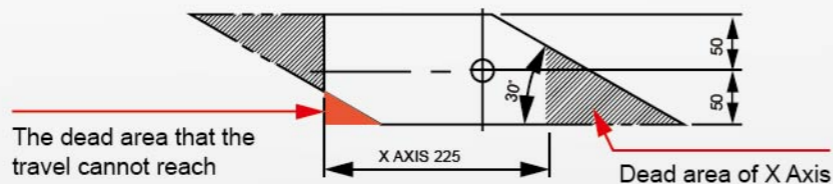
The structure of the multi-tasking turning center is with Main spindle + Sub spindle + Power Turret (BMT-65) + Y-axis, and with high level FANUC controller (0i-T) This machine is your best choice which can process complex surfaces and geometrical features required various turning or milling operations in single setup. This processing model controls the machining accuracy of the work-piece, and makes your productivity more efficient and accurate.



- 1 The base, square way, headstock seat and motor seat are integrally formed, with large span design, the machine has high rigidity and free of vibration. The square way harden via high quenching treatment, has up to HRC 50°
- 2 The machine is designed especially for work-piece with 10"-12" diameter and multi-processing. Machine specifications as follows: Spindle nose A2-8 with 10" inch chuck (Option 12" inch) for both spindles. The bar capacity of the main spindle is 78mm.
- 3 The capacity of the Y axis is +/-50mm, which allows offset processing and increase the speed of milling.
- 4 **Orthogonal Y axis Explanation**
Y axis is orthogonal placed on the X axis to ensure the full range of travel and to maximize the machining purposes.



Orthogonal Y axis
No dead area within it's travel



The dead area that the travel cannot reach
Virtual Y axis
There will be dead area within it's travel, and requires complex programs.

LTC-25iSMY FEATURE



S SUB-SPINDLE

The sub-spindle special software allows the work piece to be transferred from the main spindle to the sub-spindle at any speed for secondary machining operations.



M LIVE TOOL TURRET

The live turret makes each tool become a rotating tool for both milling and drilling operations. Tools can be either radially or axially oriented.

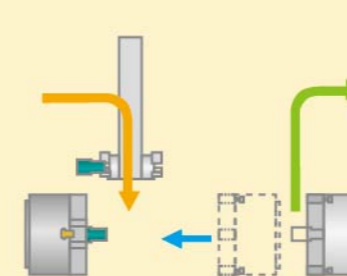
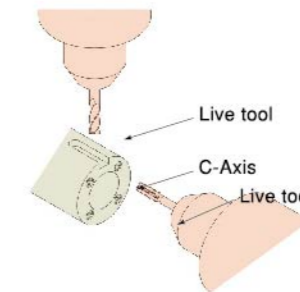
Power Turret Cutting Capacity

Tool	12 live tools
Drill	10mm
End Mill	12mm
Tapping	M10xP1.5

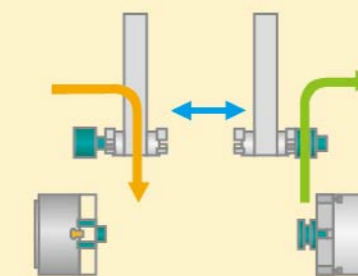


Y Y-AXIS

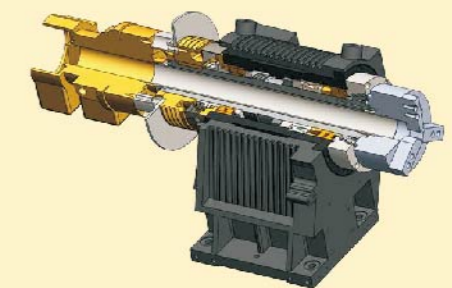
The Y axis design can decrease inaccuracy from machining and arithmetic errors.



Robot Arm Loading System:
The sub-spindle can continue the machining program on the rear side.



The loading of work-pieces become more efficient with the incorporation of the automatic Gantry Robot System.



BAR CAPACITY

Spindle $\phi 78$
Sub Spindle $\phi 66$

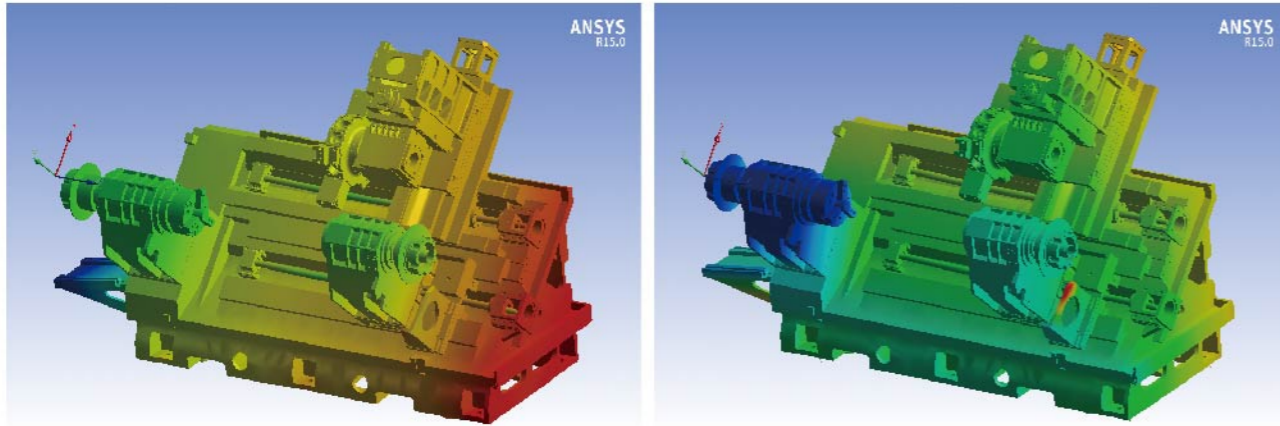
LTC-25iSMY FEA REPORT (Finite Element Analysis)

OPTIMUM

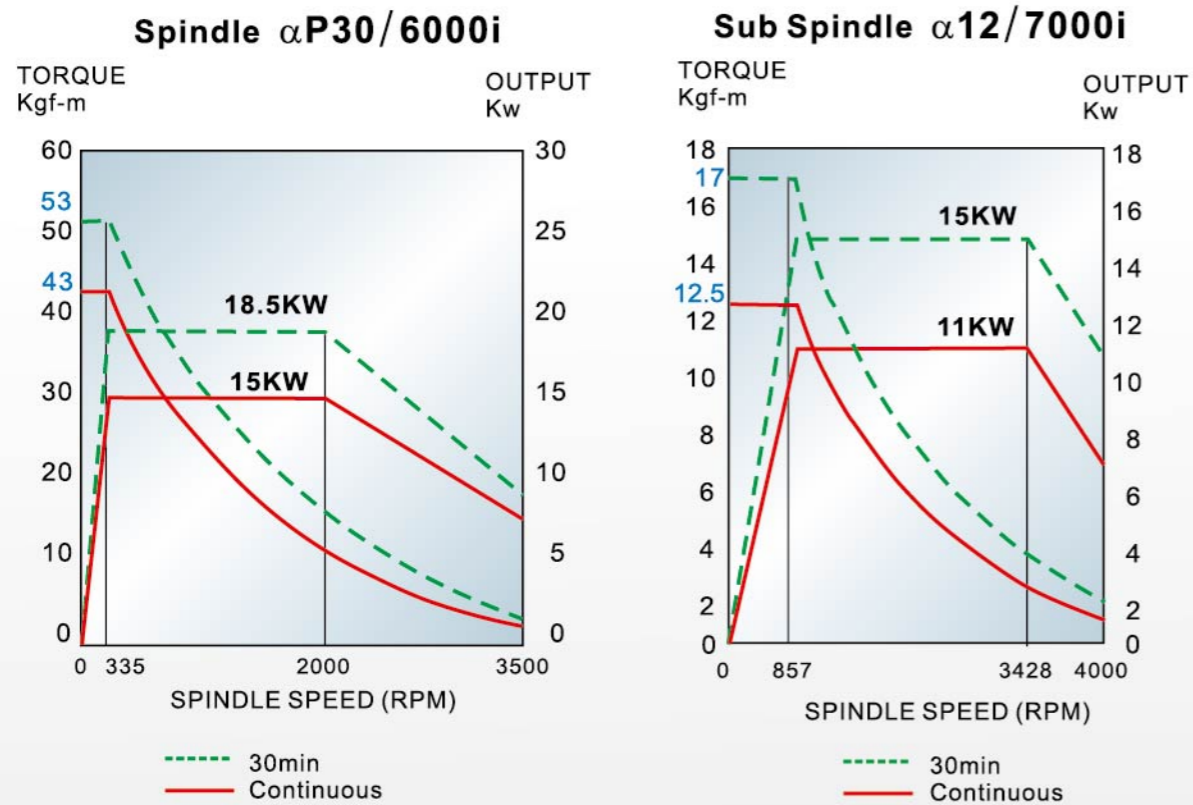
- Section areas
- Moments of inertia
- Torsional constant
- Plate thickness
- Bending stiffness
- Transverse shear
- Vibration reduce

WITH FEA YOU CAN

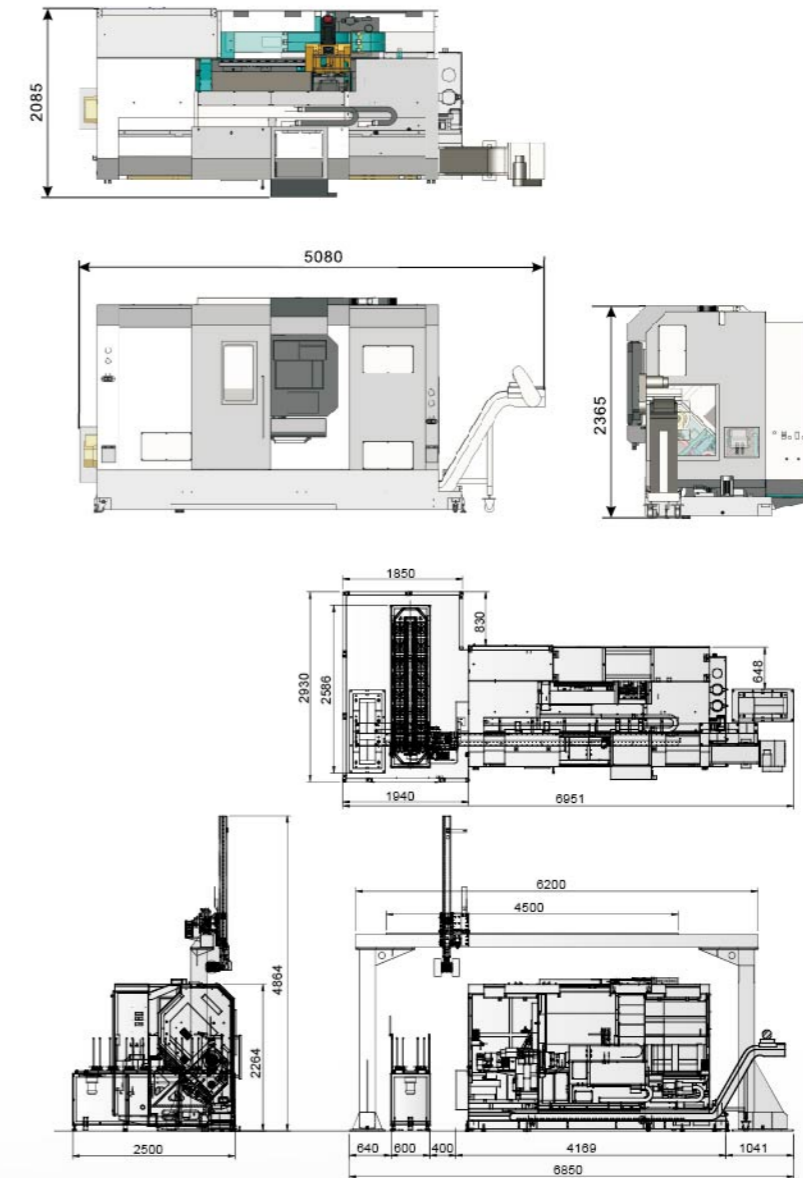
1. Predict and improve product performance and reliability.
2. Reduce physical prototyping and testing.
3. Evaluate different designs and materials.
4. Optimize design.



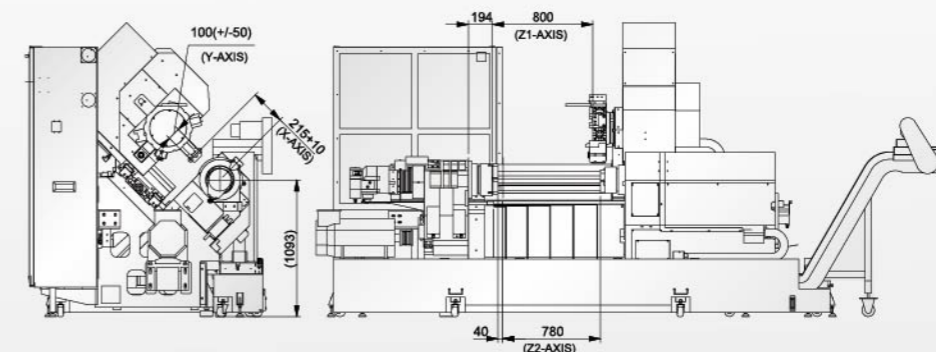
SPINDLE POWER CURVE



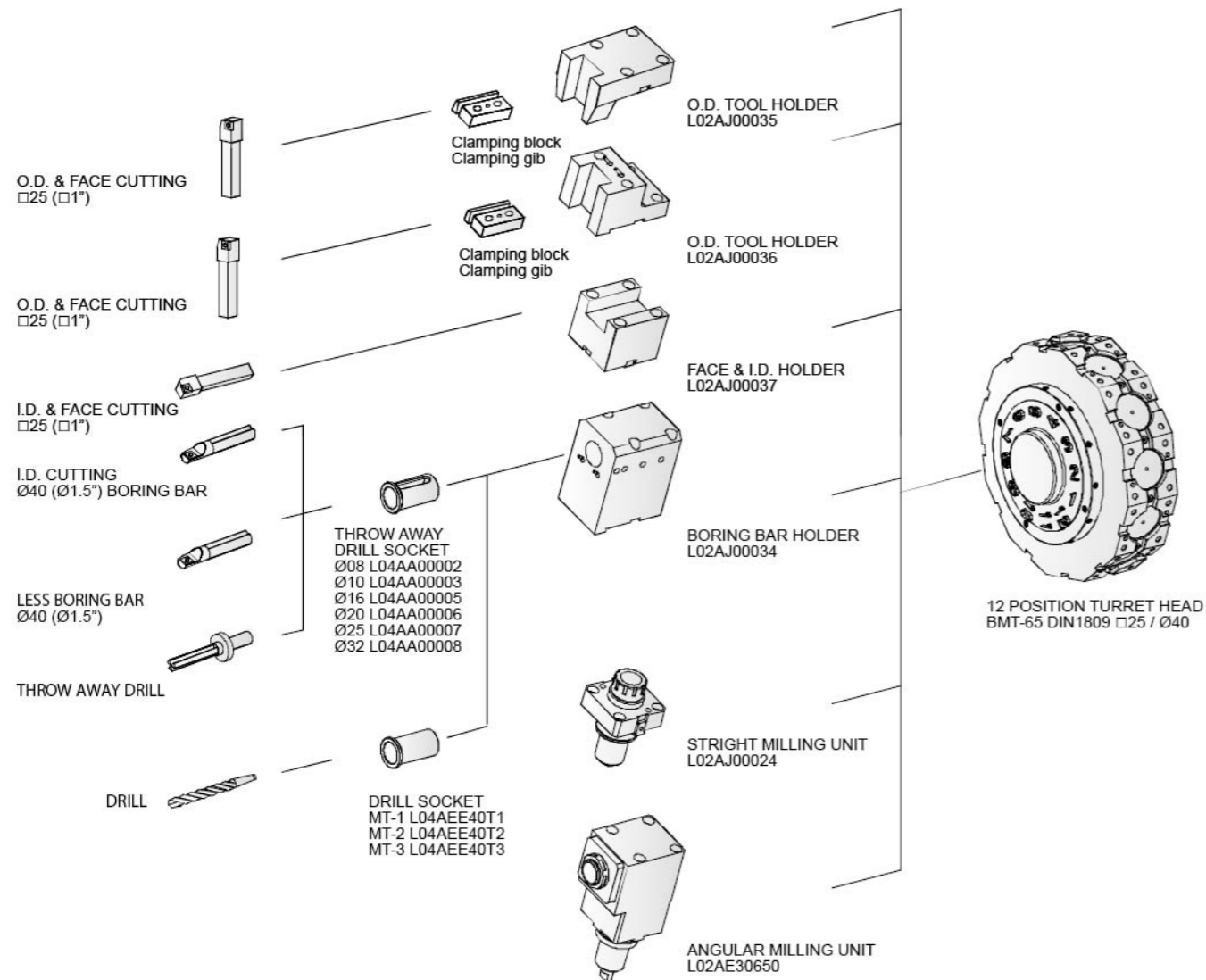
LTC-25iSMY OUTLINE DIMENSION



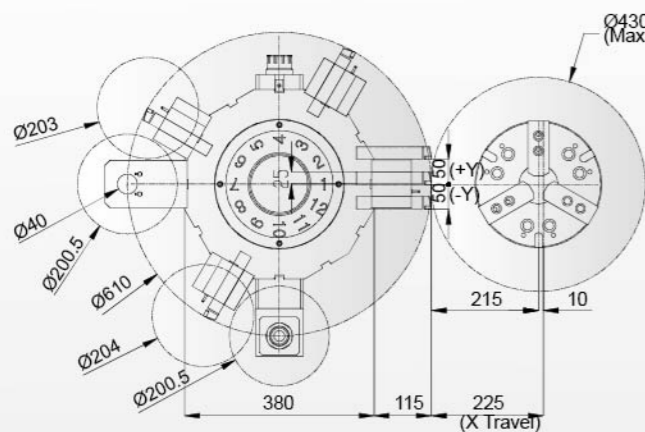
INTERNAL DIMENSION



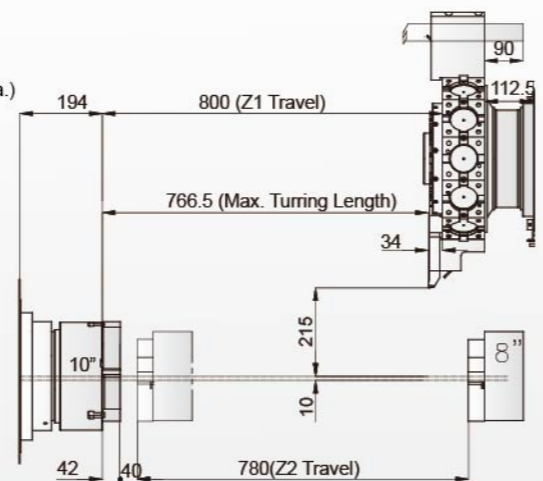
LTC-25iSMY TOOLING SYSTEM



TOOLING INTERFERENCE



WORKING CAPACITY SYSTEM



LTC-25iSMY MACHINE SPECIFICATIONS

ITEM	MODEL	Unit	LTC-25iSMY
CAPACITY			
Max. swing		mm(in)	590(23.2)
Max. turning diameter		mm(in)	430(16.9)
Max. turning length		mm(in)	770(30.3)
Bar capacity		mm(in)	78(3.07)
TRAVEL			
X axis		mm(in)	215+10(8.46+0.4)
Y axis		mm(in)	±50(±1.96)
Z1 axis		mm(in)	800(31.5)
Z2 axis		mm(in)	780(30.7)
SPINDLE			
Spindle speed		rpm	3500
Chuck size		mm(in)	254(10")
Type of spindle nose			A2-8
Spindle motor power		Kw (HP)	18.5(24.8)
SUB SPINDLE			
Sub spindle speed		rpm	4000
Sub chuck size		mm(in)	210(8")
Sub spindle nose			A2-6
Sub spindle motor power		Kw (HP)	15(20)
TURRET			
Number of tool stations		pcs	12(BMT65/DIN 1809)
Shank height for square tool		mm(in)	25(1) BMT65
Shank diameter for boring bar		mm(in)	40(1.57) BMT65
FEED RATE			
X/Y/Z1/Z2 axis rapid traverse		m/min(IPM)	15/7.5/20/20 (590.5/295/787.4/787.4)
FEED MOTORS			
X/Y/Z1/Z2 axis motor		Kw(HP)	4(5.4)/1.6(2.1)/7(9.3)/4(5.4)
MISCELLANEOUS			
Total machine weight		kg	8900
Machine length (with conveyor)		mm(in)	5080(200)
Machine width		mm(in)	2085(82.1)
Machine height		mm(in)	2365(93.1)
Power requirement		KVA	60
Controller		FANUC	0i-T

STANDARD ACCESSORIES

- BMT-65 disc(DIN 1809)
- Buzzer
- Heat exchanger
- Full enclosed splash guard
- 3 jaw open center chuck
- Foot switch
- Wide angle V-belt
- Sub-spindle air outer blow
- High pressure pump (3bar x 2pcs)
- Alarm lamp

OPTIONAL ACCESSORIES

- Main spindle air outer blow
- Chip conveyor + bucket
- Mist separator
- Oil skimmer
- High pressure pump
- Two speed gearbox
- 3 jaw close center chuck
- Linear scale (X/Z1 axis)
- Collet chuck
- Tool setter
- Robot
- Alarm lamp
- Air conditioner
- Bar feeder
- Auto door
- Fanuc controller 31i
- Siemens controller 828D