2. MACHINE SPECIFICATIONS

2.1. STANDARD SPECIFICATIONS

(1) TABLE TABLE WORK AREA (WIDTH×LENGTH)	630 × 630 mm (24.8 × 24.8 inch)
TABLE INDEXING	4th axis 0.001°
MAX. WORK SIZE	ϕ 1000 × 1100 mm (ϕ 39.5 × 43.3 inch)
TABLE LOAD CAPACITY	1200 Kg (2640 pounds)
2) TRAVEL X AXIS	1000 mm (39.37 inch)
Y AXIS	800 mm (31.5 inch)
Z AXIS	820 mm (32.28 inch)
DISTANCE FROM TABLE CENTER TO SPINDLE NOSE	130 · 950 mm (5.12 – 37.4 inch)
DISTANCE FROM TABLE SURFACE TO SPINDLE CENTER	50 · 850 mm (1.97 – 33.5 inch)
3) SPINDLE SPINDLE TAPER	NST NO.50
SPINDLE SPEED	35 · 12,000 min^{-1} (OP: 5,000 min^{-1})

Directly specified by a 5-digit S code

(4) FEED	
RAPID FEED (X AXIS) AUTO	50,000 mm/min (1968.5 inch/min.)
RAPID FEED (Y AXIS) AUTO	50,000 mm/min (1968.5 inch/min.)
RAPID FEED (Z AXIS) AUTO	50,000 mm/min (1968.5 inch/min.)
CUTTING FEED	50,000 mm/min. (1968.5 inch/min.)
(5) ATC	
TOOL STORAGE CAPACITY	50 TOOLS (OP:100, 150, 200 TOOLS)
TOOL SELECTION METHOD	RANDOM,TOOL IDENTIFIED AT MAGAZINE
TOOL SHANK	MAS. BT 50 CATERPILLAR NO.50 DIN 50
MAX. TOOL SIZE	ϕ 125 × 450 mm (ϕ4.92 × 17.72 inch)
-TWO NEIGHBORING TOOL POTS SHOULD BE EMPTY:	ϕ200 × 450 mm (ϕ7.87×17.72 inch)
MAX. TOOL WEIGHT (WITH TOOL HOLDER)	20Kg (44 pounds)
TOOL CHANGE TIME (TOOL-TO-TOOL)	3.0 sec.
CHIP TO CHIP (WITH TOOL ORIENTATION)	MINIMUM 7.0 sec.

HX630i

(6) MOTOR

SPINDLE MOTOR	(30 min. RATIO)	AC 26 kW
	(CONTINUOUS OPERATION)	AC 22 kW
ATC MOTOR		AC 1500 W
COOLANT MOTOR		AC 730(50Hz) / 1210(60Hz) W
LUBRICATION POMP MOTOR		AC 20 W
HYDRAULIC MOTOR		AC 2.2 kW

(7) MACHINE WEIGHT WITH NC 20,700 kg
(45,540 pounds)

(8) ELECTRIC POWER SOURCE

MAIN CIRCUIT	THREE PHASE CURRENT	AC 200/220 V (If the machine has a trance former, this is secondary voltage.)
	FREQUENCY	50/60 Hz
CONTROL CIRCUIT	SINGLE PHASE CURRENT	AC 100 V (Made from AC 200/220V by a trance former) DC 24 V

2.2. STANDARD ACCESSORIES

1 : Spanner wrench — 1 set

2 : Cutting fluid device — 1 set

2.3. OPTIONAL ACCESSORIES

1 : Foundation bolt

2 : 3-Step automatic change over coolant

3 : Illumination unit (work light)

4 : Spindle oil cooler

5 : Warming-up timer

6: Machining cycle finish indicator lamp

7 : Week timer

8 : Run hour display

9 : Oil mist coolant device

10: Additional M-function

11: Automatic power stop

12: Special cooler

13: Tool holder with pull studs (N. S. T. 50)
Spring collet
Face mill
Side lock

Collet
Pull stud

14: MDI memory input device

15: Automatic tool breakage sensor

NO.	SPECIFICATIONS
F6501	Controlled axis (3 axes)
F6502	Simultaneously controlled axes expansion
F6503	Tangential speed constant control
F6504	Least input increment 0.001mm / 0.001inch
F6507	Cutting feedrate clamp
F6508	Linear acceleration / deceleration before cutting feed interpolation
F6509	Fine Acceleration & Deceleration control
F6510	HRV control
F6511	Follow-up
F6512	Simple high-precision contour control
F6513	Automatic acceleration / deceleration
F6514	Automatic coordinate system setting
F6515	Manual reference position return
F6516	Buffer register
F6517	Program number
F6518	Sub program call
F6521	Decimal point programming / pocket calculator type decimal point programming
F6522	Auxiliary function (S,T,M code)
F6524	Label skip
F6525	Optional block skip
F6526	Backlash compensation
F6527	Program number search
F6528	Sequence number search
F6530	Dry run
F6531	Single block
F6532	Automatic operation (memory)
F6534	MDI operation
F6535	Tape code (EIA / ISO)
F6537	Stored pitch error compensation
F6538	Auxiliary function lock
F6539	Machine lock (all axes)
F6540	Machine lock (Z axis)
F6541	Manual absolute on and off
F6542	Reader / puncher interface (RS232C)
F6546	Feedrate override (0 – 254%)
F6547	Rapid traverse override (1, 25, 50, 100%)
F6548	Jog override
F6549	Spindle override (50-120%)

NO.	SPECIFICATIONS
F6550	Mirror image
F6551	Programmable mirror image
F6552	JOG feed
F6554	Manual handle feed (0.001, 0.01, 0.1)
F6555	Override cancel (M49 / M48)
F6556	Positioning (G00)
F6557	Linear interpolation (G01)
F6558	Circular interpolation (G02,G03)
F6560	Dwell (G04)
F6561	Exact stop (G09)
F6562	Reference position return (G28,G29)
F6563	Reference position return check (G27)
F6566	Canned cycles (G73,G74,G76,G77,G80～G89,G98,G99)
F6567	Absolute / incremental programming (G90 / G91)
F6568	Tool length compensation (G43,G44,G49)
F6569	Skip (G31)
F6570	High-speed skip
F6571	2nd reference position return (G30)
F6572	Helical interpolation (G02,G03)
F6573	Programmable data input (G10 / G11)
F6574	Stored stroke check 1
F6575	Cutter compensation C (G40,G41,G42)
F6576	Inch / metric conversion(G20, G21)
F6580	Addition of workpiece coordinate system pair (48pair)
F6581	Exact stop mode (G61)
F6582	Automatic corner override (G62)
F6583	Tool offset pairs (99 pair)
F6586	Tool offset
F6588	Tool length measurement
F6589	Part program storage length 320m
F6590	Number of registerable programs 200
F6591	Custom macro B
F6592	Data protection key
F6593	Extended part program editing
F6594	Background editing
F6595	Tool life management
F6597	Clock function
F6598	Self-diagnosis function
F6599	Periodic maintenance screen

NO.	SPECIFICATIONS
F6600	Maintenance information screen
F6601	Alarm display
F6602	Alarm history display
F6603	Operation history display
F6604	Help function
F6605	Current position display
F6606	Run hour and parts count display
F6607	Actual cutting feedrate display
F6608	Directory display and punch for each group
F6610	Emergency stop

NO.	SPECIFICATIONS
F6600	Maintenance information screen
F6601	Alarm display
F6602	Alarm history display
F6603	Operation history display
F6604	Help function
F6605	Current position display
F6606	Run hour and parts count display
F6607	Actual cutting feedrate display
F6608	Directory display and punch for each group
F6610	Emergency stop

NO.	SPECIFICATIONS
F6001	Signal direction positioning (G60)
F6002	Cylindrical interpolation
F6003	Polar coordinate interpolation
F6004	Helical interpolation B
F6005	Hypothetical axis interpolation
F6006	One-digit F code feed
F6007	3rd / 4th reference position return
F6008	High-speed cycle cutting
F6009	Retract of high-speed cycle cutting
F6010	Program restart
F6011	Stored stroke check 2
F6012	Stored stroke check 3
F6013	Stroke limit check before move
F6014	Small-hole peck drilling cycle
F6015	Involute interpolation
F6016	Exponential interpolation
F6017	High-precision contour control
F6018	Interruption type custom macro
F6019	Addition of custom macro common variables
F6020	Playback
F6021	Scaling
F6022	Coordinate system rotation
F6023	Addition of workpiece coordinate system pair (300pairs)
F6024	Figure copy
F6025	Tool offset pairs 200pairs
F6026	Tool offset pairs 400pairs
F6027	Tool offset pairs 499pairs
F6028	Tool offset pairs 999pairs
F6029	Tool offset memory B
F6030	Tool offset memory C

NO.	
31	Addition
32	3-dimensi
33	Part prog
34	Part prog
35	Part prog
36	Part prog
37	Number
38	Number
39	Optional
40	Machini