

Investment Summary

Quote # : [REDACTED]

Quote Date : August 2025

Expires On : [REDACTED] 2025

Salesperson	Email & Phone Number	Freight Terms	Payment Terms
[REDACTED]	[REDACTED]	[REDACTED]	25% Down, NET 30 Days

Bill To

[REDACTED]

Ship To

[REDACTED]

Item Number	Description	Qty	Price
HMC500-F004	OKK HMC500 F31iB, 20K 50HP CAT40 BIG+ Spindle, 60 Tools, 2PC-500mm Pallets, 1000psi CTS, AJC Prep12+1, B-scale	1	\$339,300.00
OKK-R98-TS002	OKK T1-A Renishaw OMP60 Probe and Software for HMC500	1	\$15,480.00
OKK-R98-TS004	OKK T1-C Automatic Tool Length Measure and Break detection System for HMC500	1	\$10,680.00
MMT-39470	Mist Collector - TANIS # AF-03M1110 - 110V Plug - Top Mounted - 1000CFM	1	\$11,700.00
CC-57609118	LNS Hinge Belt Chip Conveyor, Rear Discharge for HMC400/HMC500	1	\$24,300.00
Level 1 Training	Basic control functions, basic machine recovery, basic usage of machine options, machine safety, and daily maintenance	1	\$ 0.00
Total Price			\$401,460.00

Total Package Price \$ 401,460.00

Customer Discount -\$ 94,300.00

Total Investment \$ 307,160.00

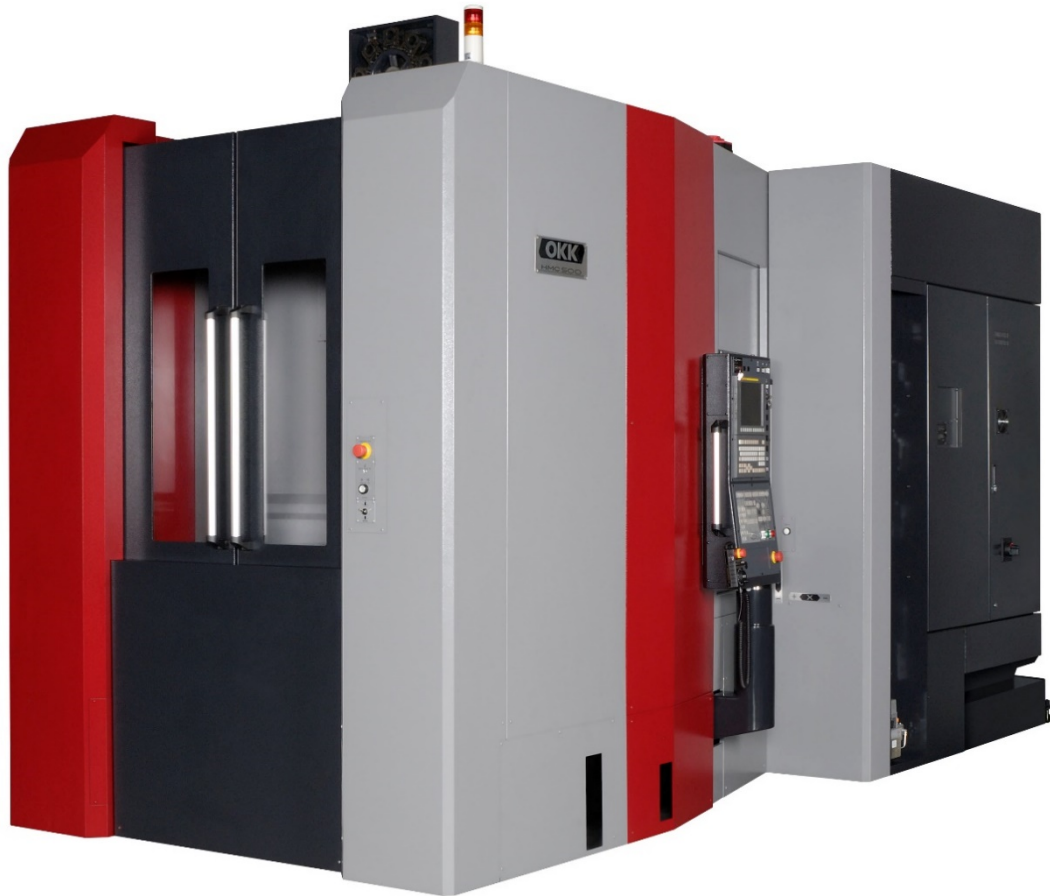
Additional Details: DELIVERY: Machine STOCK
*Discount valid on STOCK machine ONLY



HMC500-F004 Horizontal Machining Center

with Fanuc F31i-B CNC Control

Technical Specifications



OKK 100 Years of Reliability & Precision
OKK CORPORATION

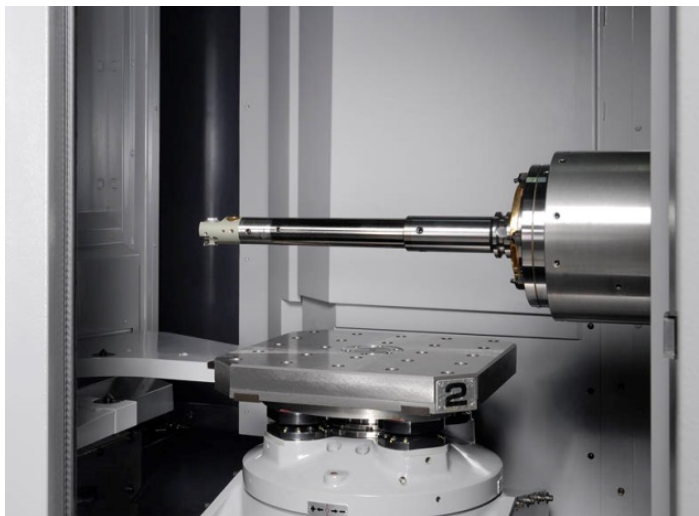
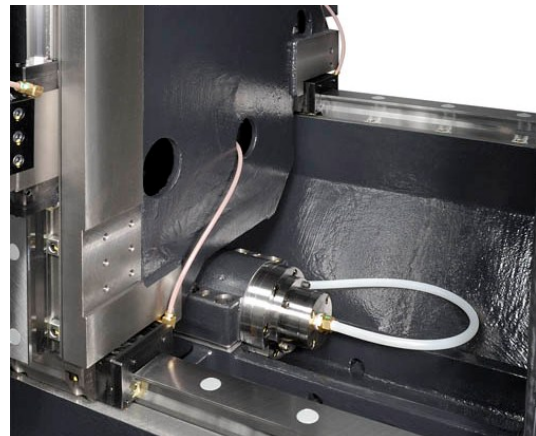
Specifications Subject to Change without Prior Notification

STANDARD FEATURES / ATTACHMENTS

- 3 color signal lamp
- AC servo motor / inverter driven tool magazine for high speed positioning
- Air dryer - inhibits moisture contamination of the machine's internal components
- All cast construction
- APC safety guard for the work load / unload station with safety interlock
- ATC shutter
- ATC zero return - ATC returns automatically to origin from any stopped position
- Automatic magazine lubrication system
- Auto way lubrication
- Ball screw cooling system
 - Cooling oil controlled to the bed temperature is circulated through the hollow ball screws used in all axes to suppress heat generation
- Ball screws, pretensioned and double anchor supported
- BIG PLUS double contact spindle grind
- Coil chip conveyors
- Colors munsell: Deep red No 5R 3/10, Gray No N5, Black No N1.5
- Coolant equipment with coolant shower chip flush
- Coolant through the spindle with filtration system, operating at 1000psi
- Foundation parts and leveling blocks (bond for anchor is not included)
- Fully enclosed automatic splash guards
- Heavily ribbed one piece T-shaped bed construction
- High grade meehanite castings
- Lighting equipment - LED lamp
- **Lift-up chip conveyor quoted separately**
- Magazine interrupt function
- Metal shutters on X, Y and Z axes
- No RS232C (RS232C is option)
- No Transformer
- Operator's splash guard door with safety interlock
- Precision pallet edge locating blocks
- SOFT AC - Adaptive Control Function
 - Monitors the spindle motor load and controls the feed rate to maintain a preset TARGET (load) or SET (max feed during air cut) - reduces machining time, increases tool life and detects tool abnormalities due to high load

STANDARD FEATURES / ATTACHMENTS

- SOFT SCALE control for improved accuracy
 - Thermal compensation control for the spindle head which corrects heat-induced distortion for dynamic machining accuracy
- Spindle air purge - reduces contaminants from entering the spindle labyrinth area
- Spindle oil cooler
- Spindle taper air blast
- Supplementary fuses
- Tool support function
- Auto grease lubrication for ballscrew and linear roller guide
- Four tapered cone pallet positioning
- Large linear cross - roller guides - lubrication-oil-impregnated sealed
- Prepared space for mounting auto jig coupler 12 (+1) port per pallet, auto jig coupler is not included
- Total 300 kg / 662 lbs magazine tool weight for 60 folder limitation
- Two station direct turn type APC



Specifications Subject to Change without Prior Notification

MACHINE SPECIFICATIONS

Maximum longitudinal travel, X axis	29.92"
Maximum vertical travel, Y axis	29.92"
Maximum table travel, Z axis	31.50"
Spindle center to pallet surface	3.15" ~ 33.07"
Spindle gauge line to pallet center	2.76" ~ 34.25"

PALLET

Pallet table dimensions	19.69" x 19.69"
*Maximum load on pallet	1,543 lb
Maximum work piece diameter	φ31.5"
Maximum work piece height.....	45.28"
*Minimum index, Built in Rotary Table	0.001°

SPINDLE

Spindle taper.....	7/24 taper #40
Minimum spindle speeds	100 rpm
*Maximum spindle speeds.....	20,000 rpm
*Spindle ranges, speed change steps	Electrical 2 steps
*Spindle motor (maximum)	50 (15% ED) hp
*Spindle motor (continuous rating).....	25 hp
*Spindle torque (maximum)	163 (10% ED) ft-lb
*Spindle torque (continuous rating)	59 ft-lb
Spindle bearings bore diameter	φ2.56"
Spindle bearings lubrication.....	Oil & Air

RAPID TRAVERSE

Rapid traverse rate: X, Y and Z axes.....	2,480 ipm
Cutting feed rate range with HQ or Hyper HQ on.....	0.04 ~ 1,575 ipm
Axis motor, digital servo: X axis	7.4 hp
Axis motor, digital servo: Y axis	7.4 hp
Axis motor, digital servo: Z axis	7.4 hp
Axis thrust maximum: X axis	3,081 lb
Axis thrust maximum: Y axis	3,081 lb
Axis thrust maximum: Z axis	4,108 lb

* specification is US standard, and will not match OKK catalog

AUTOMATIC TOOL CHANGER

Tool change system	Double swing arm
Tool selection	Address fixed random method
*Tool shank.....	CAT40
*Magazine capacity.....	60 tools
Maximum tool weight	26 (total max: 661) lb
Maximum tool moment	7.2 ft-lb
Maximum tool length.....	21.65"
Maximum tool diameter, magazine full	φ3.74"
Maximum tool diameter, adjacent pots empty	φ6.69"
Tool to tool change time.....	1.45 sec
Chip to chip time.....	2.9 sec

* specification is US standard, and will not match OKK catalog

AUTOMATIC PALLET CHANGER

Pallet thickness (Standard tapped type)	4.49"
Pallet positioning repeatability	0.0004"
Pallet change time	13 sec.

SPINDLE HEAD COOLER

Spindle head oil cooler capability (60Hz).....	5.8 hp
Spindle head oil cooler tank.....	5.3 gal
Pump size (Spindle head oil cooler).....	0.54 hp

AUTO LUBRICATION SYSTEM

Auto grease cartridge	0.88 lbs.
Auto oil tank	N/A

FLOOD COOLANT SYSTEM

*Coolant tank capacity.....	125 gal.
Standard lift-up conveyor for steel + coolant through spindle	
Pump size (Flood coolant).....	1.5 hp
Pump supply pressure (Flood coolant).....	43.5 psi

* specification is US standard, and will not match OKK catalog

HYDRAULIC UNIT

Hydraulic unit tank	5.3 gal
Pump size (Hydraulic unit)	2.0 hp
Pump supply pressure (Hydraulic unit)	1,001 psi

MACHINE WEIGHT / DIMENSIONS

Machine weight.....	23,149 lbs.
Machine dimensions: Height.....	141.93"
*Machine dimensions: W x L	108.27" x 231.50"
*Machine maintenance area: W x L.....	163.39" x 291.54"

Maintenance area includes allowance for removal of lift-up chip conveyor and door opening
* specification is US standard, and will not match OKK catalog

AIR / POWER REQUIREMENTS

Power supply	AC 200 – 220 V \pm 10% 60 Hz \pm 1 Hz
Power supply	48 kva
Air supply pressure	58.0 ~ 87.0 psi
Air supply flow rate.....	132 gpm

GUARANTEED ACCURACY

Positioning, digital encoder +/-	0.00010"
Positioning, linear scale +/-	N/A
Repeatability, digital encoder +/-.....	0.00006"
Repeatability, linear scale +/-	N/A

The above accuracies are subject to machine installed according to JIS specifications and constant temperature environment. Accuracy are based on JIS inspection standard.



FANUC 31i-B STANDARD FEATURES

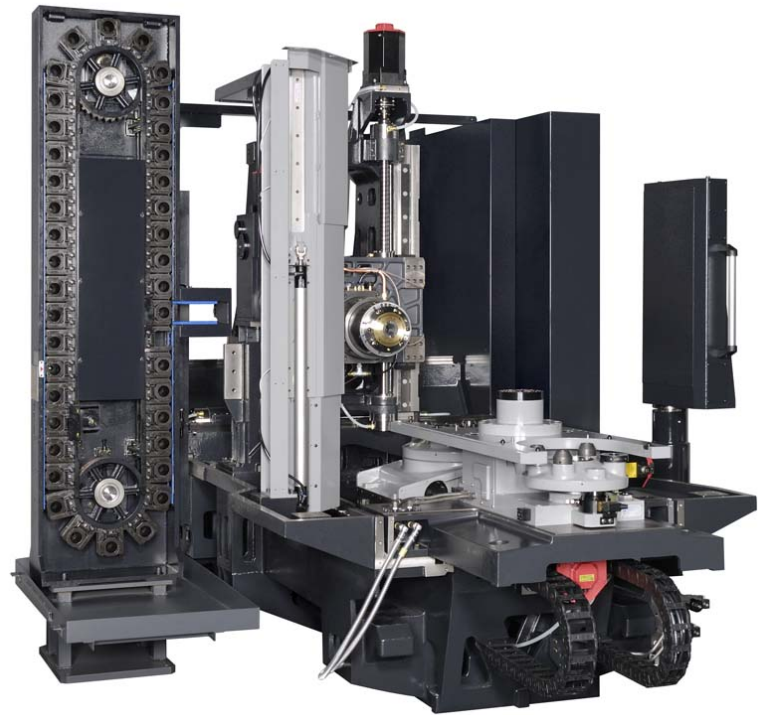
Least input increment	0.001mm / 0.0001"
Max. programmable dimension	±999999.999mm / ±39370.0787"
Absolute / Incremental programming	G90 / G91
Decimal point input	Pocket calculator type decimal point input
Inch / Metric conversion	G20 / G21
Program code	ISO / EIA automatic discrimination
Program format	FANUC standard format
Positioning / Linear interpolation	G00 / G01
Circular interpolation	G02 / G03 (CW / CCW) (Radius designation on arc)
Cutting feed rate	6.3-digit F-code, direct command
Manual handle feed	manual pulse generator 1 set (0.001, 0.01, 0.1mm)
Rapid traverse override	0 / 1 / 10 / 25 / 50 / 100%
Cutting feed rate override	0 to 200% (every 10%)
Feed rate override cancel	M49 / M48
Part program storage capacity	160m [64KB]
No. of registered programs	120
Data display	15-inch color LCD
Spindle speed	5-digit S-code, direct command
Spindle speed override	50 to 150% (every 5%)
Tool function	4-digit T-code, direct command
Auxiliary function	3-digit M-code programming
Multiple M-codes in 1 block	3 codes (Max 20 settings)
Tool offset	total 99 sets / Tool offset memory C
Program stop / Optional stop	M00 / M01
Canned cycle	G73, G74, G76, G80 to G89
Buffer memory	1 block, displays information
Pitch error compensation	memory type, maximum 128 positions for each axis

FANUC 31i-B STANDARD FEATURES

- 2nd reference position return: G30
- Absolute position detection
- ATC tool registration
- Auto corner override
- Auto restart
- Automatic acceleration / deceleration on rapid traverse & cutting feed
- Automatic coordinate system setting
- Automatic reference position return: G28 / G29
- Auxiliary function lock
- Background editing
- Backlash compensation for each rapid traverse and cutting feed
- Block delete
- Clock function
- Coordinate system setting: G92
- Data protection key
- Decimal point input 1, 2
- Dry run
- Dwell: G04
- Emergency stop
- Exact stop check / mode
- External work number search, 15 programs
- Feed hold
- Fine acceleration / deceleration control
- Follow-up function
- Graphic address menu program input
- Graphic display: trace & check
- Helical interpolation
- High response vector control: HRV control
- HQ control G8P1 (Fanuc advanced preview - contour function tuned by OKK)
- Interface NC memory embedded Ethernet FTP server software on host PC required
- Interface PCMCIA card reader
- Interface USB Port for file transfer (Not DNC capable)
- Interruption function: dry run, single block, etc.
- Label skip
- Linear / circular interpolation
- Linear acceleration / deceleration after cutting feed
- Local coordinate system setting: G52

FANUC 31i-B STANDARD FEATURES

- Machine lock
- Manual absolute on / off parameter
- Manual guide i interface with graphic function
- Manual guide i interface with operating screen
- Manually / automatic reference point return 1st & 2nd
- MDI (Manual Data Input) operation
- Mirror image function parameter
- NC alarm display / alarm history display
- Operation history display
- Optional block skip: /
- Program compensation input, G10
- Program editing
- Program name, 16 digits
- Program number search
- Program number, 4 digits
- Program restart function
- Reference position return check: G27
- Rigid tapping: G84, G74 (Mode designation: M29)
- Self-diagnosis
- Sequence number search
- Sequence number, 5 digits
- Single block
- Skip function G31 (NC function only)
- Stored stroke check 1
- Sub program control
- Tool diameter and cutting edge R compensation: G41, G42 / G40
- Tool length measurement
- Tool length offset: G43, G44 / G49
- Word search
- Work coordinate system offset
- Z-axis feed cancel



MACHINE OPTIONS

SPINDLE

SP200 20,000 RPM (Motorized spindle).....STD
Spindle motor:.....FANUC: 50 / 25 HP (15% ED / Cont.)
Spindle torque:.....FANUC: 163 / 59 FT-LBS (10% ED / Cont.)

MAGAZINE

Spindle taper #40

F98 MG060 60 tool magazine / C40 (1 x 60 tool magazines).....STD

INCLUDED NC PACKAGE AS STANDARD

FA-J873 Custom macro B, 82 variables.....Included, NC Package
FA-J946 Memory - increase to 4,199 FT (1,280m) 1/2Meg.....Included, NC Package
FA-J880 Programmable mirror imageIncluded, NC Package
FA-J953 Registerable programs: increase to 1,000 setsIncluded, NC Package
FA-J971 Run hour & parts count displayIncluded, NC Package
FA-J935 Tool life management (256 sets)Included, NC Package
FA-J927 Tool offsets increase to 200 sets total.....Included, NC Package
FA-J895 Work coordinate system, additional 48 setsIncluded, NC Package