

# Specification



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Catalogue Number: **07863**

**NEW HARTFORD MODEL F1 LG-800AP HIGH PERFORMANCE OPEN FRONTED VERTICAL MACHINING CENTRE WITH 24-STATION ARM TYPE AUTO TOOLCHANGER AND HARTROL-FANUC AI100 CONTROL SYSTEM.**



TABLE SIZE	950 x 510 MM
X AXIS TRAVEL	800 MM
Y AXIS TRAVEL	510 MM
Z AXIS TRAVEL	630 MM
TABLE TO SPINDLE NOSE	100 - 730 MM
SPINDLE CENTRE TO COLUMN	560 MM
MAX TABLE LOAD	500 KGS
MAX SPINDLE SPEED	40 - 8000 RPM
SPINDLE TAPER	BT 40
TOOLCHAGER CAPACITY	24 STATIONS
SPINDLE DRIVE MOTOR	7.5 / 10 KW
CUTTING FEED RATES	UP TO 10,000 M/MIN
RAPID TRAVERSE RATES	X & Y 30 M/MIN, Z 24 M/MIN
ELECTRICS	415V, 3PH, 50HZ



## STANDARD ACCESSORIES

Full Splash Guard  
20 Bar through Spindle Coolant  
Centralized Automatic Lubrication  
System  
Work Lamp (Fluorescent)  
Through Spindle Air Blast  
Leveling Bolts & Blocks  
Auto Power Off  
Cycle Finish Lamp

RS-232 Interface  
Manual Pulse Generator  
Operator & Maintenance Handbooks  
Coolant Gun  
CE Mark  
4<sup>th</sup> Axis Preparation & Interface  
Link Type Front Chip Conveyor  
Flushing Device

## CONTROL SPECIFICATION

Hartrol Fanuc AI100 (0iMC-PB)  
Inch / Metric Conversion (G20/G21)  
Absolute Incremental Command  
(G90/G91)  
ISO/EIA Automatic Identification  
RS232 Interface  
Positioning (G00)  
Uni-Directional Positioning (G61)  
Linear Interpolation (G01)  
Circular Interpolation (G02/G03)  
Helical Interpolation  
Polar Coordinate Command  
Memory Capacity – 320M  
Number of Stored Programs – 400  
Background Editing  
S-Code Output 4-Digit BCD-Binary  
Spindle Rate 50-120%  
Feed Per Minute  
Rapid Feedrate Override 0%, 25%, 50%,  
100%  
Cutting Feedrate Override 0-200%  
Jog Feedrate Override  
F-1 Digital Feed  
Override Cancel  
Handle Feed Rate x1, x10, x100  
Rigid Tapping / Synchronous Tapping  
M-Code  
Automatic Coordinate System Setting  
Machine Coordinate System  
Work Coordinate System Setting  
(G54/G59)  
Coordinate System Setting (G54/G59)  
Manual Reference Point Return  
Automatic Reference Point Return  
2<sup>nd</sup> Reference Point Return  
Reference Point Return Verify

Work Coordinate System Presetting  
(G92.1)  
Additional Work Coordinate System (48  
Sets)  
Tool Command (T2 BCD)  
Tool Length Offset (G43/G44/G49)  
Cutter Compensation C  
(G403/G41/G42)  
Tool Position Offset (G45-G48)  
Manual Tool Length Measurement  
Offset Memory C  
Tool Life Management  
Offsets – 400  
Single Block  
Optional Block Skip  
Dry Run  
Machine Lock  
Optional Stop (M01)  
Misc. Function Lock  
Manual Absolute On/Off  
PLC Switch  
DNC/Tape Operation  
Manual Handle Interruption  
Program Restart Function  
Sub Program Control (M98.M99)  
Corner Chamfering / Corner Rounding  
Canned Cycle for Drilling (G80-G89)  
Automatic Corner Override (G62)  
User Macro  
No. of Variable Command Sets – 100  
Backlash Compensation  
Memory Type Pitch Error Compensation  
Coordinate System rotation  
Mirror Image  
Scaling (G50/G51)  
Programming Date Input (G10)  
Skip Function (G31)



Tool Length Automatic Measurement  
(G37)  
Emergency Stop  
Travel Protection  
Program Protection  
Operation Help Display  
IC Memory Interface

Run Hour Display & Parts Count  
4<sup>th</sup> Axis Interface  
7.2" LCD Mono  
Workpiece Calibration  
Calculator  
Load Monitor  
Tool Length Manual Measurement

LENGTH	<b>2960 MM</b>
WIDTH	<b>2470 MM</b>
WEIGHT	<b>5600 KGS</b>

***NOTE:** The information contained herein is provided in good faith, but however due to unforeseen errors or omissions cannot be binding as to accuracy.*

