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Main Features

- FANUC 0i-Plus control with iHMi touch screen interface
- Massive Meehanite cast iron bed
- High precision, direct coupled spindle design with (11 / 18.5 kw \ 15 / 25 hp motor, 12,000 rpm)
- Spindle oil chiller
- Spindle orientation, load meter, override and rigid tapping
- Cam Type, Double Arm ATC (30 tools)
- Large Linear Roller Guides (X - 45 mm \ 1.772", Y - 45 mm \ 1.772", Z - 45 mm \ 1.772")
- Servo motors mounted directly to the oversized and pre-tensioned ball screws (X - 40 mm \ 1.575", Y - 40 mm \ 1.575", Z - 40 mm \ 1.575")
- Fast rapid traverse rate (X - 36 m/min \ 1,417 ipm, Y - 36 m/min \ 1,417 ipm, Z - 30 m/min \ 1,181 ipm)
- AICC II (200 block look ahead) + 1 gig data server
- Renishaw probe ready (OMI-2T optical receiver and GUI software only)
- Doosan Tool Load Monitoring and Adaptive Feedrate Control
- Doosan Smart Thermal Monitoring (Software algorithm based thermal compensation system)

Standard Equipment and Warranty

- 20 bar (230 psi) Through spindle coolant, Air through spindle
- Flood coolant with large separate coolant tank and oil skimmer (325 liter \ 86 gallon)
- Screw conveyors on both troughs for chip disposal
- Full enclosure splash guard
- Telescopic covers
- Eco friendly grease lubrication with 1 cartridge pre-installed on the machine
- Portable manual pulse generator
- Program and data protection key
- Work light and 3 color tower signal light
- Two-year machine parts warranty, one-year labor warranty. See warranty pages for details.
- Two-year control warranty: Parts and Labor
- Doosan instruction, operation, parts list and electrical drawing manuals in hardcopy format
- FANUC manuals provided on USB drive (Hardcopy available for purchase, contact parts department)

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QTY	DESCRIPTION	ITEM	TOTAL
1	DNM 6700 with FANUC 0i-M control, 30 ATC and 12K spindle	DNM 6700 / 12K / 30 ATC	
1	Discount	Discount	
1	LNS¥Turbo, magnetic conveyor, right hand discharge with variable speed drive and M-code capability.	6651-9573	
1	LNS FOX Mist Collector WS2-700 High Efficiency multi-application 3 filtration stage unit to meet or exceed OSHA and NIOSH requirements - 700 CFM, 150mm/6" suction intake at 230V/2.9 Amp. Complete with standard installation kit.	4800-0700	
1	Vertical Stand for Mist Collector Mount #MA0804548	Option 10	
1	Ellison Install-Mist Collector with M-Code Interface	*ETINSTALL-MIST COLLECTOR WITH M-CODE INTERFACE	
1	Renishaw OMP60 spindle probe, CAT 40 tool shank, 100mm probe stylus and hardware.	OMP60-40	
1	Renishaw OTS-AA touch trigger tool setter.	OTS-AA	
1	Spindle probe calibration ring gage with 2" ID.	REN-RINGGAGE	
1	Renishaw CAT40 tool setter calibration master.	REN-CAT40CAL	
1	Lyndex Nikken CNC260LFA-M Rotary Table 260mm Air Brake Left Mount Fanuc.	Option 1	

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QTY	DESCRIPTION	ITEM	TOTAL
1	Lyndex Nikken PBA-230 Air/Hydraulic Tailstock 230mm Center Height.	Option 2	
1	Lyndex Nikken R-9-SP-SET 3-Jaw Scroll Chuck & Adapter 9".	Option 3	
1	Lyndex Nikken RT-ACCESSORY sub-plate to increase center height to 230MM.	Option 4	
1	Lyndex Nikken INSTALLATION-RT-CNC-SE Includes: AMP/Cables/Fiber Optic/Hardware/PRM/Travel&Labor Costs. Installation includes: Drive unit, short bar, fiber optic cable, bulkhead cables, external cables, parameter changes, service itme and travel.	Option 5	
1	Air Gun	Option 7	
1	(2) Sets hard copies of manuals	Option 8	
1	(2) CD Roms with machine manuals	Option 9	
1	45 kVA step down transformer, 480V Delta primary to 208Y/120V secondary (Multi tap). Verify incoming voltage prior to ordering.	CED-SG3A0045KB	
1	BUDGETARY Chip Conveyor Freight	Chip Conveyor Freight	
1	BUDGETARY FREIGHT COST FOR MACHINE	Machine Freight	
1	BUDGETARY COST FOR RIGGING AND ANCHORING	Machine Rigging	

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	TOTAL	
Includes: New Machine Parts Warranty* - 2 years Fanuc Control Warranty* - 2 years Labor Warranty* - 1 year **Miscellaneous parts and accessory freight will be billed at actual as it is incurred. You may receive separate bills.**	Grand Total	
	TOTAL DUE	

NOTE: Sales tax will be assessed on final invoice as required by local tax codes and customer exemption status.

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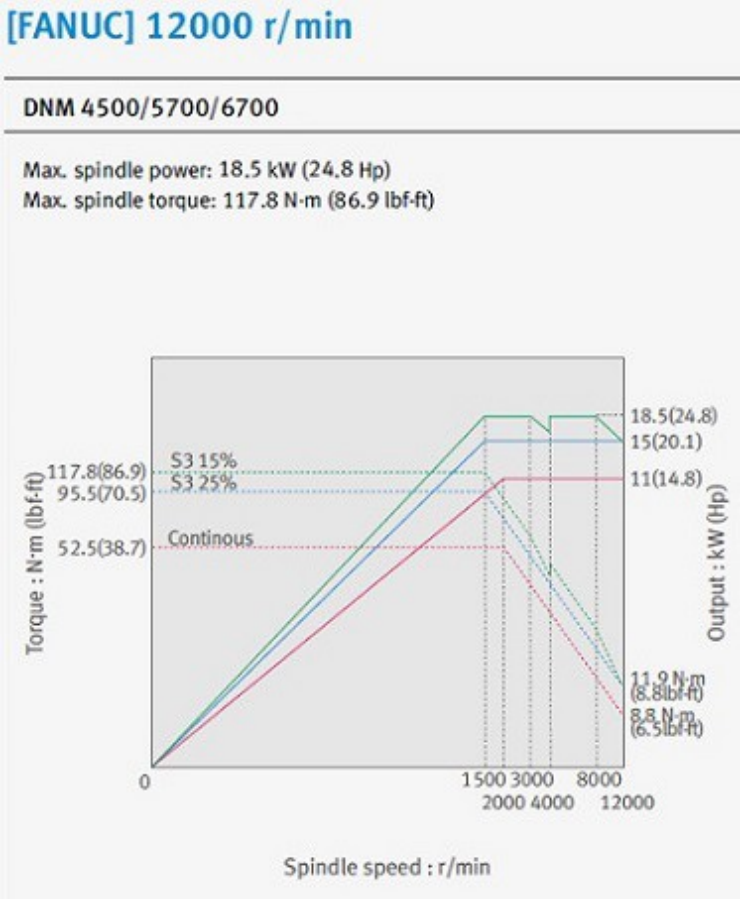
SPECIFICATIONS:

CAPACITY:

X axis travel	1,300 mm (51.18")
Y axis travel	670 mm (26.38")
Z axis travel	625 mm (24.60")
Table loading area	1,500 mm x 670 mm (59.05" x 26.37")
Allowable table load	1,300 kg (2,866 lbs)
Table T-slot spacing x width	(5) - 125mm x 18H8 (5) - 4.92" x .71"

SPINDLE:

Spindle nose to table top	150 mm to 775 mm (5.9" to 30.51")
Big Plus Spindle system	CAT 40 Big Plus
Spindle speed	12,000 rpm
AC Spindle Motor (S3 15%)	11 / 18.5 kw (15 / 25 hp)
Spindle Torque (S3 15%)	118 nm (87 ft-lbs)
Spindle Acceleration \ Deceleration time	0 - 12k (2.06 sec) \ 12k - 0 (2.12 sec)



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AUTOMATIC TOOL CHANGER:

Number of Tools (Std \ Opt \ Opt)	30 \ 40 \ 60
Tool Shank	CAT 40
Pull Stud (Supply Company #)	711-23
Max. Tool Dia. \ Adjacent pots are empty (30)	80 mm \ 125 mm (3.15" \ 4.9")
Max. Tool Dia. \ Adjacent pots are empty (40\60)	76 mm \ 125 mm (2.99" \ 4.9")
Max. Tool Length	300 mm (11.8")
Max. Tool Weight	8 kg (17.6 lbs)

MOTION:

X axis rapid traverse rate	36 m/min (1,417 ipm)
Y Axis rapid traverse rate	36 m/min (1,417 ipm)
Z axis rapid traverse rate	30 m/min (1,181 ipm)
Cutting feed rate	1 - 15,000 mm/min (.04 - 590 ipm)
Least command increment	.001 mm (.0001")
X axis feed thrust (Continuous)	2,203 lbs
Y axis feed thrust (Continuous)	2,203 lbs
Z axis feed thrust (Continuous)	2,652 lbs
Positioning accuracy (Full Stroke)*	+/- .005 mm (+/- .0002")
Repeatability	+/- .002 mm (+/- .000080")

GENERAL: *Note that below values represent basic machine only and will not reflect different tool changer variations, accessories, chip conveyors or other machine features.*

Machine Height	3,100 mm (122.04")
Floor Space Required (L x W)	3,350 mm x 2,597 mm (131.89" x 102.24")
Machine Weight	8,500 kg (18,739 lbs)

UTILITY:

Power required	33 kVA / 98.2 amps @ 220v
Voltage required - Fanuc	205-235 Volts / 3 Phase

It is the purchaser's responsibility to insure correct power requirements are met and properly supplied to the machine tool

TANK CAPACITY:

Coolant tank capacity	325 liters (86 gallons)
Lubrication tank capacity	.7 liter (.18 gallon)
Air Required	.54 mpa (80 psi) * 8.83 cfm

* Geometric accuracies guaranteed only if machine installed on a foundation meeting the minimum requirements of Doosan Machine Tools America. Please see your dealer for the current machine requirements.

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Construction:

BED, COLUMN AND SADDLE:

The bed is a rigid, one piece casting made from fine grain Meehanite cast iron with heavy ribbing to help prevent vibration and deformation during heavy cutting. Extra wide spacing of the roller guide ways provide for excellent support of the saddle, regardless of the load distribution on the table. The table is fully supported by the saddle in all positions with no overhang. The rigid box type column casting is heavily ribbed to help prevent twisting or distortion as well as helping to dampen vibration during high speed or heavy machining.

The new DNM series frames are both wider and longer than previous models and feature 8 points of leveling for even more stable support than before. The saddle is also thicker which provides for better vibration dampening and machining performance.

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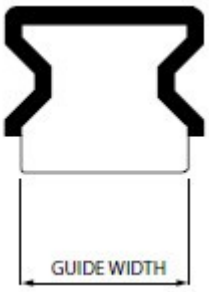
GUIDEWAYS:

All axes are of a Roller Linear Motion Guide type for higher stiffness, accuracy, and surface finish than more common Ball Bearing Guide types. They are both heavy duty (X - 45 mm \ 1.772", Y - 45 mm \ 1.772", Z - 45 mm \ 1.772") and widely spaced (X - 369 mm \ 14.53", Y - 1,110 mm \ 43.70", Z - 411 mm \ 16.18"). Roller guide ways are 3 times more rigid with 2 times more life than ball bearing guide ways and provide for optimal weight and force distribution.



BALL SCREWS AND AXIS DRIVES:

Each axis is driven by a preloaded and pre-tensioned high precision ball screw, which are supported on both ends by angular contact thrust bearings. This design allows for outstanding positioning and repeatability accuracy and helps minimize the effects of thermal growth. The large diameter ball screws (X - 40 mm \ 1.575", Y - 40 mm \ 1.575", Z - 40 mm \ 1.575") are directly connected to the servo drive motors without gears or belts in order to help eliminate backlash.

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SPINDLE & HEADSTOCK:

The direct coupled spindle drive system is a true cartridge type unit supported by high precision bearings that offers minimized noise, vibration and thermal growth of the spindle owing to the fact that there are no gears or belts inside of the spindle head body. The powerful 12,000 rpm, 11 / 18.5 kw (15 / 25 hp) motor has 118 nm (87 ft-lbs) of torque with a spindle Acceleration \ Deceleration time of 0 - 12k (2.06 sec) \ 12k - 0 (2.12 sec). The CAT 40, Big Plus spindle also features rigid tapping, further increasing productivity.

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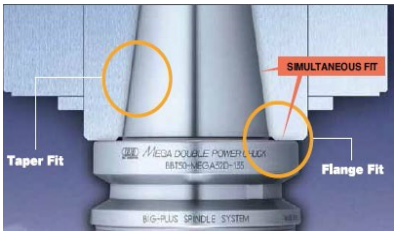
Big Plus Spindle System:



The Big Plus spindle system and tooling surpasses all other spindle concepts due to simultaneous taper and flange contact between the machine spindle and tool holder as well as complete interchangeability with existing machines and tools. Upon mounting the tool holder into the machine spindle, contact occurs prior to clamping. Due to the retention force, the taper of the tool holder expands the machine spindle in its elastic range. The tool is pulled further in until the tool flange touches the spindle face for maximum rigidity.

See supplementary document on Showpad application under MC quote supplements for more information

20 bar (230 psi) THROUGH SPINDLE COOLANT SYSTEM (TSC):

A dedicated positive displacement pump delivers the coolant directly to the tool tip. The immediate benefit is more aggressive feeds and speeds can be maintained throughout the cutting process. There is also no need to stop and adjust coolant nozzles which increases both in cut time and operator safety. Protecting the spindle and the vital rotary union from contamination is a Cyclone filter that does not require the use of bags, helping to reduce maintenance cost. The 325 liter (86 gallon) tank stores an ample supply of coolant and is isolated from the machine bed to help prevent heat transfer.

THROUGH SPINDLE AIR (TSA):

Air is supplied to the back of the pull stud and then forced through the tool using the same technique as through spindle coolant by use of M-code. The spindle air blow is commonly used on pre-hardened steel, die and mold cutting, cutting of plastics and anytime coolant would contaminate the work piece such as during the machining of certain medical components.

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OIL JACKET SPINDLE CHILLER:

Machine accuracy is maintained by using a refrigeration system that circulates cooled oil around the spindle thereby reducing the thermal effects of any heat generated by the machining processes.

AUTOMATIC TOOL CHANGER:

The 30 tool Double Arm ATC provides reliable exchange of tools with a tool to tool time of 1.2 second. Other tool changers are available; please consult the Factory Options list near the back of this quote.

PORTABLE MANUAL PULSE GENERATOR:

The hand held Manual Pulse Generator lets each axis move in increments of x1, x10 or x100 making fixture or part alignment quick and easy. The 10-foot cord gives full access to the machine and the magnetic back allows for one handed operation with the MPG being conveniently held in place on the machine table or guarding.

RENISHAW® OPTICAL PROBE READY:

The DNM 6700 12K comes equipped with the Renishaw® OMI-2T optical receiver and Renishaw GUI software. It is ready to accept either a spindle probe or tool setter or both. Probing offers many advantages over traditional methods of finding part features such as indicators and edge finders. Talk to your dealer for more information on how probing and tool setting can help keep your spindle running and increase your profits.

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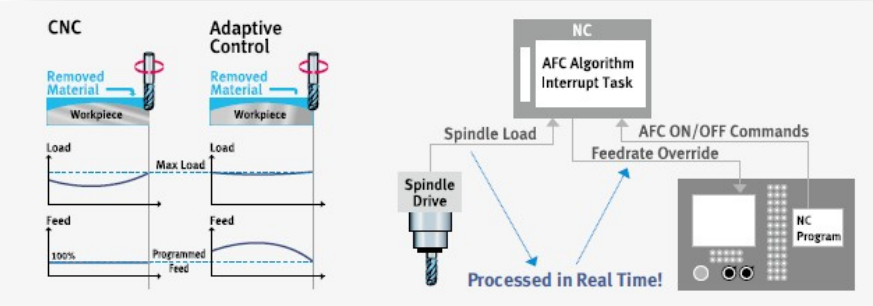
DOOSAN ADAPTIVE FEEDRATE CONTROL:

Doosan Adaptive Feedrate Control enables the Machining Center to monitor the amount of spindle load a tool is generating during a cut, and either increase or decrease the programmed feedrate to compensate. It can control the amount of axial feedrate by the amount designated by the operator. In the event of catastrophic tool failure or severe axis overload, AFC will put the machine into a “Feed Hold” condition and an alarm state will be indicated. Both minimum and maximum feedrate percentages can be controlled as well as the gain, or rate, of acceleration and deceleration. Air-cutting can also be detected and given its own percentage of feedrate override which can help to minimize wasted cycle time and keep the tool in the cut.

Doosan Adaptive Feedrate Control is not recommended for use in finishing operations, hole making operations, tapping, engraving or anywhere else where it is more desirable to keep a constant, established feedrate, otherwise tool breakage and part damage will or may occur.



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DOOSAN TOOL LOAD MONITORING SYSTEM:

The Doosan Tool Load Monitoring System continually checks the load on all axes motors as well as the spindle motor. Overload and under-load (useful for detecting a broken or missing tool) conditions can be monitored, and high\low limits can be set for each tool. There are wear and breakage settings that, when triggered, will cause the machine to generate an alarm and stop operation. This helps protect the machine, tooling and the part or fixture from damage caused by abnormal loads caused by worn or broken tooling. If used in conjunction with Tool Life Management, the machine can be set to switch to a redundant tool when the wear signal is output. Normal load, wear, and breakage values can all be independently changed to customize or fine tune the operation according to need.

There are limits to the function of the system, for instance, a very small drill may not register enough load on a high torque, geared head spindle, and therefore will not be able to be properly monitored. For most common applications such as milling cutters and Indexable insert drills, the Doosan Tool Load Monitoring System can provide some measure of protection against damage to your expensive parts, tooling and machine if used properly.

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DOOSAN SMART THERMAL MONITORING:

Doosan Smart Thermal Monitoring is a sensor-less, algorithm based software system that anticipates and compensates spindle thermal deformation depending on the rotational speed of the spindle. This function will perform best in shops with stable temperature environments, running long production jobs that have consistent thermal growth patterns.

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FULLY ENCLOSED GUARDING:

The fully enclosed guarding is made of heavy gauge sheet metal designed to contain both chips and coolant. The dual, large sliding doors open to 1,380 mm (54.33") and provide unrestricted overhead access to the table for ease of lifting heavy fixtures or work pieces.

CHIP DISPOSAL AND FLOOD COOLANT SYSTEM:

Screw Conveyors in both chip troughs pull the chips into the front mounted basket or optional conveyor.
A separate pump provides flood coolant at the spindle face through adjustable spindle mounted nozzles.

GREASE LUBRICATION

A cartridge lubrication system protects all guideways and ball screws. The ecofriendly grease lubrication system requires less maintenance and uses less lube than oil systems, reducing overall operational cost.

DNM 4Digit-series
(DNM4000/4500/4500S/4500L/5700/5700S/5700L/6700/6700L/6700XL)

NC UNIT SPEC. SELECTION SHEET

●:Standard ○:Option X:Not Available

1. Axes control

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
Controlled axes	3 (X,Y,Z)	X, Y, Z
Additional controlled axes	5 axes in total	○
Max simultaneously controlled axes	Positioning(G00)/Linear interpolation(G01) : 4 axes Circular interpolation(G02, G03) : 2 axes	●
Max simultaneously controlled axes	Positioning(G00)/Linear interpolation(G01) : 5 axes Circular interpolation(G02, G03) : 2 axes	X
Control axis detach		●
Backlash compensation		●
Emergency stop / overtravel		●
HRV control	DNM4500/5700/6700 : HRV 2 DNM4000/5700S/6700S : HRV 3	●
Least command increment	0.001 mm / 0.0001"	●
Least input increment	0.001 mm / 0.0001"	●
Increment system C	IS-C	●
Machine lock	all axes / Z axis	●
Mirror image	Reverse axis movement (setting screen and M - function)	●
Stored pitch error compensation	Pitch error offset compensation for each axis	X
Interpolation type pitch error compensation		●
Inclined Rotary Axis Control		X
Stored stroke check1	Overtraval controlled by software	●
Position switch		●
Incremental pulse coder		X
Absolute pulse coder		●

2. Interpolation & Feed function

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
2nd reference point return	G30	●
3rd / 4th reference return		●
Circular interpolation	G02, G03	●
Nano interpolation		●
Inverse time feed		●
Cylinderical interpolation	G07.1	●
Linear interpolation	G01	●
Helical interpolation		●
Helical interpolation B	Only Fanuc 30i	X
Smooth interpolation		X
Exponential interpolation		X
Involute interpolation		X
Helical involute interpolation		X
Bell-type acceleration/deceleration before look ahead interpolation		●
Smooth backlash compensation		●

2. Interpolation & Feed function *(CONTINUED)*

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
Dwell	G04	●
Exact stop check	G09, G61 (mode)	●
Feed per minute	mm / min	●
Feedrate override	0 - 200 % (10% unit)	●
Jog override	0 - 200 % (10% unit)	●
Automatic corner override	G62	●
Automatic corner deceleration		●
Cutting feedrate clamp		●
Rapid traverse bell-shaped acceleration/deceleration		●
Manual handle feed	Max. 3unit	1 unit
Manual handle feed rate	x1, x10, x100 (per pulse)	●
Handle interruption		○
Manual handle retrace		○
Manual handle feed 2/3 unit		X
Override cancel	M48 / M49	●
Positioning	G00	●
Rapid traverse override	F0 (fine feed), 25 / 50 / 100 %	●
Reference point return	G27, G28, G29	●
Skip function	G31	●
Nano smoothing	AI contour control II is required.	X
Nano smoothing 2	AI contour control II is required. (Only Fanuc 31i-B5 and 30i)	X
AI APC	20 BLOCK	X
AICC I	30 BLOCK	X
AICC I	40 BLOCK	X
AICC II	200 BLOCK	●
AICC II	400 BLOCK	○ *1)
High-speed processing	600 BLOCK	X
Look-ahead blocks expansion	1000 BLOCK	X
DSQ I	AICC II (200block) + Machining condition selection function	X
DSQ II	AICC II (200block) + Machining condition selection function + Data server(1GB)	X
DSQ III	AICC II with high speed processing (600block) + Machining condition selection function + Data server(1GB)	X
DSQ IV	AICC II with high speed processing (1000block) + Machining condition selection function + Data server(1GB)	X
SSP Package	[Standard] - Fine surface maching - Bell type acc./dec. before look ahead interpolation - Smooth backlash compensation - Automatic corner deceleration - Function for selecting machining status (10 level) [Option] - Accuracy, Productivity optimizing tuning for SSP of each machine	○ *2)

Note *1) AICC2 (400block) of 0iMF must be changed to High Speed Main board. Ask R&D center for information

Note *2) Fine surface machining is included ①AICCII 200 block, ②Smooth tolerance control+, ③Jerk control

3. Spindle & M code function

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
M- code function	M 4 digits	●
Spindle orientation		●
Spindle serial output		●
Spindle speed command	S5 digits	●
Spindle speed override	10 - 150 (10% increments)	●
Spindle output switching 1st		●
Retraction for rigid tapping		●
Rigid tapping	G84, G74	●

4. Tool function

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
Number of tool offsets	64 ea	X
Number of tool offsets	99 ea	X
Number of tool offsets	200 ea	X
Number of tool offsets	400 ea	400 ea
Number of tool offsets	499 / 999 / 2000 ea	X
Tool nose radius compensation	G40, G41, G42	●
Tool length compensation	G43, G44, G49	●
Tool life management		●
Addition of tool pairs for tool life management		●
Tool number command	T2 digits	●
Tool offset memory C	Geometry / Wear and Length / Radius offset memory	●
Tool length measurement		●
Tool length offset		●
Tool offset	G45 - G48	●
Rotary table dynamic fixture offset		X
Work setting error compensation		X
Cutting point command		X
Tool posture control		X

5. Programming & Editing function

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
Absolute / Incremental programming	G90 / G91	●
Automatic Coordinate system setting		●
Background editing		●
Canned cycle	G73, G74, G76, G80 - G89, G99	●
Circular interpolation by radius programming		●
Custom macro		●
Addition of custom macro common variables	#100 - #199, #500 - #999	●
Macro executor		●
Macro executor + C language executor		●
Fanuc picture executor		●
Decimal point input		●
Extended P-code variables 512Kbyte		X
Extended P-code variables 1Mbyte		X
Extended part program editing		●

5. Programming & Editing function *(CONTINUED)*

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
Part program storage	256KB(640m)	X
Part program storage	512KB(1,280m)	X
Part program storage	1MB(2,560m)	X
Part program storage	2MB(5,120m)	5120m
Part program storage	4MB(1,0240m)	X
Part program storage	8MB(2,0480m)	X
Inch/metric conversion	G20 / G21	●
Label skip		●
Maximum commandable value	±99999.999mm(±9999.9999 inch)	●
Number of Registered programs	400 ea	X
Number of Registered programs	500 ea	X
Number of Registered programs	1000 ea	1000 ea
Number of Registered programs	4000 ea	X
Optional block skip	9 BLOCK	●
Optional stop	M01	●
Program file name	32 characters	●
Program number	O4-digits	X
Sequence number	N 8-digit	N8 digit
Playback function		●
Program protect	\	●
Program stop / end	M00 / M02,M30	●
Programmable data input	Tool offset and work offset are entered by G10, G11	●
Sub program	Up to 10 nesting	●
Tape code	ISO / EIA Automatic discrimination	●
Thread cutting		●
Program restart		●
Workpiece coordinate system	G52 - G59	●
Addition of workpiece coordinate system	G54.1 P1 - 48 (48 pairs)	48 pairs
Addition of workpiece coordinate system	G54.1 P1 - 300 (300 pairs)	○
Tilted working plane indexing command	G68.2	○
Tilted working plane indexing function	Programming TWP command on guidance window	○
Smooth tool center point control	G43.4	X

6. OTHERS FUNCTIONS (Operation, setting & Display, etc)

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
Alarm display		●
Alarm history display		●
Actual cutting speed display		●
Clock function		●
Coordinate system rotation	G68,G69	●
Cycle start / Feed hold		●
Display of PMC alarm message	Message display when PMC alarm occurred	●
Dry run		●
Embeded Ethernet		●
Graphic display	Tool path drawing	●

6. OTHERS FUNCTIONS (Operation, setting & Display, etc) ***(CONTINUED)***

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
Help function		●
Loadmeter display		●
MDI / DISPLAY unit	10.4" color LCD	X
MDI / DISPLAY unit	15" color LCD	○
MDI / DISPLAY unit	15" color LCD with Touch Panel	●
I/O interface	RS - 232C	●
Memory card interface		●
USB memory interface	Only Data Read & Write	●
Operation functions	Tape / Memory / MDI / Manual	●
Operation history display		●
DNC operation with memory card		●
Optional angle chamfering / corner R		●
Run hour and part number display		●
Search function	Sequence NO. / Program NO.	●
Self - diagnostic function		●
Servo setting screen		●
Single block		●
External data input		●
Stored stroke check 2		●
Multi language display		●
Cs contouring control		○
Reader/Puncher interface (for 2ch)		●
Multi spindle control		○
Retraction for 3-dimensional rigid tapping		○
Spindle orientation expansion		X
High speed skip function		○
Polar coordinate command	G15 / G16	●
Polar coordinate interpolation	G12.1 / G13.1	X
Programmable mirror image	G50.1 / G51.1	●
Scaling	G50, G51	●
Single direction positioning	G60	●
Pattern data input		●
Jerk control	AI contour control II is required.	●
Fast Data server with1GB PCMCIA card		●
Fast Ethernet		○
3-dimensional coordinate conversion		○
3-dimensional tool compensation		X
3-dimensional manual feed		○
Tape format for FS15		X
Tape format for FS10/11		●
Figure copying	G72.1, G72.2	○
Machining time stamp function		○
Machine alarm diagnosis		●
CNC screen display		●
CNC screen dual display function		●

6. OTHERS FUNCTIONS (Operation, setting & Display, etc) ***(CONTINUED)***

ITEM	Spec.	Doosan Fanuc i (F0i-F Plus)
One touch macro call		○
Machining condition selection function	10 LEVELS	● *5)
Machining quality level adjustment	3 LEVELS	○ *5)
EZ Guide i (Conversational Programming Solution)		● *3)
iHMI with Machining Cycle		○ *4)
MANUAL GUIDE i		X
Tool load monitoring function (DOOSAN)		○
EZ Operation package	Easy Operation Package	●

Note *3) Only with 15" LCD standard

Note *4) Only with 15" Touch LCD standard

Note *5) If This funtion is selected, Step of Machining condition selection function is changed from 10 levels to 3 levels.

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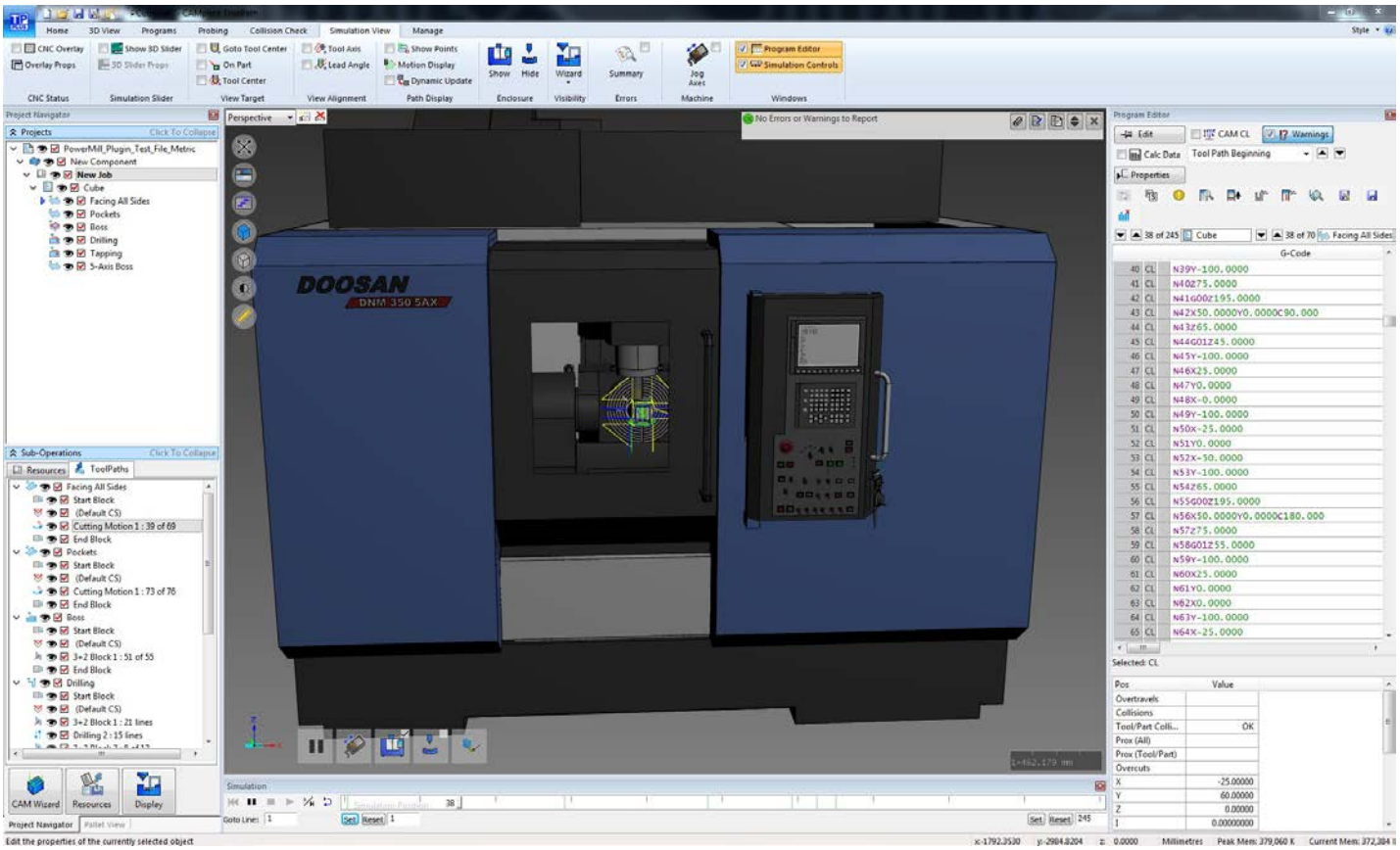
CAMplete TruePath: *See detailed standalone CAMplete quote on iPad for complete information, including pricing and currently available machine model support. All technical support questions, including pre-sales discussions, please contact CAMplete directly @ 519-725-2557*

CAMplete TruePath provides sophisticated, yet easy to use tools, for simulating and verifying your tool paths. Using toolpath data from all industry leading CAM Systems, TruePath's customizable post-processor allows you to output your NC programs the way you need them, with no on-machine editing required.

As a CAM neutral post processor, TruePath makes it easy to switch between different CAM Systems or combine tool paths from different CAM Systems in a single project. Just select your machine and NC Format; all your G-Code is output in a consistent unified format regardless of how you started.



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