

## **GREAT-150iM/iMA**

### **Absolute Superiority :**

#### **1) Speed:**

- Max rapid traverse : 60m/min
- Max cutting speed: 20m/min
- Program preview :1000 blocks

#### **2) Precision:**

- Screw pitch compensation, improving machining precision to the most
- Pulse equivalent: max precision can set as 0.0001mm

#### **3) Interface:**

- Embedded PLC with I/O number 118 x 46, users can free to edit
- USB port supply DNC function
- RS232 port supply DNC function by transmit rate 115200bit
- MPG on board or separate MPG are available
- Dual channel control of spindle speed conversion, can control two spindle Units and diverse tool magazine

#### **4) Operation:**

- Full-screen editing interface and foreground-background processing operation, which can do programming, parameter adjustment etc at same time
- 2D/3D graphic preview or simulating operation before machining, coordinates display, free shifting between 2D/3D graphic; graphic can scale up/scale down ,translate and rotate freely.
- Multilevel password protection , such as program, parameter protection to convenient equipment management
- Start machining at random block or tool number
- Compatible with popular foreign CNC system in instruction code and most program can run directly without amendment

G code	Group	Function
G00	01	Rapid positioning
G01		Linear interpolation
G02		Circular interpolation (CW)/spiral interpolation
G03		Circular interpolation (CCW)/spiral interpolation
G33		Thread cutting
G04	00	Dwell
G15	17	Polar coordinate instruction cancel
G16		Polar coordinate instruction

G17	02	Select XY plane
G18		Select ZX plane
G19		Select YZ plane
G20	06	Input in inch
G21		Input in mm
G28/G281/G282/G283	00	Return to reference point 1
G30/G301/G302/G303		Return to reference point 2,3,4
G26		ZXY return to program starting point
G261		X return to program starting point
G262		Y return to program starting point
G263		Z return to program starting point
G40	07	Cutter radius compensation cancel
G41		Cutter radius compensation left
G42		Cutter compensation right
G49		Cutter length compensation cancel
G43	08	Tool length compensation + direction
G44		Tool length compensation - direction
G45	00	Cutter offset increase
G46		Cutter offset decrease
G47		Cutter offset double increase
G48		Cutter offset double decrease
G37	11	Scaling down cancel
G36		Scaling down effective
G12	22	Programmable image cancel
G11		Programmable image effective
G52	00	Local coordinate system setting
G53	14	Select machine coordinate system
G54		Select workpiece coordinate system 1
G55		Select workpiece coordinate system 2
G56		Select workpiece coordinate system 3
G57		Select workpiece coordinate system 4
G58		Select workpiece coordinate system 5
G59		Select workpiece coordinate system 6
G60	15	Exact stop positioning
G64		Continuous path machining
G68	16	Coordinate rotation effective
G69		Coordinate rotation cancel
G73	09	Gun drilling cycle
G74		Counter tapping cycle
G76		Fine boring
G80		Canned cycle cancel
G81		Drilling cycle
G82		Drilling cycle , counter boring

G83		Peck drilling cycle
G84		Tapping cycle
G85		Boring cycle
G86		Boring cycle
G87		Boring cycle
G89		Boring cycle
G90	03	Absolute programming
G91		Incremental programming
G92	00	Set workpiece coordinate system
G94	05	Per minute feed
G95		Per revolution feed
G98	10	Return to initial point in canned cycle
G99		Return to R point in canned cycle
G22	19	Program cycle instruction
G800		Program cycle instruction cancellation
G65	12	Macro program non-modal calling
G66		Macro program modal calling
G67		Macro program modal calling cancellation
G180—G189		User self-define macro program

## GREAT-150iT/iTA

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G55		Select workpiece coordinate system 2
G56		Select workpiece coordinate system 3
G57		Select workpiece coordinate system 4
G58		Select workpiece coordinate system 5

G59		Select workpiece coordinate system 6
G60	15	Exact stop positioning
G64		Continuous path machining
G77	16	Cylinder/taper outer/inside radius cutting canned cycle
G78		Thread cutting canned cycle
G79	09	End face cutting canned cycle
G71		Excircle rough turning composite cycle
G72		End face rough turning composite cycle
G173		Outline rough turning composite cycle
G174		End face hole composite cycle
G175		Outer/inside diameter drilling/grooving composite cycle
G176		Thread cutting composite cycle
G90	03	Absolute programming
G91		Incremental programming
G92	00	Set workpiece coordinate system
G94	05	Per minute feed
G95		Per revolution feed
G96	08	Constant cutting
G97		Constant cutting cancellation
G22	19	Program cycle instruction
G800		Program cycle instruction cancellation
G65	20	Macro program non-modal calling
G66		Macro program modal calling
G67		Macro program modal calling cancellation