

DAMA

GMDC - 3100
HIGH SPEED CNC DRILLING/CUTTING MACHINE



Features

1. GMDC - 3100 is a gantry type high speed drilling and cutting machine. It's suitable for steel structure application such as large dimension bridge plate and small piece joint plate drill and cutting.
2. GMDC - 3100 is equipped with high speed spindle up to 2000rpm, supports cooling thru spindle providing oil through and mist cooling, external mist cooling to apply the different drilling job.
3. Combines Hypertherm Hyperformance Autogas plasma and plasma height sensor to get good cutting quality. Also provides drilling and cutting in one machine to save the time from parts moving.
4. Optional zinc powder marking function for base line preparation or next engineering part marking.
5. Rigid BT40 taper spindle with spindle air cooling system & air positive pressure system to protect spindle.
6. CNC system: Dama - Syntec special purpose CNC system. Windows CE base for plate drilling and cutting with ease operation interface.
7. Provides alignment function. Plate drilling and cutting can be executed without parallel with guide rails.
8. Hold - down mechanism provides height detection and keeping work part stable before drilling.
9. Standard 12T umbrella type ATC with tool life management for user to set up max Z feeding distance. The machine would change the tools automatically once the setting value is exceeded.
10. Longitudinal axes (2 sides) with auto clamping device to hold & clamp the machine body tightly during drilling and enhance the machine stability.

SPECIFICATIONS

Model	GMDC - 3100
Drilling	
CNC controller	SYNTEC SUPER 8
Effective work width	3100 mm
Machine span	5400 mm
Z axis stroke (drilling)	340 mm
Longitudinal drive(x , x")	Dual AC servo Motor / Rack / Rails
Transverse drive	AC servo Motor / Rack / Liner guide
X , Y rapid speed	24000 mm / min
Z axis rapid speed	6000 mm / min
Spindle servo motor	20 HP
Spindle gear ratio	1 : 2
Spindle rpm	200~2000 rpm
Positioning accuracy	± 0.05 / 500 mm
Reproducibility accuracy	± 0.03 mm
X , Y square accuracy	<± 0.5 / 3000 x 3000 mm
MAX drilling depth	Max 75 mm
Hold down mechanism action	Plate size request > 500 mm x 300 mm
Plate height detect	The height of plate auto measure by hold down mechanism
Spindle taper	BT 40
Tool length measure	manual input
Cooling system	Oil through mist and external mist
ATC Magazine	12 sets umbrella type (MAX configure 6 tool holder)
Tool length	170~300 mm
Drilling diameter capacity	φ 6~ φ 50
Rigid tapping capacity	M8~M24
Plasma cutting and marking	
Plasma model	HPR - 130XD, HPR - 260XD, HPR - 400XD Auto gas
Plasma height sensor	Hypertherm ArcGlide
Cutting thickness	6~40 mm (follow plasma model)
Marking	Zinc powder torch

