
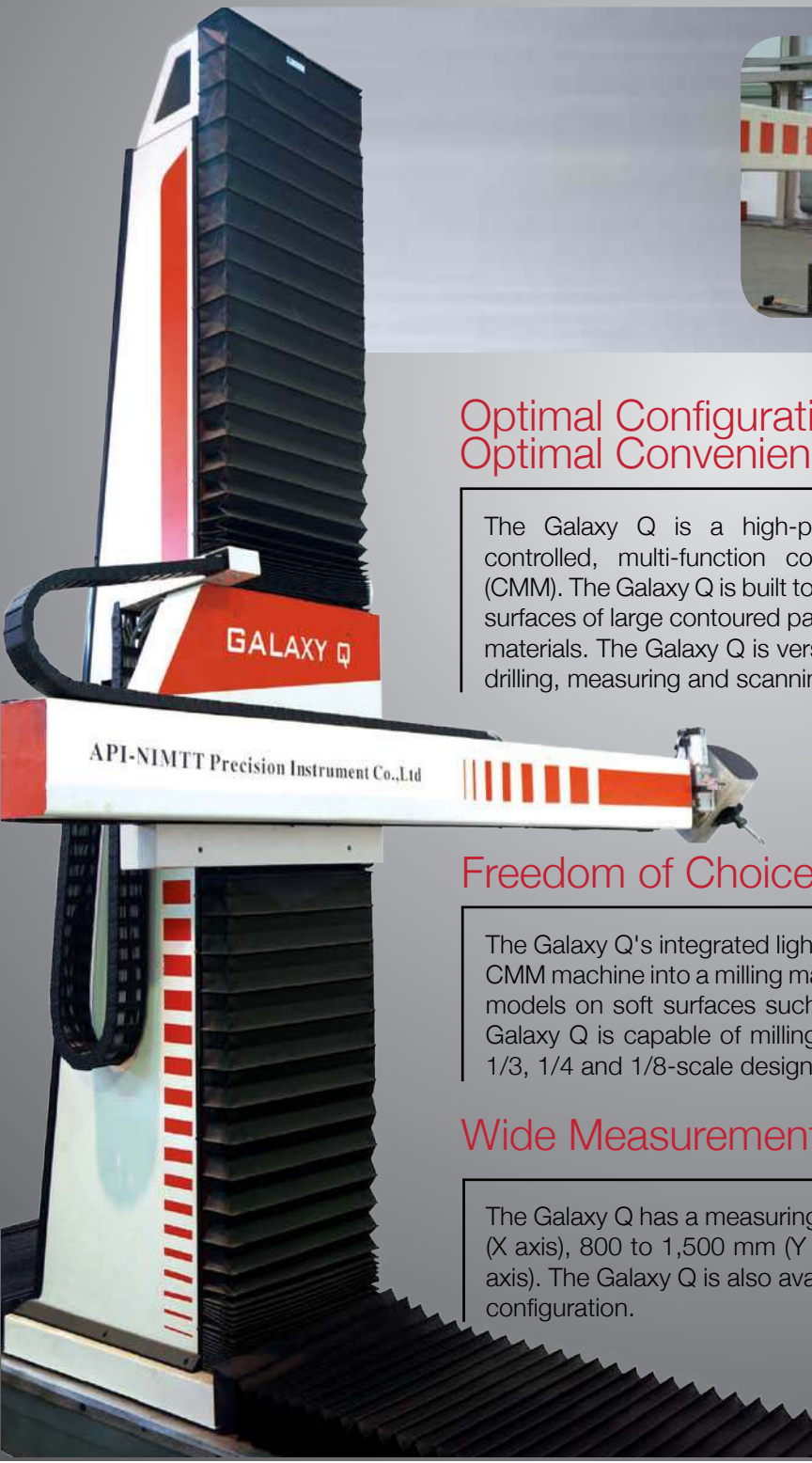


GALAXY QTM

Multi-Functional 5 Axis Machine



Automated Precision Inc.
www.apisensor.com



Optimal Configuration, Optimal Convenience

The Galaxy Q is a high-performance, direct computer controlled, multi-function coordinate measuring machine (CMM). The Galaxy Q is built to inspect large objects and scan surfaces of large contoured parts as well as the milling of light materials. The Galaxy Q is versatile enough to handle milling, drilling, measuring and scanning all in one setup.

Freedom of Choice

The Galaxy Q's integrated light milling function turns it from a CMM machine into a milling machine that can create complex models on soft surfaces such as clay and rigid foams. The Galaxy Q is capable of milling precise, full-scale models, or 1/3, 1/4 and 1/8-scale designs.

Wide Measurement Envelope

The Galaxy Q has a measuring range of 1,000 to 20,000 mm (X axis), 800 to 1,500 mm (Y axis) and 800 to 3,000 mm (Z axis). The Galaxy Q is also available in a single or double arm configuration.





GALAXY Q

Multi-functional 5 Axis Machine



Equipment Highlights:

- Double linear guide in the X-axis for constant rigidity over the entire path
- Y-axis is driven through an anti-backlash pinion and rack
- The main carriage, has a larger bearing spread which slides on the beam (X-axis) and ensures together with a lower center of gravity, reduced vibrations during motion of the XZ housing along its guide ways, and therefore a smoother, more precise operation
- Three-points mounting system with a rigid machine bed
- Magnetic Linear Encoders for high accuracy and reliability in harsh environments
- Use of high efficiency, low inertia motor drives equipped with low noise and wear transmission systems
- A Twin-wire anti-fall securing system for the Z-motion protects the operator and the work piece
- In addition to 5-axis milling and drilling operations, measuring operations can be carried out in the same setting
- Can be integrated with a variety of measurement software and controllers

GALAXY Q™

Multi-Functional 5 Axis Machine



Full Measuring Heads and Accessories

Because of its wide variety of functions, the GALAXY Q series can be utilized with a variety of Renishaw manual probe heads, the API laser scanning probe, power heads for light milling and spot drilling. It is suitable for use in different job conditions, offering an even greater advantage over other CMMs.

The Galaxy Q can be outfitted with extensions up to 500mm which can be used to allow access to deeper features.



Maximum flexibility to reach any positions in the space

The machining functions are supported by a variable speed, 1,100 W milling head, mounted on a sturdy 2-axis continuous wrist head, allowing a 30-degree indexing and orientation of the milling tool to any position in space.

Many standard accessories are available with the GALAXY-Q.

Reliability made by API

The API EMC 2 industrial grade shop-hardened controller complies with the most stringent IP54 international industry standards. It has an intelligent axis control and is designed and engineered to ensure reliability under the harshest working conditions.

JB200 Hand Control Joy-Stick Unit

Portable unit with LCD display used for the self teaching operation and motion control of the CMM axes movement, plus an emergency stop button and a speed override button.



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GALAXY Q Specifications

Models	Strokes -mm (in)			Measuring Accuracy (µm) (Single)	Overall Dimensions -mm (in.)		
	X	Y	Z		Length	*Width	Height
60.15.20	6000 (236,2)	1400 (55,1)	2000 (78,7)	±30+30L/1000	8000 (315,0)	4300 (169,3)	3300 (130,0)
70.25.20	7000 (275,6)	2500 (98,4)	2000 (78,7)	±30+30L/1000	9000 (354,3)	8200 (322,8)	3300 (130,0)
130.25.30	13000 (511,8)	2500 (98,4)	30000 (118,1)	±30+30L/1000	16000 (630,0)	8200 (322,8)	4300 (169,3)

* Includes Arm Extension/Retract Area

- Displayed measuring strokes, dimensions and weights are related to the single arm configuration
- All CQY models are available in both single and dual arm configuration - Multi-arm configuration possible on demand.
- GALAXY CQY series standard X axis measuring strokes mm/in : From 6000 mm (118.1in) up to 20000 mm (590.5 in)

GALAXY ™

Multi-Functional 5 Axis Machine

Main Characteristics	PixMill 25 –Continuous Wrist
Rotate Speed	2000 ~ 24000 rpm
Spindle Power	1.1 KW
Swivel range A -axis	360°, 30°s/tep
Swivel range B -axis	360°, 30°/step
Max. Milling speed	6000 mm/min.
Resolution of the measuring system based on Milling Cutter with 200mm length	5 µm
Cutting Depth	5mm
Removal rate	0,05- 0,2 dm³/min
Bi-Directional Repeatability of the position with 200 mm cutter length	+/- 0,73 µm
Milling Tool holding fixture Shaft diameter	Standard 3 -20mm
Adaptation to Measuring Head	Renishaw MCP
Electrical Connection	Internal Cable

