## SIROCCO hexapod



Dynamic hexapod with high amplitude

## **KEY FEATURES**

- Payload capacity 2 tons
- Linear travel range ± 600 mm
- Angular travel range ± 40°



## **APPLICATIONS**

- Motion simulator
- Swell simulator

- High payloads positioner
- Vehicle simulator



GTT designs cryogenic membrane containment systems used in the shipbuilding industry for the transport of liquid natural gas (LNG). SIROCCO hexapod allows GTT laboratories to study the impact of moving liquid, also called sloshing, on their insulation.



Naval Group uses SIROCCO hexapods as submarine simulators for training purposes to reproduce the emergency situations that submarine crews might encounter during a mission.



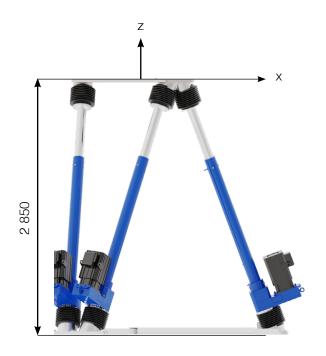
FMC Technologies uses two SIROCCO XL hexapods to test a ¼ scale LNG loading arm. These hexapods simulate the swell motion to qualify the loading arm that will connect a gas carrier to an offshore gas production factory. One hexapod simulates the gas carrier, the other the offshore factory.





	SIROCCO	
Motion and positioning		
Travel range Tx, Ty (mm)	± 600	
Travel range Tz (mm)	± 500	
Travel range Rx, Ry, Rz (deg)	± 40	
Speed Tx, Ty, (mm/s)	± 2 000	
Speed Tz (mm/s)	± 1 800	
Speed Rx, Ry (°/s)	± 200	
Speed Rz (°/s)	± 100	
Acceleration Tx, Ty, Tz (mm/s <sup>2</sup> )	± 6 000	
Acceleration Rx, Ry, (°/s²)	± 1 200	
Acceleration Rz (°/s²)	± 600	
Mechanical properties		
Payload capacity (kg) (vertical orientation only)	2 000	
Motor type	Brushless	
Miscellaneous		
Operating temperature range (°C)	0 to + 50	
Size mobile platform (mm)	Ø 3 350	
Height in middle position (mm)	~ 2 850	
Mass (kg)	~ 850	
Cable length (m)	15	
Options	Outdoor Wave basin Extra Rz rotation in the mobile platform (C axis) Acquisition (storage of motions) API External real-time trajectory control (ERTT)	
Controller		
Interface	Ethernet	
Power supply	400 VAC (three-phase) / 250 A	

The performances are specified for single axis motions, with all other axes at midrange and for a rotation center in the middle of the mobile platform.



Hexapod in middle position

