



SIROCCO hexapod

Dynamic hexapod with high amplitude



Symétrie

KEY FEATURES

- Payload capacity 2 tons
- Linear travel range ± 600 mm
- Angular travel range $\pm 40^\circ$



APPLICATIONS

- Motion simulator
- High payloads positioner
- Vehicle simulator
- Swell simulator



Credits: GTT

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.



DCNS 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 1/4 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.



Symétrie

	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/s²)	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	IP 64 motor protection Acquisition and storage of motions API Customized platform design
Controller	
Interface	Ethernet
Power supply	380 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.

