

# SIROCCO hexapod

Dynamic hexapod with high amplitude



## KEY FEATURES

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



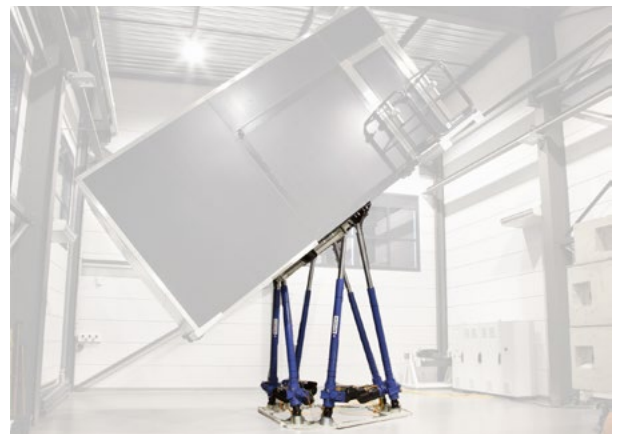
## APPLICATIONS

- 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.



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

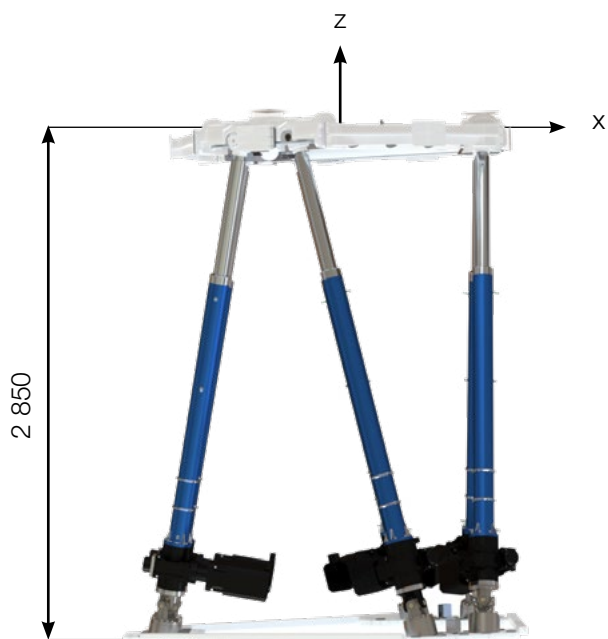


FMC Technologies uses two SIROCCO XL hexapods to test a  $\frac{1}{4}$  scale LNG loading arm. These hexapods simulate the swell motion to qualify the loading arm that will connect a gas carrier to an offshore gas production factory. One hexapod simulates the gas carrier, the other the offshore factory.

SIROCCO	
<b>Motion and positioning</b>	
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, (°/s <sup>2</sup> )	± 1 200
Acceleration Rz (°/s <sup>2</sup> )	± 600
<b>Mechanical properties</b>	
Payload capacity (kg) (vertical orientation only)	2 000
Motor type	Brushless
<b>Miscellaneous</b>	
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)
<b>Controller</b>	
Interface	Ethernet
Power supply	400 VAC (three-phase) / 250 A

Datasheet subject to change without notice. All data are superseded by any new release. R230418

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

