# **SEIDOF6** - Electric Motion Platform

Six Degrees of Freedom Max 2500Kg Payload Electric Actuation



# **Description:**

This platform allows six degrees of freedom (heave, surge, sway, roll, pitch and yaw) and uses six actuator of linear movement with electric motors.

With our electric 6-degree of freedom (6-DOF) motion system realizes "realistic movements" with multipurpose applications. Our advanced motion technology is able to create movements of cars, ships, airplanes or virtual motion theatre. It is an electric motion system but has similar performances as hydraulic motion systems. Its maintenance is much easier than hydraulic ones, as well as its transportation.

**SEIDOF7**, a **Seven** Degrees of Freedom - Electric Motion Platform is now available. SEIDOF7 includes all of the facilities of SEIDOF6 with the added 7th DOF, Horizontal Spin around its centre Axis whilst simultaneously performing any of the other standard 6DOF (Pitch. Roll, Yaw, plus, Heave, Surge, Sway).

Specifications are available upon request. Email enquiries@charod.com with your details to receive more information.



# **Specifications: SEIDOF6**

Size:

Settled Height: 0,93 m Foot Print: 1,50 x 1,72 m

Std. Flying Floor.

Structural Triangle: 0,81 m System Weight: 500 Kg

Facility:

Average Floor Loading.

Compression: 1200Kg/m<sup>2</sup>

Power.

Control:

Main: 3~, 380/480 Vac

50-60Hz

35 Amp service 1~, 200/240 Vac

50Hz

10 Amp service

Load:

Max. static load: 3600Kg

Max. dynamic Load: 500Kg (option I) 2500Kg (option II)

#### **Actuator Features:**

- AC Motors
- Fold-back design for low boarding height and efficient field service
- Screw linear actuators
- Low friction actuator using precision ballscrew design (optional)
- Encoder feedback
- Magnetic Reed switches for stroke limit
- Emergency stop brake (optional)

Motion:

# **Interface Options:**

Serial Interface (RS-485)

Ethernet Interface (Wireless optional)

## **Documentation:**

- Facility Requirements
- Installation Instructions
- Operation, Maintenance Manual

#### Reliability:

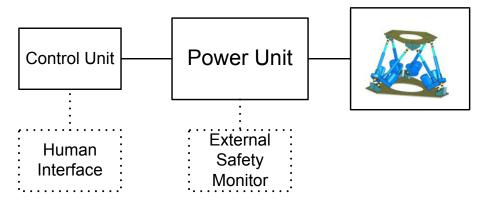
- Custom high efficiency drives and actuators, developed for support extreme conditions and arduous applications

# Field Service and Repair:

- One year part warranty from the date of shipment
- Worldwide support
- Installation and training support provided

### Compliance:

- The system is designed to European electrical codes and standards
- The system utilizes CE compliant components
- Electronics are CE marked



Degree of	Comb.	Single	Velocity		Acceleration	
freedom	Motion	Motion	Option I	Option II	Option I	Option II
Pitch	24 deg	18 deg	65 deg/s	6 deg/s	165 deg/s <sup>2</sup>	800 deg/s <sup>2</sup>
Roll	20 deg	20 deg	70 deg/s	6 deg/s	175 deg/s <sup>2</sup>	
Yaw	28 deg	26 deg	100 deg/s	9 deg/s	245 deg/s <sup>2</sup>	1200 deg/s <sup>2</sup>
Heave	0,3 m	0,3 m	0,50 m/s	0,048 m/s	1,31 m/s <sup>2</sup>	6,6 m/s <sup>2</sup>
Surge	0,26 m	0,23 m	0,80 m/s	0,074 m/s	· · · · · · · · · · · · · · · · · · ·	10,1 m/s <sup>2</sup>
Sway	0,22 m	0,21 m	0,70 m/s	0,066 m/s	1,80 m/s <sup>2</sup>	9,0 m/s <sup>2</sup>