

# 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 actuators 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](mailto: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:  
 Main: 3~, 380/480 Vac  
         50-60Hz  
         35 Amp service  
 Control: 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)

**Interface Options:**

Serial Interface (RS-485)  
 Ethernet Interface (Wireless optional)

**Documentation:**

- Facility Requirements
- Installation Instructions
- Operation, Maintenance Manual

**Reliability:**

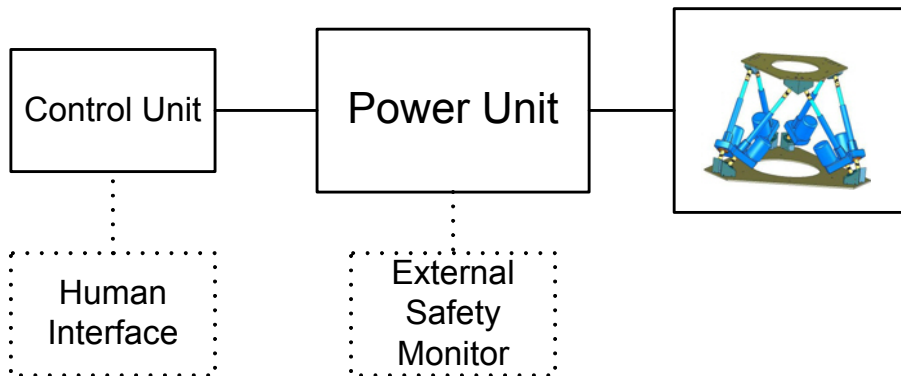
- Custom high efficiency drives and actuators, developed for support extreme conditions and arduous applications

**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



**Motion:**

Degree of freedom	Comb. Motion	Single Motion	Velocity		Acceleration	
			Option I	Option II	Option I	Option II
<b>Pitch</b>	24 deg	18 deg	65 deg/s	6 deg/s	165 deg/s <sup>2</sup>	800 deg/s <sup>2</sup>
<b>Roll</b>	20 deg	20 deg	70 deg/s	6 deg/s	175 deg/s <sup>2</sup>	870 deg/s <sup>2</sup>
<b>Yaw</b>	28 deg	26 deg	100 deg/s	9 deg/s	245 deg/s <sup>2</sup>	1200 deg/s <sup>2</sup>
<b>Heave</b>	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>
<b>Surge</b>	0,26 m	0,23 m	0,80 m/s	0,074 m/s	2,00 m/s <sup>2</sup>	10,1 m/s <sup>2</sup>
<b>Sway</b>	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>