

# **Motion Control System (MCS)**

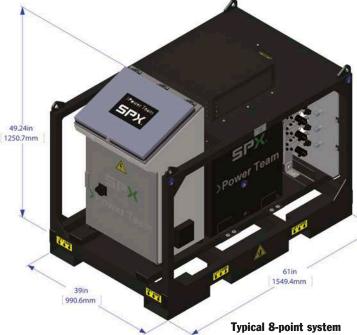
Power Team® Synchronized Lifting and Lowering System



MCS-PE554-8 shown.

### POWER TEAM® SYNCHRONIZED LIFTING AND LOWERING SYSTEM

The Power Team ® Motion Control System provides position control of a load in motion with high precision trough a combination of accurate measurements, digital processing and sophisticated hydraulics. The PLC-controlled system is a combination of digital actuation and digital control providing significant advantages such as time savings, repeatability and extremely low internal stress in the moving object. Synchronized lifting reduces the risk of bending, twisting or tilting due to uneven weight distribution or load-shifts between the lift points.



#### THE SYSTEM CONSISTS OF:

- 1. PLC controller, pump, and oil reservoir.
- 2. Displacement sensors to monitor the position of the load.
- 3. Electrically controlled valves to control the distribution of oil into the hydraulic circuits.
- 4. Pressure sensors to monitor hydraulic pressures in each hydraulic circuit.

#### **FEATURES:**

- Load Capacity: only limited by the choice of cylinders (use with single or double acting cylinders).
- Intuitive graphic, touch screen control.
- Basic systems start at 8 jacking points, also available 16 or 24 points.
- Safety features include: full stop due to power failure, sensor failure, pressure overload, tolerance error, uncontrolled load movement, etc.
- Displayed information includes:
  - -Startup diagnostics.
  - Position of lift points relative to starting position.
  - -Pressure and load in kN at each lift point.
  - -Status of each cylinder.
  - -Status of alarms.
- Lifting / lowering accuracy of +/- 1 mm.
- Operating Pressure (up to) 700 bar.
- Standard system has a 151 liter tank.
- Standard system has a PE554 pump unit.
- Suitable for single acting and double acting cylinders.
- Suitable for standard cylinders and telescopic cylinders.

Ordering info: Please contact Power Team for technical support and optimal configuration of your system





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#### TYPICAL MOVING AND WEIGHING APPLICATIONS:

Bridges

- Stadium roofs
- Oil rig platforms
- Ships
- Steel structures
- Heavy vehicles
- Vessels and heat exchangers
- Buildings