Team Engine Simulators replicate the effects of dynamic torque loads on engine driven components and systems. With speeds up to 8,000 rpm, dynamic torque output up to 3,300 lb-ft (4.4 kN-m) and torsional frequencies in excess of 600 Hz, Team Engine Simulators are easily configured to reproduce engine dynamics of virtually any displacement and number of cylinders.

Features
- Speeds up to 8,000 rpm
- Dynamic torque output up to 3,300 lb-ft (4.4 kN-m)
- Torsional frequencies in excess of 600 Hz
- PC-based control system with easy-to-use graphical user interface
- Easily programmed to simulate any number of cylinders and torque characteristics
- Integral drive motors up to 100 hp (75 kW) or use existing prime movers

Applications
- Engine crankshaft torsional vibration
- Front Engine Accessory Drive (FEAD) development and analysis
- Simulation of pre-production engines
- Typical applications include:
  - Torsional vibration dampers
  - Couplings
  - Gears, transmissions, clutches
  - Transfer cases
  - Drivelines and belt drives
<table>
<thead>
<tr>
<th>System</th>
<th>901 ESS</th>
<th>902.5 ESS</th>
<th>904 ESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic Torque</td>
<td>800 lb-ft (1.1 kN-m)</td>
<td>1,100 lb-ft (1.5 kN-m)</td>
<td>3,300 lb-ft (4.4 kN-m)</td>
</tr>
<tr>
<td>Angular Displacement</td>
<td>+/- 45 degrees</td>
<td>+/- 45 degrees</td>
<td>+/- 45 degrees</td>
</tr>
<tr>
<td>Peak Angular Velocity</td>
<td>25 radians/sec</td>
<td>20 radians/sec</td>
<td>15 radians/sec</td>
</tr>
<tr>
<td>Peak Angular Acceleration (no load)</td>
<td>30,000 radians/sec²</td>
<td>25,000 radians/sec²</td>
<td>15,000 radians/sec²</td>
</tr>
<tr>
<td>Maximum Speed</td>
<td>8,000 rpm</td>
<td>3,500 rpm</td>
<td>3,500 rpm</td>
</tr>
<tr>
<td>Recommended Hydraulic Power Supply</td>
<td>28 gpm @ 3,000 psi (108 lpm @ 205 bar)</td>
<td>68 gpm @ 3,000 psi (260 lpm @ 205 bar)</td>
<td>68 gpm @ 3,000 psi (260 lpm @ 205 bar)</td>
</tr>
<tr>
<td>Dimensions W x L x H</td>
<td>47 x 88 x 56 in (1.2 x 2.2 x 1.4 m)</td>
<td>36 x 51 x 48 in (0.9 x 1.3 x 1.2 m)</td>
<td>36 x 51 x 48 in (0.9 x 1.3 x 1.2 m)</td>
</tr>
</tbody>
</table>

**Belt Tensioning Requirements:** Adjust belt to remove all slack. Do not apply any additional tension. See Item 76 (DWG.13888) for belt tensioning and DWG. 26739 sprocket install information.

**Plan View:**
- 88 in (224 cm)
- 47 in (119 cm)

**Elevation:**
- 45 in (114 cm)
- 56 in (142 cm)

Standard 901 ESS shown above.