



Shock Absorber Performance Test System SP-01-01XX

The SP-01-01XX is built to evaluate the performance of shock absorbers. These machines are typically used in Shock Absorber Research and Development industries. The machine ensures assembled parts meet specified performance for which they are designed.

Standard features

- Electrically movable top crosshead and fixed bottom crosshead
- Tooling suitable for 2, 3 and 4 wheeler parts
- Force rating: 5 to 10 kN
- Velocity range: 0.01 to 1 m/s
- Manual gripping with easy adaptability to changing parts
- Evaluation of seal friction, gas charge, static and dynamic response

Unique Features

- High precision, crank-based servo electric driven actuators
- Displacement precision of 1 micron
- Single footprint
- Low to zero maintenance required
- Single station or dual station operation. Doubling productivity and providing cross-reference of results



Specifications

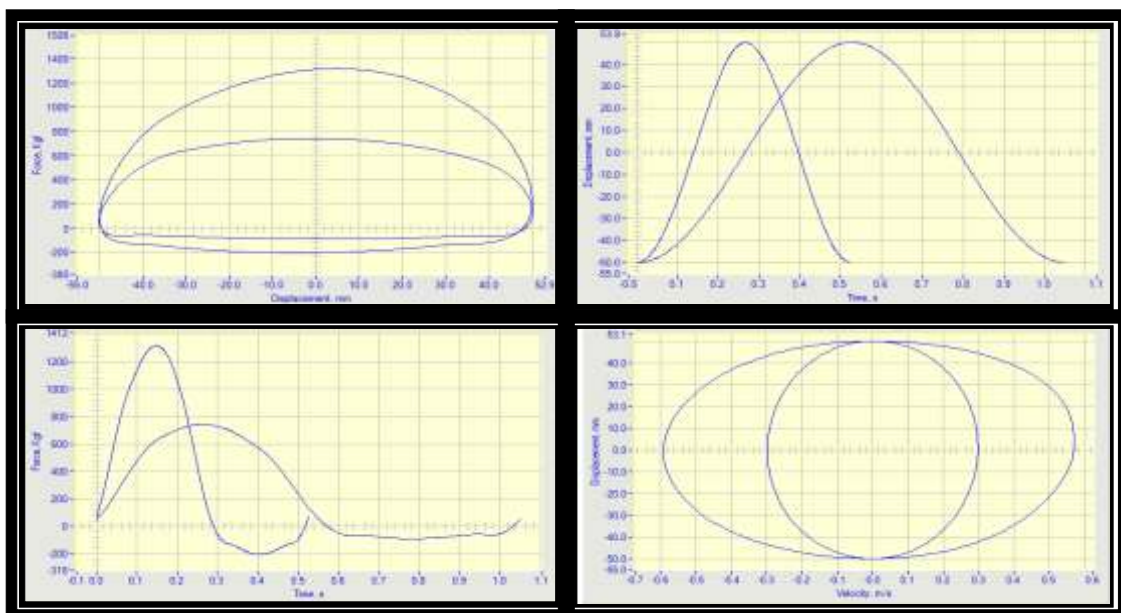
Hardware

Actuator stroke	200 mm
Dynamic force rating	5/10kN
Velocity range	0.01 to 1 m/s
Rod assembly insertion / hold down press	8 kN
Safety interlocks	Against power failure
Power rating	7.5/10/15 KVA.
Options	Light screen, part present, rod assembly inserted, grips closed, safety door.
Grips	Mechanical R&D grips

Software

Fully programmable priming and stroking conditions including number of cycles	
Displacement Sensor	1 micron digital measurement
Single or multiple cycle	Up to 8 programmable velocities in single test
Gas charge/seal friction measurement with loop tilt correction	
Tolerances in terms of tension/compression damping force, energy, lag	
Adaptive control algorithm for guaranteed stroking accuracy	
Auto-calibration of stroke and load	
Auto-taring of part weight at commencement of test	
Optional banding of passed parts into hard, medium and soft	
Automatic recording of test results into Microsoft Excel spreadsheets for c.p.k. analysis, etc.	
Optional automatic assembly defect detection (missing part, backlash, etc.)	
Quality of waveform confirmed by accelerometer feedback.	

Test Results



Options for user selectable graphs