



Shock Absorber Durability Test System

SP-01-04XX

The SP-01-04XX is built to test multiple shock absorbers in combination with side load applications and temperature monitoring features. The machine is used to ensure that assembled parts meet specified performance specifications. It is the result of over seven years of R&D with a focus on harmonizing production line test requirements for 2, 3 and 4-wheeler suspension components.

Standard features

- Two column bottom mount actuators or four column top mount actuators with a wide T-slot bed base
- Grips for simultaneously testing multiple specimens
- Pneumatic/hydraulic actuators mounted on columns for side load applications
- Closed loop water cooling for specimens
- Temperature sense via thermocouples
- Force rating: 5 to 50 kN
- Sustained velocity rating up to 4.5 m/s
- Optional high speed testing up to 7m/s

Unique Features

- Proprietary low noise, servo-controlled pump for energy efficiency. Down to about 30% of most conventional pumps
- Contamination insensitive servo-hydraulics with readily available COTS spares.
- Dust proof air conditioned enclosures for electrical and electronics
- Single controller for testing multiple test specimens



Durability Test System

Specifications

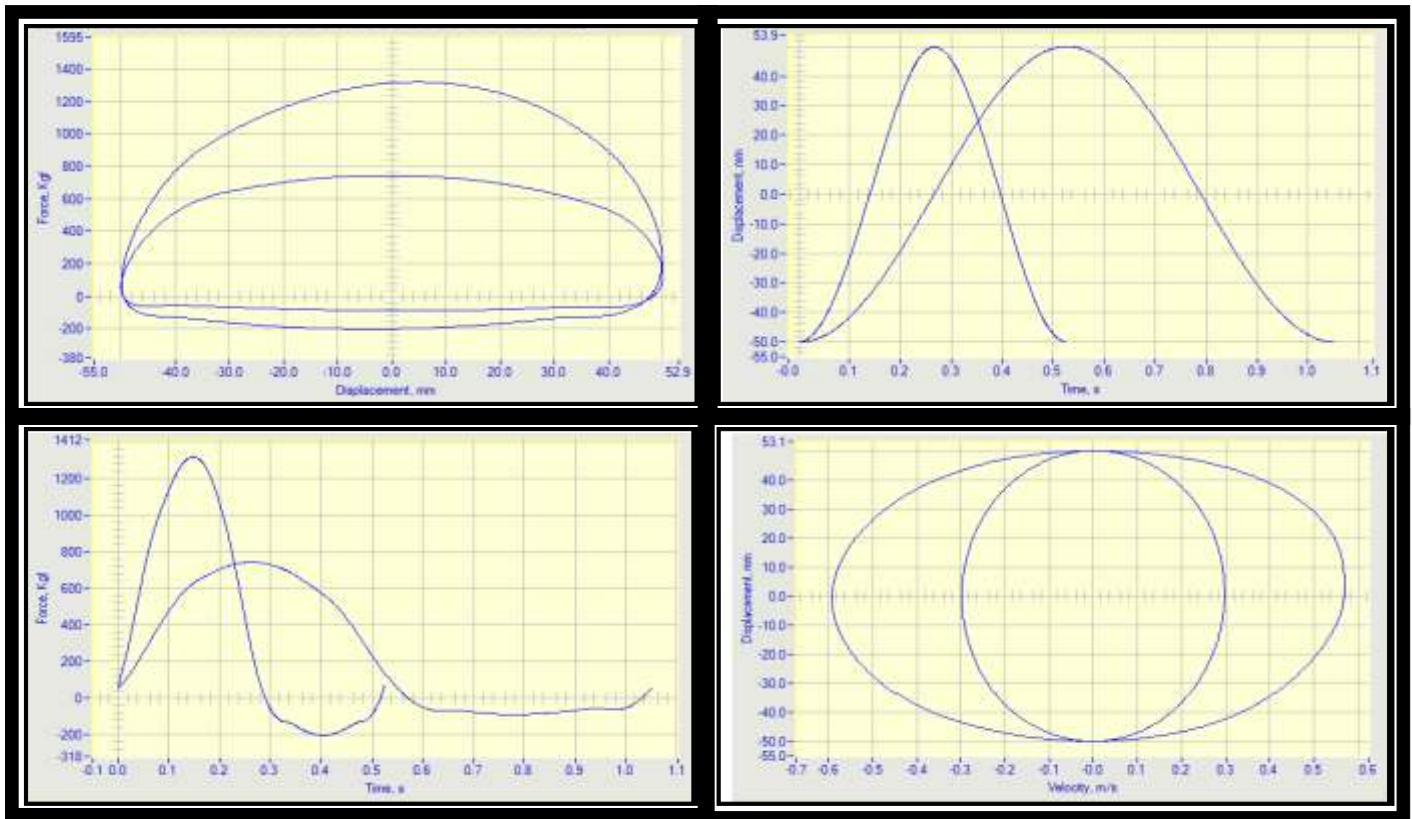
Hardware

Actuator stroke	250 mm
Dynamic force rating	5/10/15/ 25/50 kN
Velocity range	0.01 to 7 m/s
Safety interlocks	Against pump failure and power failure
Power rating	Up to 220 kW
Options	Safety door
Grips	Multi-sample grip with clevis assembly
Grips	Self-aligning pneumatic top grip and hydraulic bottom grip.

Software

Fully programmable priming and stroking conditions including number of cycles	
Displacement Sensor	High resolution LVDT
Single or multiple cycle	Up to 8 programmable velocities in single test and durability test

Test Results



Options for user selectable graphs