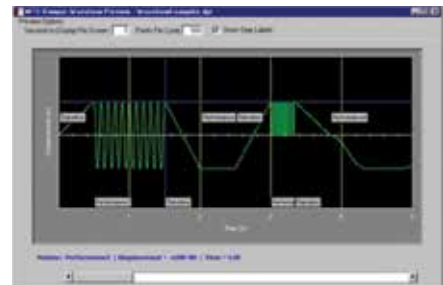


MTS Rail Damper Test System



The Special Designed Load Frame is optimized for precision measurements of dynamic characteristics of railway dampers. Adjustable between 0 and 90 degree tilting angles, this load frame has:

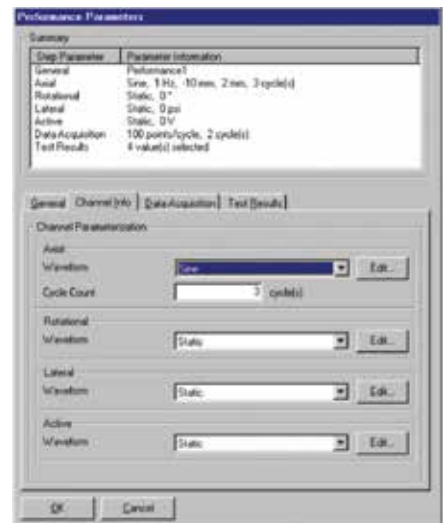
- » Step-less adjustability and clamping on the tilting table
- » A force rating of ± 50 kN
- » Hydrostatic bearing actuators with a 250 mm stroke
- » Engineered for a test space up to 1300 mm
- » Load cells rated at 50 kN with accuracy $\pm 0.5\%$.
- » Actuator anti-rotate mechanisms
- » Manual adjustability, or alternately by electric motors
- » Angularity is shown on a scale at an index
- » Includes double acting hydraulic lift cylinders for positioning of crosshead at any position
- » Includes two M12 x 1.25 mm rod eye bearings for fixturing attachments
- » Friction force measurement kit
- » Specimen adapters



FLEXIBLE FUNCTION GENERATION

MTS Damper performance and durability testing software includes:

- » Sine
- » Triangle
- » Square
- » Dual rate sine
- » Dual rate ramp
- » Sine on sine
- » Ramp on ramp
- » Sine sweep (linear or log)
- » Profile (arbitrary)
- » Friction test with seal reset
- » RPC file playback (available as an option)
- » Temperature dependent performance testing flexible post processing and reporting

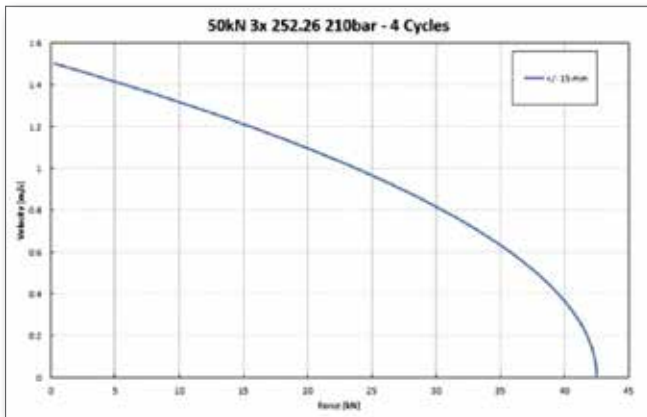
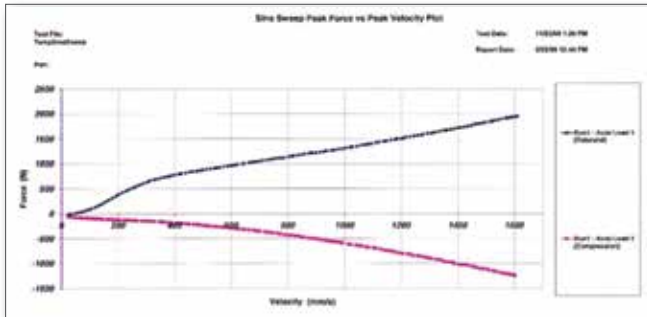


Flexible post processing and reporting:

- » Plot resolution selection
- » Customized report generation
- » Visual valve lag and nose angle test
- » Force versus displacement characteristics
- » Force versus velocity characteristics
- » Peak force versus peak velocity characteristics
- » Peak force versus temperature
- » Various statistics
- » Averages from multiple cycles
- » Durability testing
- » Histogram
- » Displacement vs. time
- » Force vs. time
- » Velocity vs. time

Calculated results:

- » Peak rebound force
- » Peak compression force
- » Peak rebound velocity
- » Peak compression velocity
- » Force at peak rebound velocity
- » Force at peak compression velocity
- » Average peak rebound/compression force
- » Average peak rebound/compression velocity
- » Average rebound/compression force
- » Average rebound/compression velocity
- » Rebound/compression spring rate
- » Seal friction



Maximum velocity for 4 cycles, sine wave, with 30 mm stroke double amplitude (+/- 15 mm)



MTS Systems
 14000 Technology Drive
 Eden Prairie, MN 55344-2290 USA

Telephone: 1-952-937-4000
 Toll Free: 1-800-328-2255

E-mail: info@mts.com
www.mts.com

ISO 9001 Certified QMS

MTS is a registered trademark of MTS Systems within the United States. This trademark may be protected in other countries. RTM No. 211177.

©2021 MTS Systems
 100-522-585 RailDamper • Printed in U.S.A. • 09/21