



**SV-SHOCKS®**

*Fit and forget!*



**SV-SHOCKS®**

**RAILWAY**

SHOCK ABSORBERS • DAMPERS



**SV-Shocks Ltd**

**SV-Shocks Ltd (Suomen Vaimennin Oy)** is a traditional shock absorber and damper manufacturer. We have produced and designed shock absorbers for railway vehicles for almost 50 years. We also design and manufacture industry-recognised shock absorbers for other heavy-duty vehicles, including trucks, trailers, buses, military vehicles and industrial purposes. Our production plant is located in Järvenpää, in southern Finland. SV-Shocks is a quality orientated company and we have been certified according to ISO 9001, ISO 14001, ISO 3834 and EN 15085.

**Railway horizontal and vertical hydraulic dampers**

As a result of demands for higher railway speeds and passenger comfort, hydraulic dampers are more important than ever. Horizontal and vertical damping plays a key role in the achievement of stability and the reduction of vibrations by transforming kinetic energy into thermal energy. Our company, as a trusted partner and specialist in world of damper products, is totally committed to offering the best possible solutions for each rail transportation system.

**Railway shock absorbers and dampers**

SV-Shocks has a broad industry experience and a worldwide reputation for reliable and long-life products, meeting the needs of even highly customised applications. As a flexible manufacturer and a pioneer in valve technology we are able to produce tailored products according to local needs. SV railway shock absorbers are well known as high-quality products. Every shock absorber is thoroughly tested before it leaves the factory to meet our highest quality requirements. Our high quality products provide a safe and maintenance free operation until the next planned major overhaul of the bogies.

**SV-Shocks manufactures railway shock absorbers and dampers for:**

- **Primary and secondary suspension (horizontal and vertical)**
- **Yaw dampers**
- **Anti-roll dampers (between two cars)**
- **Pantograph dampers**
- **Special applications**



**Train, Tram and Metro applications**



**The Finnish State Railways (VR) chooses SV!**

VR and SV have cooperated for many years. The shock absorbers are mainly used in the bogie in passenger wagons. «We trust in the quality of SV Shocks. The life time should be longer than the repair interval for a bogie. This requirement has been very well fulfilled by SV» says Matti Tyrni, responsible for materials at VR.



**Main markets**

Today 85% of our production is exported. SV-Shock's main market area is Europe but our products are sold worldwide.

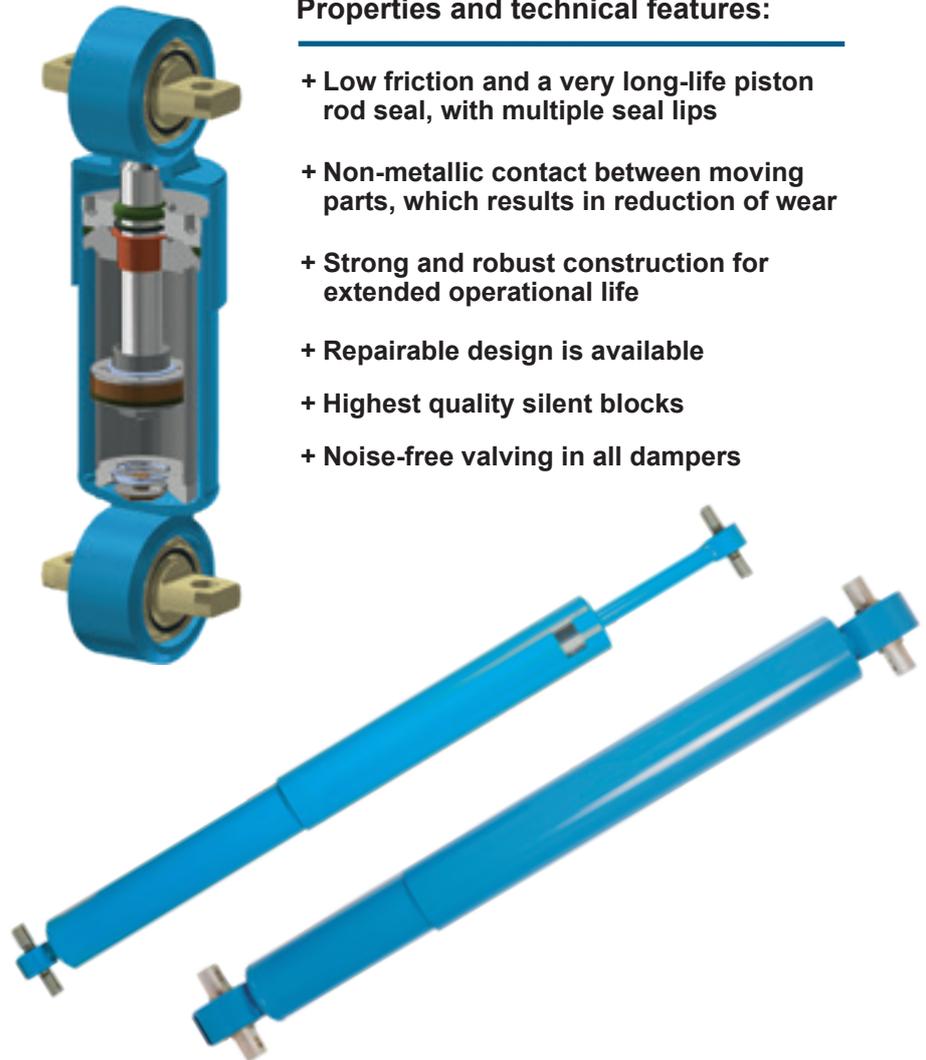


**Railway shock absorbers for primary and secondary suspension**

We specialise in railway dampers and shock absorbers for challenging conditions where variable amplitudes, higher velocities, accelerations and challenging environmental conditions are confronted. In these applications the ultimate performance and long service-life of SV railway shock absorbers excel.

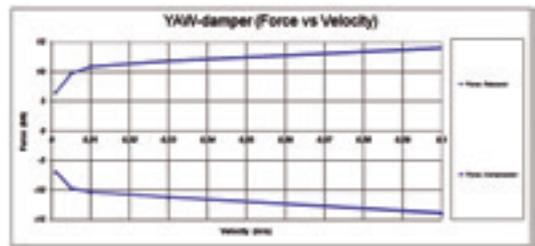
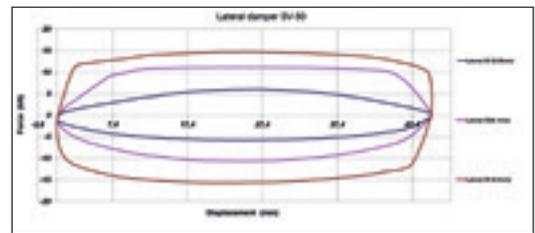
**Properties and technical features:**

- + Low friction and a very long-life piston rod seal, with multiple seal lips
- + Non-metallic contact between moving parts, which results in reduction of wear
- + Strong and robust construction for extended operational life
- + Repairable design is available
- + Highest quality silent blocks
- + Noise-free valving in all dampers



**SV-Shocks production and design skills** enable us to produce a large variety of railway dampers in large or short production runs. We can manufacture shock absorbers for every purpose, ensuring that the specific requirements of all customers are met quickly and efficiently. SV-Shocks is committed to the delivery of reliable products to the market.





SV-Shocks has invested in a completely new state of the art test system and upgraded all existing test systems. With our powerful testing devices we can perform demanding performance and durability tests in any position and at any waveforms. We can make tests up to 50kN forces with velocities from 0.001 m/s up to 5 m/s.

SV-Shocks offers a comprehensive repair and test service for all of our shock absorbers. We also offer testing services for railway shock absorbers and dampers of other brands; if you have testing needs please contact us for more information.



**Contact Details**

**SV-Shocks Ltd.**

(Suomen Vaimennin Oy)  
 Laurilantie 5  
 04410 Järvenpää  
 Finland  
 Tel: +358 207 515 240  
 Email: info@sv-shocks.fi  
 www.sv-shocks.fi

