

Tailor made

SV-SHOCKS®
SPECIAL SHOCK ABSORBERS



- - Lifting shock absorbers **Heavy duty industrial shock** absorbers
  - Lockable shock absorbers
  - Earth quake dampers
  - **Multi stage stopper dampers** (Energy absorbers)
  - **Door dampers**
  - Racing shock absorbers
  - Off road shock absorbers for high velocities and high loads
  - **Special products**

## **Special applications - for every purpose**

SV manufactures and supplies quality shock absorbers for the most demanding needs such as the defence industry, earthquake protection and heavy machinery. SV is an expert on special applications and short series. We can manufacture shock absorbers for every purpose, ensuring that the specific requirements of all customers are met quickly and efficiently. SV is committed to manufacture reliable products to the market.

#### SV AxLS axle lifting shock absorbers

SV AxLS axle lifting shock absorbers work as normal shock absorbers but can also be used as lifting cylinders to lift up the axle when needed. A liftable axle can be a trailing or supporting axle in a truck, or for example extra axles in a large trailer. Sometimes it is also needed to lift up the axle to use it as counterweight. SV is producing lifting shock absorbers for trucks and trailers.

#### **Earth Quake dampers**

Earth quakes generate high accelerations and relatively large movements in buildings and structures. SV has designed dampers to protect structures from this damaging phenomenon.

#### Lockable shock absorbers

Lockable shock absorbers can be used to lock all movements into current position. SV has designed two different versions of this unique product.

#### Multi stage decelator dampers (Energy absorber)

Moving or rolling mass must be stopped in a smooth and safe way especially in many production lines. SV has developed a unique product for this purpose, with displacement dependent damping features. These characteristics allow a very smooth damping force at the beginning, followed by a constantly generated more powerful damping force as the damper is pressed inwards. In the paper industry this damper can be used for example to stop paper rolls smoothly on the correct place.













## Special Applications

### Suomen Vaimennin Oy - the company

**Suomen Vaimennin Oy (SV)** is a traditional shock absorber and damper manufacturer. SV Shocks has produced and designed shock absorbers for all kinds of vehicles almost 50 years. SV designs and manufactures industry-recognised shock absorbers for heavy-duty vehicles including trucks, trailers, buses, military vehicles, railways and other industrial purposes. Suomen Vaimennin Oy's production plant is located in southern Finland.

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#### **Door dampers**

Particularly in special vehicles it is sometimes needed to restrict the movement of a heavy door to a limited velocity to avoid damage to both door and hinges. SV has developed a versatile product which can be tuned to any door or similar application.

#### Racing shock absorber dampers

SV produces dampers for vehicles used in racing. These dampers are designed to offer the best possible road holding and optimal handling in challenging speeds on the track. When you need to push limits even further you can rely on SV-Shocks to keep you on the track.

# Off road shock absorbers for high velocities and high loads (Military and Civil use)

Off road vehicles often confront extra high velocities, accelerations and loads when they are driven on surfaces where they are designed to be used. Velocities can increase up to 4-5 m/s, which requires extremely good damping features from the shock absorber. Military vehicles are often used in tough conditions where both acceleration and speed are high and the damping features have to meet the highest demands for safety and comfort. SV has developed ultra strong products optimized for severe and tough conditions like this.

#### Special absorbers

SV has manufactured a variety of different special products like for example towing dampers and adjustable shock absorbers. We can produce superior solutions for the most challenging needs.

#### SV heavy duty Industrial shock absorbers

SV heavy duty Industrial shock absorbers protect equipment or goods from large impacts in different applications. These products are required whenever a vertically or horizontally moving mass needs to be evenly decelerated with the lowest possible braking force over the full stroke.

Our industrial shock absorbers are tailor made products designed for smooth and safe deceleration with large load capacities, where deceleration forces may be up to 400 000N. These products are available in a wide variety of stroke lengths from few mm up to 2 meters to meet your deceleration requirements.

These Industrial shock absorbers may have an internal or external accumulator replacing mechanical return springs and providing a reduced weight. The surface treatment method is selected according to the actual application and environment with up to 1000 hours salt spray test compatibility.













#### **Tailor Made**

SV is specialized in designing dampers and shock absorbers for all sizes, purposes and applications.

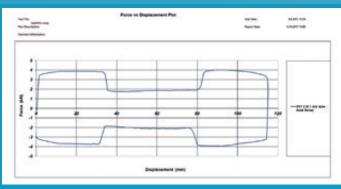


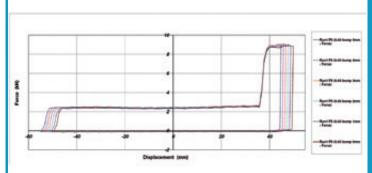






Every shock absorber is tested before it leaves the factory











# **Contact Details**

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