



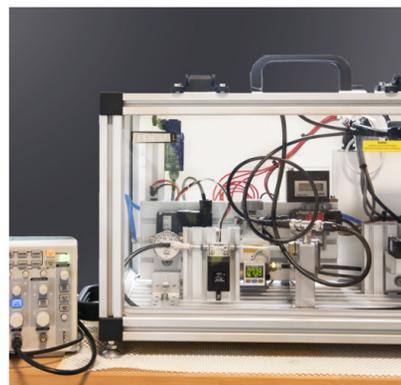
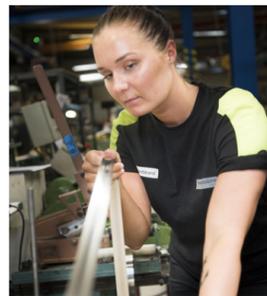
INNOVATION AND R&D OUR FUTURE

We are your partner for special requirements,
at your side developing together.

At voestalpine Precision Strip AB we always accept a challenge. Our Innovation initiatives are moving our business into new product areas and markets. Redefining the limits of what is possible.

The R&D department in Munkfors ensures continuous enhancements in the product and process areas. We are your preferred partner for your special requirements, at your side supporting your product development. Our strength lies in the combination of the latest technologies and our experienced workforce.

As part of the voestalpine Group, we control all essential quality parameters, starting from the specific selection of steel grades which perfectly suit your applications. Whenever new demands for new applications require it, we can develop project-specific alloys together with our customers.



With the latest technologies and equipment we can offer product specific:

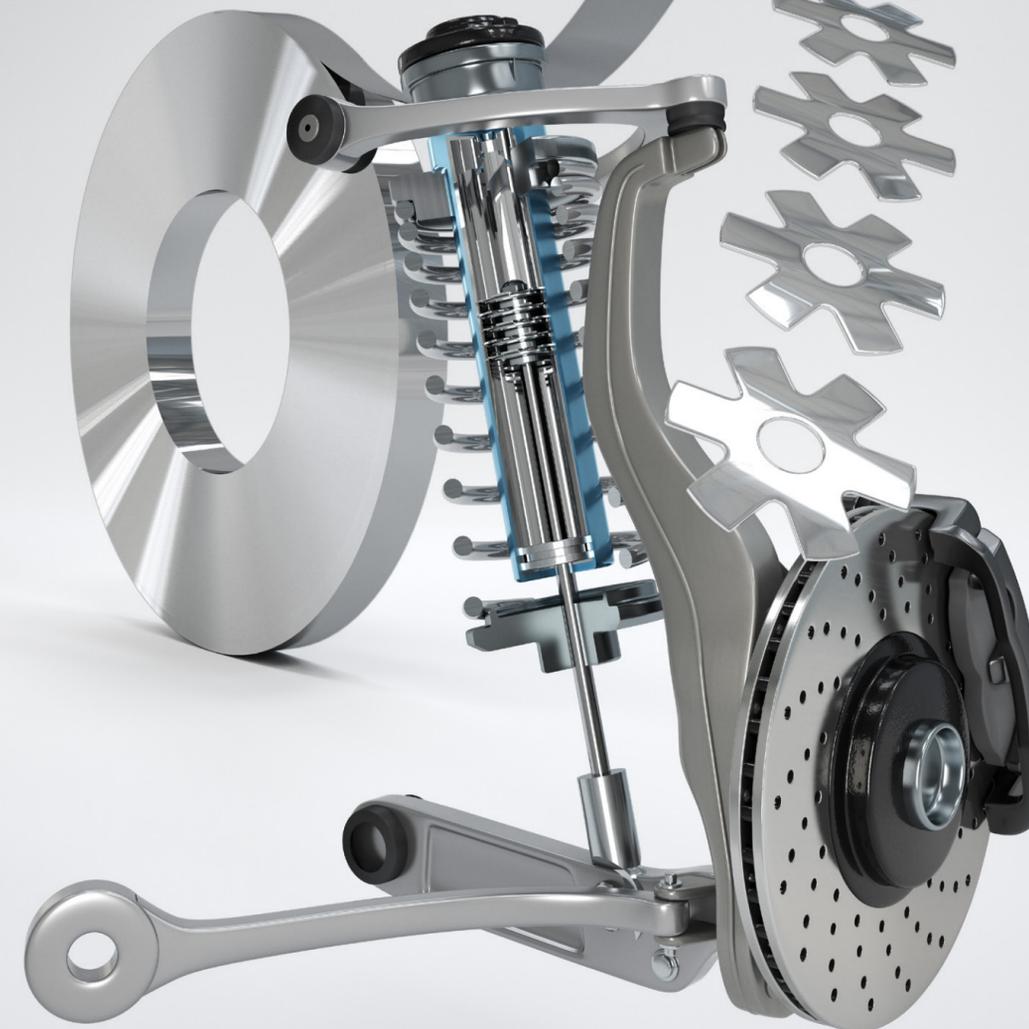
- » Impact fatigue testing
- » Fracture studies
- » Wear profiles and angles
- » Full material analysis
- » XRD and SEM studies

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voestalpine
ONE STEP AHEAD.

uddeholmstrip

PRODUCT FOLDER
SHOCK ABSORBER
STEEL



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MEETING HIGH DEMANDS ON RIDE CONTROL

voestalpine Precision Strip AB offers shock absorber steels meeting the challenging demands of modern automotive technology.

The ride control of a vehicle is heavily dependent on its shock absorbers. Ultimately, the valves inside the shock absorber determine the consistency and accuracy of the performance. It places challenging demands on the material properties.

Under the uddeholmstrip® brand, voestalpine Precision Strip AB has been one of the leading suppliers of shock absorber steel for decades. Our customers are the OEM manufacturers of shock absorbers and the stampers of the shock absorber valves.

Extensive testing has proven that martensitic hardened and tempered steels exhibit the ultimate material characteristics when superior fatigue performance is required. The precision strip steel and its heat treatment provide the prerequisite for an excellent performance of the shock absorber valve.

The thickness tolerance, the surface finish and the metallurgical cleanliness secure the required performance. Thus resulting in a reliable operation and long lasting service life of the shock absorber, with consistent quality.

The shock absorber valve design and manufacture are critical too. To satisfy all our clients' requirements our shock absorber steel comprises precision strip steel meeting the stringent demands of the industry.

The shock absorber steel from voestalpine Precision Strip AB has been developed in close co-operation with leading shock absorber manufacturers to meet the highest demands of modern automotive technology.

The steel is characterized by:

- » Excellent surface finish
- » Consistent and controlled thickness tolerances
- » Low content of harmful inclusions
- » High fatigue strength
- » Accurate flatness and straightness

Inspection and selection of raw materials and subsequent operations are carried out with the greatest care and precision. Special inspection lines ensure a consistent and superior quality of strip steel. A uniform and high strength is achieved through accurate and controlled heat treatment.

The superior surface finishing eliminates potentially dangerous scratches and stress raisers.



UHB 20C



Size range, thickness: 0.076 – 1.00 mm
Size range, width: 6 – 340 mm

UHB 20C is a 1% carbon steel with high tensile strength and is the standard choice as the material for shock absorber valves.

It is hardened and tempered to a fine martensitic structure providing the highest fatigue strength amongst all carbon steels.

UHB 20C is an excellent choice for applications where corrosion resistance is not so critical and economical volume production of shock absorber valves is the main criteria. Alternative stainless materials for special demands can also be supplied when requested.

DESCRIPTION

UHB 20C is a 1% carbon steel developed for shock absorber valves.

ADVANTAGES

- » Highest fatigue strength amongst all carbon steels
- » Consistent and reliable quality with proven performance