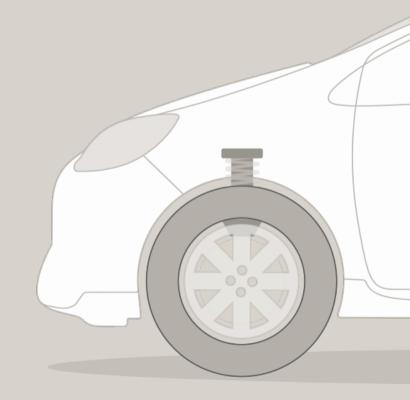
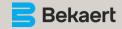
### Wire solutions for shock absorbers

"Smooth out every ride and enhance every drive."

# Shock absorbers







### Key trends in Shock absorbers

- Shock absorbers are a part of the suspension system of a vehicle
- Its main goal is to keep the wheels on the road,
- They function by **dampening** the suspension spring action, and provide **stability** to the car
- Shock absorbers improve driving comfort (ride performance) and increase car safety.

- From standard hydraulic systems, features are added to the shock absorber system to boost the performance.
- The new shock absorber systems improve stability and enhance safety. They mitigate body roll in most driving conditions, also during cornering, acceleration, and emergency braking.
- Car systems have been designed to last longer, with the expectation that shock absorber will function properly throughout the car's lifetime.
- Adaptive shock absorber systems are growing in popularity



### Shock absorbers



### Smoothen out every ride with the help of our wires...

### **Strength**

## Customized solution

Highest strength and ductility combination for each situation & Design

### **Consistency**

### **High Precision**

Built-in a confined space, homogeneous wire properties are key for optimal functionality

### Where can you find our wire solutions?

Component	Bekaert product
Rebound spring	Shaped oil tempered wire Shaped hard drawn wire High strength spring wire Customized wire Solutions
Damping valve springs	Hard drawn spring wire
Intake valve	Hard drawn spring wire
Oil seal	Oil seal spring wire Fine spring wire for Gartner springs



### Drum Brake Systems

 Drum brakes will play a crucial role in achieving safer cleaner transportation



## 5 reasons why drum brakes are key for the future of braking



### Reduced particle emission

- Fine dust from brake pads is trapped in the drum, reducing particle emissions (PM10) by 95%, meeting new EURO norms.

#### Corrosion resistance

 The enclosed environment of drum brake systems guarantees their functionality, unlike discs which are prone to corrosion due to lower usage.

### 3. Thermal Load Management

With Regenerative braking and, consequently, the lower use of mechanical brakes, heat dissipation is no longer critical, and the thermal performance of drum brakes is adequate.

### 4. Cost Effective

- Drum brakes are a more economical option than disc brakes due to their lower installation and maintenance costs and longer lifespan.

### 5. Future Proof for Electronic Braking

- Drum brakes offer a simpler path for the implementation of electronic braking systems, including brake-by-wire technology.



### Why choose Bekaert as your preferred partner

One that can co-innovate with you

**High-end Bezinal® Coated** spring wires are the undeniable and trusted solution in brake systems



 Bezinal® is renowned for meeting high-standard safety requirements for superior corrosion protection at the wire level in the automotive industry.

Our wire solutions meet high industry standards from 24hrs to 1000 hrs corrosion protection.

 Trusted in highly demanding applications, resulting in a longer lifetime with enhanced safety measures.

Our wire solutions have consistently met automotive industry standards for over 40 years.

 When narrow tolerances and optimal performance are required, choose wire solutions with homogeneous properties that ensure stable processing.

As trusted solution, Tier 1 manufacturers have been using Bezinal wire solutions to meet critical standards of the evolving automotive industry.



### **Braking systems**

### Bezinal® coated steel wire

Superior Corrosion Resistance

Compliant with EN 10270-1

Advanced optimized design

**Active coating** 

counteracts corrosive attacks, resulting in **longer lifetime** 

**Optimal Properties** 

Standardized or customized, whatever suits your requirements the best

**Flexibility** 

Superior wire properties allow redesign or development of new functionalities



### Customized solutions for every type of vehicle

- In cases where heavy-duty vehicles, trains, and commercial vehicles require higher forces, stronger wire is necessary. Bekaert provides various wire strengths, including hardened and tempered wire solutions.
  - For offroad vehicles: Loaders, shovers...
  - For trains
  - For commercial vehicles





