Wire solutions for seating

Enabling you to provide an unmatched driving experience for all passengers

Seating







Key trends in Seating

Rethinking seat design features to optimize a comfortable and enhanced driver experience

- More comfort expectations lead to advanced seating features and a perfect match with the body ergonomics
- Front seat architecture gradually replaces the rear seat bench for improved comfort
- Bringing the heat to the body instead of heating the space

Global legislative push to meet sustainability requirements

- Reducing the CO₂ footprint conflicts with the need for more comfort features
- Efforts from the entire value chain will be required to lower the CO₂ footprint in the industry.
- Innovation in new materials will be crucial, thinking beyond today's solutions

In which areas can we help you delivering value?







- Functionalities to optimize the time spent in the car
- ✓ adaptable and ergonomic
- ✓ bring the heat to the body

- Rear seat evolves from bench style
 to comfortable front seat design
- Read more in the following article:

- The quest for new sustainable materials yet complying with the increased demand for comfort
- ✓ Bringing new seating concepts
- Are hybrid car seats with steel and other materials replacing PU foam?







Co-innovation for a better future

We are ready to innovate with sustainability in mind

- A car seat is not just a place to sit it's a vital component of the car's identity. Achieving the perfect balance between comfort and sustainability is essential. With the legislative push to lower CO2 emissions, we must think outside-the-box.
- While new materials may seem tempting, let's not underestimate the power of steel. With its unmatched strength, ductility, and the promise of green steel on the horizon, it's time to rethink innovation within seating design.
- By innovating together, we can create a greener and more sustainable future for the seats we use daily.





 Car seats are vital to a car's identity, and improving their comfort increases the interior's value.

Seats should **perfectly fit your body ergonomics**, making you feel at home.

Where can you find our wire solutions?

Component	Subcomponent	Bekaert Products
Seat Suspension	Wires for lumbar and cushion support	(PP coated) Insulator, cross wires, zig zag wires
Seat Reclining System	Connecting rod Springs for continuous and discontinuous recliners	Bars, Tube Power Spring (OT,HD) , wrap spring wire
Seat Frame	Torsion bars Rear Seat Frame	Springs steel grade Low Carbon steel wire
Powered Seating	Wires for Flexible shafts (Wire for) Push Pull Cables & ropes	Automotive rope wires, galvanized, Bezinal and brass coated, uncoated Casing wire, uncoated, coated
Seat Heating	Heating cable	Bekinox® VN + Bekiflex® Hx
Seat Trim	Tie down wire Smart Fabrics	Customized OT wire Conductive Yarns
Head Rest	Wire for Forming Parts	Bezinal Coated spring wires
Others	Springs EMI shielding in plastic molded parts	High tensile spring wire, Phosphated, Galvanized, Bezinal. OT wires Bekishield



Optimum seating customization



- Based on the level of "customization needs" different aspects of seating can be optimized
- 1. The **multidirectional adjustments** of the seat: suspension, reclining, lift, tilt, lumbar support
- 2. The **material aspect** of the seat: protection, Electric Static Discharge (ESD*), comfortable touch and feel
- Not only for front seats but also for rear seats since the goal would be to enable optimum comfort not only for the driver and co-driver but also for the passengers



Bringing the heat to the body





- The increasing demand for electric vehicles (EVs) with higher comfort levels has resulted in the need for more heating options in passenger cars.
 To reduce vehicle energy consumption, preference is given to occupancy-based heating. This lowers energy consumption from the energy pack, allowing for more driving distance.
- Components in the car where we bring the heat:
 - Car seat heating
 - Seat bolster
 - Seat extension
- We are ready to innovate with occupancy-based heating applications in mind:
 - · Steering wheel heating
 - Door and arm-rests
 - Seatbelts
 - Backseat heating



Ensuring efficient, reliable and durable performance

- Bekiflex® Hx ultra fine heating cables in a hybrid construction combining a high strength textile core and conductive wires - steel or copper based
 - With high durability
 - Easy to process and integrate
 - Wide electrical resistance
 - Increased mechanical performance



- Flexible and extreme durable
- Superior bending resistance
- High corrosion and temperature resistance
- Overall extrusion coating possible





