

Texible

Developing the future

Taking great strides in the field of smart textiles to meet the demand of advanced medical solutions for healthcare, sports, and more.

Pressure sensing textiles

Futuristic smart insole technology enables healthcare professionals to utilize pressure point data recorded during use.



To meet the demand of advanced medical solutions, Texible has developed pressure sensing technology utilizing Bekinox® VN stainless steel yarn. The highly flexible, durable nature of this metal fiber works with tightly embroidered curves to deliver consistent functionality across a variety of healthcare applications.

The challenge

The demands of Texible's products were clear. Provide a flexible metal fiber yarn capable of demanding curves, durable enough to withstand hundreds of industrial washes, with sufficient conductivity to deliver accurate measurements through 5 layers of materials.

Once in use, the stainless steel thread throughout the product must maintain contact with various pressure points to provide exact measurements. Because Texible's product line is designed with athletes, healthcare workers, and patients in mind, every bit of material must endure excessive movements, regular bending, possible corrosion, and more.

The solution

The technical experts at Bekaert worked with Texible's lead engineers to determine the best possible metal fiber solution to suit Stapp One's insole production needs. Bekinox® VN stainless steel yarn serves as the resolution to their smart textile requirements. Bekaert utilized a polyester wrapped stainless steel yarn that is both compatible with shuttle embroidery and meets the conductive needs of the pressure sensors without imparting an insulating effect. In turn, this enables Texible to continue producing pressure sensing smart textiles, such as insoles and bed pads, which serve as crucial aids to healthcare workers alike.