

Twaron® ComForte SB1Plus: being ballistic ready has never felt this lightweight.

Today, the ballistic protection market is seeking for better protection and greater comfort in body armor. For years, a reoccurring problem for body armor manufacturers has been to either produce a very lightweight vest using shields, or craft a comfortable but heavier vest out of fabrics.

Demanding new solutions

A combination of maximum ballistic protection at minimum weight and at maximum comfort can now be found in Teijin Aramid's Twaron® ComForte SB1Plus. Twaron® ComForte SB1Plus is specified for law enforcement, civilian security and combat personnel around the world because of combining the softness and comfort of Twaron® microfilament fabrics with the weight reduction advantages of shield materials.



Key benefits of Twaron® ComForte SB1Plus:

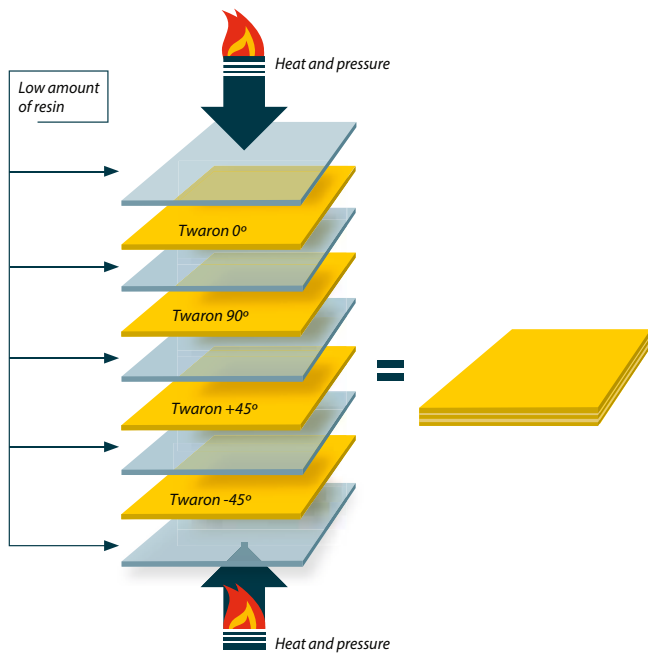
- > **High ballistic protection**
- > **Maximum comfort at minimum weight**
- > **Up to 25% weight reduction**
- > **Improved sweat management**
- > **Longer lifetime**

A sandwich construction

Twaron® Laminated Fabric Technology SB1 (ComForte SB1Plus) is a thin, very flexible laminate comprising two Twaron® fabric layers sandwiched with three layers of ultra-thin PE film. The two fabrics are made from Twaron® para-aramid microfilament yarn running in one direction, and very fine PES threads running in the other direction. This fabric construction system prevents an intruding bullet from pushing the yarns apart – a distinct advantage over typical shield materials.

For the user, this translates into significantly improved bullet resistance compared to traditional ballistic fabrics. The same level of ballistic protection can be achieved with less material, which increases comfort and mobility for the wearer.

Twaron®



Production process of Twaron® ComForte SB1Plus

Weight reduction

The weight of this multi-layer sandwich construction is only 220 grams per square meter. What's more, the weight of the entire ballistic pack can be further reduced by as much as 25% to meet the requirements of certain standards (e.g., TR 2008, NIJ 01.01.04, NIJ 01.01.06). Or in other words: the weight of ballistic pack can be decreased in particular cases by more than 1.5 kg per m² (TR SK1). Additionally, through the use of advanced laminate production technology we have been able to create a surface which offers an unique soft textile like texture. Twaron® ComForte SB1Plus gives a soft, natural appeal, especially when compared to the artificial plastic feel of shields. End users wearing Twaron® ComForte SB1Plus will appreciate the numerous comfort aspects in contrast to the uncomfortable sweat producing shield in the old vest.

Recyclable

Ballistic materials are recyclable, and at Teijin Aramid we buy them back. We also guarantee the demilitarization of the recycled material. Read more about our recycling and buy back activities on www.teijinaramid.com/recycling.

Professional support

We have extensive experience in developing ballistic solutions of all kinds. To ensure that your specific needs are met, and to create the optimum solution, we offer a wide range of dedicated support options. These can include technical support at your location, as well as the use of our dedicated test facilities.



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More information

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