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Title

Speedo Fastskin FSII Bodyskin worn by Petria Thomas

Date

2004

Primary Maker Speedo International Ltd

Medium

Polyester, elastane

Dimensions

Overall: 1190 x 360 mm, 0.22 kg Clothing size: 27

Name

Swimsuit

History

The Speedo Fastskin was launched in 2000 at Homebush Bay in Sydney. The design was developed by a core research team of scientists, swimmers, a swimming coach, a computer clothing company, a Japanese textile company, a bio mechanist and a shark expert. They found that the unique texture of a shark's skin allows it to move faster through the water. The Fastskin fabric mimics the rough dermal denticles of shark skin to reduce drag in key areas of the body. The polyester and elastane fabric compresses the body to stop skin vibration and muscle oscillation, with the effect of saving energy and further reducing drag. The suit aids in connecting muscles through a combination of panels and unique seaming. It follows an anatomic pattern where the seams act like tendons and provide tension in the suit, while the fabric panels act like muscles, stretching and returning to their original shape. The Fastskin FSII was launched in 2004 for the Athens Olympics. The new range featured male and female specific, and stroke specific swimsuits. The FSII fabric contains a special material made from a titanium alloy, which is knitted into the costume, with a silicon crystalloid knitted into the chest and back. Seams have been engineered to follow the flow of the water, with greater stretch to allow freedom of movement. Seams are an essential element in minimising drag and optimising performance. As seams play a vital role in allowing fabric to be stretched to maximum tension, which gives complete freedom of movement, the number of stitches is very high.