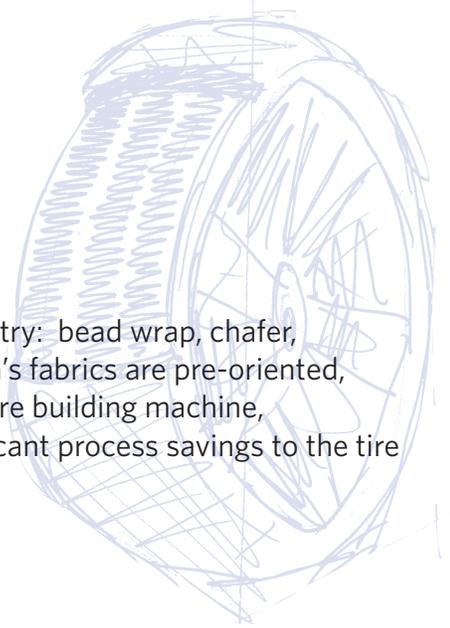


Milliken®

Tire Components

Bead and Sidewall

Milliken offers a broad selection of bead and sidewall fabrics for the tire industry: bead wrap, chafer, toe protector, chipper, and flippers in a wide variety of constructions. Milliken's fabrics are pre-oriented, tackified, slit, and ready-to-use. These fabrics can be applied directly at the tire building machine, bypassing calendaring, bias cutting, splicing, and slitting; thus bringing significant process savings to the tire manufacturer. Milliken also offers treated fabrics in wide roll form.



Ready-to-Use Bias Toe Protector

Pre-oriented bias fabric strips, textured or twisted, RFL-treated, with excellent green building tack

Ready-to-Use Chipper & Flipper

Fabrics for use in radial and bias truck tires and other heavy-duty applications

Square-Woven Chafer

Twisted, textured, and monofilament constructions with standard and wickproof RFL chemical treatments available



Ready-to-Use Bead Wrap

Precision-slit, with multiple tack levels available

Milliken offers knitted and woven bead wraps with two different tack levels available. The chemical treatment is formulated for excellent adhesion to the rubberized bead wire and to the apex rubber. The Bead Wrap strongly retains the bead within the tire structure. Milliken's Bead Wrap is a ready-to-use precision slit tape, which eliminates the need for calendaring and slitting in the tire plant, thereby reducing rubber usage, process waste, and energy cost. The applied tackifier is 100% solvent free and therefore more environmental friendly.

	Knitted bead wrap		Woven bead wrap	
Tack level	High	Regular	High	Regular
Weight	110g/m ²	101g/m ²	135g/m ²	100g/m ²
Gauge	0,45mm	0,45mm	0,46mm	0,46mm
Length	Up to 100m			
Standard width	17 to 25mm			
Edges	Cold slit			

Milliken™

Ready to Use Chafer Products

Milliken's splice-free, ready-to-use chafer products are applied directly at the tire building machine. The chafer can be used alone or in conjunction with a gum strip. The tire manufacturer bypasses fabric calendering, bias cutting, splicing, and slitting, resulting in significant material and processing cost savings, as well as reductions in inventory and complexity.

Twisted Bias Chafer

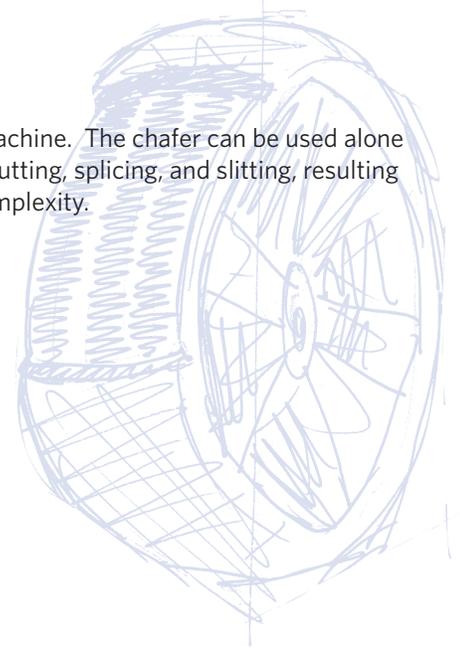
700Dtex woven fabric
940Dtex twisted fabric

Textured Bias Chafer

700Dtex woven fabric
940Dtex twisted fabric

Smart Chafer™

235Dtex knitted fabric
(weight similar to 700dtex conventional chafer)
470Dtex knitted fabric
(weight similar to 1400dtex conventional chafer)



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