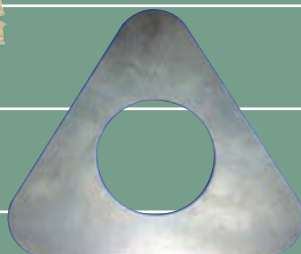
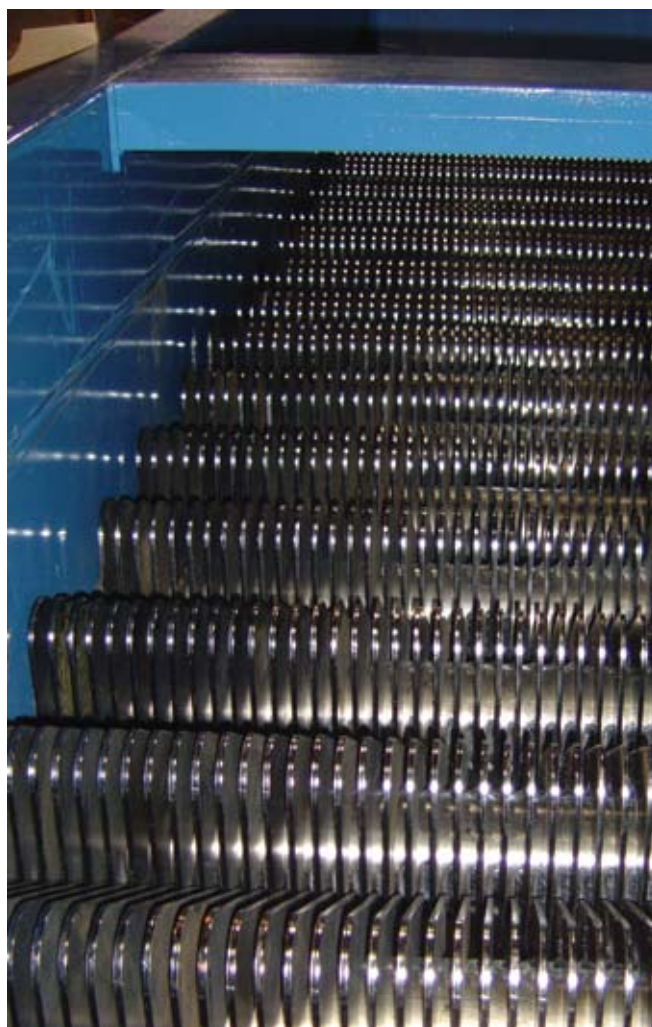




## Trillium™ Screen



**ACROWOOD**



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### OSB Strand Screening

Limp, wet and fines rich green strands have always been a challenge to efficiently screen. That's why Acrowood has developed the patent-pending Trillium™ Screen. Fines are trapped between the strands in layers, complicating flow rate control with lumpy surges.

Dry strands are stiff, fluffy and curved, often containing high fines. The flow rate from the drier is uneven, with heavy surges. Fines rob capacity in the drier. As much as 15 percent of fresh strands are fines.

Fines that pass into the drier exhaust stack form particulate and gaseous emissions. They do nothing to improve board properties, and they rob resin efficiency. Screening this material poses many challenges. Acrowood's Trillium Screen agitates the fiber, liberating the fines from strands. The patent-pending disc shape achieves this without damaging strands. No other screening method available achieves this degree of separation.

#### How it works...

In mill trials, Acrowood set up an 18-shaft screen with Trillium discs -- three-sided discs manufactured with the DiamondRoll™ drive system. The triangular shape of the discs provided greater agitation, retaining 74 percent of the large strands on the surface of the screen, while passing 26 percent of the undersized material through the screen's 3 mm IFO. The method allows fines to pass with the small strands, and uses a DiamondRoll Fines Screen below for good strand recovery.



#### Machine Basics

The Trillium Screen uses the DiamondRoll drive design, a tried and true method. Key to the DiamondRoll and Trillium Screens' adaptability is the drive system. Each drive group uses a continuous loop of chain, which drives each shaft. A single motor is located at the discharge end of each drive group. On one end of the shaft a special sprocket, known as a rack tooth sprocket, engages the chain as it is pulled across the top.

Because of the design of the teeth in the rack tooth sprocket, the chain pulls the shaft smoothly, transmitting the power of the chain to the rolls. This drive system has proven to be efficient and strong, and an improved design over the "loop to loop" drive system.

#### Chain Needs No Lubrication

Oil lubrication has been eliminated from the side frame, since the chain is lubricated for life. The chain is a high-strength sintered bushing roller chain, with lubricant incorporated into the structure of the bushing itself. The flange mounted bearings are grease lubricated. The fittings can be accessed directly, or can be piped to a central lubrication manifold. All components are built with long service life and minimal maintenance requirements in mind.



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