

Rips and Grooves from Foreign Objects

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In its section on extending belt life in chapter four, Martin Engineering's Foundations draws the distinction between normal wear and avoidable damage. The term "avoidable damage" obviously implies some steps can be taken to limit certain risks, but to an extent one type of conveyor belt damage defies this easy categorization.

Sometimes, stray pieces of metal can find their way onto a conveyor belt, generally from some sort of packaging or container used to carry conveyed materials.

If these scraps become lodged in a chute or some other mechanism, they can quickly tear through or groove the top cover or even the carcass of a belt. This can cause as much damage in moments as abrasion might in years, potentially rendering a conveyor unusable.



Abrasion from material loading will be seen as wear in the top cover in the load carrying area of the belt.

More importantly, the book explains that there is very little that can absolutely remove the possibility of this type of damage, and any potential for failure represents the potential for catastrophic failure. Some systems like grizzly screens, metal detectors and video monitors can improve the chance of catching scraps before they reach a belt or before they do damage, but they nonetheless require constant monitoring.

More on rips and grooves from foreign objects can be found in Chapter 4 of $FOUNDATIONS^{TM}$ Fourth Edition by Martin Engineering.

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