



The Cost of Carryback

Problem: Carryback can affect the entire length of a conveyor belt

Solution: Belt Cleaners and Transfer Point

Carryback can actually prove more costly and difficult to address than transfer-point spillage.

Though there are similarities between the two problems, carryback can actually prove more costly and difficult to address than transfer-point spillage or other localized issues with fugitive materials.

The primary issues with carryback is that, because materials can come off the belt at any point, it can affect the entire length of a conveyor belt, whereas most issues of spillage are largely contained to a single point in the system. This will require cleaning crews to work along the full length of the conveyor, and making its removal more extensive and expensive than the localized cleanup of spillage.

Carryback often builds up on idlers, increasing friction and contributing to bearing failures. One large German lignite-mining firm calculated that roughly 30 percent of its return idler replacements were caused by wear in the support ring or face of the idler caused by the release of material along the belt line. This buildup can also create out-of-round components that contribute to mistracking. This problem is intensified by the fact that material buildup is generally spread unevenly across idlers. This mistracking can then lead to



Removed from the belt, carryback can attach to other surfaces, including the belt-cleaning system and the vertical walls of the chute.



Carryback can build up on idlers, causing issues with mistracking.



spillage or off-center loading, furthering issues with mistracking. Conveyor belt mistracking itself leads to shortened belt life, excessive labor costs for maintenance and cleanup, unscheduled downtime, and safety hazards.

A little cleanup/maintenance is inevitable in some cases but with proper carryback removal systems and transfer point solutions, maintenance time and expenses can be drastically reduced. In turn, this will prevent equipment failure and larger efficiency problems.

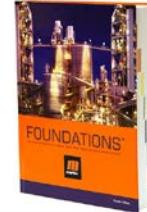
For carryback removal solutions, visit

<https://www.martin-eng.com/products/belt-cleaning-solutions.html>

For information on how to properly align conveyor belts, visit

<https://www.martin-eng.com/products/transfer-point-solutions/belt-alignment.html>

More on carryback can be found in Chapter 14 of FOUNDATIONS™ Fourth Edition by Martin Engineering.



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