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White Paper

Tuning your Conveyor Accessories: Dealing with the Impacts of High-Speed Conveyors

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Increasing the throughput of a belt conveyor system can either be achieved by a wider conveyor belt or a higher belt velocity. The first solution is most often impossible to realise, whereas the second often induces problems through higher stress on belts and transfer points. Here you can find solutions for this dilemma.

As coal mining and processing operations continue the ongoing search for ways to increase production volumes, one area of focus has been the conveyor systems that carry massive amounts of bulk material over long distances at high speeds. One sign of this is the increasing use of wider conveyors which are able to handle larger loads, a viable approach on new material handling systems or those undergoing a retrofit. Wider belts are typically not an option on existing conveyors, however, and many companies are increasing belt speeds to raise throughput. As the trend continues to accelerate, there are a number of challenges that arise. One of the most damaging is the increased heat from friction at speeds of 700 fpm (3.5 m/s) or more, placing greater stress on belts, bearings and other components.