

Variable Selection for Conveyor-Belt Mean Wear Rate Prediction

Journal Article

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Relevance to the Centre

Rubber belt conveyors are an integral part of many mining and bulk haulage applications. The belts are designed to wear in-service and thus need to be replaced periodically. This paper presents a process for building a model, and results thereof, to predict the life of new conveyor-belts based on a variety of design and operating parameters. This work also demonstrates, that for this dataset, in which two explanatory variables dominate, performance error is largely unaffected by variable selection approach. Finally, the work shows how widely used data science methods can be applied to commercially impactful equipment life prediction. The work can be easily replicated by conveyor owners to improve their own belt maintenance planning.

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