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IP OPPORTUNITY

Parallel Conveyor Belt Sampler

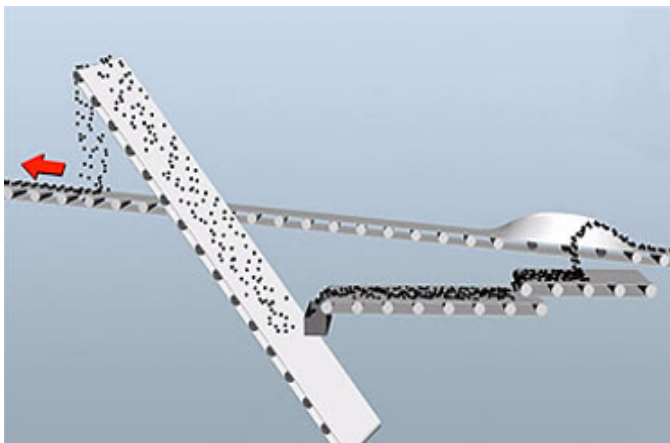
Invention Description

Each year billions of tonnes of materials are transferred by conveyor, and in the majority of cases they require constant sampling for quality control. The Parallel Conveyor Belt Sampler will greatly improve the safety, efficiency and quality of this process, as well as saving time and money.

It involves a parallel conveyor belt serving as a sampling system that runs alongside the current operational conveyor system. A hydraulic ram (a tripper mechanism) redirects the flow of materials from the main conveyor belt onto the parallel wider, slower impact belt. The impact belt then drops the material onto a sampling belt with a built-in weightometer. At the same time, a cross stream cutter takes a sample of the falling stream, which can be split down through secondary and tertiary sample systems. The diverted stream is then put back onto the main fast moving conveyor belt.

Inventor

Mr Noel Lambert, TUNRA Clean Coal



Features and Benefits

- Allows for 'falling stream sampling', the most accurate sampling option available.
- Can be easily retrofitted to already existing belt conveying systems.
- The hydraulic ram can be lowered in order for production to continue at the same time as maintenance work, or for a stop belt sample to be taken.
- The entire unit can be built at one level, making maintenance easier and preventing sample breakage.
- Systems can be run as stratified random, or on mass or time basis.
- Two systems can be set up on one belt, allowing for results cross-checking and verification.

Market Value and Size

This product applies to any industry that uses a conveyor belt system, ranging from mining to agriculture. As a result it is internationally applicable across numerous industries.

Development Stage

This product is currently at the planning and design stage. We seek partners and funding for the development of a prototype unit.

Patents

Provisional Patent Application No: 2010901979.

Contact details: David Fleming - Business Development Manager
P: +61 2 4921 8777
E: david.fleming@newcastle.edu.au