



**Spidler™**



The Spidler™ logo is located in the top left corner of the image. It features the word "Spidler" in a bold, sans-serif font, with a yellow spider-like symbol above the letter 'i'. A trademark symbol (TM) is positioned to the upper right of the word.

## BENEFITS

- Significant health and safety improvements by limiting the need to manually change idler rollers
- Reduced downtime caused by failed idlers
- Allows idlers to be replaced anytime of the day negating the need to plan major roller changes during shutdowns
- Supports extending idler life since they can be changed anytime of the day

**ENABLES IDLERS TO BE REPLACED 24/7...**

**...WHILE THE CONVEYOR CONTINUES TO OPERATE**

Changing conveyor idlers is a time consuming, high risk and non-productive task.

The current method used to change idlers involves stopping production, isolating equipment, lifting the conveyor belt as well as manhandling the idlers to and from the conveyor. There are a significant number of injuries caused each year from this task.

In an average bulk handling facility a single idler replacement causes over one hour in downtime, resulting in significant production loss.

The Spidler™ was developed by Sandpit Innovation and Lewis Australia in response to the physical and financial risk's involved in manually changing idlers.

A demonstration Spidler™ machine has been successfully tested in a large scale

iron ore port operation located in Port Hedland, Western Australia. The machine demonstrated replacing idlers using a gantry mounted robot, without human intervention, while the conveyor was under normal operating conditions (+15ktph).

By using robotics and automation technology human intervention concerns are eliminated. Furthermore, the change out is performed while the conveyor is fully operational, allowing production to continue.

The Spidler™ consists of a conveyor mounted carriage, a set of lifting arms capable of lifting a fully loaded conveyor belt (+15ktph), a swivel mounted robot and on-board power, hydraulics and electrics. The machine runs on light gauge rail mounted to the existing conveyor foundation which allows the device to travel the full length of the conveyor as well as up any inclines ( $\leq 15$  degrees).



# concept proven



Belt running +15ktpH...  
Live demonstration June 2013...  
Western Australia Iron Ore port facility...

Sandpit Innovation is currently taking orders of 2014 delivery.  
For expressions of interest please contact us:



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