

CASE STUDY: Tru-Trac[®] Conveyor Belt Tracking System

Product:	Tru-Trac [®] Conveyor Belt Tracking System
Product category:	Conveyor Belt Tracking
Location:	Power Station, Yallourn, Victoria
Conveyed material:	Brown Coal
Conveyor belt width:	1200 mm to 1400 mm
Conveyor belt speed:	4.5 to 5.0 metres per second
Rate:	2400 tonnes per hour
Installation date:	4 years ago, 2010

Previous problem:

The Yallourn Power Station commenced operations in 1974 with four generating units commissioned between 1974 and 1982. Every hour 2,400 tonnes of brown coal is used to boil water into superheated steam to drive four turbine generators. Our customer said:

The Cost of Material Spillage:

- **Loss of conveyed material**
- **Premature conveyor system replacement costs**
- **Labour clean-up costs**
- **Trip hazards and OHS injury costs**
- **Downtime loss of production costs**
- **Damage to surrounding conveyor structure**

"We were experiencing constant tracking problems with our 2 tail-end spill conveyors. Both conveyors have gravity fed take up's and whatever we did to track them, the continual wire rope on the counterweights would automatically counter any adjustments that we made.

The conveyors were originally fitted with an inverted vee return idler which was installed to correct any tracking issues. It has been my experience over many years that inverted vees work well in this area but not successfully on slow moving conveyors."

The brown coal operated power station is located in the Latrobe Valley 150km east of Melbourne.



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Resolution:



Above: Image of the Tru-Trac® Conveyor Belt Tracking System - the range covers self-aligning idlers for tracking both the return and load-carrying sides on slow moving, reversible, high-speed and high-load belts up to 2500mm.

Below: Tru-Trac® Conveyor Belt Tracking System installed.



Right: Tru-Trac® customised installation at the Power Station.

Our customer continued:

"I had previously used Tru-Trac® idlers before and decided to trial one on our worst conveyor. I removed the inverted vee and then installed the Tru-Trac® in the same spot which was upside down to the normal fitting method.

It was an immediate success. I trialled it for 3 months and then bought another 3 for the remaining spill conveyors. I installed them in exactly the same location and in the same manner and I no longer have any belt tracking issues at all. They have been in use now for 4 years and I have not had to touch them."

Our customer is delighted with the decision to install the Tru-Trac® Conveyor Belt Tracking System. It has met our customer's expectations and solved their **immediate belt tracking issues**. After 4 years of continuous use, the Tru-Trac® **reliably keeps the belt tracked "true" and has required no adjustments to maintain the correct belt alignment**. The outcome is that material spillage is successfully avoided and clean-ups are not necessary.

