

BEST PRACTICE

LOCATION: Quarry **ARTICLE YEAR:** 2007
ACTIVITY: Maintenance & Housekeeping **COMPANY:** Bardon Aggregates
SUB ACTIVITY: N/A **COMPANY LOCATION:** Westleigh Quarry, Tiverton, Devon
BEST PRACTICE No: BP466 **COMPANY TEL:** 07740934114

TITLE

 On Video

Lift devil - safe replacement of rollers on belt systems

ARTICLE

In order to replace return rollers on a conveyor belt it is necessary for the return belt to be lifted clear of the roller. This is required so the old roller can be removed in a controlled manner and a new one fitted in its place.

In the past the most common way of doing this was by using a bar wedged under the return side of the belt and tucked under the handrails. The bar would then be tied off and the roller replaced. This was however, not a very safe practice. Tension was left in the belt from this and so it was hard to control the safe removal of the roller, meaning it could fall from whatever height it was at.

To improve on this situation the lift devil was created. The main design specification for this was that it had to be light and easy to use.

The lift devil comprises of:

- two lengths of medium grade pipe
- a pair of adjustable spanners
- a ratchet podger spanner
- a 6mm hexagon bolt for the safety catch.

The fitting of the lift devil is done by just one person safely and quickly. The uppermost longest bar is placed across the top side on the conveyor chassis with the locator legs either side of the belt. The small short bar is then placed into the locator legs and the 6mm retainer bolt fitted. This bolt is fitted so the small bar cannot be dislodged from their locator legs. With the ratchet podger fitted to the hexagon bar on the end of the top bar, the adjustable spanner is used to turn the top bar. The ratchet podger stops the small bar from going back on its self and so holds the belt clear of the roller, which means it can then be replaced in a safe controlled manner.

This entry was a runner up.

ARTICLE IMAGES

