

BEST PRACTICE

LOCATION: Quarry
ACTIVITY: Production and Processing
SUB ACTIVITY: Aggregate processing
BEST PRACTICE No: BP144

ARTICLE YEAR: 2005
COMPANY: Tarmac Central
COMPANY LOCATION: Lound Quarry, Nottinghamshire
COMPANY TEL: 01777 818325

TITLE

Plough removal of snow from conveyer belts

ARTICLE

Throughout winter, when snow or rainwater falls on field conveyor belts, it collects in the trough of the belt, freezes and turns to ice overnight. The following morning when the conveyors are started, the snow and ice is carried along the belt and is deposited into the drive-head transfer chutes, which frequently become blocked and need to be cleared before work can begin.

Operatives have to be deployed to manually dig out the blocked chutes using shovels and scrapers, exposing them to manual handling risks as well as the risk of slips, trips and falls from working on frozen ground or from climbing onto icy conveyor structures to gain access to the chutes.

At Lound Quarry, Tarmac designed and built a snowplough that could be fitted to the conveyor. The plough is mounted permanently on the conveyor structure, and consists of a box-section steel frame mounted over the belt and a hinged-arm with a plough attachment fitted on the end fixed to the frame. ,Skirting-rubber™ is used for the face of the plough to prevent risk of damage to the conveyor belt. When the plough is needed, the arm is lowered onto the moving belt and the plough then deflects snow and ice off the conveyor before it can reach the transfer-point. When not required, the plough is locked out of the way in its raised position.

ARTICLE IMAGES