

Willington Quarry grading screen drive cover

William Newton | 2 Mar 2022 | ID225

🚩 Idea of the Month Competition Nominees

✅ Closed with success by William Newton

Approver: William Newton

Implementation coordinator: William Newton

Plan: Quick Wins

Classes: Efficiency + Employee Engagement + Health & Safety + Quality

Problem, context, environment, status

The site grading screen has twice over the last 12 months had a drive belt failure due to small amounts of spillage falling into the drive if the feed chute at the top of the plant blocks. This is due to small stones getting trapped in the drive and destroying the drive belt. This results in down time and loss of production so the spillage can be cleaned up and the drive belt replaced with new.

Resources: [Grading screen drive](#), [Blocked screen](#), [Spillage inside guarding](#)



Grading screen drive



Blocked screen



Spillage inside guarding

Description of the initiative

As it is very difficult to completely stop the chute above the screen from blocking, the best solution to prevent the down time of damage to the drive belts was to try and stop the spillage from getting into the drive and damaging the belts. This was done by fabricating a small cover above the drive to deflect spillage away from the drive belts, so preventing damage to the belts and increasing plant run time.

Resources: [Screen with out cover](#), [Cover fitted over drive](#), [New cover](#), [New drive belt](#)



Screen with out cover



Cover fitted over drive



New cover



New drive belt

Expected benefits

Reduce down time , reduce spillage from failed drive belts. Reduce cost by removing early failure of drive belts due to stones getting into drive and destroying belts. Easy to make and fit and effective , improving motor cooling by removing spillage that clogs motor fins.

Resources: Cover



Cover