

BEST PRACTICE

LOCATION: **ARTICLE YEAR:** 2010
ACTIVITY: Access & Egress & Working at Height **COMPANY:** Hanson UK
SUB ACTIVITY: N/A **COMPANY LOCATION:** Bradford Asphalt Plant
BEST PRACTICE No: BP747 **COMPANY TEL:** 01274 606479

TITLE

Safe access and egress for maintenance and housekeeping

ARTICLE

Description

Bradford Asphalt plant had a problem with distance-guarding that covered eight feed bins running to the main feed conveyor. Since the whole section had to be isolated via a Castell key, it did not allow frequent cleaning and maintenance of the individual belts. This resulted in significant dust and material build-up throughout the week. The occupational hygiene dust surveys showed that the levels were approaching the workplace exposure limit. To maintain housekeeping standards and comply with legal requirements under COSHH, production had to be halted to ensure safe working.

A further safety issue was that maintenance on the feeder or belts had to be undertaken at height. Operatives were using step ladders since there was insufficient space to use lifting equipment. A solution was sought that would allow independent access to each of the feeders/transfer belts for maintenance and/or cleaning and to provide close-guard protection when running.

An innovative, dual-function guarding and access system has now been designed and installed at the plant. The new design features a heavy duty lattice platform at either side of the feeder/belt, hinged at the base. When the feeder/belt and collect conveyor are operational they are in the vertical position and provide close-guarding protection. This allows access to the area to clean up dust accumulation/spillages from around and under the belts while the feeders remain operational.

If maintenance is required on any of the feeders/belts, they are isolated and locked off using personal clasps, and the appropriate platforms are lowered and locked to provide a working platform. Handrails are slotted into the fixings around the circumference of the platform and a purpose-made metal ladder hung onto the platform side, with a protective chain across the ladder head when people are working on the platform. A metal bridge has also been made to span the collection conveyor and allow safe access to identical platforms on the far side of the belt. When work is complete, the platform reverts back to the vertical position to act as a close-guard, isolation is removed and the feeder re-started.

A new industrial vacuum provides an improved level of reach under the belt, reducing both manual handling and the incidence of increased airborne RCS. Attachments purchased with the vacuum allow suction to be carried out in advance, removing the problem of a build-up of fine ,ledge dust™ usually disturbed during maintenance.

Benefits

The site team has taken great satisfaction in solving a long standing problem. The solution was found by taking everyone™s ideas into account and ensuring good communication at all levels. The main benefits are:

ARTICLE IMAGES

