

## BEST PRACTICE

LOCATION: Quarry  
ACTIVITY: Access & Egress & Working at Height  
SUB ACTIVITY: N/A  
BEST PRACTICE No: BP2056  
COUNTRY OF ORIGIN:

ARTICLE YEAR 2019  
COMPANY: Aggregate Industries  
COMPANY LOCATION: Bardon Hill  
COMPANY TEL: 0000

### TITLE

Light weight plastic guards

### ARTICLE

#### DESCRIPTION

Aggregate Industries' sand and gravel quarry at Newbold produces in excess of one million tonnes per annum. The main conveyor from the surge pile, that feeds material to the processing plant, has a high capacity belt. It is subjected to very high wear around the tail end drum which is in constant need of routine maintenance.

The guards are regularly removed to gain access for planned maintenance activities such as changing idlers, replacing barge boards and skirts, cleaning, replacing bearings and pulleys and replacing the conveyor belt.

The original guards were manufactured of steel and held in place by numerous bolts. Removal and re-fitting of these heavy guards was time consuming and labour intensive. The hazards associated with these panels were related to the manual handling of heavy and awkward sections, trapping and pinching of fingers, slips and trips over removed guard panels on walkways.

The decision was taken to trial the Diacon, quick release, plastic guard system supplied by MES International Limited. The system was installed and incorporates the following features:

1. The guard panels do not require a frame construction
2. Panel weight is marked clearly on each guard section
3. Lightweight panels are very easy to remove
4. Panels are 100% corrosion free, no need to paint
5. Panels have long life UV protection (10 years plus)
6. Panels easily configurable to fit most applications
7. Panels have a mount using drop on hook and hang system – panels can be stored on handrails when removed
8. The bolts securing the panels are fully encapsulated and retained in the plastic guarding system (No more missing bolts)
9. Guards can be designed to accommodate associated activities - e.g. remote greasing and trip wire control
10. The panels have sound deadening qualities

#### BENEFITS

- Maintenance significantly easier and more efficient
- Operators can remove a panel without assistance – reduced resource requirement
- Reduction in downtime and lost production | Short payback on investment due to savings | New system popular with operators
- Reduced manual handling hazards
- Meets UK standards on manual handling
- Reduced risk of slips, trips and falls
- Reduced risk of injury whilst working with panels – trapping and pinching
- A safer work environment

### ARTICLE IMAGES

Click image to enlarge



Before

Click image to enlarge



After