# BEST PRACTICE

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| **LOCATION:** | | **ARTICLE YEAR:** | 2010 |
| **ACTIVITY:** | Production and Processing | **COMPANY:** | Midland Quarry Products |
| **SUB ACTIVITY:** | Asphalt & coated stone | **COMPANY LOCATION:** | Cliffe Hill Asphalt plant |
| **BEST PRACTICE No:** | BP698 | **COMPANY TEL:** | 015302 30530 |

**TITLE** On Video

## Redesign of batch heater thrust assemblies

**ARTICLE**

DESCRIPTION

In the original design for the Quadretec (now Mixlance) batch heater, the thrust wheel assemblies were positioned underneath the batch heater drum. Any maintenance, such has greasing or changing the wheel assemblies, had to be undertaken when the drum had stopped.

The thrust wheel assembly weighs approximately 25kgs and is an awkward shape to lift and position. This work was carried out by the fitter who had to crawl into a tight space and operate whilst lying on his side. Maintenance on the wheel assembly created manual handling and trapping hazards and was undertaken in a restricted work area.

When maintenance was required, the heater had to cool down before the wheel assembly could be accessed, adding to the plant downtime.

When the batch heater was being replaced, the opportunity to reposition the thrust wheel assemblies was an important safety issue. In consultation with Mixlance, the manufacturer, a new design was agreed. The thrust wheels are now positioned on the outside of the batch heater drum making them easily accessible from the walkway and enabling greasing and wheel changes to take place safely.

BENEFITS

1.The manual handling and trapping risks associated with working on the thrust wheel assembly have been removed

2. The wheel assemblies now run cooler reducing wear on the bearings and the frequency of replacement

3. The wheel assemblies can be changed safely and immediately without having to wait for the heater to cool down resulting in less downtime

4. Tarmac has implemented a programme of changing all batch heater wheel assemblies to the new, safer design at a cost of £7,000.

**ARTICLE IMAGES**

Before

After