BEST PRACTICE

LOCATION:	**Asphalt/Coating plant**	**ARTICLE YEAR**	**2019**
ACTIVITY:	**Maintenance & Housekeeping**	**COMPANY:**	**Midland Quarry Products**
SUB ACTIVITY:	**N/A**	**COMPANY LOCATION:**	**Quadratec Cliffe Hill Quarry**
BEST PRACTICE No:	**BP2075**	**COMPANY TEL:**	**0000**
COUNTRY OF ORIGIN:			

TITLE

Batch heater barrel upgrade

ARTICLE

DESCRIPTION

MQP's asphalt batching plant at Cliffe Hill Quarry has twin barrels. Historically MQP would replace the lifter liners in both barrels every 6 months and the actual lifters roughly every 2-3 years.

However, following the introduction of RAP and an increase in the operating temperatures in the barrels, the wear rate increased. The liners were requiring replacement every 3 months and the actual lifters every 12 – 18 months – effectively doubling the wear rate.

The enhanced wear rate was doubling the amount of maintenance required in each barrel, increasing confined space work, burning and welding, manual handing, plant downtime and cost.

MQP decided to review what could be done to reduce the wear.

Working with a contract maintenance company, it was decided to trial the use stainless steel, lifters, liners and bolts in one of the barrels. This replaced the traditional mild steel components. The new stainless steel parts were installed during a Christmas holiday shut down and then monitored on a monthly basis. After 12 months they still looked like new!

The first barrel has been operating for over 18 months and is still not showing any signs of wear, no maintenance has been required on the inside of the barrel.

The cost of per barrel of manufacturing and installing the stainless steel lifters and liners is £15,000. This approximately equals the costs of using and replacing the mild steel lifters and liners over a 12 to 18-month period. However, this figure does not include all the operational efficiencies and the health and safety benefits. MQP is still waiting to find out what the actual life span for the new lifters and liners will be. The second barrel has now been converted.

BENEFITS

- Reduced need for confined space work
- Reduced burning, welding and manual handling
- Reduction in downtime for maintenance
- Improved efficiency of plant in operation
- Reduced contamination issues as the barrel is completely emptying
- No residues as the lifters staying in great condition
- Maintenance team available for alternative work

ARTICLE IMAGES

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