

BEST PRACTICE

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|--------------------|-----------------------------|-------------------|---------------------------------|
| LOCATION: | Quarry | ARTICLE YEAR | 2006 |
| ACTIVITY: | Manual handling and storage | COMPANY: | Hanson Aggregates |
| SUB ACTIVITY: | N/A | COMPANY LOCATION: | Forcett Quarry, North Yorkshire |
| BEST PRACTICE No: | BP370 | COMPANY TEL: | 01325 718291 |
| COUNTRY OF ORIGIN: | United Kingdom | | |

TITLE

Primary crusher drive belt tension

ARTICLE

The primary crusher drive belts at this quarry were tensioned by moving the motor backwards and forwards on its bed. The motor, which weighs over a tonne, was held in place by four bolts and adjusted via a threaded bar. The belt was deemed to be at the correct tension when a man standing on a 36mm spanner could no longer turn the nut on the threaded bar.

This led to risk of injury through over-exertion, the spanner slipping or the operator falling.

To remove the physical aspect of this process, a hydraulic system was introduced. The motor bed was replaced with one designed to accept hydraulic rams. The rams were placed in lugs and pumped up to complete the tensioning. This simple yet innovative solution has not only made the task much safer, but it has also reduced the time it takes to tension the belts from around two hours to just 40 minutes.

ARTICLE IMAGES