

BEST PRACTICE

LOCATION: Quarry
ACTIVITY: Production and Processing
SUB ACTIVITY: Aggregate processing
BEST PRACTICE No: BP382
COUNTRY OF ORIGIN: United Kingdom

ARTICLE YEAR: 2006
COMPANY: Bardon Aggregates
COMPANY LOCATION: Colemans Quarry, Somerset
COMPANY TEL: 01373 836401

TITLE

Inclinometer for dumper to avoid overturning

ARTICLE

An incident occurred at this quarry where a driver's misjudgement caused the dumper's skip to turn over whilst tipping on a stockpile. In order to avoid another incident, the company decided to install an inclinometer.

However, fitting inclinometers to dumpers was a relatively rare practice and there was nothing suitable available. The company worked with Transport Support to design and install an inclinometer suitable for a Caterpillar 740 articulated dumper.

The instrumentation sits on the back axle of the dumper and monitors its angle. A tipping margin can be set, including defining a maximum angle. As well as a beeping noise inside the cab, there is also a speaker on the outside of the machine to alert those nearby of a potential hazard.

The inclinometer is still undergoing development. Further research is being considered to make the system only active in either first gear or reverse and also to link the system to the hydraulics of the skip so that, if the audible warning was ignored, the hydraulics would stop working.

ARTICLE IMAGES

