



SAFETY ALERT

Failure of flameproof enclosure – thread repairs

INCIDENT

The Department of Primary Industries (DPI) was notified that a number of thread repairs on a flameproof motor had failed.



Figures 1 and 2: Two separate examples of the numerous failed thread repairs on a flameproof motor

CIRCUMSTANCES

The failed repairs on the flameproof motor were located by a workshop that was contracted to overhaul the motor. The Motor had recently been removed from service in a hazardous zone of an underground coal mine.

INVESTIGATION

Both the Department and the workshop, which conducted the original repairs to the motor, sponsored professional investigations to analysis the failure. In addition the investigation considered the viability of thread repair methods.

RECOMMENDATIONS

Underground coal mines and flameproof overhaul workshops that undertake repairs to flameproof apparatus should review the full technical report that is available on the DPI web site, and implement recommendations made in the report. Reports can be located at <http://www.minerals.nsw.gov.au> > Safety > Technical Services > Electrical Engineering Safety > Guidance Material > Technical Papers.

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