

Safety Alert

Mines Inspectorate

Safety Alert No. 267 (ver. 6)
30 May 2011

Incorrect use of Victaulic flexible coupling SC 77

Mine type: All | **Hazard:** Air header becoming a projectile | **Cause:** Incorrect use not fit for purpose

Incident: A four-inch flexible Victaulic SC77 coupling was used to join a poly shouldered adaptor to a 6.3 kg steel air header in an underground mine. When air pressure was applied, the coupling failed to secure the ends, and as a result the air header was propelled 7 metres.

Equipment: Victaulic flexible coupling, Style SC77 (shown below right with air fittings attached) and a poly shouldered adaptor (shown below left).



Comments:

Investigations found that the coupling failed because it was not installed correctly. However, subsequent to the investigation it has been established that the manufacturer's Installation Instructions in section 5 state *Do not use Non-Victaulic fittings with Style SC 77 Couplings* and so this style fitting should not have been used in this application in the first place.

Installation Instructions for the SC77 can be found at www.victaulic.com/Docs/lit/I-SC77.pdf (1.93MB pdf).

Recommendations:

1. That Victaulic style SC77 flexible couplings not be used with any poly shouldered fittings or Non-Victaulic fittings and any that are, be removed.
2. That when introducing a new item of plant into the work environment, risk-management principles that take into account manufacturer's instructions be applied.

In this case, because the consequences of failure could reasonably have been foreseen as fatal, the change-management process should have been rigorous.

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