



***TECHNICAL BULLETIN***  
***ETI FIRE SYSTEM – RELIEF VALVE WARNING***  
***AND SERVICE BULLETIN***

**OVERVIEW:**

For safety and compliance to relevant Australian Standards, ETI foam storage cylinders, which are made to AS2470, have a relief valve fitted to protect against over pressurisation. For cylinders of 30 litres to 106 litres capacity, this relief valve is assembled into the filler plug. See photo 1. This is then concealed by a protective cap which has a sign indicating the location of the relief valve.

See photo 2. For the LES 15 L system where the relief valve is mounted on the discharge valve, the same relief valve is fitted with a tight fitting white plastic cap. The concealment of the relief valve in both cases is meant to minimise access to unauthorised adjustment and to protect the relief valve from foreign matter.



Photo 1



Photo 2



Photo 3

This is factory calibrated to relieve pressure at 2.0 Mpa (20 Bar) which is the maximum safe design pressure of the cylinder. The normal pressure for charging these cylinders is detailed in the ETI technical Manual at 1.375 Mpa (13.75 Bar).

A recent incident occurred where a relief valve was tampered with, raising concerns, as it showed that it may no longer be effective. Under duty of care provisions we wish to issue this technical bulletin so that all persons involved in installation and maintenance are aware that the relief valve is not to be adjusted or tampered with in any way.

People trained by ETI are also advised that all technical staff working with pressure vessels have a duty of care to pay due diligence to all related standards where this is made clear in AS2030. It states in chapter 5 of the standard that "Is reconditioned, and is covered by a certificate from the device reconditioner within the previous two years as complying with the inspection and test requirements of AS 2613 for the application".

Effectively this means that the pressure relief valve should be replaced every two years, as this will be far more cost effective than having the valve re-calibrated. However in the interest of supporting safety, ETI offers to re- check calibration of relief valves free of charge if they are returned to us.



Another concerning incident was that we were made aware that in certain locations (outside Australia) that pressurising equipment was being used that had the capacity to far exceed the test pressure of the cylinder at 3.0 MPa (30 Bar).

ETI offers a regulator approved for use. It has an absolute maximum of 2.5 Mpa (25 Bar) and an adjustable relief valve in the regulator which we recommend setting at 2.0 MPA (20 Bar). In this way the technician is not able to over pressurise during charging of the cylinder. The maximum charging pressure is still some 50% below the test pressure of the cylinder thereby maximising safe practices. The duty of care in the competency of the technicians doing this work rests with the employer. We recommend that training backed by verification of competency and permit control be used in all procedures relating to installing and maintaining ETI fire systems, and in particularly to work involving pressure vessels and high pressure gas charging equipment.. ETI has a comprehensive training facility at its factory in Magelang, Central Java, Indonesia and ETI dealers offer training in these important areas.

Prompted by our concern over a recent relief valve tampering incident, ETI has now re-designed the relief valve to be a less vulnerable to tampering by having the adjustment internal and then the access resin sealed after factory setting. All production from July 2011 will be of this type. We recommend that previous models with factory adjusted settings be replaced at the next fire system service or at the annual service. To support this program, ETI offers no charge replacements for existing models for customers who order the replacements before 15 August 2011

Yours sincerely

**LEIGH WALDON**  
Technical Director