PT ETI FIRE SYSTEMS
Jl Magelang – Kopeng, KM 11
Tegalrejo, Magelang 56192
Central Java – Indonesia

TECHNICAL BULLETIN
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ETI FOAM CYLINDERS

TECHNICAL BULLETIN

MANUFACTURING SPECIFICATIONS FOR FOAM CYLINDERS
FOR LISTING TO AS 5062 -2006

Currently ETI is undertaking the required listing process for compliance to AS 5062 – 2006. The foam cylinders are currently manufactured to all relevant Australian Standards.
The Steel Foam Storage Cylinders for heavy applications are sizes 26 Litre, 45 Litre, 65 Litre and 106 litre are manufactured under the following:-

BS EN ISO 9001:2000

- EN ISO 9001:2000
- ISO 9001:2000
- SNI 19-9001-2001

Quality Management Systems are Approved by:-
LLOYDS REGISTER QUALITY MANAGEMENT SYSTEM STANDARDS.

These cylinders are manufactured too much thicker wall thicknesses than most cylinders on the market today for this application. AS 5062-2006 now requires that potable water is to be used for the foam mix. When potable water is used with approved ETI foam, corrosion is negligible as long term tests at ETI have documented.

I wanted to also make customers involved in technical support and sales of the ETI product aware of some benefits that should be expressed to customers and I also wanted to announce a significant product improvement.

1) Note : AS 2337 1999 , Inspection test by mass for corrosion Ref 8.5 states "REJECTION CRITERIA" Any cylinder whose tested tare mass is less than 95% of the original tare mass shall be condemned in accordance with Clause 9.3." The actual net mass is stamped on the base ring for this purpose. Also, ETI cylinders manufactured in this range have a wall thickness of 3.2 millimeters. The minimum safe design wall thickness for these cylinders is 2.65 millimeters. This means under the standards for inspection that a 5% mass/weight loss is tolerable and up to 0.55mm reduction at the wall thickness.

ETI cylinders should be classified to AS1210 – 1997 D3 1 (d) Vessels in which corrosion effects are known to be negligible or entirely absent. This is based on the use of non corrosive potable water and approved ETI foam at the correct mix rate. Nevertheless, visual inspections must be done in accordance with the relevant standards.

2) ANNOUNCEMENT. ETI will now commence to manufacture the valve neck ring and the filler port in 304 grade stainless steel, welded to the steel pressure vessel. The body of the cylinders will remain unchanged from the above specification and compliances remain unchanged. This is beneficial in removing external surface corrosion to exposed fittings and gives a higher quality appearance. This will mean that we have an extremely high quality range of cylinders with greater mechanical strength for heavy applications than lighter weight stainless steel cylinders on the market. Our cylinders will also have part stainless steel construction. Current production runs will be of this new specification and customers should see the flow through of this cylinder specification shortly after existing stocks are exhausted.

Ph Int 62 293 550 7333
Fax Int 62 293 550 9253
info@etifiresystems.com

3) Another cylinder of 15 liters nominal total volume with 11.5 liters foam capacity, is also being added to the range in conjunction with our AS compliance program. This will be particularly beneficial for design of fire systems in light vehicle applications. For this cylinder, to keep carry weight to a minimum, it will be manufactured in thinner wall stainless steel. The complete specifications of this cylinder will be published in the soon to be released Edition 4 of the ETI Technical Manual.

Yours Truly
LEIGH WALDON
Chairman and Technical Director
PT. ETI Fire Systems