

Common Myth #14

Posted on [March 1, 2013](#) by [Amerex](#)

If a cylinder fails the visual inspection requirements, but passes the hydrotest, it's OK.

Description

Absolutely not! It is possible for a cylinder to pass hydrostatic testing in spite of having disqualifying features, features that have occurred during in-service field use, e.g., cuts.

While this doesn't seem logical this topic is vital because DOT has been levying fines for visual inspections not being performed. How can this be if the unit passes an actual hydrostatic test? It's important to remember that because the unit made it to your shop for testing that someone was paying attention to the extinguisher date. But did they do a thorough external visual exam before it arrived in your shop? Also it's important to remember that the cylinder requalification work that you perform has your name on it and that this cylinder may be in service for another five (5), seven (7), or twelve (12) years.

Cylinder requalification begins with a visual inspection. If this is performed correctly, according to Compressed Gas Association (CGA) pamphlet C-6, Standards for Visual Inspection of Compressed Gas Cylinders, you might not even have to perform a hydrostatic test! How can this be you wonder? Visual cylinder requalification proceeds hydrostatic testing, it doesn't replace it. If the visual inspection reveals cylinder features that are severe enough then the cylinder should be condemned and thus a hydrostatic test need not be performed.

OK, how can you tell when cylinder damage is severe enough to remove the cylinder from service without a hydrostatic test? According to CGA pamphlet C-6, , cylinders can be visually condemned for any of the following reasons:

Dents Cuts, Gouges or Digs

Isolated Pitting General Corrosion

Fire Damage Arc and Torch Burns

Line Corrosion Corrosion or Pitting

Neck Defects Crevice Pitting

Bulges Attachments

It is especially important to remember that by applying your stamp and labels you have accepted total responsibility for the safety of the cylinder. Don't forget that most warranties have expired by hydrostatic test time, leaving you with the entire liability burden.

CGA Pamphlet C-6 is only eleven (11) pages long and is very easy reading. While some of the measurement criteria are tough, the points you must understand are easily grasped by simply reading the document. You will probably welcome the opportunity to use this pamphlet as a tool to condemn your customers' cylinders. While you are still very likely to run into resistance, this pamphlet is your ultimate guide and must be followed.

Additionally – NFPA 10 has even more stringent requirements for the visual examination. See Chapter 8 paragraph 8.4.2*. There are nine items listed – the presence of any one of those items is cause for the cylinder to fail the exam and be condemned.

You will still have many difficult occasions when your clients don't care what the rules are. All they want is their cylinder tested and returned to service! Being a professional in the business of service, maintenance, and testing of fire extinguishers is not tough as long as you remember that even more important than a piece of property is the life of the operator of the fire extinguisher you tested and approved!