Common Myth #16

Posted on March 1, 2013 by Amerex

The gauge is reading in barely in the green on the high/low side. The factory must have over/under pressurized the extinguisher

Description

This depends entirely upon the temperature of the fire extinguisher. Maybe the extinguisher needs to be fixed – maybe it doesn't.

Please take a look at our Tech Tip #2. This Tech Tip explains how gauges work and also how temperature may affect the pressure in a fire extinguisher.

During summer months, we get complaints that an extinguisher is over-pressurized. When we investigate we find that the extinguisher was not over-pressurized – it was hot.

During winter months, we get the same number of calls complaining about extinguishers either being under-pressurized or leaking pressure. Further investigation proves that neither was the case. The extinguisher was cold.

While nitrogen is much more thermally stable than say, carbon dioxide, when you see 195 PSI as the working pressure for a fire extinguisher, that pressure is based upon a temperature of 70° Fahrenheit (21°C). As the extinguisher becomes cold or hot, the temperature shown on the gauge will vary.

Underwriters Laboratory tests are conducted throughout the temperature range that the extinguisher is listed for. Typically you will see next to the UL manifest a temperature operating range of -40° F to +120° F. UL tests the extinguisher for range, flow rates, fire tests etc. at both temperature extremes. This testing is meant to dispel any questions about the extinguisher's performance under a variety of temperature conditions. This also means that if the extinguisher is not reading in the optimum range because of temperature, it is no cause for alarm.

It may save you time (and therefore money) if you have a means to determine the extinguisher's temperature in a quick and efficient manner. This will avoid unnecessary work, trips and recharges. Keep in mind that if you try to condition the extinguisher to indoor, conditioned temperatures, this may take some time. Tepending on the size of the cylinder, it may take several days.

Paying attention to the temperature of the extinguisher may save you aggravation and help explain things to your customers during severe spells of either cold or hot weather.