

## Common Myth #3

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### Stainless steel extinguishers won't corrode.

#### Description

**Yes, they can.** While stainless steel is LESS SUSCEPTIBLE to corrosion in most environments, and is far superior for construction of water extinguishers, that does not take away the possibility of corrosion.

Quality of water supplies used to refill water extinguishers varies greatly throughout North America and the rest of the world. The amount of Chlorine and Chlorides in these water supplies may have an adverse effect on the life of the shell. As little as 30 Parts per Million (PPM) of Chlorine will cause stainless steel to corrode.

Installing stainless steel extinguishers in salt atmosphere environments (around coastal installations) may also corrode the outside of the shell over a period of time. It has been our experience that stainless steel extinguishers left OUTSIDE, UNCOVERED IN COASTAL ENVIRONMENTS DO VERY WELL, since rain is allowed to wash off built up salt. If the same extinguisher is put into an UNVENTILATED CABINET OR HAS A COVER IT CORRODES VERY QUICKLY.

Another issue that we find is corrosion of Class K units. This is usually caused by restaurant personnel spraying a chlorine solution on all of the equipment in the cooking area to prevent bacterial growth. However, chlorine will attack stainless aggressively. Should you run across this – look at the restaurants stainless appliances, hood and other surfaces. It is very likely that the corrosion problem is not isolated to just their Class K extinguisher.

Another common occurrence is water extinguishers around oxidizers. Here you are caught between a rock and a hard place. If the oxidizers (which are not usually flammable, but will intensify any fire), are stored in or around Class A material, water based extinguishers are the only thing available to use. Our water mist extinguishers offer some more protection as they have a painted shell.

Something else to keep in mind, corrosion on stainless steel shells works completely different and looks different than on mild steel shells, like dry chemical extinguishers. Instead of spreading out in a pattern and then flaking away layers of metal (such as you may have seen on dry chemical extinguishers), corrosion on stainless steel shells will not spread out or flake. Instead it will bore through the shell creating a pinhole at each spot where corrosion has developed a foothold. Anything that looks like aged line corrosion on a stainless steel shell should prompt you to hydrotest the shell (even if it is not due) or in some cases to condemn the unit without a hydrotest.

Amerex is one of the few companies that have been successful in making quality stainless steel water, wet chemical and water mist extinguishers for years. Our vast experience may help you in determining proper inspection, maintenance, recharge and hydrotest procedures for these superior class A, B, C, and K units.

