January 2017

CLEAN AGENTS 101

As technology and data changes, so does the hardware behind it. With that being said we need to keep this technology safe and protected from fire. The best way to do this? Well clean agents may be your best option!

Clean agents are useful when it comes to the three main goals of fire protection:

1. Continuous business operation
2. Prevent property damage
3. Save lives and prevent injury

There are four main categories when it comes to clean agents, the most popular being chemical and noble gases (inert). The remaining two are hybrid-water mist and carbon dioxide systems.

The very first episode of our mini series starring Clean Agents is coming your way in **February 2017!**

So what are the differences?

Hybrid-water mist systems are a newer

Chemical Clean Agent systems leave little to no residue and do not require costly clean-up. These systems can discharge in 10 seconds or less, extinguishing a fire quickly and effectively. The HFC-227ea & Novec 1230 systems are two of the most recognized systems in the world today. These system can halt combustible, electrical, and flammable liquid fires.

Noble gases, or inert systems, are considered the most green of all of the clean agents. This system requires the use of one or more of the gases nitrogen, argon, or helium. Although oxygen is being pushed out of the room, the inert system still allows enough oxygen to support a life while suppressing the fire.

alternative that incorporate both gases and water mist. The first system on the market, Vortex by Victaulic, emits water droplets smaller than 10 microns in size this means only 0.13 to 1.06 gallons per minute. This not only releases less water, but it also absorbs **50% more** heat than a traditional system. Talk about minimizing water damage!

Carbon dioxide systems are primarily used for unoccupied spaces and considered one of the original clean agent systems. CO_2 leaves behind no residue, cannot spoil, and requires no clean up. This system can smother fires within seconds and can be used in areas where water would damage property.

More Special Hazard Systems

Special Environment

We Want *YOUR* Questions!

Have a question about Clean Agents? Then send your messages to us via email, administrator@ranfpe.com, or through our Contact Page on our website.

www.ranfpe.com

Watch our mini series airing in February to see if your question was answered!

RAN around the World

Our president, Doug, spent the last week in Japan on a business trip. He was able to explore the cities of Tokyo and Ota while trying some of their amazing cuisine along the way!
Doug consulted for a facility for one of our global clients that asked for assistance in meeting their insurance carrier's request for enhanced fire protection. In the upcoming month RAN will be providing insights and working on economical fire protection upgrades that span from sprinkler systems to fire alarms, clean agent, and flammable liquid protection to name a few.

Next stop.. Germany!

FUN FIRE PROTECTION FACTS ABOUT JAPAN

1. Most of all fire protection products used in Japan are made in Japan.
2. The Japanese Fire Code takes precedence over most other codes and standards, like NFPA.
3. Japan still uses Halon (clean agent) to effectively address fire hazards.
4. Japan is on the metric system, imagine that!
5. The local AHJ has a lot of power on what is deemed acceptable fire protection. Close coordination is required to ensure that the final system is accepted.