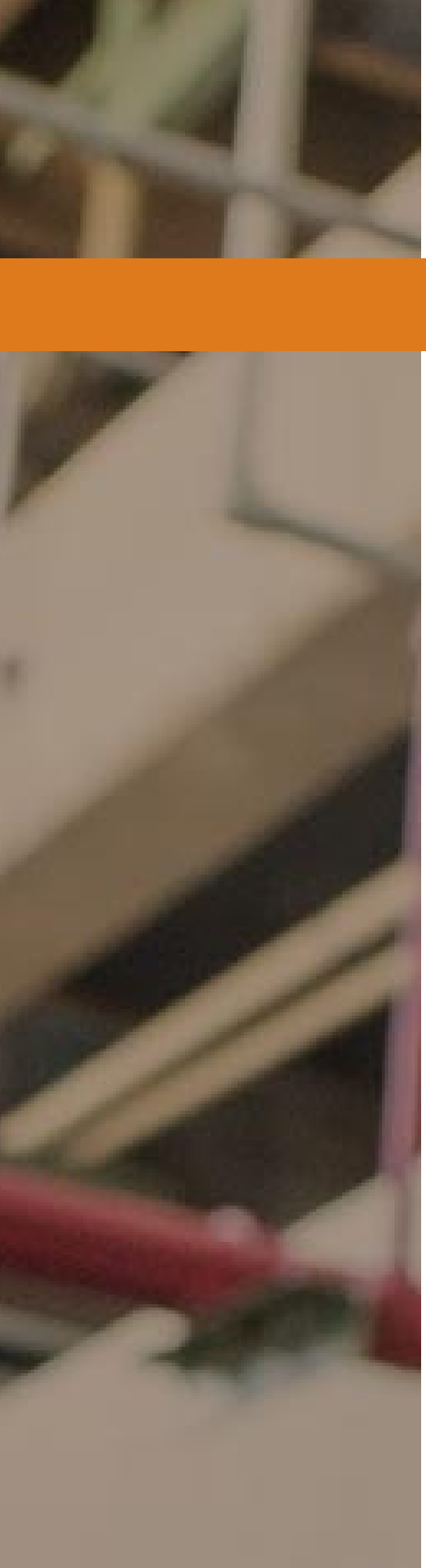


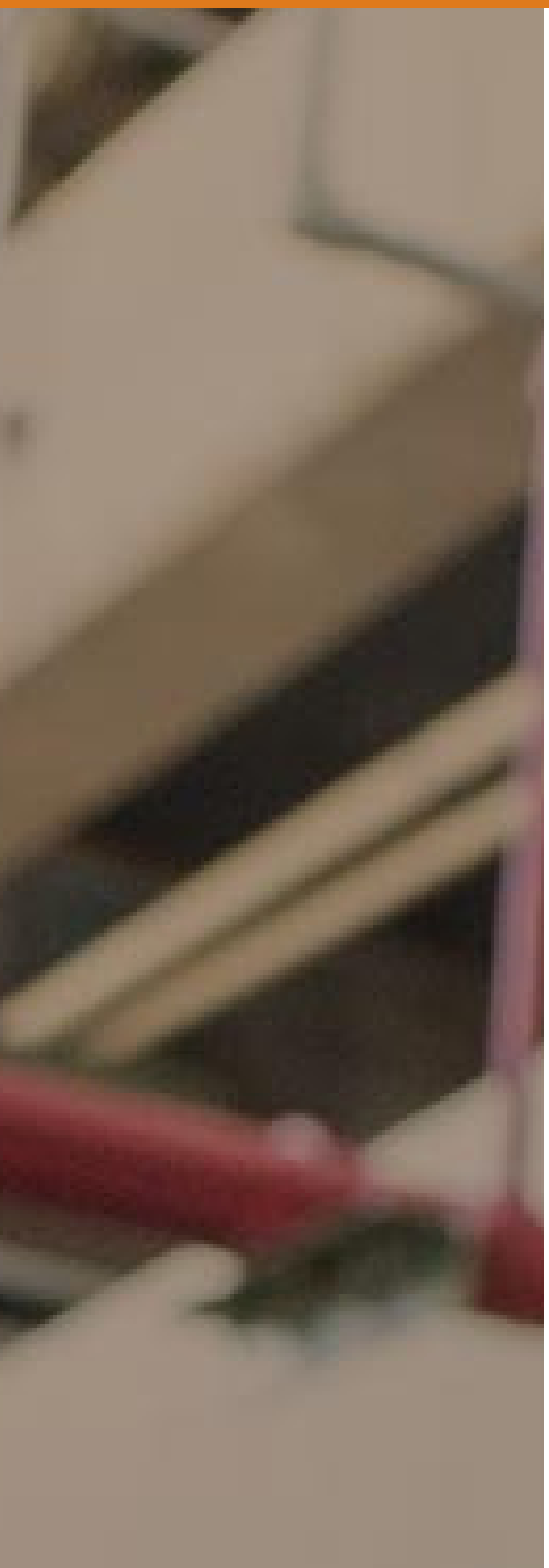
GAS SYSTEMS TESTING

Because an Enclosure Integrity Test is a mandatory commissioning function for any gaseous extinguishing system that complies with ISO 14520, NFPA 2001, EN 15004 and AS ISO 14520, it needs to be carried out by experts. This test is critical in confirming whether the enclosure that is being protected is able to maintain the suppression agent for a minimum duration of 10 minutes.

Gaseous Fire Extinguishing System: What the system does

A gaseous extinguishing system is usually designed to extinguish a fire following initial discharge, and with a well-sealed enclosure, it will maintain an extinguishing concentration for a minimum duration to prevent re-flash of the fire.

This is to allow time for fire services, site emergency response personnel, and safety officers to prepare and evaluate the fire situation. This also allows them to take control of the fire emergency after the fire extinguishing system has done its job..



Why gaseous fire suppression testing is so crucial

The other critical reason that an Enclosure Integrity Test has to be conducted on an enclosure where a fire extinguishing system is installed is to evaluate how tight the enclosure may be for the purpose of assessing pressure relief venting.

All gaseous extinguishing systems create negative and/or positive pressures on discharge. The magnitude of these
pressures will be dependent on the integrity of the enclosure. If an Enclosure Integrity Test has not been conducted then there is no way to assess whether the pressures on discharge will create a structural integrity problem for it.

Under ISO 14520, NFPA 2001, EN15004 and AS ISO 14520, all enclosures must be evaluated to ensure that structural
integrity is not likely to be compromised during a discharge. A critical part of this evaluation is to perform an Enclosure Integrity Test..