

Fact Sheet No. 2

Fire extinguisher servicing



According to a recent survey, fire extinguishers are estimated to save the UK economy over £500million, prevent 1,629 injuries, and prevent the loss of 24 lives. In 80% of the 2,173 incidents recorded in the survey fire extinguishers successfully dealt with the fire and in 75% of those cases, the fire brigade was not required to attend. The survey demonstrates the important role that portable fire extinguishers play in the preservation of life and property. In the majority of incidents when a fire has started, fire extinguishers are sought out and are generally the first form of fire-fighting on the scene. Therefore it is equally vital that those extinguishers are well installed and maintained.

Do we really need to have our extinguishers serviced?

Yes. Under the new Fire Safety Order, all employers are required to provide an adequate means of fighting a fire. Once installed this equipment should be regularly maintained by a competent person. BS 5306-3:2000 is the code of practice for the maintenance of portable fire extinguishers.

All employers in charge of a workplace must have their fire extinguishers serviced in line with this standard. Fire extinguishers should be professionally maintained by a 'competent person' at least once a year. Some of our customers choose more regular service intervals like six monthly or quarterly, reasons for this include:

- There is an ongoing problem of extinguishers being tampered with;
- Poor controls. Staff, not reporting used extinguishers;
- Especially high-risk processes requiring extra security;
- Lack of manpower to perform regular checks internally.

What defines a 'competent person'?

The standard defines a competent person as "a person with the necessary training and experience, with access to the relevant tools, equipment and information, manuals and knowledge of any special procedures recommended by the manufacturer of the portable fire extinguisher, to be capable of carrying out the relevant maintenance procedures of this standard".

What does a normal service involve?

The standard lays out in great detail the exact procedures that should be followed to

complete the service. These procedures vary depending on the type, make and model. They include checking all parts, gauges, strainer tubes, breather valves, safety devices and operating mechanisms to ensure they are safe and in good working order. Where possible parts are weighed and inspected both internally and externally for signs of wear or corrosion. The details of the service are recorded on a label on the extinguisher itself, and on a written report which is handed to the customer.

What is a 'discharge test' or 'extended service'?

The standard describes three types of service that are required: basic, extended and overhaul. All extinguishers require an extended service, though the intervals vary as the following table shows:

Type	Basic	Extended	Overhaul
Water/Foam	Annual	5 yearly	-
Powder	Annual	5 yearly	-
Powder (sealed)	Annual	10 yearly	-
CO2	Annual	5 yearly	10 yearly

An extended service includes a total controlled test discharge. This means the extinguisher is operated and carefully assessed. A thorough inspection is then undertaken, paying close attention to thread wear, internal linings, welds etc. If the extinguisher is deemed safe it is recharged and returned to service. The 'discharge test' fee that you see on your invoice covers the time spent by the engineer on this part of the extended service.

What happens if extinguishers are found to be unsafe or unserviceable?

Potentially the most serious hazard of defective extinguishers is the sudden uncontrolled release of pressure or ejection of parts. This can be caused by corrosion, wear or damage

to threads of any pressure retaining part, corrosion of welds, or extensive general corrosion or severe pitting. In this case the extinguisher will be deemed 'unsafe for use' and marked 'condemned'. It should be immediately removed from service and made safe.

Where an extinguisher poses no safety hazard but is unlikely to operate correctly, is obsolete or does not conform to the standard, it will be deemed 'unfit for service' (UFS). Permanent UFS status can be due to a split internal lining, corrosion to the extinguisher body or where the extinguisher type has been deemed obsolete (e.g. Halon or soda-acid types). These problems are irreparable and the extinguisher will be marked 'condemned'.

What could we be doing ourselves to help?

Clause 4 of the standard states: "It is recommended that regular visual inspections of all portable fire extinguishers be carried out by the user or user's representative..." It suggests these inspections should be at least monthly and ideally weekly. These inspections should ensure:

- Fire extinguishers are in their correct positions and show no signs of use
- The means of escape are clear of all obstructions; and
- The fire notices are clearly visible.

Further reading

For full details of the laws and standards relating to portable fire extinguishers please refer to the following documents: BS EN 3; BS 5306-8; BS 5306-3:2000; BS 6643-1; The Pressure Equipment Directive [2]; 'Fire Safety - An Employers Guide' from HSE Books is a very helpful booklet.