

Inspection Services

Elmac Technologies[®] the international technical leaders in flame and explosion protection systems offer a comprehensive inspection service for flame arresters and low pressure venting equipment*.

Customers can benefit from low-cost in-situ servicing of their safety equipment by the acknowledged experts in flame arresters and low pressure venting equipment.



Why are inspections required?

Flame arresters and low pressure venting equipment are essential safety items which, if not inspected regularly, can become blocked or fouled leading to reductions in process efficiency, or worse, a loss of explosion protection.

Flame arresters fitted on storage tanks that become blocked due to process contaminants or acts of nature (bird nests, bee hives etc.) could lead to storage tank implosion. Low pressure venting equipment with faulty valves could result in uncontrolled vapour release, thus leading to the presence of potentially explosive atmospheres and an increased risk of deflagration.

Several other factors may also cause the performance of a device to alter over time including changes in process conditions, increasing corrosion rates in flame arrester elements. It is known for arresters to be accidentally damaged during installation and for that damage to go undetected. By ensuring safety equipment is regularly inspected, operators optimise plant process efficiency, reduce operating costs and minimise the risk of damage to plant and personnel.

Why are Elmac offering an inspection service?

Elmac are offering an inspection service in response to an increasing requirement from operators who:

Due to maintenance crew down-sizing, are finding it increasingly difficult to complete maintenance schedules

Have fewer staff familiar with inspection and maintenance of flame arresters and low pressure venting equipment

Need assistance in ensuring compliance with the latest regulatory guidelines

Wish to satisfy the requirements of their insurers

How often are inspections required?

The frequency of inspections depends on the process. Elmac recommends at least one inspection per year or:

- After any explosion or significant process disturbance
- At any sign of increasing pressure drop or flow losses
- In the event of any downstream contamination
- Prior to any change to process design or conditions

*Low Pressure Venting Equipment includes: pressure relief valves, vacuum relief valves, pressure/vacuum combination valves, tank blanketing valves, safety vents, manways, free vents and gauge hatches.

Inspection Services

ELMAC EXPERTISE

Flame Arresters &
Low Pressure Venting Equipment

Who will carry out the service?

The inspection will be carried out on-site by Elmac's highly trained, qualified and experienced engineers. Coupled with a reputation for outstanding customer service, Elmac are acknowledged as technical experts in flame arresting and low pressure venting equipment. Since the 1940s Elmac have accumulated considerable experience of the complexities associated with the design, installation and operation of these types of safety equipment around the world.

What will an inspection include?

An Elmac inspection consists of the following stages:

- Risk assessment
- Dismantle equipment (if required)
- Inspect equipment for evidence of:
 - Physical damage
 - Corrosion
 - Blockages
 - Heat damage
- In the event of any of the above, repair if possible
- If equipment is operational:
 - Replace gaskets/seals with new
 - Re-align elements/pallets as required
 - Return equipment to full working order
- Provide full written report and assessment of findings and recommendations

How long does an inspection take?

The duration of the service will depend upon the number, size, type and location of the equipment to be serviced. An estimate will be provided as part of a written quotation.

Are site surveys included?

Elmac are able to offer advice and guidance for explosion protection systems and low pressure venting equipment for a wide range of industrial applications. Customers should advise if they would like to include this as part of the service.

Who will benefit from this service?

In conjunction with an inspection, Elmac engineers are able to assist operators with other issues related to flame arresters and low pressure venting equipment:

- Provide updates on regulatory compliance
- Present product information and operating capabilities
- Provide full overhaul and re-setting of valves and ERVs



Where is this service available?

Elmac is able to offer inspection services to any site or facility in the United Kingdom.

When are inspections available?

Elmac maintains sufficient flexibility in its inspection schedules to match customer plant down-times and maintenance programmes.

What do customers need to provide?

Elmac engineers are trained in all relevant health and safety requirements including:

- The Health and Safety at Work Act
- Working at Height regulations
- Manual handling
- COSHH and DSEAR
- ISO 14001 and OHSAS 18001

Operators are expected to ensure a safe working environment for the inspection service and to provide access to equipment (ie. ladders/scaffolding/cleaned tanks/pipes etc.) along with any exceptional personal protective equipment.

How much will it cost?

Inspection service costs will depend upon the number, size, accessibility and location of the items which require servicing. Full written quotations are available on request.

Any other questions?

The Elmac Customer Support team will be happy to answer any questions you have regarding Elmac inspection services.

Customer Support

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All specifications are correct at time of print, are for guidance purposes only and subject to change without prior notice.



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