

# Flame arresters and low pressure venting equipment



**Elmac Technologies Limited**  
Greenfield  
Flintshire  
United Kingdom  
CH8 9DP  
T +44 (0) 1352 717600  
F +44 (0) 1352 717642  
E [sales@elmactechnologies.com](mailto:sales@elmactechnologies.com)

# Flame arresters and low pressure venting equipment

Elmac Technologies® is renowned for bringing enhanced levels of safety protection to the world's most challenging industrial environments.

In this brief guide, we outline our range of flame arresters and low pressure venting equipment.

Elmac's range of products are designed for various applications and conditions, please visit our website [www.elmactechnologies.com](http://www.elmactechnologies.com) email [info@elmactechnologies.com](mailto:info@elmactechnologies.com) or call + 44 (0) 1352 717600 for specific advice.

## Flame Arresters (ATEX Accredited)

### End-of-Line deflagration flame arresters

End-of-line deflagration arresters are designed to be installed at the end of a pipeline or exit vent from a vessel, where the ignition source is external.



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| <p><b>AVA Series</b></p> <ul style="list-style-type: none"> <li>• Replaceable element</li> <li>• Gas groups I and IIA</li> <li>• 15 – 400mm NB</li> </ul> | <p><b>FE-EXH Series</b></p> <ul style="list-style-type: none"> <li>• Replaceable element</li> <li>• Gas groups up to IIB3</li> <li>• 15 – 400mm NB</li> </ul> | <p><b>AVC Series</b></p> <ul style="list-style-type: none"> <li>• Replaceable element</li> <li>• Gas groups up to IIC</li> <li>• 25 – 150mm NB</li> </ul> | <p><b>SV Series</b></p> <ul style="list-style-type: none"> <li>• Light duty</li> <li>• Fixed element models</li> <li>• Gas groups up to IIB3</li> <li>• 10 – 50mm NB</li> </ul> | <p><b>SVE Series</b></p> <ul style="list-style-type: none"> <li>• Light duty</li> <li>• Fixed element models</li> <li>• Gas groups up to IIB3</li> <li>• 15 – 50mm NB</li> </ul> | <p><b>FE-IE Series</b></p> <ul style="list-style-type: none"> <li>• For use with Pressure / Vacuum Relief Valves</li> <li>• Gas groups up to IIB3</li> <li>• 15 – 300mm NB</li> </ul> |
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### In-Line deflagration flame arresters

In-line deflagration arresters are designed for pipeline installation close to the potential source of ignition.



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| <p><b>SGE-IB Series</b></p> <ul style="list-style-type: none"> <li>• Replaceable element</li> <li>• Gas groups up to IIB3</li> <li>• 15 – 400mm NB</li> </ul> | <p><b>DFB Series</b></p> <ul style="list-style-type: none"> <li>• Replaceable element</li> <li>• Gas groups up to IIB3</li> <li>• 25 – 150mm NB</li> </ul> | <p><b>MB-IB Series</b></p> <ul style="list-style-type: none"> <li>• Microbore units for gas sampling/analysis</li> <li>• Gas groups up to IIB3</li> <li>• 15 – 20mm NB</li> </ul> | <p><b>CE-IB Series</b></p> <ul style="list-style-type: none"> <li>• Replaceable element</li> <li>• Gas groups up to IIB3</li> <li>• 15 – 200mm NB</li> </ul> |
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### In-Line detonation flame arresters

Elmac models are designed for the worst-case unstable detonation conditions in pipelines.

## Low Pressure Venting Equipment

### Storage tank and vessel protection

Elmac tank fittings are designed to protect tanks from rupture or implosion during filling and/or emptying cycles. They limit product loss and environmental discharges whilst also protecting tanks during thermal changes.



### Pressure/Vacuum Relief Valves

- Pressure-only, vacuum-only or combined
- Weight or spring loaded
- 50 – 300mm NB

### Tank Blanketing Valves

- Prevent ingress of air / moisture
- Reduce evaporation of stored product to negligible amount
- 15 – 100mm NB

### Bursting Discs

- Wide choice of materials and designs
- Forward and reverse acting
- 50 – 400mm NB

### Tank access and ventilation



### Manways

- Pressure-only and pressure/vacuum relief emergency manways
- PV models have additional spring-loaded vacuum valve
- 250 – 600mm NB

### Gauge Hatches

- For measurement and sampling
- Safety pedal for 'hands-free' operation
- Pressure relief option available

### Vents

- Free vents and filter vents
- Wide range of sizes/materials
- Customised designs for individual applications

## Ancillary Equipment



### Thermocouples

- For use with deflagration and detonation arresters
- Temperature measurement of process flow
- Tailored to customer requirements

### Pressure Transducers

- For inclusion in Elmac in-line deflagration and detonation arresters
- Enable valuable process monitoring/creation of data streams

### Flashback Guards & Spark Arresters

- 304L and 316L stainless steel
- Knitted mesh panels
- Customised design for individual applications
- Tailored frames and mountings