

PROTEGO® Detonation Arresters

State of the Art Technology with Full ATEX Approval



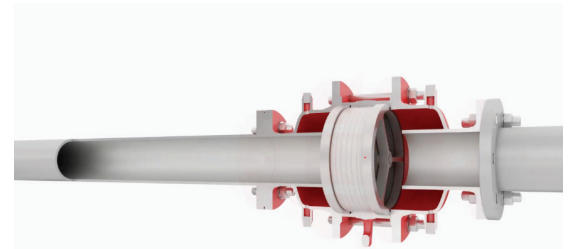
REDUCE CAPITAL & MAINTENANCE COSTS WITH OUR UNIQUE “STATE OF THE ART” DR-SERIES INLINE DETONATION FLAME ARRESTER TECHNOLOGY

PROBLEM

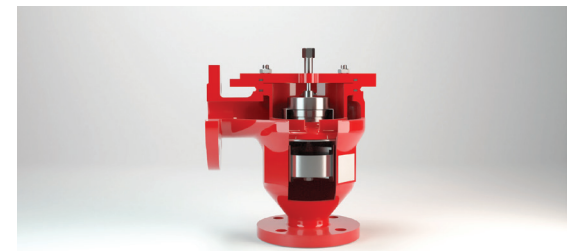
In times when budgets are tight and money is short it is more important than ever to use “**State of the Art Technology**” which economically solves your problems without sacrificing **safety** or **product quality**. If process conditions require In-line Detonation Flame Arresters to protect process vessels or tanks from detonations (which can occur if there is a flashback from a thermal combustion unit or if there is an ignition within the vapour collection header) the type of Detonation Arrester which is commonly installed at vessel or tank has a conventional “straight through” housing shape [Fig.1]. The installation of this type of detonation arrester results in the following problems:

- 90 degree elbow is required for the tank connection.
- Separation of pipe flanges to enable maintenance.
- Additional support structure maybe required during maintenance.

The problems result in high capital costs and high cost of ownership.



[Fig.1] PROTEGO® DA-Series In-Line Detonation Flame Arrester has the lowest pressure drop worldwid, but is still not the best design for installation on top of your reactors or tanks.



[Fig.2] PROTEGO® DR-Series In-Line Detonation Flame Arrester for reactor and tank protection.

Reduce Operational Expenses Without Compromising Safety



SOLUTION

After analyzing customer needs, listening to design engineers and maintenance crews, **PROTEGO®** developed the DR-Series of In-line Detonation Flame Arresters [fig.2]. The DR-Series uses a unique Shock Absorber, the flow optimized **Shock Absorber** breaks the impulse of the detonation shock wave so that a minimal amount of **FLAMEFILTER®** are required to dissipate heat, which keep **pressure drops low** and **maximizes flow efficiency**. DR-Series devices with “angle bodied” housing are ideal for installation on top of tanks or vessels.

Like all **PROTEGO®** Flame and Detonation Arresters, this model is end user oriented and focuses on low cost of ownership by minimizing maintenance burden. By removing the Shock Absorber/ Housing Cover maintenance crews can get direct access to the element assembly which generally consists of multiple 10mm thick filter discs held in an enclosing cage. If necessary, these discs can easily be removed from the enclosing cage for cleaning purposes. Single discs are also available as spare parts which helps to reduce the cost of ownership dramatically.

The DR-Series arresters are type approved for **Group IIA & IIB3** Vapours in accordance with **ISO 16852/ 80079-49:2024**.



PROTEGO® Enclosing cage with multi-disc filter system.

ALSO CHECK OUR CATALOGUE FOR OTHER FLAME AND DETONATION ARRESTER SOLUTIONS. SPECIAL PRODUCTS FOR POLYMERIZING VAPOURS (STYRENE, ACRYLATES), WHICH ARE IMMUNE TO CLOGGING ARE AVAILABLE

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