

PROTEGO® BE/HK & BE/HR Series Flame Arresters Can Stand Up to a Standing Flame in Alcohol Service

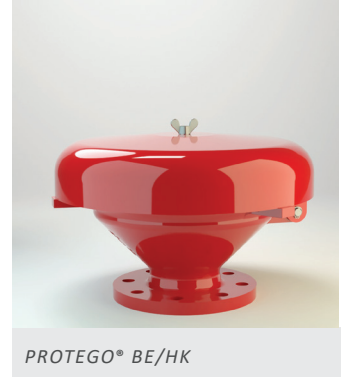


PROBLEM

The vast majority of end-of-line Flame Arresters available on the market are rated for use in **Group IIA** vapour service. Industry test protocols for end-of-line Flame Arresters often require that an arrester be tested to verify they prevent flashback due to atmospheric deflagration (explosions) and that they also prevent flashback in the event of a continuous burning flame lasting from 30 minutes up to 2 hours. A typical **Group IIA** vapor used in such testing is propane (MESG 0.92 mm).



Endurance Burning Test



PROTEGO® BE/HK

Although many alcohols have an MESG above 0.92 mm and are classified as **Group IIA** vapors, these vapors burn much hotter than common **Group IIA** vapors. Field tests conducted by **PROTEGO®** and the **International Notified Bodies** have conclusively proven that a typical Group IIA end-of-line Flame Arrester that has passed continuous burn test with propane vapors may rapidly experience flashback if subjected to a continuous burning with alcohol vapors. To fully comply with international standards, **PROTEGO®** tests Group IIA endurance burning proof Flame Arresters with hexane.

The ability of an end-of-line Flame Arrester to **prevent flashback** in case of a continuous burning of alcohol vapors is further reduced if, a fixed weatherhood, gooseneck pipe connection, or P/V valve is installed above the Arrester. These arrangements allow temperatures caused by the continuous burn and the probability of flashback to increase.

SOLUTION

The **PROTEGO® BE/HK** and **BE/HR** series of end-of-line Flame Arresters provide **unlimited flashback protection** in the event of a continuous burning flame. These Arrester models are also approved for **Group IIB3** and **Group IIA** vapor services and provide you with the **extra level of safety required**.

Most Flame Arresters Will Experience a Rapid Flashback if Subjected to a Continuous Burning Flame from Alcohol Vapors



PRODUCT DETAILS

The **PROTEGO® BE/HK** and **BE/HR** end-of-line Flame Arresters feature a **spring-loaded weatherhood** which is held in place by a fusible link. In case a continuous burning flame develops on the Arrester, the weatherhood automatically opens to allow the release of heat to the atmosphere (instead of allowing a buildup of heat on the **FLAMEFILTER®** element). The **FLAMEFILTER®** element construction also has a special design to conduct heat radially in order to minimize heat build-up. These design features are incorporated into the **BE/HK** and **BE/HR** units so that protection against flashback is ensured in case of a continuous burning flame; even in **Group IIB3** vapor services.

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