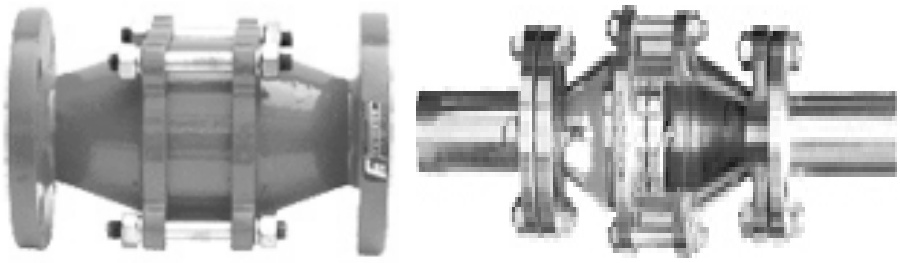
Flame Arrestor



An Arrestor is a passive device involving no moving parts which comprises of passageways of apertures that allow vapours to flow freely through the arrestor, but will not allow the passage of the flame front through it, thus prohibiting the transmission of flame from the unprotected side to the protected side of the device, when flammable mixtures are present. thus prohibiting the transmission of flame from the unprotected side to the protected side of the device, when flammable mixtures are present. The arrestor acts to simultaneously dispense & cool an approaching flame to a temperature below the Mixtures Auto Ignition Point, thus extinguishing the flame.

They prevent flash back against deflagrations in a pipe line. Therefore it is usually recommended that the flame arrestor be located as close to the potential source of ignition as possible. The maximum distance from the potential source of ignition will always be defined for any in-line deflagration flame arrestor and will be typically within 20 x the nominal bore of the pipe in which the arrestor is installed. If compliance with this constraint is not possible then it will be necessary to install a detonation flame arrestor which will withstand the more severe conditions that could occur.

Size & Construction

- Size :15 mm to 600 mm (1/2” to 24”).
- Body : Aluminium, Carbon Steel, Stainless Steel (304, 316, 304L, 316L),
- Arrestor Element :SS 316, SS 304, SS 321, SS 316Ti, Aluminium, Hastalloy C / B, Monel.
- Special Construction :Steam Jacketing, Temperature Sensors.

Testing & Certification

- Flame Arrestor are inspected By CCOE approved inspection agency on request.
- Sutiable for gas groups IIA , IIB & II C.
- Fainger Make Flame Arrestor are Type Tested and Certified by CMRI
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Type

- **End-of-Line Deflagration Flame arrestor :**

o End of line arrestor are designed to prevent the travel of the external flame caused by an external source of ignition from entering a system and also sometimes to prevent the flash back of a flame which has been stabilized on the arrestor. These are mounted at the end of a pipe (flanged or threaded inlet connection) and vents directly to the atmosphere. They withstand High pressures and temperatures, caused by combustion of mixtures.

- **In-line :** Inline Flame Arrestor are designed to prevent the passage of flame along a pipe line containing a flammable mixture which can get ignited.

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o **In-line Detonation Flame arrestor :** Detonation Flame Arrestor are designed to be installed in a pipeline where there is a significant distance between the arrestor and the potential source of ignition, or where the pipe is not straight and smooth, and there may be roughness, obstructions, bends, junctions or changes in section in the intervening pipe work. In-line detonation Flame Arrestor offer protection against high flame velocities, where the velocity is supersonic and is accompanied by a shock wave. Detonation arrestors must be especially applied when long pipes are connected between arrestor and ignition source.