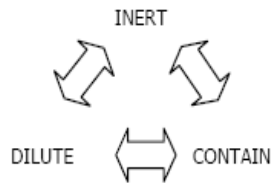


## Vent Collection Safety & Flashback Protection with



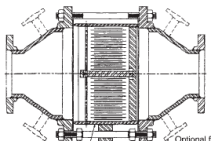
This involves the protection of ductwork and equipment from the transmission of detonations and deflagrations in the vent system.

Sources of ignition may include direct flames in the abatement device or various operations carried out in equipment attached to the vent system.



In order to meet the requirements of the ATEX Directive, the following philosophies are employed: inertion (below MOC), dilution (below LEL), or containment using flame arresters and slam-shut / suppression systems; or a combination of these.

Vent systems connect with every item in the plant. Introducing a poorly thought-out philosophy change can have major impacts on the ability to operate.



Accordingly, the selection of the correct approach is critical, and is a function of: plant and operations; flammability and corrosion characteristics of materials; and of the abatement device.

Our holistic approach examines your entire operation to ensure the most cost effective and least operationally disruptive solution possible. We achieve this through:

- **Structured data gathering methodology to establish:**
  - **Flammability Profile of Materials**
  - **Database of all Vent Sources**
  - **Relevant Operational Information**
  - **Abatement System Constraints**
- **Proprietary methodology consistent with HSE Guidelines**
- **Management of dispersed nature of data collection and design**
- **Expert application of NFPA 69 and TRbF 20 to meet with obligations under ATEX**

