



## PATENTED STATE-OF-THE-ART TECHNOLOGY WORKING FOR YOU!



**OSDF (Offset Dual Flange)**

The OSDF FAV Systems Detonation Flame Arrester is the best quality and the best protection that you can buy for the following features: gasket integrity, flame propagation stoppage through the full flame front spectrum, for having the longest continuous burn time rating, eliminating fluid traps and guaranteed cleanability. The OSDF incorporates the use of dual flanges on the flame quenching element section to ensure that the proper gasket can be installed to accommodate critical conditions. The dual flange arrangement also remains intact during a severe continuous burn condition. During a continuous burn condition the down stream side of the Detonation Flame Arrester gets red hot and can suffer from heat warpage and distortion. On the dual flange Detonation Flame Arrester, the upstream flanges do not get subjected to the elevated heat so they remain intact and functional, keeping critical piping intact.

The OSDF also offers superior flame front stoppage at elevated operating pressures. FAV Systems has increased the initial test pressure to ensure that these models will perform in demanding situations. Test reports are available upon request. The flame quenching process is PATENTED and incorporates the use of a ceramic bead pack to segregate and cool the approaching flame front which quenches or snuffs out the combustion. The ceramic bead pack is corrosion resistant and removable for cleaning purposes. The ceramic beads can be taken out, cleaned and reinstalled, saving the end user considerable costs. The ceramic bead pack is also not affected by a continuous burn condition. The maximum temperature rating of the alumina ceramic is well over the melting point of carbon or stainless steels. This feature ensures that the flame barrier between safety and danger remains broad for personnel and equipment protection.

The OSDF does incorporate a thicker continuous burn grid to ensure the maximum safety window for personnel to react or for the condition to change and go away. FAV Systems Inc. has invested countless hours and funds to develop the continuous burn protection that we offer in our Detonation Flame Arrester. We operate a production equipment rental division that has equipment subjected to all conditions. We have verified that continuous burns occur more often, or there are more chances of a continuous burn occurring than there is of having a severe flash back. Most common continuous burns are severe but only last about 1 hour. Generally they are detected and addressed or the process condition changes which in turn changes the continuous burn. Also there is a danger that during a continuous burn, if the flow is shut off and the detonation flame arrester is inadequate the flame can jump through the element once the velocity drops and you can get a failure. If you are safety minded, invest in the best, FAV Systems SS Detonation Flame Arrestors.

The OSDF is manufactured with the inlet and outlet being offset. This allows fluids travelling along the bottom of the piping to pass through the bottom of the detonation flame arrester and carry on down the piping. The element section then is always dry and fully open to allow the least amount of pressure drop and the maximum flow to pass through the unit. The OSDF can be installed vertically, 45°, or horizontally. This rugged design is unmatched in the industry.



DETONATION  
AND FLAME  
ARRESTORS

**FAV SYSTEMS INC. S.S.**  
DETONATION FLAME ARRESTOR



## TEST REPORTS ARE AVAILABLE AT YOUR REQUEST!

The OSDF is the top end of the FAV Systems family of Detonation Flame Arrestors. Generally they are installed in Petrochemical Plants, Refineries, or in critical conditions that require the best equipment you can buy applications. It is hard to define value when you are considering the personnel and equipment these devices are protecting.

We guarantee cleanability or we will give you a new element at our cost. We have cleaned hundreds of elements of all sizes, saving our customers hundreds of thousands of dollars. The FAV Systems Detonation Arrestors have proven to be superior in performance and cleanability. With the removable ceramic beads and the cleanable continuous burn grid, we guarantee that we can bring your element back to its original state. Abusive situations may be excluded.

### Detonation Arrestor Model: Offset Single Flange OSSF

The Offset Single Flange incorporates all the working features of the OSDF except it does not utilize the dual flanges on the element section. It is manufactured with a machined gasket face on the element section. The same gasket section is available for the OSSF as for the OSDF. The reason for the design change is economics.

Some applications call for exotic metals such as hastelloy and Tantalum to be used for chemical attack corrosion resistant. When large diameter flanges are purchased of these types of materials it can be very expensive. FAV Systems has re-engineered these OSSF's to reduce costs. There is some integrity lost in the bolting system but in most of these applications they are monitored closely. The OSSF gives you superior performance at an applicable price.



OSSF (Offset Single Flange)

**FOR YOUR NEXT PROJECT USE  
FAV SYSTEMS INC. WE CAN  
SHOW YOU A BETTER WAY.**

SPECIALIZED IN PREVENTING FUGITIVE EMISSIONS

Contact: 1 (956) 589 8832

[www.favsystems.com](http://www.favsystems.com)