

ADVANTAGES

- ▶ Prevents flashback
- ▶ Less purge gas required (94% less)
- ▶ Significant cost savings over time
- ▶ Extends flare tip working life by preventing burnback
- ▶ Lower capital costs
- ▶ Not affected by wind velocities, thermal contractions, or flow oscillations
- ▶ No moving parts (will not bind, wear out, or fail)
- ▶ Functions with wide range of gases (heavy and light)
- ▶ Extremely low pressure drop

GENERAL DESCRIPTION

Flashback prevention + low purge gas consumption + low cost = Flare Industries' Dynamic Seal. It is a very simple equation. Flashback occurs when ambient air penetrates the flare stack and mixes with waste gas, creating a combustible mixture. The most common and most acceptable safety measure is to purge the system with a gas that does not contain oxygen and will not reach dew point at ambient conditions. Purge gas constantly flows through the flare header piping and flare stack insuring that air infiltration does not occur. Sweeping a stack with purge gas twenty four hours per day without a purge seal can result in exorbitant operating expenses over time.

The Dynamic Seal is a simple innovation insuring reliable operation and significant cost savings year after year. The reverse conical baffle design reduces flow area in the flare tip while simultaneously increasing purge gas velocity. A vortex effect is created in the exiting purge gas which inspirates intruding air. This intruding air is drawn out of the boundary layer and into the exiting purge gas flow column, thus purging the flare tip. The Dynamic Seal can be used in horizontal as well as vertical applications due to the fact that it relies on fluid flow rather than gravity in order to operate properly. Since there are no moving parts, the Dynamic Seal virtually lasts forever. This Flare Industries' technology offers several inherent cost and safety advantages. Also referred to as a velocity seal.

DYNAMIC SEAL



DESIGN FEATURES

Stainless steel construction
 Single conical baffle
 Reverse flow configuration

SPECIFICATIONS

MATERIAL: Stainless steel
DIAMETERS (NOMINAL): 4" - 60"
LOCATION: Integral to the flare tip

DYNAMIC SEAL

