

HOW TO SELECT THE RIGHT STEEL FLARE STACK TYPE

Steel flare stack types are classified as horizontal, elevated, or slanted as well as single point or multipoint burners. The flared stream mediums and phases that exist are: vapor, liquid or liquid vapor mixtures. Before a flare type is selected, it is important to understand the environmental impacts, process requirements and economic considerations of a particular operation or project. Improper application of a steel flare stack technology can lead to not only poor performance, but also negative environmental impacts.

HORIZONTAL - horizontal flares utilize burners which release into pits to retain liquids discharged with gases. For liquid and vapor mixtures, a horizontal flare is appropriate.

ELEVATED - flares fire vertically from a point higher than any other equipment and are ideal for gaseous streams.

SLANTED - typically utilized to achieve low radiation, noise, and space requirements at production platforms.

SINGLE POINT - a steel flare stack that has an exposed pipe with only one exit point. Single-point flares can be smokeless or non-smokeless using air-assisted or steam-assisted designs and are suitable for low-pressure applications. [1]

MULTIPOINT - recognized as being better for the environment due to staging features which boost combustion and create smokeless burning. A steel flare stack that has several exit points and is designed for higher pressure applications. These can be located on the ground level or at an altitude using boom supports. [1]

Dixie Southern fabricates steel flare stacks custom to your specific needs. Contact us today to get started!

References

1. "Flare Selection for the Chemical Process Industries"

<https://www.chemengonline.com/flare-selection-cpi/>

