Bursted Flame Arrestor

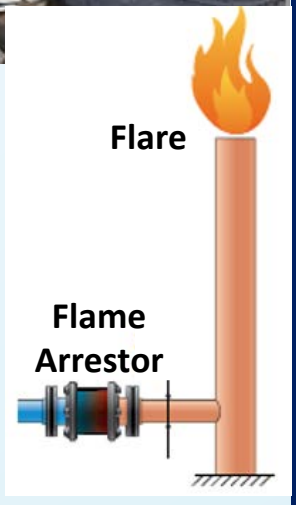
EPSC Learning Sheet May 2022

EPSC

What Happened:
High gas flow rate above design was sent by a compressor to a flare. This caused high pressure and the inline flame arrestor to burst releasing natural gas.

Aspects:

- The gas flow was too high to be measured by the flow meter! The flow was outside design. The operators were unaware of process limits and thought they could flare at any rate. Train operators well and provide clear procedures.
- It is good practice to have an alarm on high flow and on high pressure in a flare line to stay within safe operating limits.



- Flame arrestors are critical equipment, their reliability has to be ensured. Cleaning is important as they can foul and become a restriction.
- Flame arrestors pressure rating is often below the pipe spec.
- Avoid deflagration flame arrestors in flare systems. See ISO 16852 for design of flame arrestors on flare systems.

Operate flare systems within safe limits