

# LEE TECH TALK

## TECHNICAL APPLICATION NEWS BRIEF

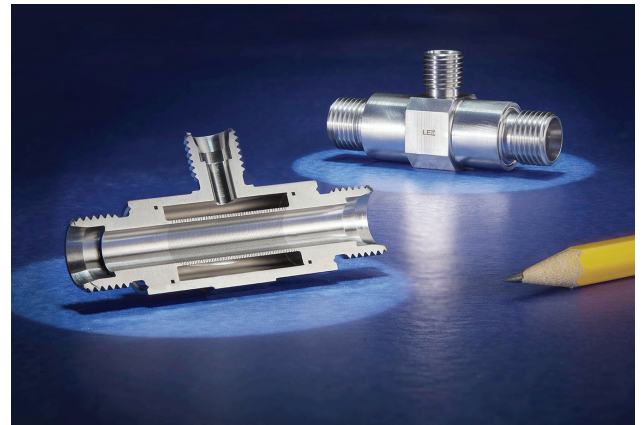
### LEE HI-BAR® IN-LINE WASH FLOW SAFETY SCREENS TAKE FILTRATION TO A HIGHER LEVEL

#### THE CHALLENGE

Protecting components from contamination is essential in critical fluid control applications, such as those found in the aerospace, power generation and automotive industries. While many systems are designed to be relatively immune to low levels of small size contaminants, single larger rogue particles can cause blockages which could result in system failure and downtime.

#### THE SOLUTION

As a specialist in miniature, precision components, The Lee Company is continually developing and enhancing our field-proven range of HI-BAR® Safety Screens to effectively block contaminants. A good example of this is the development of a new line-mounted wash flow safety screen. This configuration features a high strength, drilled safety screen integrated within a T-fitting assembly. The main, unscreened flow travels straight through the fitting while fluid exiting through the T-fitting end passes through the filter to critical components requiring additional protection. This design can be easily customized to meet a wide range of fitting envelope and screen hole size specifications.



#### THE BENEFITS

One of the important features of the Lee HI-BAR® wash flow safety screen is its one-piece smooth, internal surface. This eliminates risks associated with a traditional wire mesh design which contains uneven surfaces and pockets within the pipe diameter which may potentially trap contaminants. With the drilled screen element, these contaminants will be washed uninterrupted downstream in the main, unfiltered flow.

#### POTENTIAL APPLICATIONS

Safety screens are vital wherever there is a need to protect critical fluid handling systems. While taking advantage of the washing effect to increase screen life, Lee HI-BAR® wash flow screens provide protection for servo valves, bearings or any other component requiring finely filtered fluid. Currently, they can be found in a wide range of uses in both fuel and hydraulic systems.

#### LEE SAFETY SCREENS

The HI-BAR® wash flow safety screen is the latest addition to the extensive offering of screens available from The Lee Company to suit a wide range of applications. Lee safety screens are available in a variety of installation configurations, sizes and materials including stainless steel, aluminium, titanium, brass, PEEK and MP35N.

Lee HI-BAR® Safety Screens can be manufactured with circular hole sizes down to 25 micron or over 1500 micron. In addition, custom configurations have been produced using rectangular slots. These are particularly effective in screening fluids with spherical particles while providing maximum resistance to clogging.