

**Strainer Information** 

# KECKLEY PIPELINE STRAINERS INSTALLATION AND MAINTENANCE

#### **GENERAL**

A Y-strainer can be installed in either a horizontal or vertical position (Downward flow) with the screen element pointing downward. This allows the strainer screen to collect material in the strainer at the lowest point of the screen.

Basket strainers are designed for installation in horizontal lines. They are commonly used for liquid service applications.

## **INSTALLATION**

Carefully check all machined surfaces to make sure they are free of defects, and the inside of the strainer is free of foreign objects. All strainers should be installed with the arrow on the strainer body pointing in the direction of flow. For installation of threaded strainers an appropriate sealant should be used on the threads. For the installation of flanged strainers the flanged bolting should be tightened gradually going back and forth in a clockwise rotation until all bolts are tight. The system can now be pressurized gradually while checking for any leakage around all connections. If leakage occurs, depressurize the system and start the installation procedure over.

#### **MAINTENANCE**

## WARNING

Before the removal or loosening of any bushing, cap, plug or cover on a strainer, extreme caution should be exercised to ensure there is zero pounds pressure in the system. Only after the system has been depressurized, should the strainer be drained for service.

# SERVICE ON A PRESSURIZED STRAINER CAN CAUSE SERIOUS INJURY AND/OR PROPERTY DAMAGE.

A Y-strainer screen can be cleaned by removing the plug in the bushing, cap or bolted cover allowing the strainer to drain the loose material inside the screen. If a blow-off valve is connected to the strainer it can be opened to achieve the same result as the above. The Y-strainer screen can also be cleaned by removing the bushing, cap or cover to access the screen element.

Basket strainers with a closed bottom basket can be cleaned by removing the cap or cover and pulling out the basket screen for service. If the strainer screen is bottomless (Style DV, BDV, SDV) the blow-off plug can be removed allowing it to be drained and cleaned like a Y-strainer.

Care should be taken in cleaning screens. After removing a screen, it should be soaked in a cleaning solution or cleaned by using a brush. Do not allow trapped material in the screen to harden, as it will be difficult to remove. A regular cleaning schedule is recommended to avoid screens from becoming clogged.

A pressure gauge installed before and after a strainer will indicate a pressure loss due to clogging. This can help in establishing a maintenance schedule for cleaning the strainer screen. Extra screens can useful in keeping the system operating during the cleaning process.