

Instruction Manual for Strainers

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1.Product Overview:-

UKL Strainers help collect and subsequently remove pipeline debris such as scale, rust, jointing compound and weld metal in pipelines, thus protecting expensive and critical equipment and processes. Damage to the plant is frequently caused by such pipeline contaminants which may find their way into the pipeline system.

Y-Type Strainers are the most economical choice for large debris removal. They are most common type of strainers used in pressurized fluid lines, and also find wide usage in suction or vacuum conditions.

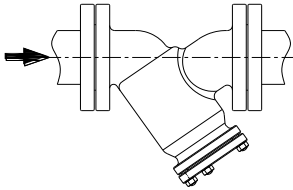
2. Installation and Commissioning Instructions:

Your UKL make Strainers will provide you with long, trouble-free service if they are correctly installed and maintained. A few minutes of your time spend reading these instructions now may save hours of trouble and downtime later.

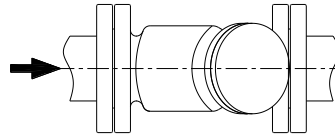
1. Check maximum operating pressure and temperature of the product and ensure that product is technically compatible with the system on which it is installed. If maximum operating conditions of the system is more than the product, which is being installed on the system, ensure that a safety device is included in system to prevent over pressurization.
2. Y-Strainer has the advantage of being able to be installed in either orientation be it horizontal or vertical position. However, in both cases, the screening element or "leg" must be on the "downside" of the strainer body so that entrapped solids can be properly collected and held for easy disposal.
3. Strainers in horizontal steam or gas lines should be installed so that the pocket is in the horizontal plane. This stops water collecting in the pocket, helping to prevent water droplets being carried over, which can cause erosion and affect heat transfer processes. On liquid systems however, the pocket should point vertically downwards, this ensures that the removed debris is not drawn back into the pipeline during operation.
4. On applications where significant amounts of debris are expected, a blow down valve can usually be fitted in the strainer cap, which enables the strainer to use the pressure of the Process fluid to remove the contaminants, without having to shut down the plant. A ball valve can also be fitted to flush the debris that is easily removable from the screen and exhaust to atmosphere or a drain system for process applications only.



STRAINER INSTALLED ON LIQUID LINES



STRAINER INSTALLED ON STEAM / GAS LINE



3. Operations:

Strainers will prevent movement of dirt and debris through the screens, which is larger than the holes in the screen. The pressure drop across the strainer will increase when accumulation of dirt and debris will block the screen. Regular cleaning / blow down is recommended to keep the screen clean.

Uni Klinger make Y-type strainers comply with the requirement of the European Pressure Equipment Directive 97/23/EC and carry CE mark when so required. Products fall within the PED categories I to III.

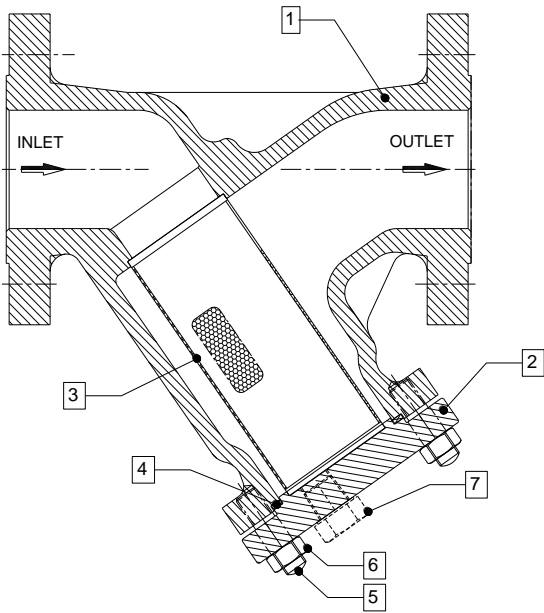
4. Maintenance and Troubleshooting:

Before undertaking any maintenance on the strainer, it must be isolated from both the upstream line and downstream line and should be at ambient pressure and temperature conditions to avoid any risk during maintenance.

Following procedure should be adapted to replace / clean the screen:

- Remove the strainer cap
- On most sizes up to DN25 the cap is with screwed connection which can be unscrewed simply by spanners.
- On all higher sizes the cap / cover is retained by bolts / nuts. The number of bolts / nuts used will depend on the strainer size, material of construction and design rating.
- Once the cap / cover is removed the strainer screen can be taken out.
- Clean the screen or replace with a new one.
- Re-assemble the screen into the cap / cover by pushing the end into the recess.
- Always fit a new strainer cap gasket ensuring the jointing faces are clean.
- Tighten the strainer cap or bolts / nuts sequentially. A suitable lubricant on bolt threads is recommended to avoid seizing of bolts / studs.
- Check for leaks.

5. BILL OF MATERIAL



Sr.	Component	Material
1	Body	WCB / LCB / CF8 / CF8M
2	Cover	WCB / LCB / CF8 / CF8M
3	Strainer Screen	AISI 304 / 316 / 316L
4	Gasket	SPW SS 304/316 + Graphite Filler
5	Stud	ASTM A 193 GR.B7 / B8
6	Nuts	ASTM A 194 GR.2H / GR.8
7	Drain plug	ASTM A105

AVAILABLE SPARES:

Strainer Screen
Cap / Cover gasket

PRESSURE / TEMPERATURE LIMITS:

Refer Name plate fixed on product and technical data sheet for maximum/minimum pressure and temperature rating according to Material of pressure part of the strainer.

6. Storage:

- USY and the respective spares should be stored only in enclosed dry rooms in a non-aggressive atmosphere. Fully assembled strainers must be stored as supplied by UNI KLINGER. Spare parts must be handled with care and should be stored in their original packing.
- It is recommended to take protective measures if parts are stored in dusty conditions.
- The ambient temperature in store room must be between -20 Deg. C and +50 Deg. C.
- Sudden change in temperatures must be avoided.
- Any damage due to inappropriate storage shall release UNI KLINGER of any obligations derived from warranty, guarantee, and product liability.

Other Products :



Cast / Forged Steel Piston Valves, Bellow seal valves, High Pressure valves (Gate/Globe), Strainers – "Y" Type, ITVS
Steam Traps (Thermodynamic, Thermostatic, Ball Float Traps and IBT), Pressure Reducing Station, Condensate Recovery Products.
Level Gauges (Reflex, Transparent, Bicolor), Sight Glass, Hot Water Generation System, Safety and Relief Valves.
FSD Products : Compressed Asbestos / Non Asbestos Fiber Sheeting / Cut Gaskets, Spiral Wound Gaskets.

In view of technical progress design and dimensions are subjected to change without notice.



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A joint venture of the Neterwala group of companies and KLINGER AG. Switzerland.

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