



## INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

### Series 691 and 692 Duplex Basket Strainers

#### Installation

All units must be fitted into pipelines and/or on to attachments using the correct mating flanges or threads in a way that ensures stresses are not introduced into the main body, support as required and ensure that room is available for screen removal.

Fit unit ensuring the direction of flow is correct (all units indicate flow direction on the body) and the connections are for horizontal flow with the screen covers at the top of the chambers. All units are for pressure applications, suction applications with a higher back up pressure (i.e. with header tank) are also suitable. A positive shut-off option is offered to overcome vacuum problems if required.

Ensure operating conditions (i.e. pressure/temperature/flow etc ...) all conform with limitations of design as specified.

#### Start-Up

Before start-up ensure that the correct screens are in the chambers, covers and accessories are fitted seal tight and operating mechanisms perform correctly as per unit specification. Never adjust strainer parts when unit is pressurized.

#### Setting and Operation

All fully assembled units are hydrostatically and cycle tested at the factory. The design incorporates safety features for correct re-assembly (drive pin positions must not be changed or faulty assembly may result)

When in the flow condition, the handle position is directly over the chamber being used. The diverter mechanism always allows flow through the screen and although stopping the flow through one chamber, it is not a shut off valve. Moving the handle 170° changes the chamber in use. With the handle in the intermediate, (i.e. 90° from either chamber) no attempt must be made to remove either of the screen covers. The pressure drop does not improve in this situation and although double the screen area is available, it is not a recommended function of the strainer.

#### Equalizing System (When Fitted)

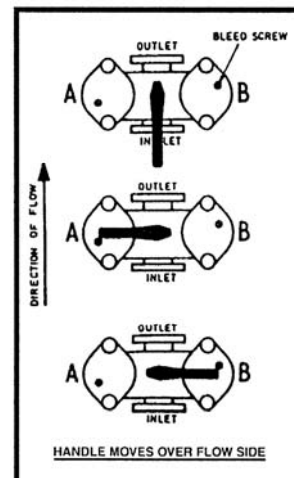
A valve and interconnecting pipe work are fitted between each screen chamber. The valve must be opened before any attempt is made to move the change over handle.

**WARNING – The valve must be re-closed after change over. NO attempt must be made to remove drain plug or open screen chamber when the valve is open**

#### Operating and Cleaning Instructions

To clean chamber 'A', move plug handle to position 3. As the unit does not incorporate a tight shut-off valve, take care to protect operator for any leakage by suitable means when operating/cleaning the unit.

- Carefully release drain plug in chamber 'A' allowing pressure to relieve before completely removing to the empty chamber
- Remove cover nuts, lift out the screen, and remove the contained dirt and sediment. (Paper and other disposable elements are replaced with new units)
- Wash screen thoroughly and flush chamber if necessary. (Protect bottom chamber below screen from contamination, as this is the filtered or clean part of the strainer)
- Replace drain plug and washer
- Check condition of o-rings in the cover and on the screen, replace if necessary
- Place the screen into the chamber and ensure that its lifting handle protrudes over the top of the body.
- Check cover is sitting on handle before touching body on 6" and 8" size units
- Refit cover and cover nuts
- Take plug to lift cover before swinging it into position, so as to not damage o-ring
- Turn plug handle to give partial flow into cleaned chamber, vent off air and re-seat bleed screw. Return plug handle to position 3



#### POSITION 1

Both chambers in use.  
Do not open covers.

#### POSITION 2

Chamber 'A' is in use.  
Chamber 'B' can be cleaned.

#### POSITION 3

Chamber 'B' is in use.  
Chamber 'A' can be cleaned.

**Operating and Cleaning Instructions Continued**

If an equalizing valve is fitted, it can be operated after the cover had been refitted for the purpose of venting the cleaned chamber. The valve must be closed after performing this operation. Cleaned chamber is now ready for use.

The same process applies to chamber 'B' except that the plug handle is moved to position 2.

Screens have a safe differential pressure of approximately 30 psi, but it is recommended that operators do not take the screen to this limit but work to a maximum of 20 psi. The reason for this is the rapid rate of increase of pressure drop when the screen starts clogging, and if care is not taken in these high regions, the highest differential could be exceeded and the screen (or its finer mediums) could be damaged.

**De-Commissioning**

To remove strainer, it is necessary to isolate from supply and any backflow, to drain and dismantle from system. It may be necessary to protect internals from deterioration, in which case the strainer can be completely dismantled and treated.

**Positive Shut-Off Option Note**

Such units are fitted with specially shaped o-rings positioned in the plug mechanism. These should be inspected at regular intervals. It is suggested the seal may not be suitable where, if a failure were to occur, there is a serious risk to operator safety

**Accessories Note**

If accessories are fitted to your unit (i.e. differential pressure indicators, vents, magnets, etc ...) ensure you have full instructions regarding the use of such items.

We reserve the right to impregnate castings unless otherwise advised.

**Parts Breakdown**

