



## VALVE INSTALLATION AND MAINTENANCE

### IMPORTANT!

YOUR NEW GRESSWELL VALVE IS A PRECISION UNIT THAT COMPLIES WITH THE **PRESSURE EQUIPMENT DIRECTIVE 97/23/EC** AND THE **PRESSURE EQUIPMENT REGULATIONS 1999** - ANY UNAUTHORISED ADJUSTMENT, TAMPERING, DISASSEMBLY OR MODIFICATION WILL INVALIDATE THE MANUFACTURERS WARRANTY AND THE CE COMPLIANCE OF THE VALVE. THESE INSTRUCTIONS MUST BE CAREFULLY READ BEFORE ANY WORK INVOLVING PRODUCTS SUPPLIED BY GRESSWELL VALVES IS UNDERTAKEN. **PRODUCTS SUPPLIED BY GRESSWELL VALVES MUST NOT BE FITTED OR USED IN APPLICATIONS UNLESS RECOMMENDED BY GRESSWELL VALVES OR AN APPROVED DISTRIBUTOR- IF IN DOUBT, PLEASE ASK!**

Valves which have been correctly selected in accordance with their service conditions should give years of trouble-free performance if correctly installed and regularly maintained. Instructions regarding the installation and maintenance of particular valve types should always be consulted and the following information is intended only as a basic guide.

**WARNING:** LEVER TYPE VALVES - Due to the potential discharge of steam/process fluid from the lever assembly, the appropriate PPE (i.e. gloves, eye protection) must be worn when operating the lever.

### INSTALLATION

It is strongly recommended that valves be sited with their spindles upwards at a point where pressure surging or pulsation does not occur.

**PTFE Tape MUST NOT be used** for thread sealing on the inlet side, as pieces of tape carried into the valve are the biggest cause of malfunction. The manufacturer's warranty may be invalidated if PTFE tape is used. Always use a liquid sealer instead.

Discharge pipes should not be smaller than the valves outlet port and **must** be self draining.

If the installation forms part of a sealed system, any possible 'back pressure must be considered in the setting of the relief valve. Gresswell engineers are able to advise on this.

Where the discharge is not fully sealed, valves should be positioned where there is no possible risk to personnel during the normal course of operation.

Wherever practical, valves should be installed where there is adequate space available so that they can be conveniently operated, maintained and if necessary, removed.

Before installing a valve, check to ensure that size, pressure rating, materials of construction, end connections, etc., are suitable for the service conditions of the particular application.

Care must be taken to ensure that all dirt, which may have accumulated in the valve during storage, is removed before installation and also that cleanliness is maintained during installation, because the introduction of dirt can result in damage to valve seats and operating mechanisms. To facilitate cleanliness Gresswell Valves fit covers to open ends. These should

be left in place until the valves are fitted into the line.

To minimise the danger of abrasive particles damaging the seats, quality pipeline strainers should be fitted upstream of important valves.

Valves are precision units and as such their smooth operation will be impaired if they are subjected to line distortion stresses. Such strains must be avoided by ensuring that flanges and pipe work are square and true and are properly supported to prevent the line buckling under the weight of the valves or pipe work.

Please note that valves must not be welded without written agreement from Gresswell Valves as to do so will invalidate the maker's guarantee.

If valves are welded into the line, particular care must be taken to prevent distortion causing line strains, which may occur if welds are not properly executed and stress relieved.

New systems must be flushed out before use to remove dirt and slag splatter which will cause damage and is detrimental to valve performance.

Pipe work systems must always be subjected to testing prior to becoming fully operational. Line testing will also prove the quality of thread sealing and flange bolting.

All Gresswell Safety Relief Valves are delivered to a set pressure (at which the valve will begin to lift) as stated on the tag attached. Any attempt to adjust the valve will invalidate the manufacturers warranty and the CE compliance of the valve.

Gresswell should be consulted if there is any doubt regarding the valves SAFE operation.

# MAINTENANCE

As with all mechanical devices, a regular maintenance programme is the best means of ensuring continued operational efficiency.

Regular scheduled (visual) inspection of all valves is essential and especially of those which are operated only occasionally, such as isolation and emergency valves. Continuing efficient operation of strainers should also be checked at the same time.

Any specific maintenance required on a particular valve should only be carried out by Gresswell Valves or

an approved distributor.

Any unauthorised maintenance or adjustment to a valve will invalidate the manufacturers warranty and the CE compliance of that valve.

Gresswell Valves has a readily available stock of spares for its valves and will be pleased to quote for reconditioning where appropriate. Please note that spares will not be supplied direct to the end user as spares must only be fitted by Gresswell Valves or an approved distributor.

## 12 MONTH LIMITED WARRANTY STATEMENT

Gresswell Valves warrants to the original consumer/purchaser ("you") that new Gresswell Valves products ("Products") will be free from defects in material and workmanship for the Standard Warranty Period of 12 months. The start of the warranty period is the documented date of despatch of the Product from Gresswell Valves or Gresswell Valves' approved distributor. The warranty period on replacement Products is the remainder of the warranty on the original Product or 90 days, whichever is longer.

If you discover a defect in material or workmanship during the Standard Warranty Period and Gresswell Valves agrees that the defect exists, Gresswell Valves will, at its option, repair or replace the Product at no charge to you provided it is returned during the Standard Warranty Period to the facility designated by Gresswell Valves. Gresswell Valves shall not be responsible for any loss or damages incurred in shipping. In the event of a defect covered by this warranty Gresswell Valves will return the repaired or replaced product to the purchaser at Gresswell Valves' cost.

To request warranty service and before returning a Product to Gresswell Valves, please contact Gresswell Valves or a Gresswell Valves' approved distributor. If Gresswell Valves elects to repair a Product, Gresswell Valves owns all parts removed from the repaired Product

This limited warranty applies only to the Gresswell Valves products that can be identified by the original, unaltered Gresswell Valves trademark, trade name or logo affixed to them. Gresswell Valves does not warrant any product that is not manufactured by, for, or with permission from Gresswell Valves.

This warranty does not cover any of the following conditions:

- Fair wear and tear.
- Abuse, unreasonable use, mistreatment or neglect.
- Unusual physical stress.
- Damage caused during installation of the Product.
- Damage caused by the equipment or system with which the Product is used.
- Damage caused by modification or repair not made or authorised by Gresswell Valves.
- Products whose Gresswell Valves Serial Number/Material Number have been removed, torn or defaced.
- Damage caused by improper or improperly used packaging.
- Products that are determined to be stolen.
- Any other condition as outlined in this Installation Guide
- Further, this limited warranty is void if the Product cover or any label or seal on the Product, is removed or damaged.

