



## **FOR TRECICE PRESSURE GAUGES**

Trecice Pressure Gauges are offered in a variety of styles, sizes, and bourdon tube materials. Gauges should be selected carefully to meet the demands of the situation and, in particular, the range should be selected so that the working pressure is approximately 50% of the total range.

### **Principles of Operation**

Trecice Pressure Gauges utilize the bourdon type tube construction. When this bourdon tube is subjected to the pressures of the media being measured, the bourdon tube flexes and this motion is transmitted to the pointer through a mechanical multiplication-type movement.

### **Installation**

When installing a Trecice Pressure Gauge, care should be taken not to use the instrument case itself to wrench in the pressure connection. Always use a wrench fitted to the flats on the socket for this purpose. If the instrument is used to wrench in this connection, it is quite possible that the movement alignment will be disturbed. The instrument should be mounted upright as nearly as possible in a vertical plane; however, the instrument will read correctly when mounted with 15° of the vertical plane.

The gauge may be installed either surface mounted, flush mounted or rigidly on the line. When surface mounting the instrument on a wall or a panel, make sure the instrument is connected free from any piping strains or stresses. Also check to make sure the mounting surface is flat, and that the instrument, if surface mounted, is mounted on the three pads provided for three point suspension.

Care should be exercised in selecting a location that is as free from vibration as possible. Vibration is the pressure gauge's worst enemy, and these vibrations will tend to wear out the fine gear sections within the gauge. If there is a vibration in the pipeline and the gauge is remotely located, it is advisable to a small section of flexible tubing between the gauge and the line to absorb these vibrations. When a gauge is used on a media where pressure pulsations exist, it is recommended to use either: (1) a choke screw, (2) pressure snubber, (3) pressure impulse dampener, or a (5) needle valve. Any of the aforementioned will reduce wear on the gauge.

When a gauge is used on steam service, it is advisable to use a coil siphon filled with water between the gauge and the pressure media. In selecting a gauge, the method of construction must be considered; that is, solder, silver, braze or welded construction.

When the gauge is located in a corrosive atmosphere, care should be taken in ordering the instrument weatherproofed to restrict the entry of these corrosive fumes into the case. In measuring the pressure media of corrosive materials, the gauge should be ordered with socket and bourdon tube specifications suitable to resist these corrosive media.

### **Maintenance**

Pressure gauges should be kept clean by replacing glass, rings, etc, to keep internal parts from outside elements. Pressure gauge movement or linkage should never be oiled as oil attracts dirt and causes the movement to become gummy after a period of time. This will cause the gauge to act sluggish. If a gauge requires attention due to sluggishness, usually cleaning the movement with carbon tetrachloride or some similar solvent will correct the problem.

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