

# BOURDON TUBE PRESSURE GAUGES

## Installation, Operation & Maintenance Instructions

This bulletin contains information pertaining to the installation & care of **MILJOCO** bourdon tube pressure gauges. The use of gauges featuring different constructions would be described in separate bulletins.

### Selection Criteria

1. Selection of the proper gauge would include consideration to materials of construction which should be selected to provide maximum safety, performance & value with consideration to the temperature and corrosiveness of both the ambient environment and the media being measured. **CAUTION: Any gauge used on steam systems must have a coil syphon installed between the gauge and the process steam. Failure to do so will increase the risk of personal injury to the system operator.**
2. The pressure gauge range should be selected so that the working pressure is stated as close to 50% of scale as possible. This generally optimizes the accuracy of the gauge, while generally protecting the bourdon tube from exposure to pressures beyond the maximum range of scale.
3. Gauge should be installed at a location as free from vibration as possible. Where this is impossible, gauge selection should be made to prolong life & enhance readability, such as a grease dampened movement or liquid filled case.
4. Gauge should be installed at location as free from pulsation as possible. Where this is impossible, a pulsation-reducing accessory such as a filter snubber should be installed at the gauge to prolong gauge life & enhance readability.

### Installation & Operation

1. Select the proper sized wrench tool so as to fit the metal flat adjacent the pipe threads on the socket of the gauge. NEVER screw gauge into place using the case as a handle or knob.
2. A properly installed gauge will always be accompanied by a local positive shutoff valve at the gauge to allow for the removal and service or replacement of the gauge.
3. Treat the pipe threads with appropriate material to suit application such as teflon thread tape or pipe sealant compatible with the media being measured.
4. Carefully thread the gauge into place with the scale reading as near to vertical as possible, ideally within 15° of the vertical axis, considering gauge visibility and a leak free seal.
5. When installing a panel mounted gauge, ensure that there are no undue forces of stress, tension, or torsion on the gauge fitting.

### Maintenance

1. Generally, a properly installed gauge should require no mechanical maintenance. If there is a clear indication of erroneous readings, the gauge should be removed and recalibrated by a professional instrument service technician.
2. Keep the environment in which the gauge is operating as clean as possible. Contamination of the movement can occur and adversely affect a gauge's performance. Replace any broken lens or case as necessary on the gauge to avoid foreign matter contaminating the gauge internals.
3. If cleaning of gauge internals is necessary, use fast-evaporating solution to remove dirt & debris from movement and linkages.