

The background of the entire page is a photograph of an industrial refinery or chemical plant at night. The sky is a deep blue with some light clouds. The refinery is illuminated by numerous lights, creating a warm glow. In the foreground, there are several large white cylindrical storage tanks. In the middle ground, there are several tall, vertical distillation columns or towers, each with multiple levels of trays and piping. The overall scene is a complex industrial landscape.

**QTS**

*Quest-Tec Solutions*  
*The New Standard of Level*

**ARMORED TUBULAR  
LEVEL INDICATORS**

# ARMORED TUBULAR LEVEL GAGE

***EXCLUSIVE, MAX-SEAL INSERTS FOR MAXIMUM SAFETY & ZERO MAINTENANCE***

Quest-Tec Direct-Reading Level Gauges are a simple and reliable way to determine the level of liquid in a tank or vessel, because they give you a direct view without compromising the integrity of your process system. Quest-Tec level gauges operate such that the liquid level in the transparent sight tube is always the same as the liquid level inside the tank or vessel. Quest-Tec Armored Tubular level gauges can be used at operating pressures up to 285 psig. For higher operating pressures, use Quest-Tec's Magne-Trac Magnetic Level Indicator, Steam-Trac, or Glass-Trac Gauges.

## SIMPLE, RELIABLE, AND MAINTENANCE-FREE

Quest-Tec Level Gauges are simple: the only components (not including mounting hardware) are the armored shield, the sight tubing, and two self-sealing "Max-Seal Inserts".



These products are maintenance-free, only the PTFE "Max-Seal Inserts" and the borosilicate sight tubing are exposed to process fluids. Once the gauges are installed, they do not have to be removed and disassembled for inspection or cleaning. Standard shields are epoxy-coated carbon steel. Shields are also available in 316 grade stainless steel and fiberglass.

# Max-seal Inserts For Permanent, Stress-free Sealing

All Quest-Tec Armored Tubular Level Gauges incorporate PTFE Teflon® Max-Seal inserts, which seal on the outside diameter of the glass sight tube, not the ends of the sight tube. Since Max-Seal inserts allow sight tube movement without leaking, stresses caused by differential expansion between the sight tube and the housing are eliminated. There are no elastomer seals or O-rings to inspect and replace. Max-Seal inserts are resistant to most chemicals and have a long life span.

## QUEST-TEC QUALITY PROGRAM

Quest-Tec gauges are quality ensured to exceed performance requirements with maintenance-free service. Quest-Tec's Quality Program is an accredited ISO 9001 program.

**API Certified ISO 9001:2008 QMS, Cert #0736**

Quest-Tec monitors product quality and preserves material traceability. Systematic reviews of materials, manufacturing processes, and product construction are consistently evaluated by management for improvement through technical innovation. The importance and care placed at each step of the process ensures quality is delivered.

## FACTORY MUTUAL APPROVED

Quest-Tec Direct-Reading Level Gauges are approved by the Factory Mutual System.



## Easy Installation

Single-section model QST and QDT level gauges are easy to install because they are shipped fully assembled. Quest-Tec QST level gauges are available in lengths up to 12.5 feet with glass sight tubes and up to 20.0 feet in polycarbonate or acrylic sight tubes, so there are no staggered assemblies or complex piping arrangements as with conventional multi-section level gauges. Single-section models QDT are available in lengths up to 10.0 feet depending on the choice of inner and outer sight tubes.

## PROCESS APPLICATIONS

Quest-Tec direct-reading level gauges are used by leading companies in a wide range of applications. These products are maintenance-free, only the PTFE "Max-Seal Inserts" and the borosilicate sight tubing are exposed to process fluids. Once the gauges are installed, they do not have to be removed and disassembled for inspection or cleaning. Standards shields are epoxy-coated carbon steel. Shields are also available in 316 grade stainless steel and fiberglass.

### Model QST Single Tube

General Service at or near ambient temperatures

### Model QDT Double Tube

Cryogenic or hot process conditions:

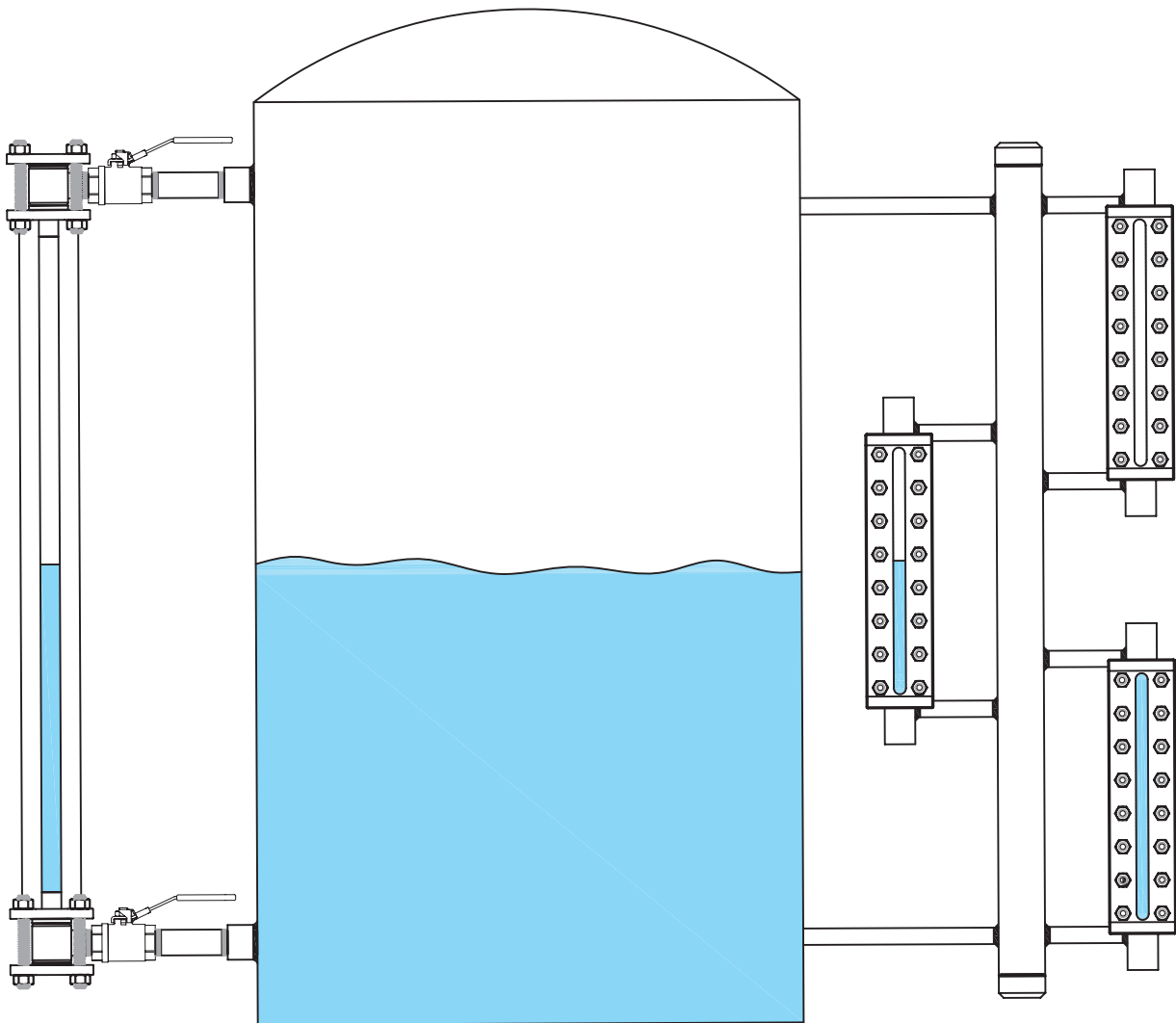
High-purity for 3A and FDA applications are available.



## Straight Column Versus Bridle Assembly

Low pressure applications can be solved with a Straight Column, an alternative solution to multi-section Bridle Assembly, which Quest-Tec also manufactures [displayed below]. Straight Column options provide the benefit of a light weight lower complexity model while offering a reduced installation time and overall cost.

Straight Column units are more visible and can have scales attached as an accessory. Illuminator accessories are also available with Straight Column units. Improved visibility, ease of installation, and maintenance are critical when deciding on which unit to select.



Quest-Tec Solutions has an experienced Sales Department that can help you specify which unit is best for your application.



# QST Model Number Builder

Company: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_  
 Requested by: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Address: \_\_\_\_\_ Email: \_\_\_\_\_

## GAUGE COLUMN

Length (in)  
Face to Face DIM

Gauge Model  
QST – Single Tube

Sight Tube  
 HP10 = 1.0" od  
 PI10 = 1.0" id  
 PI15 = 1.5" id  
 HW15 = 1.5" od  
 PI20  
 HW20

Material and Flange Size  
 CS = Carbon Steel  
 6S = 316 SS  
 FG = Fiberglass  
  
 10 = 1.0 inch  
 15 = 1.5 inch  
 20 = 2.0 inch  
 30 = 3.0 inch

## 90 DEGREE PROCESS CONNECTIONS (ADDS 2.0")

Process Connection Type  
 FL = Flanged  
 TC = Threaded  
 FV = Flanged Valve  
 TV = Threaded Valve

Body Size & Material  
 CS = Carbon Steel  
 6S = 316 SS  
 FG = Fiberglass  
  
 10 = 1.0 inch  
 15 = 1.5 inch  
 20 = 2.0 inch  
 30 = 3.0 inch

Process Connection Size  
 10 = 1.0 inches  
 15 = 1.5 inches  
 20 = 2.0 inches

## OPTIONAL EQUIPMENT

ILL = Illuminator

SC = Scale in Inches

DC = Drain Conn.

VC = Vent Conn

Vent / Drain Size

Note: C/C length is 2.0 inches longer than Gauge Column length  
 Example: 60-QDT-HP10-CS10-LX22-6S-10-FL-20-BVC-IL-SC-TC-05 = 62.0" C/C  
 60-QDT-HPT10-CSI10 -LX22-SC = 60" F/F with scale



# QDT Model Number Builder

Company: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_  
 Requested by: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Address: \_\_\_\_\_ Email: \_\_\_\_\_

## GAUGE COLUMN

<input type="text"/>	<input type="text" value="QDT"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Length (in) Face to Face DIM	Gauge Model QDT – Double Tube	Sight Tube HP10 = 1.0" od PI10 = 1.0" id PI15 = 1.5" id HW15 = 1.5" od PI20 = 2.0" id HW20 = 2.0 od	Material and Flange Size CS = Carbon Steel 6S = 316 SS FG = Fiberglass  10 = 1.0 inch 15 = 1.5 inch 20 = 2.0 inch 30 = 3.0 inch	Outer Sight Tube LX22 = 2.5 in Polycarbonate LX27 = 2.75 in Polycarbonate LX30 = 3.0 in Polycarbonate OG25 = 2.5 in Borosilicate OG30 = 3.0 in Borosilicate

## 90 DEGREE PROCESS CONNECTIONS (ADDS 2.0")

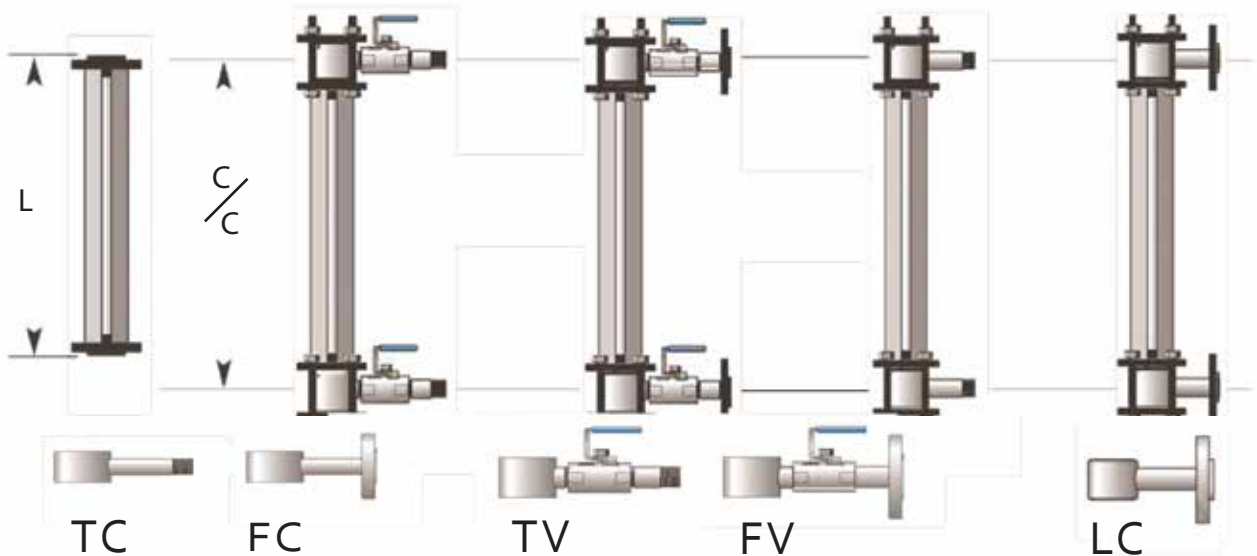
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Body Materials 6S = 316 SS CS = Carbon CP = CPVC PV = PVC	Body Size 10 = 1.0 inches 15 = 1.5 inches 20 = 2.0 inches	Process Connection Type FL = Flanged TC = Threaded FV = Flanged Valve TV = Threaded Valve	Process Connection Size 10 = 1.0 inches 15 = 1.5 inches 20 = 2.0 inches	Ball Check Valve BCV = 1.0 " Ball Valve with PTFE heck Ball

## OPTIONAL EQUIPMENT

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ILL = Illuminator	SC = Scale in Inches	DC = Drain Conn.	VC = Vent Conn	Vent / Drain Size

Note: C/C length is 2.0 inches longer than Gauge Column length  
 Example: 60-QDT-HP10-CS10-LX22-6S-10-FL-20-BVC-IL-SC-TC-05 = 62.0" C/C  
 60-QDT-HPT10-CS110 –LX22-SC = 60" F/F with scale

# Gauge to Vessel Connections



## TC/ FC

### Gage Connectors

- Threaded ½ to 1 in. MNPT (TC)
- Flanged ½ to 2 in. (FC)
- Carbon steel, 316 SS or CPVC
- Socket weld or weld neck flanges are available

## TV/FV

### Gage Connector with BCV Vales

- Threaded ½ to 1 in. NPT (TV)
- Flanged ½ to 2 in. (FV)
- Carbon steel, 316 SS or CPVC
- Socket weld or weld neck flanges are available

## LC

- PTFE Teflon® -Lined Gage Connector
- Flanged ¾, 1, 1 ½, or 2 in.
- 150 # or 300 # Class
- Carbon steel or 316 SS

## Options

- Calibrated scale: Polycarbonate
- Level floats: Orange PP \_\_\_\_ Teflon \_\_\_\_
- Explosion-proof illuminator
- Sight tub redlining
- Vent and drain valves: Carbon Steel \_\_\_\_ 316 SS

Notes: Centerline dimension is 2.0" longer than Face to Face dimension .Visible dimension is 5.0" less than Center to Center and 3.0" less than Face to Face

ISO 9001: 2008



Quest-Tec Solutions  
Registration #0736

REPRESENTED BY: \_\_\_\_\_



13930 S. Wayside | Houston, TX 77048 | Toll Free: 866.240.9906 | Tel: 281.240.0440  
Fax: 281.240.2440 | www.QTSlevel.com | Sales@QTSlevel.com

