



Tank Level Gauging, Safety Equipment & Inventory Management for Alcohol and Beverage Applications

Beverage | Wine | Spirits | Brewery

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an **L&J TECHNOLOGIES**
company



Level Gauging Solutions for Beverage Applications

L&J Technologies is dedicated to creating custom solutions for your application needs. With a wide range of level gauging products and safety equipment, L&J Technologies' product offering is the perfect solution to maintain the quality of your product for the beverage, wine, spirits and brewery industries.

Designed to meet high performance standards, L&J Technologies helps customers optimize productivity, maintain cleanability and quality while also conserving valuable product and money. We measure our equipment against international regulations to ensure safety, reliability and quality for the beverage industry. Capable of withstanding even the harshest of environments, our highly precise level and safety equipment are the ideal solution for your beverage applications.

For applications with strong dust or foam generation and others that require high cleaning standards, L&J Technologies has the solution. Some of our product recommendations for Beverage Applications include:

- Radar Gauges
- Servo Gauge
- Inventory Management Systems
- Transmitter
- Tape Gauges
- Conservation Vents
- Gauge Hatches
- Flame, Deflagration & Detonation Arresters
- Combination Flame Arresters

L&J engineering's Radar Gauges

As a more advanced alternative to Float and Tape Gauges, L&J engineering offers radar gauging technology for beverage applications. As a sure way to guarantee quality and purity of beverage products, L&J engineering's non-contact radar gauges guarantee cleanability in demanding measurement environments. With independent, reliable, continuous level measurement, the MCG 1600SFI and evo 2600 can perform under the most intense dust and foam generation.

evo 2600 - Radar Gauge

- $\pm 3\text{mm}$ Accuracy Standard
- 4-20ma Loop Powered
- 26 GHz Frequency
- FMCW Technology
- e.WAVE Display
- e.CAL Intuitive Setup Wizard
- Wireless Communication Available
- Available in 316 Stainless Steel and 316 L Stainless Steel



MCG 1600SFI - Radar Gauge

- $\pm 0.5\text{mm}$ Accuracy Standard
- Custody Transfer Accuracy
- FMCW Technology
- Handheld Infrared Calibration via Local LCD Display
- Antennas Tailored for Specific Applications
- Housing Dimensions & Weight: 6.6" H x 9.0" W, 8 lbs
- Wireless Communication Available
- SIL 2, UL/CUL Listed, ATEX Approved
- Available in 316 Stainless Steel and 316 L Stainless Steel



L&J engineering's Servo Gauge

With only 3 moving parts, L&J engineering's MCG 1500SFI Servo Gauge has minimized parts to ensure reliability and quality in beverage applications. As the most compact and light servo available, its $\pm 0.4\text{mm}$ accuracy coupled with its 0.4mm make the MCG 1500SFI the most accurate servo on the market.

MCG 1500SFI - Servo Gauge

- $\leq \pm 0.4\text{mm}$ Accuracy
- Measures product and interface with custody transfer accuracy
- Infrared Calibration
- Available in 316 Stainless Steel and 316 L Stainless Steel
- Advanced flash memory technology
- Ground level display eliminates tank climbing
- Minimal moving parts (3) ensure reliability
- Monitor field / internal parameters
- Measures temperature, pressure and density



L&J engineering's Inventory Management Systems

Monitoring the status of liquid inventories is important, that's why L&J engineering has made it easier for the end user. Built on the Windows™ family of operating systems, L&J engineering's Inventory Management Systems provides real time data on multiple tanks for plant personnel to see at their convenience. Calculated values (such as gross and net volumes) are displayed as well as based on tank specific configured parameters. Information recorded and displayed is available over a network, on client terminals or is available for export in standard formats. The information can also be transmitted digitally to a PLC, DCS or another accounting system.

MCG 3630 - Touch Panel Tank Monitor

- Displays Level, Temperature, BS&W and Density from Multiple Tanks
- Touch Screen User Input
- Wireless Option Available
- Multi-Protocol Compatible
- Supports Host Communication



MCG 3900 - Inventory Management System

- Customizable Graphic User Interface
- Multi-Loop / Multi-Protocol / Multi-Vendor
- Monitors up to 1000 tanks on 32 loops
- Multi-server / Multi-client / Multi-field
- Supports L&J S.M.A.R.T Diagnostics
- Supports Non-L&J Gauges & Protocols
- Sophisticated Connectivity Features
- Plug-in Software Expansion
- Multi-Media and Relay Alarm Outputs
- User-definable Printed Reports
- Printed Alarm and Inventory Reports



L&J engineering's Transmitter

Utilizing the new, patented absolute magnetic encoding, L&J engineering's MCG 2000MAX leads the transmitter industry with its accuracy of 1/32" and 1/64". Featuring low power technology, the MCG 2000MAX transmitter gathers information on the level of liquid in a beverage tank such as spot or average temperature, pressure, discretives and alarms. When coupled to the Shand & Jurs' 92021 and other mechanical gauges, the MCG 2000MAX converts mechanical level measurements into electronic data.

MCG 2000MAX - Transmitter

- Magnetic Absolute Xmitter
- Ultra Low Power
- Absolute Magnetic Encoding for Level Detection
- Level, Temperature and Optional Discrete/Analog I/O
- Infrared Calibration via Local Display
- Advanced Flash Memory Technology
- No Batteries or Eproms
- Available in 316 Stainless Steel and 316 L Stainless Steel
- 2-Wire Loop Powered Option
- Multiple Protocols (L&J Tankway, Hart, etc.)



Shand & Jurs Automatic Tape Gauges

With industry wide acceptance, the Shand & Jurs Automatic Tape Gauge is a reliable and affordable solution for measuring the liquid level in beverage applications. Its ability to measure the level of product via a digital counter to 1/16 of inch makes the 92021 an accurate and traditional measurement device for liquid level needs.

92021 - Automatic Tape Gauge

- Measuring Accuracy of 1/16"
- 90' Gauging Flange
- Simple Installation
- Ground or Roof Reading
- Completely Automatic
- Easily Serviced
- Available in 316 Stainless Steel and 316 L Stainless Steel
- Economical



Shand & Jurs Conservation Vents

Designed to relieve excess pressure, Shand & Jurs' line of Conservation Vents maintain normal pressure and vacuum settings in beverage applications. Shand & Jurs Conservation Vents can not only be used for pressure relief, but can also be used to reduce tank emissions into the atmosphere and to prevent the formation of a vacuum.

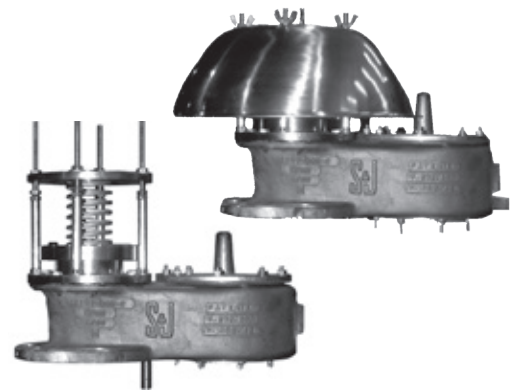
94020 - Weight Loaded Conservation Vent

- Sizes 2" through 12"
- Provides Pressure and Vacuum Relief
- Options: Open Vent, Closed Vent and Limit Switch
- Available in 316 Stainless Steel and 316 L Stainless Steel
- Innovative "Expanda-Seal" Option
- CE & ATEX Approved



94040 - Spring Loaded Conservation Vent

- Sizes 2" through 12"
- Provides Pressure and Vacuum Relief
- Guided pressure pallet assures smooth lift and closure
- Available in 316 Stainless Steel and 316 L Stainless Steel
- Unique diaphragm construction assures positive seal and minimal blowdown
- Withstands variety of materials including highly corrosive and toxic products
- Pallet lip design contributes to high flow characteristics



Shand & Jurs Gauge Hatches

Providing easy access for monitoring level or temperature of liquids, Shand & Jurs' Gauge Hatches can be used for supplemental pressure relief in beverage applications.

95021 - Gauge Hatch

- Easy access for product gauging or sampling
- "Quik-Clamp" option allows for hands-free operation
- Available in sizes from 4" to 12"
- Available in 316 Stainless Steel and 316 L Stainless Steel
- Teflon diaphragm ensures safe tight seal



Shand & Jurs Flame, Deflagration and Detonation Arresters

Designed to be used as a barrier between the tank and vent in order to safeguard the tank contents from igniting inside a tank, a Flame Arrester acts as a fire barrier preventing any passage of a flame and dissipating the heat of the flame below the auto-ignition temperature. Flame Arresters are only effective at near-atmospheric conditions which limits the systems that they can be used and are not meant for excessive burning.

94306 - Vertical Flame Arrester

- Unitized tube bank design
- Maximum protection and efficiency with minimum pressure drop
- Available in 316 Stainless Steel and 316 L Stainless Steel
- Easy inspection and maintenance, due to simple removal of tube bank
- FM Approval, 2" to 12" inclusive, NEC Group D



Shand & Jurs Combination Flame Arresters

Combining both pressure/vacuum relief vents and flame arresters, Shand & Jurs' line of Combination Flame Arresters assures tank safety in any beverage application. Using a Conservation Vent/Free Vent with a Factory Mutual/ATEX approved Flame Arrester, Shand & Jurs' combo units are a single package that are easy to configure. Shand & Jurs' combo units provide pressure and vacuum relief and also help to prevent flashback into a beverage tank from the ignition of the vent's relief stream. Shand & Jurs' line of combo units include the 94550, 94560, and 94570.

94550 - Combination Free Vent & Flame Arrester

- One compact fitting for positive flame arrest & maximum flow venting
- Easily accessible, unitized tube bank
- Available in sizes 2" through 12" DIN sizes available
- Available in 316 Stainless Steel and 316 L Stainless Steel
- FM Approved



94560/94570 - Combination Conservation Vent & Flame Arrester

- 94560- 2"-4" Sizes
- 94570- 2"-12" Sizes ANSI and DIN
- Unitized tube bank design, FM Approved
- Cost effective, dual purpose
- Provides pressure & vacuum relief
- Serves as a barrier between external flame and internal vapors
- Maximum protection and efficiency with minimum pressure drop
- Weight loaded for both vacuum and pressure venting
- Open or closed vent configurations
- Attached with quick release bolts and hinge
- Available in 316 Stainless Steel and 316 L Stainless Steel
- Three inlet types: screwed, flat face flange and raised face flange



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L&J Technologies offers a complete line of products that provide solutions for hundreds of Industrial and commercial applications. Visit us online at www.ljtechnologies.com

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Liquid Level Gauging,
Temperature Detection &
Inventory Management



Liquid Level Switches



Point/Multi-Point Level Controls
& Continuous Level Sensors



Tank Vents, Flame and
Detonation Arresters,
Fittings & FRP Equipment



Digester Gas Equipment
Waste Gas Burners



Mold Level & Strip
Guiding Measurement
& Control Systems for
Metals/Steel Industries

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