Our unique non-invasive ultrasonic technology has been developed and built upon over the last 35 years, and is proven throughout the world across a vast number of installations.

**Talk to the experts...**
- Ultrasonic technology with wide ranging and unique applications for several industries
- Heritage deeply rooted in the brewing and distilling industry, with an illustrious reputation across the Scotch Distilleries market
- The world’s only 100% non-invasive liquid level measurement:
  - Zero modifications to your vessels
  - No downtime for installation and commissioning

**Industries & Applications:**

**Beverage:**
- CO$_2$ control/monitoring in beer & sparkling wine
- Alcohol strength measurement
- Beer, water, spirit vat level measurement

**Petrochemical:**
- Chemical treatment process automation
- Acid bath strength, level and batching
- Chemical manufacture/production

**Oil & Gas:**
- Fuel storage tank level measurement (LPG, gasoline, diesel, kerosene...)
- Liquid level/interface detection in oil processing

**Transport:**
- Truck cargo monitoring
- Offloading fuel identification systems
- Fuel tank theft prevention
Non-Invasive Tank Level Gauge

VesselCheck ST1

- Used extensively across Oil & Gas, Beverage, Chemical and Pharmaceutical industries
- Truly non-invasive
- Sensors bonded to outside of tank
- Fits tank of most shapes and sizes
- Output to Telemetry system – various options
- Low cost, reliable & accurate tank gauging

- Not affected by pressure
- Easy installation – no tank break-in
- Simple retrofit to existing tanks
- No down-time during installation
- No moving parts – no maintenance
- Temperature integrated sensors available

Hazardous Area Non-Invasive Tank Level Gauge

VesselCheck ST1AD

- Approved for hazardous area
- Used extensively across Oil & Gas, Beverage, Chemical and Pharmaceutical industries
- Truly non-invasive
- Transceiver bonds to outside of tank
- No tank break-in
- Easy installation

- Ambient temperature compensated (temperature measurement in display unit)
- No down-time during installation
- Suitable for tanks of most shapes and materials
- Not affected by pressure
- No moving parts – no maintenance
- Low cost & reliable tank gauging

12 or 24 V d.c.
0.5V / 4-20mA
Modbus RS485

24V d.c. Supply
4-20mA or 0.5V
Output Modbus RS485
**Non-Invasive Tank Level Measurement System**

**VesselCheck ST2**
- Level measurement for 2 tanks
- Truly non-invasive technique
- Sensors bonded to outside of tank base and side wall
- 20 point calibration table
- 4 - 20mA / 1.5 V analogue outputs
- RS485 / 232 Modbus serial communications
- ATEX/ IECEx approved sensors for hazardous areas available
- Optional local display keypad
- Fast, reliable and accurate tank contents measurement
- Easy installation – no tank break-in
- Easy retrofit to existing tanks
- No down-time during installation
- No moving parts – little or no maintenance required

**Non-Invasive Tank Level Measurement System**

**VesselCheck ST4**
- Level measurement for up to 4 tanks
- Truly non-invasive technique
- Sensors bonded to outside of tank base and side wall
- 20 point calibration table
- 4 - 20mA / 1 - 5V analogue outputs
- RS485 / 232 Modbus serial communications
- ATEX / IECEx approved sensors for hazardous areas available
- Optional local display & keypad
- Fast, reliable and accurate tank contents measurement
- Easy installation – no tank break-in, easy retrofit to existing tanks
- No down-time during installation
- No moving parts - little or no maintenance required
Non-Invasive Point Level Detector for Tanks & Pipes (Hi-Lo Alarm)

SpotCheck 1000/4000

- Non-invasive liquid level switch for use in applications where avoiding contact is vital
- Uses ultrasonic “footprint” to determine presence or absence of liquids inside a tank or pipe
- Sensor is clamped externally to the wall of the pipe or vessel
- Enables tank high / low level alarm
- Response time of 1 second

Applications include:
- Pump run dry protection
- Pig detection
- Tanker off-load pump control
- Overfill alarm
- Hygienic level switch for foodstuffs, liquids, pharmaceuticals and chemicals

Pneumatic and Electronic Level & Pressure Transmitter

CT Hollege

- Suitable for hygienic applications
- High accuracy
- Long term proven reliability
- Rugged construction
- Simple installation and set-up
- Standard and bespoke units
- Pneumatic systems for hazardous areas
- Liquid and slurry continuous level measurement
- Continuous pressure monitoring
- Low cost, reliable & accurate tank gauging
- Not affected by pressure
- Easy installation – no tank break-in
- Simple retrofit to existing tanks
- No down-time during installation
- No moving parts – no maintenance

Graphic Colour Operator Interface

HMI

- 5.7” TFT Colour LCD
- 5 Button Keypad
- Resistive Analogue Touchscreen
- RS232/422/485 Comms port
- Integrated Ethernet & web server
- USB Port
- Configured to your application
- High Performance Core
- Integrated Functionality
- To be used with the Canongate VesselCheck series for level measurement
In-Line Measurement

**Liquid Concentration Sensor & Transmitter**

DensiCheck TX

- Economic measurement of liquid concentration and density through use of ultrasound technology
- Available as non-invasive and invasive formats
- ATEX hazardous area approved
- Zero drift and no re-calibration
- No moving parts
- Lower installation and maintenance costs
- Increased process efficiency
- Improved quality monitoring
- High accuracy and repeatability

**Oxygen Measurement**

OxyCheck

- Designed for hygienic applications to measure dissolved oxygen content (DO₂) reliably and accurately
- Uses photodiode technology
- Measurement range from 4ppm to 25ppm (0.05% - 300% saturation)
- Low maintenance required
- Electrolyte free and no fragile membrane
- Quick response and not affected by flow rate
- Integrated RS485 Modbus RTU interface

**Carbon Dioxide Measurement**

CarboCheck

- Accurate monitoring and control of dissolved CO₂ levels in carbonated beverages
- +/-0.02 CO₂ (+/-0.04 g/l)
- Hygienic fitting, can be cleaned in-place
- No sampling or product by-pass lines
- Available as single/ dual channel controller or up to 4 channel monitor
- Low maintenance requirement
- No moving parts
- Improved ‘right first time’ carbonation figures in-line or in-tank
- More efficient process control

**Multi-measurement Controller & Analyser**

MultiCheck

- Allows for multiple control & measurement of Carbon Dioxide, Oxygen and Alcohol/Plato
- Comprises of central control unit and sensors, providing a “one-system” measures all approach
- Ensures fast identification of products outside specification
- Very low maintenance required
- +/- 0.05 g/l for CO₂
- +/- 0.02 Plato
- +/-0.05% alcohol by volume
- +/- 5ppb O₂
Beverage Industry Specific Products

Rapid Staining Tests on Seeds
GrainStain
- Rapid Staining test on seeds, particularly barley and wheat
- Precision control of temperature, vacuum and time allows carrying out staining under reproducible and standardised conditions, ensuring optimum staining performance
- Completely self-contained unit with own integral vacuum pump.
- Two and four place versions available
- Independent vacuum gauge and control for each tube
- Integral pump adjustable to 380mm Hg
- Individual tube drain system
- Audible alarm system
- Illuminated mains power on/off switch
- Vacuum pump switch plus indicating LED
- Timers adjustable up to 30 minutes each with indicating LEDs
- Audible alarm system with push button cancel facility
- Heater indicating LEDs
- Individual adjusters for each sample tube temperature measurement

Mashing Bath for Extract Measurement
CT4 Mashing Bath
- Mashing bath for measurement of extract by IOB, EBC and ASBC procedures
- Stainless steel bath with integral pump for circulation of water through heater box and bath Beakers in the bath are stirred using magnetic followers and all samples are mashed and cooked together
- Bath is designed to be fully automatic, and manual control is possible if required
- PLC Control
- Colour graphics with touch display
- Programmable delayed start
- Audible alarm
- Bath temperature controlled by internal attemperation unit
- Temperature measured and controlled to +/- 0.2°C
- Low level water cut out
- Accurate water dispense (+/- 5ml) to all beakers in less than 2 minutes
- Simple touch screen access to volume calibrations
- Real time trending of machine sequence
- Remote servicing available via modem
- Two automatic pre-programmed mashing sequences
- Data storage of last 30 processes
- Overview screen to monitor all control I/O operations