



# PRODUCT BROCHURE

## | BREWERY & DISTILLERY



A MEMBER OF  
**FOOD &  
DRINK  
FORUM**



Industrial  
Trading  
Solutions



# About ITS



An experienced brewery and distillery supplier, Industrial Trading Solutions Ltd are hygienic equipment specialists with over 100 years of combined technical knowledge and applied skills in the food & beverage, brewery, distillery, dairy, pharmaceutical and personal care industries.

Formed in 2002 and based in the Midlands UK, ITS now distribute a multitude of top industry brands with a fast service, at competitive prices and all with an unmatched customer ethos.

Our technical team can support you with large system projects, one-off product purchases and maintenance & repair services.

As an ISO9001, ISO14001 & ISO45001 accredited business, you can expect the very best service and the highest standards from Industrial Trading Solutions Ltd.

"Operating within a safe and transparent culture of respect and innovation, we are dedicated to positively conduct ourselves with high ethical standards and integrity. We will continue to invest in and develop our staff, reliable product ranges and services provided, to ensure the high standards expected with the market we operate are upheld or exceeded. As the complete solutions supplier of choice, we value all stakeholders of the business and build strong relationships to reinforce our unrivalled reputation and future growth."

***Peter Jeans, Company Founder and Chairman***



DISTRIBUTING SOLUTIONS ◆ PROCESSING EXCELLENCE



# Contents

**Pumps**

p. 4-7

**Valves**

p.8-13

**Automation**

p. 14

**Tank Equipment**

p. 15-17

**Heating & Cooling**

p. 18-19

**Installation Material**

p. 20

**Additional Products**

p. 21-23

**Aftersales**

p. 24



# Centrifugal Pumps

Our range of centrifugal pumps come from manufacturers with expertise in designing pumps that meet the stringent hygienic requirements of the brewery industry. Used for transfers of fluids such as beer, water, DAL and CIP fluids, centrifugal pumps provide high efficiency solutions for high volume applications whilst remaining an economical choice.

## How it works

The centrifugal pump impeller, mounted on a shaft driven by an electric motor, rotates at high speed, transferring energy to the liquid thereby increasing pressure. The increase in pressure is due to the centrifugal force generated, subsequently increasing the kinetic energy of the liquid.



Centrifugal Impeller

## Features & Benefits

- Low life-cycle costs due to energy-efficient operation, easy cleanability, simple maintenance and long service life
- Exceptional levels of hygiene with EHEDG and 3-A certification or compliance with current GMP regulations to minimise contamination risks
- Robust, reliable stainless steel design ensures continuous operation and more uptime
- Simple maintenance thanks to front-loading design, easy seal conversion, and quick wear parts replacement



Solidc Pump



LKH- Standard Brewery Pump



LKH-Prime



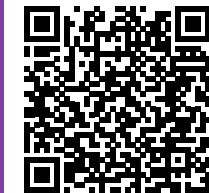
LKH-MultiStage



LKHPF/LKHI



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Video:



# Twin Screw Pumps

Choose a twin screw pump when you want to eliminate the need for 2 pumps and two process lines, but need a reliable product that can gently handle any viscosity fluid like finished carbonated beer or yeast and also CIP fluids. These pumps serve as a dual purpose in a single product and does this without damaging shear sensitive yeast or carbonated products impacting texture and flavour.

## How it works

Twin Screw Pumps are rotating positive displacement pumps, using two screws to convey the product along the screw axis. The contact-free intermeshing screws and the housing form closed chambers, constantly moving product from suction to discharge.

## Video:



SLH-4G Twin Screw Pump



SLH-4G Twin Screw Pump



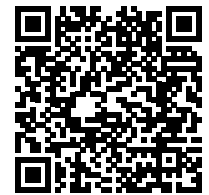
Twin Screw Tech



OS Twin Screw Pump Range

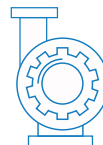


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## Features & Benefits

- Dual purpose pump for gentle transfer of product and transfer of CIP Fluids
- Safe Operation at high viscosities
- Low Pulsations
- Constant flow at varying pressures and volumes
- Suction lift up to 8.5m (25ft)





# Eccentric Disc Pumps

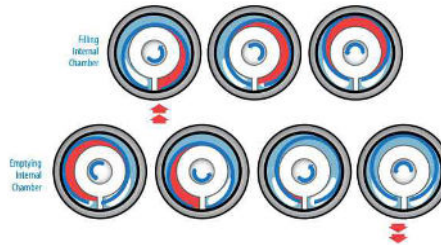
Designed for low shear applications on product lines such as yeast handling, these eccentric disc pumps maintain product integrity and give the additional benefit of product recovery increasing product yield as well as being a low maintenance solution with their mechanical seal-less design

## How it works

Eccentric Disc pumps consist of a contacting Stainless Steel cylinder and a non-galling alloy piston mounted on an eccentric shaft sealed by a flexible stainless steel bellows. As the eccentric shaft rotates the piston creates chambers within the cylinder which generate compression pressures drawing product from the suction side and pushing it out the discharge port with low shear rates. The flexible stainless steel bellows removes the need for traditional mechanical seals resulting in a low maintenance solution to reduce



H-Flo



Eccentric Disc Technology



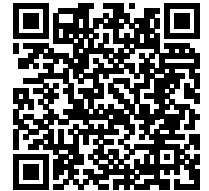
SLS / SLC range



SLS2



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## Features & Benefits

- Unique seal-less design features a double stainless steel bellows which ensures durability, safety and product containment.
- Eccentric disc technology provides very high suction and discharge pressures which allows it to self-prime and fully strip lines, maximising product recovery.
- Eccentric Disc pumps can run dry for up to 5 minutes, and the self-compensating eccentric disc principle provides consistent flow rates over a long period of time. The flow rate is extremely accurate even at low speeds.
- There are fewer moving parts, which results in reduced maintenance and downtime.

Video:



# Rotary Lobes

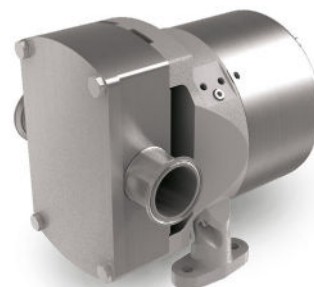
Our range of rotary lobe pumps come from manufacturers with expertise in designing pumps that meet the hygienic requirements of the Brewery Industry. Used for gentle transfer of yeast slurries and other products, Lobe pumps provide the perfect solution for gentle handling of products and low volume, high pressure applications.

## How it works

Our Rotary Lobe pumps consist of two intermeshed rotors affixed to a gear train. A gear train in the pump gearbox drives and accurately synchronises the rotors. The rotors move in opposite directions, creating a partial vacuum that allows atmospheric pressure or other external pressures to force the fluid into the pump chamber. As the rotors disengage, a cavity forms and expands, filling with fluid. As the rotors engage, the cavity diminishes, displacing the fluid into the outlet port.

## Features & Benefits

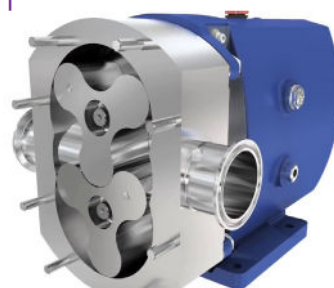
- Reliable, high-performance, low-maintenance pumps for continuous processing with minimal to no unplanned production stops
- \*High-quality end-product due to gentle, low-shear pumping
- \*Compliance with hygienic standards for general, food-grade and pharmaceutical processing requirements
- Versatile, efficient pumping of low-, medium- and high-viscosity fluids
- Pharmaceutical grade version available with documentation package for full supply chain transparency and traceability



Optilobe



SRU



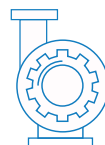
Rotary Lobe Technology



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Video:



# Butterfly Valves

Our hygienic butterfly valves are straightforward on/off routing valves with a substantial opening area and low flow resistance. They are an optimal solution in modern processing technology and ideal for use with low and medium-viscosity liquids.

## How it works

These can be operated either by means of a pneumatic actuator from a remote location or manually operated by means of a handle. For automatic operation, a pneumatic actuator converts the motion of the axial piston into a 90° rotation of the shaft. The actuator torque increases as the valve disc comes into contact with the seal ring of the butterfly valve to secure proper closing of the valve seat.

For manual operation, a handle mechanically locks the valve in open or closed position. Two-position, four-position, regulating 90°-position, and multi-position handles are available. Manual valves can also be mounted with indication units for feedback on the valve position (open/closed).

## Features & Benefits

- Minimised flow obstruction enables easy passage of process fluids, including fluids with concentrations of particles, through the valves
- Low flow resistance for easy passage of liquids with varying levels of viscosity, thereby reducing the energy used to move the fluid through the valve
- Fully modular, interchangeable range to suit any process line requirement, making selection, inline installation, operation and maintenance easy
- Fast, economical maintenance requires no special tools, only wear part replacement of a single component; flange version even easier and faster
- Optional intelligent sensing and control units with quick auto setup function, providing perfect valve control



Manual LKB-F



Automated LKB



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## Video:





# Single Seat Valves

Our range of single seat valves consists of large numbers of purpose-designed valve units that are very robust and flexible. They are ideal for use in processes with a high hygiene standard.

## How it works

The SSV is an air-operated seat valve, that can be remotely controlled. The valve can be configured as a shut-off or change-over valve with various actuators NO, NC or Two-step for smoother operation to avoid pressure peaks and/or over filling of a tank.

## Features & Benefits

- Few moving parts reduce service requirements and inventory costs
- Superior cleanability – smooth inner valve body (surface finish of Ra <0.8 µm) eliminates crevices
- Extended seal life due to defined seal compression
- Static seal leak detection helps ensure product safety
- Double lip seal provides protection against bacterial contamination



SSV Tangential



Unique SSV Y-body



Unique SSV

Video:



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# Regulating Valves

Our range of Regulating valves offers a wide range of solutions for regulation of flow, pressure and temperature of products. Options are available based on the reliable and robust SSV style valves whilst other stand-alone models are available all maintaining high standards of hygiene.

## How it works

Our range of regulating valves are available with Pneumatic or electro-pneumatic Actuators and control heads which remotely adjust the position of diaphragms or valve plugs to regulate product conditions set by the system requirements. Control can be achieved in varying levels of accuracy from basic regulation to precise regulation to an accuracy degree of 0.1%. The valves can be configured in normally closed or normally open actuator functions with varying levels of feedback to control systems.

## Features & Benefits

- Superior hygiene- polished surface finish and no dead spaces allow for full cleanability of product contact areas
- Static seal leak detection helps identify failed seals as soon as they happen
- Varying levels of control allow for a suitable solution for any system
- Interchangeable parts allow for converting valve internals to meet varying flow conditions for full flexibility
- Commonality of spares – Some regulating valve ranges are based on the reliable SSV range and have common service kits to reduce spares holdings



CPMI - Constant Pressure Modulating Valve



RV-ST



Unique RV-P



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# Mixproof Valves

Our range of mixproof valves have been designed to offer you peace of mind with your process by minimise the risk of product contamination when running multiple processes at once. With additional options available for specialised cleaning features and aseptic fluid handling they are ideal for brewery applications where microbacterial growth causes product contamination. The use of our mixproof range provides your process with added double seat protection to ensure safe and hygienic operation. The guaranteed spillage free plug design of the unique mixproof range gives you confidence in the reliability and hygienic design of the valve.



Unique Mixproof Ultrapure  
with Thinktop V70

## How it works

The Unique mixproof valve is a normally closed (NC) valve controlled from a remote location by means of compressed air. The valve has two independent plugs and seals to separate the flow of liquids and prevent cross-contamination; the space between the seals forms a leakage chamber at atmospheric pressure allowing any product to drain, should a seal fail, giving visual indication that a service is required whilst still maintaining cross contamination protection of product between bodies.

## Features & Benefits

- Maximum product safety, minimised risk of cross-contamination
- Enhanced product yield due to cost-effective, spillage-free operation
- Optimised plant efficiency and enhanced cleanability
- Optimised cleaning program offered with the V70 burst clean feature to reduce water wastage during seat lifts
- Fully configurable with a broad range of models and options to meet virtually any hygienic processing requirement



SMP-BC / SMP-BCA Valves



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## Video:





# Sampling Valves

So that you can monitor beer in fermenters and beer tanks, we have a range of sampling valves including:

- Microsample points
- Membrane sample valves
- Double seat sample valve
- Sample taps

Everything from gravity samples to pH and carbonation needs small samples of beer so that the evaluation can be carried out. Our sampling valves ensure this can be done without contaminating the sample or the sample source. Drawing representative samples that accurately reflect product characteristics enables product control and ensures product safety and quality.

## How it works

Sampling valves enable the operator to extract a representative portion of the process liquid for analysis to ensure quality control. The valves are operated either by manual handle, by pneumatic actuator, or by a combination of manual handle and pneumatic actuator. For sterile sampling, a hypodermic needle is inserted into a rubber membrane plug to draw the process liquid for evaluation.



PEM 2 Sampling Valve



M4 Sampling Valve



Membrane Sample Valve



Unique Sampling Valve

## Features & Benefits

- Representative, contamination-free sampling with various options and accessories, including a double seat valve cleaning functionality
- Safe sampling using quality sampling accessories, including pressure relief valves, to assure proper usage and workplace safety
- Sterile sampling using quality sampling accessories, including a steam generator or hypodermic needle, to ensure extraction of microbial-free samples
- Flexible, easy-to-clean hygienic solutions for manual and/or pneumatic operation in a single sampling valve
- Versatile sampling methods, from hypodermic needle and plug to manual or pneumatic solutions with large ports and diaphragm



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# Safety Valves

Our Safety valves are intended to protect pressured tanks and act as a fail safe during the processes carried out in breweries and distilleries that are renowned for significant pressures.

Pressure can build inside vessels or systems due to blocked discharge, thermal expansion, chemical reactions, or a combination of these events. Our Safety Valves are designed to flexibly relieve excess pressure from vessels or equipment at all times and under any circumstances. As the last and vital component in accident prevention, a high-quality, hygienic safety valve is an essential part of your operations.

## How it works

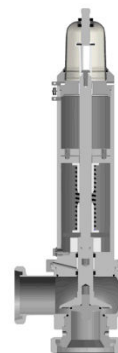
Safety valves relieve pressure or prevent vacuum conditions, delivered with the counterweights or spring set and locked at pre-set opening pressures or opening vacuums to suit either customer requirements or the tank design data. When the pressure or vacuum in the tank exceeds the pre-set opening value, the valve relieves the excess pressure or lets in atmospheric air.

## Features & Benefits

- Safe, reliable operation
- Hygienic design
- Prevents unsanitary leakage and overflow
- Safeguards both personnel and equipment against accidents due to overpressure
- Optional manual or automated overwrite for valve cleaning



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Safety Valve Cross Section



Spring Loaded Safety Valve



Combined Pressure relief and Anti Vacuum Valve



Pressure Exhaust Valve



Pressure Relief Valve



# Automation

Automation is one of the most vital components in a factory providing the Programmable logic controller (PLC) with real time feedback of equipment positions and status. The ThinkTop V50 and V70 products allow for full automation of our valve range, providing extensive options for varying indication feedback systems. Localised solenoid valves within control heads allow for quick and smooth operation of equipment. Additional Burst Clean features can be found on the V70 models to maximise cleanability and minimise water wastage during CIP cleaning of Mixproof valves. Intuitive auto set-up features within the V50 and V70 range allows for a one push configuration saving time and costs during installation.

## How it works

Control units offer a multi-positional feedback solution for all types of automated valves from Butterflies to Mixproofs. They can be supplied with a number of solenoid valves for optimal control of actuator functions, locally to the valve, increasing response time when called upon by the PLC. The ThinkTop converts the electrical PLC output signal into mechanical energy to energise or de-energise the valve. The inductive sensors detect the position of a magnetic sensor mounted on the actuator providing feedback to the PLC on the valves live position.

## Features & Benefits

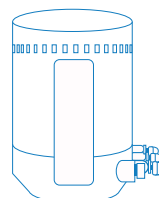
- Fast, intuitive setup takes place in seconds
- Smart control with 24/7 self-diagnostics
- 360° LED visual status indication, visible from any direction
- Built-to-last waterproof design withstands vibration and thermal expansion
- Fastest ever burst seat cleaning reduces water consumption by up to 90%



## ThinkTop Control Heads



SSV Automated Valve with ThinkTop V50



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## Video:





# Manways & Tank Covers

We have over 50 different types of tank covers, with a range of shapes and sizes to meet every need. Tank covers are available for both standard and pressure rated vessels.

## How it works

Manways and tank covers are used in a wide variety of applications. Side mounted manways allow for easy internal access to larger tanks when empty whilst still maintaining a secure seal during process operation when full. Top mounted manways allow for visual inspections of tanks, whether full or empty, and provide an easy access point for further products to be added to various production processes e.g. powders, flavorings, colorings.

The range varies from single hinged versions, non-pressure rated units, to multiple swing bolt versions suitable for high pressure applications. Options for alternative seal materials and surface finishes are available to meet any hygienic requirements in the dairy process.

## Features & Benefits

- Our tank covers are high quality openings that provide quick and easy entry and access to tank interiors in the dairy food and beverage and biopharm industries
- We offer more than 50 different types of oval, circular and rectangular covers that provide a quick, easy and convenient entry and access to tank interiors
- They are available in a variety of surface finishes and seal materials, these securely fit the openings of high, low or non pressure tanks



Circular Manways Type LKDS



Access Tank Cover Type C



Oval Manways Type LKD



Pressured Manway type HLSD-2



Access Tank Cover Type O



Circular manways Type LKDC



Access Tank Cover Type R



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# Static and Rotary Cleaning Heads

Our range is divided into four main classes of cleaning devices plus additional technology.

1. Static - These are fixed spray pattern devices delivering cleaning fluids either through 1 head/nozzle or a manifold of multiple heads/nozzles. Used mostly for easily cleanable products/surfaces which can be cleaned with cascading flow rather than impact/jetting. The most common type of static device used is a static spray ball.

2. Rotary Spray. These cleaning heads spin under the fluid pressure and this rotation allows for a more directed spray to be distributed omni-directionality. The motion, combined with the more directed spray gives these heads a far greater scrubbing action than static nozzles.

3. Rotary Jet Cleaners. These cleaning heads have 2 or more nozzles that produce powerful straight jets of fluid. These

impact on the surface of the tank blasting away tough residues. The nozzles will rotate in two dimensions over a set cleaning cycle so that the cleaning jets are brought to bear on each part of the tank.

4. Shadow Cleaning Technology - The adjustable nozzles of the PlusClean thoroughly clean shadow areas, including underneath agitator blades, coils and connections. Changeovers, whether batch or continuous processing, are safer, faster and contamination free due to an even more efficient cleaning cycle. This translates into higher productivity while using far less resources. Pairing the PlusClean with any top-mounted tank cleaning device saves money and resources.

Both the Rotary Spray Head and Jet Head tank cleaning devices provide exceptional cleanability, better end product quality, greater overall output and reduced operating costs.

## Features & Benefits

- They are all designed for hygienic applications
- Available in various sizes
- Available in different configurations covering any tank size



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## Video:



GamaJet



LKRK Static Ball



TJ40G



PlusClean



Orbitor 4 front



TJ20G



Orbitor 100 front



SaniMicro Rotary Spray Head

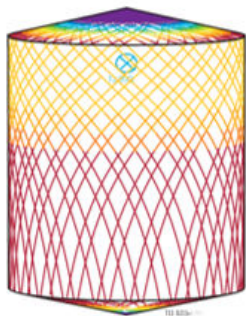
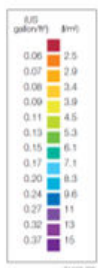
# Tank Cleaning Simulator

With certain tank cleaning selections, Industrial Trading Solutions Ltd are able to provide you with a working simulation of the cleaning pattern within your specified tank, so that you can be absolutely sure you have made the right choice.

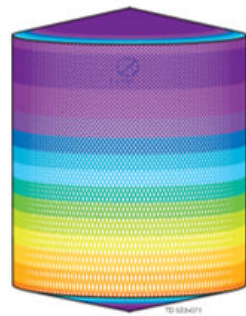
The simulation gives information on wetting intensity, pattern mesh width and cleaning jet velocity. This information is used to determine the best location of the tank cleaning machine and the correct combination of flow, time and pressure to implement.

A demo containing different cleaning simulations covering a variety of applications can be used as reference and documentation for tank cleaning applications - it is also free and available upon request.

Wetting Intensity



D4.6m H5.5m, Totejorg TJ 20G, 4 x ø5.5 mm, Time = 2.08 min., Water consumption = 403 l

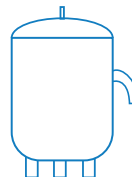


D4.6m H5.5m, Totejorg TJ 20G, 4 x ø5.5 mm, Time = 8.3 min., Water consumption = 1612 l

Tank Washing Nozzle	Up To	Coverage Distance In Metres (Diameter)											
		2	3	4	5	7	9	12	16	18	20	30	40+
TW 12-20	1.8m												
TW 1	3.6m				Static								
CLUMP	4.9m												
LEM	6.0m												
SVSTW	6.0m												
LKRK	6.0m												
SaniMicro / RSB25	5.0m												
HydroWhirl S	6.0m						Rotary Spray						
SaniMidget / RSB45	6.0m												
SaniMagnum / RSB65	6.0m												
HydroWhirl Poseidon	7.6m												
Orbitor Compact	17m									Rotary Jet			
Orbitor 4	26m												
TJ20G	28m												
Orbitor 2	40m												
TJ40G	43m												
Storm Blaster	50m												
TJ TZ-66	58m												



Scan the QR Code to read more about Tank Cleaning Solutions





# Gasketed Plate Heat Exchangers

ITS are one of the leading distributors of heat exchangers for heating and cooling duties. With our in-house sizing software we are able to size and configure heat exchangers to best suit customers processes whilst still maintaining maximum performance and efficiency.

## How it works

Each unit consists of a number of stainless steel plates compressed via a frame and pressure plate and sealed by removable gaskets. Product flows between alternating channels created by the the compressed plates and gaskets whilst a heating or cooling media flows between the opposite alternating channels. The heat is then transferred from one media to another via conduction.

Patented plate designs allow for maximum thermal heat transfer between liquids optimising the efficiency of each unit and enhancing performance.

Multi-Sectional units can be arranged for beer pasteurisation or Wort heat recovery and cooling systems to help minimise energy required to heat or cool products to required temperatures by removing heat already stored in the product.

Our thermal design engineers will help you design and select the model and configuration that is suitable for your application needs while delivering maximum thermal performance and minimise pressure drops through equipment.

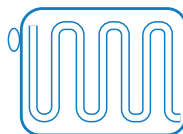
## Features & Benefits

- Range of plates makes FrontLine heat exchangers easily scalable to ensure consistent product quality
- Service-friendly – FDA compliant gaskets for easy opening, inspection and cleaning
- Fouling resistance and thermal efficiency thanks to range of pressing depths and chevron patterns as well as various corrugations
- Flexible – heat transfer area can be modified by adding or removing plates or combining different plates and material if process parameters change
- Suitable for multi-section plate heat exchangers for pasteurisation

## Video:



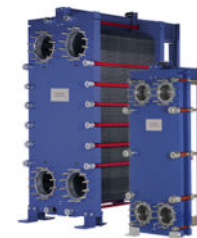
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Clip Line



Frontline Range



Frontline WideGap



Industrial Line

# Shell & Tube Heat Exchangers

Our shell and tube heat exchangers are used in many industry applications for heating and cooling fluids. In the dairy industry they can be commonly found on CIP systems.

Shell and Tube Units offer low pressure drops through the units whilst maintaining high thermal performance. With no wearing parts these units are virtually maintenance free over their process lifetime.

## How it works

Instead of transferring heat through parallel plates, shell and tube heat exchangers transfer heat between a singular tubes or a bundle of multiple tubes that are surrounded by a large shell vessel. Fluids that run through the tubes exchange heat with fluids that run over the tubes contained by the shell.



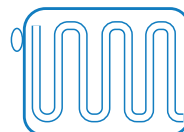
ViscoLine

## Features & Benefits

- Flexible configuration and easy to maintain for long service life
- Specific fouling-resistant design provides for long running times
- Leakage Detection
- Drainable
- Hygienic Design
- Compliant Design
- Comprehensive Documentation



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# Tube & Fittings

ITS is your complete source for specialised fittings and tubing required in the brewery process applications.

Our hygienic tube and fittings range meets precise requirements for safety, reliability and efficiency for standard duty in brewery applications. All hygienic tubes and fittings comply with ISO 2037, ASME BPE DIN11850 or BS4825 dimension standards.

## Features & Benefits

- Easy-to-clean hygienic fittings with internal surface finishes for hygienic and high-purity applications.
- Minimised risk of dead legs and microbial contamination due to crevice-free welds.
- Compliance with global hygienic standards including ISO 2037, ASME and ASME BPE dimensions, EN 10357-A, and BS 4825.
- Easy access to spare parts availability.



Hygienic Bends



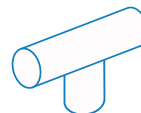
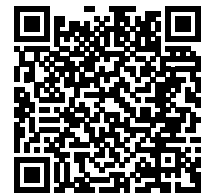
Hygienic Fittings



Hygienic Tube



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# Filtration

Auto-line filters are designed as compact self-cleaning automatic filters with a wide range of applications. The Auto-line filter is used when an automatic continuous cleaning process is required. Also Available: Bag Filters, Magnetic Filters, Cartridge Filters and Controllers.

## How it works

The impurities are being concentrated in the filter, until it is drained away. The drainage is done, while the filter is still in operation, which makes the liquid loss due to cleaning minimal. Special versions can be supplied according to customer requirements. Typically other temperature and/ or pressure levels.

## Features & Benefits

- Removes unwanted particles
- High operational reliability.
- Continuous flow process
- Self-cleaning application.
- Ensures the quality, high standard in food safety.
- Eliminates downtime
- Optimised earnings.

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# Digital Load Cells (Weighing Devices)

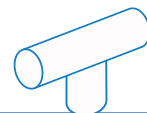
We offer a range of high quality digital load cells suitable for the brewery industry. All are flexible and easy to use with a broad range of configurable load cell interface modules, offering direct fieldbus connectivity or analogue output feature, plug-and-play installation, integrated diagnostics and ATEX versions.

Capacitive technology features a number of advantages compared to other technologies used in transducers for measuring force and weight, such as high accuracy (up to 99.99%), outstanding reliability, simple mechanical and electrical installation, and minimal maintenance for use in tough and demanding applications.

## Features & Benefits

- Load cells are available in load cell capacities from 1kg up to 500T and in OIML (up to C6) and ATEX versions
- Based on a patented digital technology, which features true plug-and-play electrical installation
- Load cells tolerate up to 1000% overload, which allows a very simple and hygienic mechanical installation

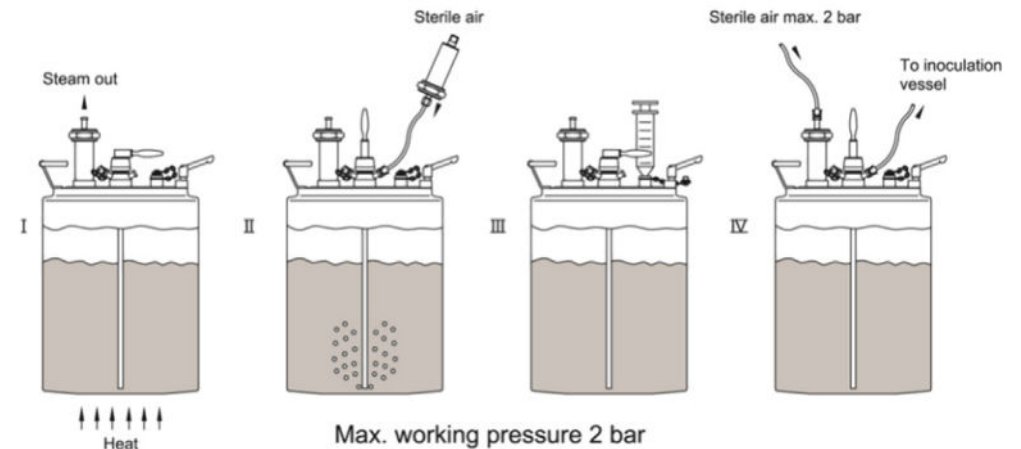
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# Yeast Propagation

The Carlsberg flask is used for sterilising wort and propagating pure yeast culture for yeast propagation plants in laboratory scale.

The Carlsberg Flask is constructed as a cylindrical container with flat bottom. The Carlsberg Flask is equipped with breathing filters and a membrane sample valve for aeration and product transfer. Yeast can be added through a micro sample port by the means of a syringe.



## How it works

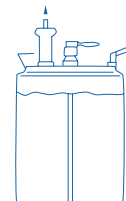
The flask is filled with wort to the net capacity corresponding to approximately 80% of the total volume.

Sterilisation takes place in an autoclave, on a gas burner or an electric hotplate. After sterilisation, the flask is placed in a refrigerator or a cold room in order to cool down the wort to the desired working temperature. Aeration of the cold wort is made through the membrane sample valve connected to the aeration lance.

Yeast culture can be introduced aseptically through the membrane fitting by means of a syringe. Alternatively, dry yeast culture can be transferred to the flask by the empty filter housing.



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# Pigging Systems

Designed to integrate transfer lines perfectly, our pigging systems are intended to recover the residual mass in the piping using a pig. The pig is positioned upstream of the zone to be evacuated, then sent in the piping by a thrusting fluid (gas or liquid). The standard equipment comprises a launching station, a receiving station and a pig.

It can be completed by full flow multi-way valves, which can be used to adapt the lines in order to optimise the pigging phases. Pigging control can be manual or automatic with a pig speed control unit.

## Features & Benefits

- Reduction in product losses (recovery above 99.5%)
- Pigging of all products transported in piping (viscous, solid bearing, solidifying, etc.)
- Enhanced line use flexibility by limiting the risks of cross-contamination
- Elimination of the dilution phenomenon induced by water thrust without a pig
- Reduction in the volumes of effluent to be treated
- Reduction in the consumption of cleaning agents and washing cycles
- Reduction in the operating costs and return on investment as of the first year of use
- Customised system that adapts to all types of requirements and constraints



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## Videos:



# Hygienic Silicone Hose

Our food and pharma grade silicone hoses meet and exceed: USP Class VI, FDA, bfr 3-A and many other certificates.

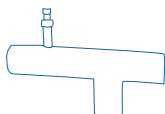
the hose and the fitting, in this way, ensures a higher level of non-retention area in the flexible hose.

A wide range of fittings are available according to each need and are crimped in-house to assure that our products are free of bacteria. We use the szr® system to avoid the step between

Also available are hoses that keep liquids cool or electrically heated, plus silicone sleeves, reinforced or translucent hose and hose suitable for transportation of semi liquids.



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## Spares

ITS offers a complete range of genuine OEM spares for all products supplied, with access to the knowledge and expertise to keep your equipment running at peak performance throughout its lifetime. Our high-quality, durable parts put productivity first and therefore provide:

- Increased uptime and productivity
- Longer lasting parts for a longer lifespan
- Reduced cost of ownership

Don't compromise - Buy genuine spares from ITS

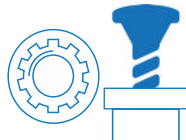


## Servicing and Maintenance

With our network of UK Field Engineers we can provide fast, direct, on-site support, or you can make use of our dedicated in-house facilities in the Midlands. You can rely on us for a fast turnaround and outstanding workmanship - all supported with genuine spares and our technically trained customer service team.

### What can we help with?

- On-site Valve/Pump/Heat Exchanger/Tank Equipment identification and site log
- Complete Spares and Service for hygienic flow equipment
- Sustainable development tool for water, energy, waste and product savings
- Emergency Breakdown
- Maintenance Scheduling





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HiFlux Filtration A/S

