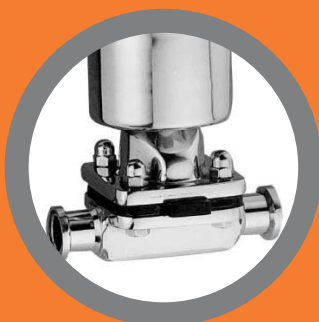
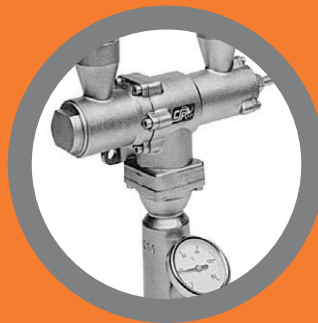




Product reference guide

Pumps • Valves • Filters • Flow accessories • Tank equipment



Pumps



▶ Sanitary centrifugal pumps – CS Series

- Close coupled sanitary centrifugal pump with open impeller and independent shaft support
- Low shear high efficiency design giving an optimised performance and characteristically low NPSH requirement
- For flow rates up to 300,000 l/hr and pressures up to 10 bar
- Range of connection types, elastomers and mechanical seals available
- Suitable for a wide range of requirements in the food, beverage and pharmaceutical process sectors, including evaporator applications



▶ Sanitary centrifugal pumps – CSM multistage

- Designed for high pressure applications, system pressures up to 40 bar
- Capacities range from 0 to 50 m³/h with heads up to 150m, available in 1, 2, 3 or 4 stages
- Sturdy construction using forged 316L ss, excellent surface finishing
- Range of connection types, elastomers and mechanical seal designs available

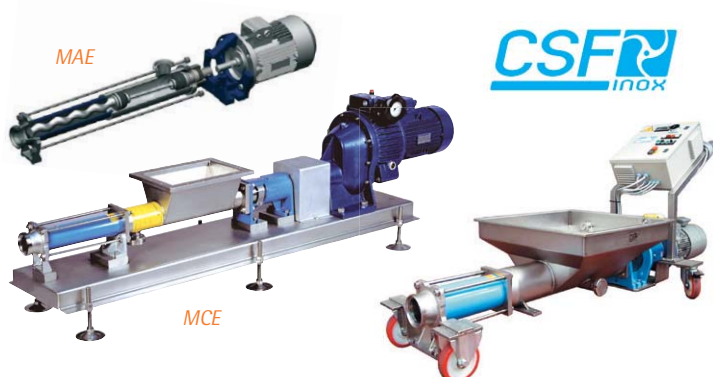


▶ Sanitary centrifugal pumps – CL Series

- Pressed body and hygienic design
- With integral motor shaft
- Polished in 316L ss

▶ CR screw impeller pump

- Combining the properties of a centrifugal pump with the delicate handling of a positive displacement pump
- For pumping solids in liquid. Designed not to clog and to be easily disassembled for inspection



▶ Progressive cavity pumps

- The eccentric screw pumps are positive displacement self-priming pumps with a single rotating axis
- Designed to move the product delicately and consistently
- Suitable to handle low viscosity products like wine or must and also high viscosity products and with solids in suspension
- Multistage pumps capable of pressures up to 24 bar
- Available in sizes from 1" to 6" with auger and pre-feed options available for handling very thick products

Pumps



AS Series



A Series

▶ Liquid ring pumps

- Self-priming, single and double stage liquid ring pumps
- Especially suitable for pumping CIP solution, water, juices, wine and spirits, chemicals and pharmaceutical media in CIP scavenge/return and tank emptying duties
- For flows up to 55 m³/hr



▶ Air-operated piston pumps

- Pneumatic piston pumps are available in various executions and sizes for pressures from 0 to 150 bar and flows from 1 to 80 l/min
- Suitable for pumping very high viscosity products and can be used in explosion proof environments
- Easy to disassemble and maintain



Dual wing rotor

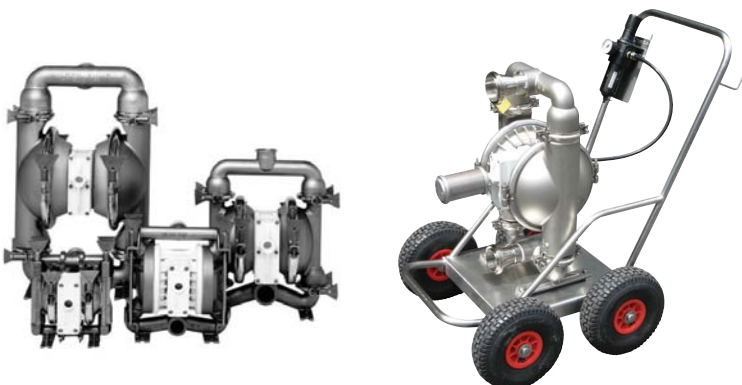
Bi-lobe rotor

Tri-lobe rotor



▶ Rotary lobe pumps

- Positive displacement rotary lobe pumps available in a range of sizes from 1" to 8" and with rotor options including traditional ss tri-lobe and dual-wing rotary piston designs
- Manufactured to exacting standards. OMAC lobe pumps have deservedly earned an enviable reputation in industry for their quality and reliability
- Options include; flushed seals, aseptic version, enlarged inlet, heat jacketing, with hydraulic drives for road tankers and pumps in special materials including, titanium, hastelloy, monel and thermoplastic



▶ Air operated diaphragm pumps

- Reciprocating pneumatically operated diaphragm pumps available in 316L ss body or plastic body
- Self priming and able to be run dry. Suitable for pumping over a range of viscosities and products with particulates
- Pump size in 1/4" to 3" with a range of diaphragm and elastomer options

Pumps



SN

▶ Positive sinusoidal displacement pumps

- Designed for gentle handling of the product, without slippage, product shear or pulsation
- High efficiency with excellent suction capabilities giving a consistent performance even with products over a range of viscosities
- Flow rates up to 36 m³/hr and maximum pressure of 15 bar



DS-M series



AMP series

▶ Peristaltic pumps

- Positive displacement volumetric pump with unique features
- Suction lift to 9m, can be run dry without damage, seal-less and reversible
- Particularly useful for dosing applications and pumping abrasive products
- Available in a wide range of sizes from just a few litres /hr to more than 20,000 l/hr, Boyser peristaltic pumps are trouble free, silent and easy to clean



GR



EP Major 60

▶ Flexible impeller pumps

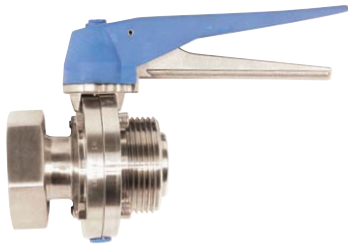
- Low speed rotary positive displacement pump, ideally suited to low pressure product transfer applications.
- A versatile positive displacement pump for delicate fragile and viscous fluids, also suitable for products with solids in suspension
- Widely used in juice, must and wine transfer



▶ Shear pumps

- In-line shear emulsifying pumps for circulation and smoothing of emulsions and lightly abrasive suspensions
- Useful also for circulation of storage tanks in order to avoid sedimentation or separation
- Available in a range of sizes and configurations to suit particular applications

Valves



PT handle - Plastic multi-position



SP handle - SS pull and turn handle



ST handle - SS multi-position

▶ SM Series – butterfly valve

SM economical valve

- 304 or 316 ss available in 1" to 12" sizes
- 3 different handle options
- Male RJT, female RJT or butt weld end connections in stock, TC-clamp connections also available
- Silicone seal as standard. EPDM and Viton on request



7M11 – SS handle



Micro-metric handle

▶ Tassalini 700 Series – butterfly valve

Tassalini valve (700 Series)

- Premium Italian valve, sold for more than 15 years in NZ
- 304 or 316 ss
- 1/2" to 10" sizes
- Multiple handles (ss trigger, plastic trigger, ss pull and turn, micro-metric adjustment)
- Male RJT, female RJT, tri-clamp or butt weld end connections in stock
- Silicone seal as standard. EPDM and Viton on request

Pneumatically actuated version

- ss actuator and control top
- Horizontal double-acting or single-acting version
- Vertical single-acting actuator
- Micro-switch or proximity switch for feedback

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Horizontal actuator



Vertical actuator



ZVF



Giotto control top



▶ Bardiani actuated butterfly valve

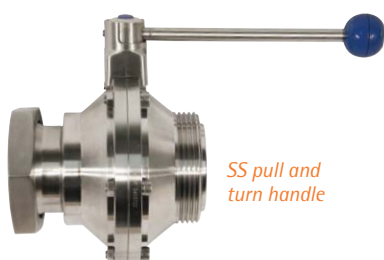
Bardiani butterfly valve

- Premium Italian valve, sold for more than 15 years in NZ
- 316L stainless steel construction
- 1/2" to 6" sizes
- Maximum pressure 10bar to full vacuum

Pneumatically actuated version with control top

- J-Giotto and Giotto top control heads with LED display lights, integrated solenoid valve with protective circuit board for power spikes and proximity switches for signal feedback

Valves



SS pull and turn handle

▶ D Series – economical ball valves

- 304 ss and 2", 3" and 4" sizes in stock, up to 6" on request
- Male/female RJT or butt weld end connections
- PTFE seat rings



▶ Plug cock valves

- 316 ss and 1" to 4" sizes
- 2-way and 3-way versions
- Male RJT or tri-clamp process connections



Compact version Series 81



Flushable Series 50

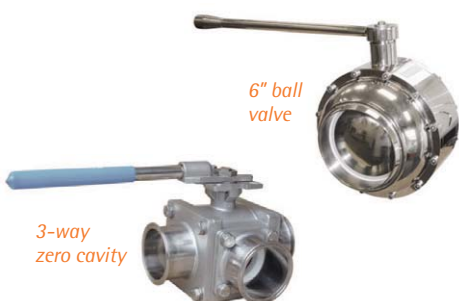


Fully encapsulated Series 90



▶ Tassalini ball valves

- 316 ss and 1" to 3" sizes as standard (4" flushable size)
- Can be actuated with horizontal, double-acting or vertical, single-acting actuator
- Male RJT or butt weld end connections



6" ball valve

3-way zero cavity



▶ 2-way and 3-way ball valves

- 316 ss and 1" to 4" sizes
- L-Port or T-Port configurations in 3-way valve
- Fully encapsulating PTFE seat in hygienic design
- High-mount iso pad for actuation
- Tri-clamp connections in stock, butt weld end also available
- Flushable versions available

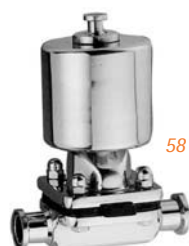


▶ Micro diaphragm valves

- Available in 1/4", 3/8" and 1/2" sizes
- PTFE diaphragm
- All 316L stainless steel
- Weld or tri-clamp connections
- Various surface finishes available (LS & LL)



57



58



60



▶ Tassalini diaphragm valves

- Sizes from 1/2" to 2" in 316L stainless steel
- EPDM or PTFE diaphragm
- Weld or tri-clamp connections
- Various surface finishes available (LS and LL)
- Available in manual or pneumatically operated with control top in stainless steel

Valves



BBZP



BBZK



ZM



BBZO

▶ Bardiani divert and shut-off valves

- 316L ss and 1" to 6" size range
- Manual or automatic
- Complete range of flow paths
- Range of options including aseptic design, steam barrier, twin stop shutter, double block and bleed
- Modulating control valve options
- Available in tank bottom execution



BBZS1



BBZSA



BBZS5
Pneumatic Lift

▶ Bardiani pressure relief valves

- Sizes from 1/2" to 4" in AISI 316L ss
- Adjustable spring or pneumatic loaded
- 10 bar pressure rating across all sizes with higher spring pressures available on request
- Versions include; Parabolic shutter, steam barrier, metallic bellows and aseptic diaphragm seal configurations
- Pneumatic seat lift for CIP



E25



E27



645L



K64VP



SK1232



645BNZ

▶ Pressure/vacuum relief valves

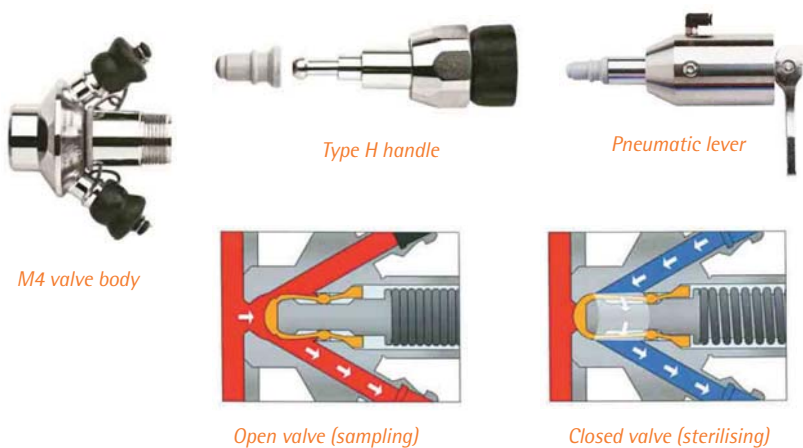
- Offer protection to the tank from both over-pressure and vacuum from pumping or during CIP
- Sizes from 1/4" to 4"
- Flowrates up to 160,000 l/h
- Economical E25 and E27 option
- K64VP offers adjustable set pressure to relieve and is ideal for tanks under pressure such as beer tanks
- 645BNZ available in sizes from 2" to 4" female RJT connections (Also available in 1 1/2" to 2 1/2" butt weld connections as 645L)

Valves



▶ Sampling valves

- W36 with replaceable diaphragm seal in silicone or EPDM
- W36 available in a flushable version
- W37 lockable sample valve (with butt weld connection)
- 710 valve with unique "2 in 1" sampling for both syringe penetration and bulk samples
- BSP valve with thread connection for economical sampling



▶ Aseptic sampling valves

- World leader in aseptic sampling with 150,000 valves in operation world-wide
- Available in tank or pipe welding
- M4 with 4mm opening, W9 in 9mm, W25 in 25mm
- Various handle configurations, also pneumatic options available for automatic sampling
- Sample bags and flask for aseptic collection available on request

SOLE DISTRIBUTORS IN NEW ZEALAND



▶ Sanitary non-return valves

- Sizes from 1/2" to 8" in 316L ss
- CS style with weld or tri-clamp connections
- Suitable for horizontal or vertical installation
- Low pressure springs available
- Magnetic type with no spring available on request



▶ High pressure valves

- Sanitary piston type shut-off and divert designs up to 150 bar
- 316L ss construction
- Aseptic version with steam barrier on request
- Stellite coated plug/seat
- Various control head options
- Needle valve design from 1/4" to 1" for pressures up to 10,000 bar



▶ Pinch valve

- Full flow, 2-way valve
- Rubber sleeve shuts with air pressure
- Sizes from 2" to 6"
- Weld, RJT and tri-clamp connections



▶ Air release valve

- 316L ss with special floating ball
- Vents air from process lines
- Reduces cavitation in pumps
- 1/2" standard connection
- Replaceable floating ball and PTFE seal

Filters



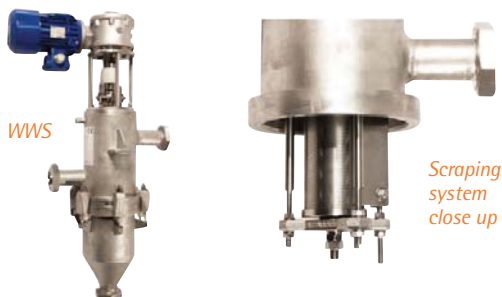
▶ In-line filters

- Sanitary design filter housings to suit line sizes from 1" to 8"
- Available in 304 or 316L ss construction
- Right angle, straight through or duplex designs
- Low pressure loss
- Removable filter element in ss
- Filtration sizes down to 63 micron absolute
- Filter insert options available in wedgewire (slotted tube), perforated plate and perforated plate with gauze
- Absolute filter inserts available on request



▶ Bag, cartridge and lenticular filters

- Complete range of housings to suit bag, lenticular and cartridge filtration
- Available in 316L and 304 ss to suit all process requirements
- Bag filters are available with ss basket with unique 3-ply sandwich design for absolute filtration (ss basket available as a separate item for retro-fitting into existing housings)
- Lenticular housings available in 1,2 or 3 stack sizes and either 12" or 16" in diameter
- Centre rods in ss available for running the lenticular filters with reduced stacks
- Cartridge filter housings available in single and multiple cartridge configurations to suit 10", 20" and 30" cartridges
- Available complete with valving, pressure gauges and skid-mounted with positive displacement pumps and controls



▶ Self-cleaning filters

- Self-cleaning wedgewire filters with motor-driven rotating screens, suitable for the separation of suspensions and the continuous removal of particles
- Filtration with most liquids, filtering from 35 micron to 3mm aperture
- Available with automatic purge system



▶ Screen and sock gasket filters

- Screen and sock gaskets designed to fit in a clamp union
- Screen gasket sizes from 1/2" to 6"
- Sock gasket sizes from 1" to 4"
- Sock lengths are 6", other sizes on request
- Various gasket materials available
- Mesh is 316L ss and ranges from 5mm to 40 micron absolute
- Special meshes available on request
- FDA, USDA and 3A compliant

Filters



Vertical screen filter



Rotary vacuum filter 2m²



Sheet filter 400x400

► Specialty filters

- Range of earth filters for coarse and fine filtration of wine, oils and chemicals
- Range of plate and frame filters for final filtration of liquids
- Membrane filters such as RO and microfiltration available on request

Flow accessories



450 series



445 series



441 series



► Sight glasses

Cylindrical:

- 1/2" to 6" sizes
- Pyrex safety glass as standard
- Acrylic available on request
- Suitable for pressures up to 10 bar
- Male RJT, female RJT tri-clamp or butt weld ends

Flat:

- 1" to 12" sizes
- Pyrex or acrylic viewing disc
- Flat sight glass available with version with an integrated light and wiper options
- Bulls eye sight glasses also available



► Liquid level gauge fittings

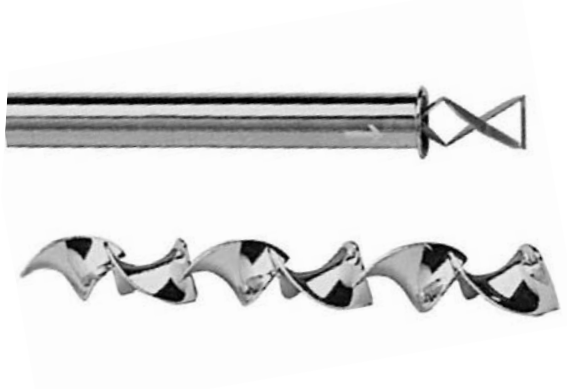
- 316L ss constructions
- Clamp connection to tank (BSP available on request)
- Compression fittings to suit 22mm OD tube (different sizes available)
- Tube available in a range of lengths and tube OD



► Variable area flowmeters

- Sanitary design
- Sizes from 1/2" to 2 1/2"
- Flows from 2 to 26,000 l/h
- Special versions up to 4" size and 60,000 l/h
- Flow tube in CIP-resistant polysulfon material
- Stainless steel float
- Customised end connections to suit a variety of process connections

Flow accessories



▶ Static mixers

- Sizes from 1" to 10"
- 316L stainless steel construction
- Polished internals with removable mixing elements
- High-efficiency, low pressure-loss mixing
- Single direction mixing vortex ensures high shear and better mixing than conventional mixing units



▶ Clamp union components

Ferrules

- Short, medium and long weld ferrules from 1/2" to 12" in 316L ss

Blank end caps

- Solid 316L end caps in sizes from 1/2" to 12"

Clamps

- Four clamp designs available from 1/2" to 12"
- Heavy duty (bolted) for high pressure

Gaskets

- Sizes from 1/2" to 12" available ex stock
- Flanged and unflanged versions in EPDM, NBR, Silicone, Viton, Solid PTFE and PTFE envelope style

Special versions

- Schedule 5 available
- Certified components with laser markings and special polishing available on request

Other common European union components and seals such as SMS, DIN available ex stock



▶ Steam/water mixers

- Economical, instant hot water
- 3/4" and 1 1/4" sizes
- Safety device ensures live steam cannot be ejected
- Integral temp gauge and non-return valves included
- Suitable for a range of process applications
- Used extensively in washdown stations



▶ Sanitary gauges

- Bourdon tube sanitary pressure gauges suitable for food, dairy and pharmaceutical applications
- Process connection diaphragm seal in 1 1/2" and 2" sizes
- Glycerine filled and sealed
- All stainless steel construction
- Face dials in 63mm and 100mm as standard
- 0 to 6 bar and 0 to 10 bar ranges as standard
- Other sizes of face dials and pressure ranges available on request

Tank equipment - Manways



- Stainless steel construction, AISI 304L or AISI 316L
- Quality European design and manufacture
- Wide range of gasket material options - natural rubber, nitrile, EPDM and viton (food grade certified)

▶ A Series - inward opening



A1

- P max: 3.8 bar
- Size: 445 x 340mm
- Flat frame, can be bent on request to suit



A4

- P max: 3.2 bar
- Size: 440 x 340mm
- 80 x 12mm frame



A7 Eco

- P max: 3 bar
- Size: 440 x 310mm
- Horizontal mount



A8 Eco

- P max: 3 bar
- Size: 440 x 310mm
- Vertical mount



A10 Eco

- P max: 3 bar
- Size: 440 x 310mm
- No hinge



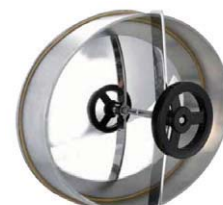
A15

- P max: 8 bar
- Size: 520 x 420mm
- 60 x 12mm frame
- Locating lugs, telescopic adjustment, swivel hinge



A16

- P max: 8 bar
- Size: 520 x 420mm
- 100 x 12mm frame (150mm avail)
- Locating lugs, telescopic adjustment, swivel hinge



A21

- P max: 6 bar
- Size: 520 x 420mm
- 80mm frame height (up to 160mm)
- No hinge



A29

- P max: 4 bar
- Size: 560 x 450mm
- 100 x 10mm frame (130mm avail)
- Locating lugs, telescopic adjustment, swivel hinge

▶ A Series - outward opening



A13

- P max: -1.0/+0.7 bar
- Size: 440 x 310mm
- 80 x 8mm frame



A25

- P max: 0.5 bar
- Size: 480 x 380mm
- 80 x 8mm frame



A28

- P max: -1.0/+1.0 bar
- Size: 440 x 310mm
- Glass cover for viewing

▶ D Series - pressure manways



D2

- P max: -1.0/+15 bar
- 150, 200 and 250 mm size
- 100 frame height



D3

- P max: -1.0/+6 bar
- Sizes: 300 to 800mm
- Sight glass optional



D13 - PED Certified

- P max: up to 10 bar, depending on temperature
- Sizes: 300 to 700mm
- Sight glass optional

Tank equipment - Manways

- Stainless steel construction, AISI 304L or AISI 316L
- Quality European design and manufacture
- Wide range of gasket material options - natural rubber, nitrile, EPDM and viton (food grade certified)



► B Series – outward opening



B1

- P max: -1.0/+1.0 bar
- 750 x 450mm size in stock
- 600 x 600 and 750 x 750mm sizes on request
- 70 x 8mm frame height



B2 Eco

- P max: -1.0/+1.2 bar
- Size: 530 x 410mm
- 60 x 8mm frame
- Other frame heights available
- Vertical mounting



B6 Eco

- P max: -1.0/+1.1 bar
- Size: 530 x 410mm
- 60 x 8mm frame
- Other frame heights available
- Horizontal mounting



B7

- P max: -1.0/+0.6 bar
- Size: 420 x 310mm
- 60 x 10mm frame

► D Series – round outward opening



D8

- P max: -0.5/+0.2 bar
- Sizes: 200 to 600mm
- 100 frame height
- Swivel hinge



D9 Eco

- P max: 0.02 bar
- 150 and 250mm in stock
- 60mm frame height
- Other sizes on request



D10

- P max: 0.2 bar
- 200mm size in stock
- 50mm frame height
- Other sizes and frame heights on request



D14

- P max: -0.8/+0.3 bar
- Sizes: 500 to 1600mm
- 100 frame height



D15

- P max: -0.5/+0.3 bar
- Sizes: 420 to 800 mm
- 100 frame height



D20

- P max: -0.5/+0.2 bar
- Sizes: 200 to 1600 mm
- 100 frame height



D22 Eco

- P max: -0.3/+0.1 bar
- Sizes: 200 to 600 mm
- 100 frame height

Tank equipment



▶ Tank tops

Tank tops for breweries

- Complete tank top arrangements
- Separate pressure and vacuum relief valves
- Automatic CIP with rotary cleaner or fixed sprayball
- Options for automatic gas and CIP connections

TC series



▶ Tank cleaning equipment

Rotating sprayheads

- Sizes from 25 to 77mm
- Use 1/3 of typical cleaning chemicals
- Used for cleaning tanks up to 90,000 litres
- Tank rinsing of 300,000 litre tanks
- Can be used with a standard pump
- BSP and clip-on connections

Fixed sprayballs

- Sizes from 28 to 90mm head
- Various spray patterns available
- Clip-on connections over standard tube
- Economical cleaning option



▶ Rotary jet heads

- Maximum tank cleaning
- Automatic cleaning operation
- Short cycle time
- Low maintenance
- Optimum cleaning solution of tanks from 200 litres to 500,000 litres in size



Specialty equipment



Hercules SSHE

▶ Scraped surface heat exchanger

- Ideal for thermal exchange of products with high viscosities and for products with particulates in suspension
- Rotating blades continuously clean the surface
- Products include; sauces, chocolate, yoghurts, pet food, coffee extracts and honey
- Features include ease of inspection, high degree of cleanability and aseptic version with flushed seals
- Modular design allows for multiple unit in-series



Specialty equipment



Tube-in-tube



Multi-tube

▶ Tube-in-tube heat exchangers

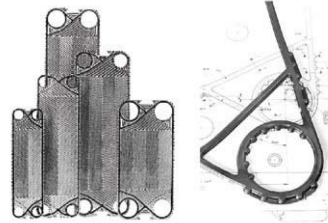
- Available as either single, tube-in-tube designs or multi-tube
- Ideal for thermal exchange of products having low or medium viscosities, even with particulates



Mobile plate and frame

▶ Plate and frame heat exchangers

- Specifically designed for dairy and food industries
- High thermal efficiency plate design
- Relatively small footprint
- Capacities from 200 l/h to 20,000 l/h



▶ Heat exchanger plates and gaskets

- Plates to suit most makes and models of PHE
- Customised frames to suit most plates for new machines
- Replacement gaskets to suit most leading brands of PHE including Alfa Laval, APV, Pasilac, Sondex, Schmidt, Fisher and Hisaka
- Available in a wide range of materials
- Competitive prices and short delivery times



Low temp vacuum evaporator

▶ REDA food processing equipment

- Production of heating, cooling, separation systems for the entire food and dairy sector
- Products include; self-cleaning centrifugal separators, low temperature vacuum evaporators, complete UHT plants, milk and cream standardiser plants and fruit purees and concentrates pasteurising
- Sectors include; dairy, food, fruit juice and wine



Complete UHT plant



Self-cleaning centrifugal separator



▶ Powder/liquid blenders

- These units are specially designed for the thorough mixing of powders into liquid solution
- Suitable for the production of; syrups, powdered milk, cocoa, soups, flour and starches, brines, puddings and yoghurts, caseinates and casein
- Available with matched centrifugal and positive displacement feed and circulation pumps



Specialists in sanitary process equipment

HD Process NZ Ltd, specialists in sanitary process equipment, was created in 1997 and is a solely-owned New Zealand family business. We pride ourselves on supplying quality sanitary stainless steel process equipment to meet all food industry needs. We work with integrity and commitment to assist our client business partners to solve their food processing requirements.

Ph: 64 9 580 2520

Fx: 64 9 580 2525

Email: mail@hdprocess.co.nz

10 Maurice Road
Penrose, Auckland

Our industry partners include:

- Wine
- Dairy
- Food
- Beverage
- Pharmaceutical
- Specialty chemical
- Honey

Our product pange includes:

- Pumps
- Valves
- Heat exchangers
- Tank equipment
- Filters, cleaning devices
- Mixers
- Blenders
- Flow accessories

Visit our website for more product information



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