

Dairy Processing Machinery Specification Sheet

Tanks, separation, heat treatment and filling for every stage between the milking parlour and the pallet.

Twenty-four machines that all answer one commercial question: how does milk get from a farm tank to a sealed pack without losing quality or shelf life on the way. The range covers reception and weighing, cooling and storage, separation and homogenisation, pasteurisation and UHT, fermentation and cheese making, filling into cups, pouches, cans and bottles, and the CIP that cleans all of it afterwards.

24 products in this category. Every figure below is published on the product pages at trueglowimaging.com/categories/dairy-machinery.html

Stainless Steel Storage Tank

HTK-CCG-01 · Food sanitary grade

A food sanitary grade stainless steel storage tank from 500 L to 100,000 L in SUS304 or SUS316L, used to store dairy products, fruit juice and drinks. The same design covers milk storage, pasteurised milk, UHT milk and sterilised milk tanks, chocolate storage, vegetable oil, non-dairy creamer, apple, pear, orange, coconut milk and mango juice tanks, and water storage.

Specification

Product Model	HTK-CCG-01
Product Volume	500 L to 100,000 L, customised
Material	SUS304 / SUS316L
Grade	Food sanitary grade
Dairy Applications	Milk, pasteurised milk, UHT milk, sterilised milk
Juice Applications	Apple, pear, orange, mango juice, coconut milk
Other Applications	Chocolate, vegetable oil, non-dairy creamer, water
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Two Hundred to One Volume Range. 500 L to 100,000 L in one design family means a plant can buy day tanks and bulk storage from the same specification and the same fabricator.

One Vessel Type Across Many Products. Milk, juice, chocolate, vegetable oil, creamer and water all use the same sanitary design, which simplifies both procurement and spares.

Food Sanitary Construction as Standard. Sanitary grade means the internal finish, the welds and the fittings are specified for food contact rather than for general industrial storage.

Material Choice per Product. SUS304 or SUS316L, chosen by product acidity and cleaning chemistry rather than applied across the whole plant.

Where it is used

Raw and pasteurised milk storage in a dairy • UHT and sterilised milk holding tanks • Apple, pear, orange and mango juice storage • Coconut milk and non-dairy creamer storage • Chocolate and vegetable oil storage • Process water storage in a beverage plant

Large Outdoor Milk Storage Silo

HTK-NC-01 · SUS304 / SUS316L

A large outdoor milk storage silo from 15,000 L to 120,000 L in SUS304 or SUS316L, built as a three layer tank with insulation and jacket. The inner shell is 3 to 4 mm, the outer cladding 2 mm and the cooling jacket 1.5 mm. It is supplied with product inlet and outlet, manway, side agitator, PT100 thermometer, air ventilation cap, aseptic sample valve, CIP cleaning ball, cooling inlet and outlet and level instrumentation.

Specification

Product Model	HTK-NC-01
Product Volume	15,000 L to 120,000 L, customised

Material	SUS304 / SUS316L
Inner Shell	3-4 mm
Outer Cladding	2 mm
Cooling Jacket	1.5 mm
Structure	Three layer tank with insulation and jacket
Agitation	Side agitator
Instrumentation	PT100 thermometer, level sensors
Sampling	Aseptic sample valve
Cleaning	CIP cleaning ball
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

Plate Thicknesses Published. Inner shell 3-4 mm, outer cladding 2 mm, cooling jacket 1.5 mm. Silo quotations rarely state these, and they are what the price difference between suppliers actually comes from.

Built to Stand Outdoors. Three layer construction with insulation and cladding is what lets a silo hold milk temperature outside, which frees the building for process equipment.

Aseptic Sample Valve Fitted. Milk in bulk storage has to be sampled without contaminating the silo. The valve is standard rather than an extra.

Side Agitator as Standard. A side agitator keeps fat from separating during long holding periods, which is what keeps the silo contents homogeneous for the next process step.

Where it is used

Bulk raw milk storage at a large dairy plant • Outdoor silo storage freeing indoor floor space • Buffer storage between milk intake and processing • Storing other liquid food products in bulk • Holding milk between tanker deliveries and processing runs • Large dairy factories requiring 120,000 L capacity

Blending Tank

HTK-JBG-01 · SUS304 / SUS316L

A mixing and blending tank from 500 L to 30,000 L in SUS304 or SUS316L, built as a vertical single layer, double layer PU insulated or three layer diple jacket tank. Six agitator types are available: paddle, anchor, propeller, frame, side and eccentric. It is used as a flavour milk mixing tank, UHT milk mixing tank, fruit juice blending tank, beverage blending tank and juice mixing tank.

Specification

Product Model	HTK-JBG-01
Product Volume	500 L to 30,000 L, customised
Material	SUS304 / SUS316L
Structures	Vertical single layer; double layer PU insulated; three layer diple jacket
Agitator Types	Paddle, anchor, propeller, frame, side, eccentric
Applications	Flavour milk, UHT milk, fruit juice, beverage and juice blending
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Six Agitator Types to Choose From. Paddle, anchor, propeller, frame, side and eccentric agitators each suit a different viscosity and mixing duty. Getting the agitator wrong is the most common reason a blending tank underperforms.

Three Shell Constructions. Single layer where no temperature control is needed, PU insulated where it must be held, three layer diple jacket where it must be heated or cooled actively.

Designed and Manufactured to Requirement. The tank is designed and built to the customer's specification rather than selected from a range, which matters when it has to fit an existing plant layout.

500 L to 30,000 L. One design family covers a small flavour batch and a bulk beverage blend.

Where it is used

Blending flavoured milk before UHT treatment • Mixing UHT milk formulations • Fruit juice blending to a target brix • Beverage blending with sugar and additives • Reconstituting powdered ingredients into liquid • Batch preparation ahead of filling

Milk Cooling Tank

HTK-LQG-01 • SUS304 / SUS316L

A milk cooling tank from 1000 L to 10,000 L in SUS304 or SUS316L, insulated with a dimple pad on the tank wall, used to cool and store fresh milk at dairy farms, milk collection centres and dairy plants. Cooling milk quickly is what keeps bacterial growth in check between milking and processing. The refrigeration uses imported brand compressor, expanding valve and electromagnetic valve.

Specification

Product Model	HTK-LQG-01
Product Volume	1000 L to 10,000 L, customised
Material	SUS304 / SUS316L
Structure	Insulated with dimple pad on tank wall
Refrigeration	Imported brand compressor, expanding valve, electromagnetic valve
Purpose	Cooling and storing fresh milk to prevent bacterial growth
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Cools Fast Enough to Stop Bacterial Growth. The window between milking and cooling is where milk quality is won or lost. The refrigeration system is sized for that, not for holding an already cold product.

Dimple Pad Cooling on the Wall. A dimple pad transfers heat evenly across the shell rather than through a single coil, which is what avoids freezing milk against the wall.

Named Refrigeration Components. Imported brand compressor, expanding valve and electromagnetic valve, so replacement parts come through normal refrigeration supply channels.

1000 L to 10,000 L. One design covers a single farm through to a collection centre gathering from many.

Where it is used

Cooling fresh milk at a dairy farm after milking • Milk collection centres holding milk before transport • Buffer cooling at a dairy plant intake • Cow farms storing milk between tanker collections • Small dairies holding milk before processing • Preparing milk for the next processing step

Milk Transport Tank

HTK-YNG-01 • SUS304 / SUS316L

A double layer insulated milk transport tank from 1000 L to 10,000 L in SUS304 or SUS316L, mounted on a truck to move fresh milk from farms and collection points to the processing factory. It is supplied with product inlet and outlet, manway, CIP cleaning ball, clapboard, aseptic breath cap, lifting ears, ellipse cover and support saddle.

Specification

Product Model	HTK-YNG-01
Product Volume	1000 L to 10,000 L, customised
Material	SUS304 / SUS316L
Structure	Double layer insulation tank
Internal Fittings	Clapboard, CIP cleaning ball
Venting	Aseptic breath cap
Mounting	Support saddle, lifting ear
Access	Manway, ellipse cover

Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Clapboard Against Surge in Transit. A partly full tank on a moving truck surges hard enough to affect braking. The internal clapboard is what breaks that movement up.

Insulated to Hold Temperature on the Road. Double layer insulated construction keeps milk cold between the farm and the factory, which is where quality is most often lost.

CIP Ball and Aseptic Breath Cap Fitted. The tank is cleaned in place between loads and vents through a filtered cap rather than open to the road. Both are standard components.

Support Saddle and Lifting Ears. The tank is built to be mounted on a truck chassis and lifted off again, which is what makes it a transport tank rather than a storage tank on wheels.

Where it is used

Collecting milk from individual dairy farms • Transporting milk from collection centres to the processing plant • Moving milk between plants or processing areas • Milk collection routes calling at several farmers • Transporting other liquid food products in bulk • Rural collection where processing is distant from the farm

Milk Weighing Tank

HTK-BNC-01 · SUS304 / SUS316L

A milk weighing tank from 300 L to 1500 L in SUS304 or SUS316L, used on farms and at collection points to weigh fresh milk before it is transported to the processing plant. It is built to food hygienic standard with a simple, no-dead-corner structure that is straightforward to clean between loads.

Specification

Product Model	HTK-BNC-01
Product Volume	300 L to 1500 L, customised
Material	SUS304 / SUS316L
Function	Weighing fresh milk before onward transport
Construction	Simple structure, no dead corner, food hygienic standard
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Weight Recorded at the Point of Collection. Milk is bought and paid for by weight. Weighing at the farm rather than at the factory is what makes the transaction verifiable to both sides.

No Dead Corners. A simple structure with no dead corners is what allows the tank to be cleaned properly between loads, which matters when it handles milk from multiple sources.

300 L to 1500 L. Sized for a single farm or a collection point rather than for bulk storage, which keeps the weighing accurate at realistic batch sizes.

Built to Food Hygienic Standard. Manufactured strictly to food hygienic standard, which is what allows it to sit in the milk chain rather than alongside it.

Where it is used

Weighing milk at the farm before collection • Recording volumes at a milk collection centre • Verifying delivered quantity at plant intake • Weighing individual farmer deliveries on a route • Small dairy operations tracking daily volumes • Preparing measured batches for the next processing step

Milk Receiving Tank

HTK-SNC-01 · SUS304 / SUS316L

A milk receiving tank from 300 L to 1500 L in SUS304 or SUS316L, used to receive and collect fresh milk from the farm before it moves to the processing plant. It is built strictly to food hygienic standard with a simple structure and no dead corners, so it can be

cleaned quickly between collections.

Specification

Product Model	HTK-SNC-01
Product Volume	300 L to 1500 L, customised
Material	SUS304 / SUS316L
Function	Receiving and collecting fresh milk from the farm
Construction	Simple structure, no dead corner, food hygienic standard
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

First Vessel in the Milk Chain. The receiving tank is where milk first enters the collection system. Its hygiene standard sets the ceiling for everything downstream of it.

No Dead Corners. Milk residue in a corner of a receiving tank contaminates the next collection. The structure is designed to eliminate them.

Quick to Clean Between Collections. Simple construction is what makes a fast turnaround between deliveries possible on a collection round.

300 L to 1500 L. Sized for individual farm collections rather than bulk storage.

Where it is used

Receiving milk from the milking parlour • Collecting milk at a village collection point • Intake buffer before transfer to a transport tank • Small dairy operations receiving daily milk • Farms transferring milk to a collection vehicle • Holding milk briefly before the next processing step

Separator

HTK-FLJ-01 • SUS304 / SUS316L

A centrifugal separator handling 1000 L/H to 30,000 L/H in SUS304 or SUS316L, used for dairy purification, milk and fat separation, and for fruit juice, tea drinks, coffee and beer. It separates solid particles finer than 1 micron that are highly dispersed in suspension from the liquid phase, without destroying the active ingredients, so nutritional value, freshness and original aroma remain intact. Inlet pressure is 0.05 to 0.1 MPa, outlet pressure 0.1 to 0.4 MPa, and motor power 4 kW to 30 kW.

Specification

Product Model	HTK-FLJ-01
Working Capacity	1000 L/H to 30,000 L/H, customised
Material	SUS304 / SUS316L
Separation Limit	Solid particles below 1 micron
Inlet Pressure	0.05 MPa - 0.1 MPa
Outlet Pressure	0.1 MPa - 0.4 MPa
Motor Power	4 kW - 30 kW
Applications	Dairy purification, milk and fat separation, fruit juice, tea drinks, coffee, beer
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

Separation Below One Micron. Particles under 1 micron, highly dispersed in suspension, are exactly what a filter cannot remove without blinding. Centrifugal separation is the process that does.

Active Ingredients Survive the Process. Separation is mechanical, not thermal, so the nutritional value, freshness and original aroma of the product are not damaged the way heat treatment damages them.

Complete Pressure and Power Data. Inlet 0.05-0.1 MPa, outlet 0.1-0.4 MPa and motor 4-30 kW. A separator cannot be integrated into a line without these figures, and they are published.

One Machine Across Five Product Types. Dairy, fruit juice, tea drinks, coffee and beer all use the same separator technology, which simplifies procurement for a mixed plant.

Where it is used

Purifying raw milk before pasteurisation • Separating cream from milk to standardise fat • Clarifying fruit juice before concentration
• Clarifying tea drinks and coffee extracts • Removing yeast and trub from beer • Removing fine suspended solids from beverages

Degasser

HTK-TQJ-01 · SUS304 / SUS316L

A vacuum degasser handling 1000 L/H to 15,000 L/H in SUS304 or SUS316L, using a vacuum system to remove odour and dissolved oxygen from milk and fruit juice beverages. Full-auto, semi-auto and manual control are all available, and motor power runs from 5.5 kW to 20 kW.

Specification

Product Model	HTK-TQJ-01
Working Capacity	1000 L/H to 15,000 L/H, customised
Material	SUS304 / SUS316L
Method	Vacuum system
Removes	Smell and oxygen from milk and fruit juice beverages
Control	Full-auto, semi-auto or manual
Power	5.5 kW - 20 kW
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Removes Dissolved Oxygen Before Filling. Oxygen in juice drives oxidation and colour loss through shelf life. Removing it before filling is far more effective than protecting the headspace afterwards.

Strips Off-Odours From Milk. Feed-related off-odours in raw milk carry through into the finished product. Vacuum degassing removes them along with the dissolved gas.

Three Control Levels. Full-auto, semi-auto or manual, so the machine matches the level of automation the rest of the plant runs at.

Published Power Range. 5.5 kW to 20 kW depending on capacity, which is what the electrical design needs and is often left out of quotations.

Where it is used

Removing dissolved oxygen from fruit juice before filling • Deodorising raw milk before pasteurisation • Reducing foaming in downstream filling machines • Improving shelf life of bottled juice • Removing air entrained during blending • Preparing product for aseptic filling

Spray Dryer

HTK-GZT-01 · SUS304 mirror plate

A spray dryer handling 1000 L/H to 30,000 L/H in SUS304, used to produce milk powder and fruit juice powder. Product recovery is no less than 97% and finished particle size is 80 to 120 mesh. The inner cylinder of the spray tower is SUS304 mirror plate no less than 2.5 mm thick, the tower body is insulated, and the outside carries a stainless steel platform, stairs and railings. Product contact surfaces are mirror polished to Ra 0.8 micron or better.

Specification

Product Model	HTK-GZT-01
Working Capacity	1000 L/H to 30,000 L/H, customised
Material	SUS304
Product Recovery Rate	No less than 97%
Finished Particle Size	80 to 120 mesh

Inner Cylinder	SUS304 mirror plate, no less than 2.5 mm
Tower Body	Insulated
External Access	Stainless steel platform, stairs and railings
Product Contact Finish	Mirror polished, Ra 0.8 micron or better
Systems	Product feeding, medium circulation, air dehumidification and heating
Minimum Order	One unit
Production Capacity	10 units per month

Key benefits

Recovery No Less Than 97%. Powder lost to the exhaust is product paid for and not sold. A stated recovery figure above 97% is what makes the operating economics calculable.

Mirror Finish to Ra 0.8 Micron. Powder sticks to any surface roughness it can find. A mirror polished product contact surface is what keeps the tower clean and the product free-flowing.

2.5 mm Minimum Tower Plate. Tower plate thickness is a real cost difference between suppliers and it is published here rather than left vague.

Access Platform Supplied. Stainless steel platform, stairs and railings come with the tower, which is what makes routine inspection and cleaning possible.

Where it is used

Producing whole and skimmed milk powder • Fruit juice powder production • Drying concentrated product after evaporation • Producing instant powder for beverage manufacture • Powder production for export in bulk • Converting seasonal liquid product into a shelf-stable powder

Aseptic Tank

HTK-AT-01 • SUS316L product contact

An aseptic tank in 10 T, 15 T, 20 T and 30 T sizes, with SUS316L on product contact parts and SUS304 elsewhere, used in dairy, fruit juice and beverage factories to store sterile product before filling. Standard components include an aseptic stirrer, aseptic pressure manway, CIP cleaning ball, ladder, handrail and guardrail, SIEMENS load scale, supporting legs and a PLC full-auto control system.

Specification

Product Model	HTK-AT-01
Product Volume	10 T, 15 T, 20 T, 30 T, customised
Product Contact Material	SUS316L stainless steel
Other Parts	SUS304 stainless steel
Agitation	Aseptic stirrer
Access	Aseptic pressure manway, ladder, handrail, guardrail
Cleaning	CIP cleaning ball
Weighing	SIEMENS load scale
Control	PLC full-auto control system
Minimum Order	One unit
Production Capacity	20 units per month

Key benefits

Keeps Sterility Between Process and Filler. Product sterilised upstream is only sterile until something breaks the barrier. An aseptic tank with a pressure manway and aseptic stirrer is what holds it until filling.

Load Scale Fitted as Standard. A SIEMENS load scale means tank contents are known by weight rather than estimated by level, which matters for both yield accounting and filler scheduling.

Decouples Steriliser From Filler. Buffer volume between the two means a filler stoppage does not force the steriliser down, and vice versa.

PLC Full-Auto Control. Aseptic operation depends on a defined sequence of sterilisation, pressurisation and filling steps. Automating it removes the step someone forgets.

Where it is used

Buffering sterile juice between UHT and aseptic filling • Holding sterile dairy product before packaging • Aseptic storage in a beverage factory • Decoupling continuous sterilisation from batch filling • Holding product during a filler changeover • Aseptic bulk storage before bag or carton filling

Cheese Vat

HTK-GLC-01 · SUS304 / SUS316L

A cheese vat from 500 L to 2000 L in SUS304 or SUS316L, used on dairy production lines, at dairy farms and in milk plants to make cheese. It is built strictly to food hygienic standard with a no-dead-corner structure, so the vat can be cleaned properly between batches of a product where contamination shows up in the finished cheese weeks later.

Specification

Product Model	HTK-GLC-01
Product Volume	500 L to 2000 L, customised
Material	SUS304 / SUS316L
Function	Cheese production
Construction	Food hygienic standard, no dead corner
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

No Dead Corners in a Vat That Holds Curd. Curd and whey residue in a corner is a contamination source that appears in the finished cheese long after the batch. The structure is designed to remove them.

500 L to 2000 L. Sized for artisan and small-plant cheese production, where batch size is set by the recipe rather than by plant throughput.

Material Choice at Order. SUS304 or SUS316L, so the specification can follow the acidity of the cheese being made and the cleaning chemistry used.

Built to Food Hygienic Standard. Cheese making involves long holding times at warm temperatures, which is precisely when hygiene standards matter most.

Where it is used

Artisan cheese production in a small dairy • Cheese making on a farm dairy • Pilot batches for new cheese products • Cheese production within a larger milk plant • Curd cutting and whey separation • Batch cheese production up to 2000 L

CAN Filling and Seaming Machine

HTK-YLGGZ-01 · SUS304 or SUS316L

A can filling and seaming machine running at 200 to 1000 cans per minute in SUS304 or SUS316L, suitable for both slim and stubby cans. It uses SIEMENS PLC control with touch screen, runs at a high degree of automation with precise filling and seaming, and a frequency converter gives variable speed. Multiple safety devices protect both the machine and personnel at high speed, and can size changeover is quick.

Specification

Product Model	HTK-YLGGZ-01
Working Capacity	200 cans per minute to 1000 CPM, customised
Material	SUS304 or SUS316L
Can Formats	Slim can and stubby can
Control	SIEMENS PLC and touch screen
Speed Regulation	Frequency converter
Safety	Multiple integrated safety devices

Changeover	Quick can size changeover
Minimum Order	One unit
Production Capacity	10 units per month

Key benefits

Slim and Stubby Cans on One Machine. Most beverage brands run both formats. A machine handling both, with quick changeover, avoids a second line or a long conversion.

Filling and Seaming in One Frame. The seam has to be made immediately after filling. Combining both in one machine removes the transfer where headspace and oxygen pickup go wrong.

Safety Devices for High-Speed Running. At up to 1000 cans per minute, mechanical guarding alone is not enough. Multiple integrated safety devices protect the machine and the operator.

Quick Can Size Changeover. Changeover time is dead time. A machine designed for quick size change is what makes short runs of a second format viable.

Where it is used

Canning beer on a brewery packaging line • Filling carbonated soft drinks into cans • Dairy drinks in can format • Fruit juice canning lines • Running slim and stubby formats on one line • High-speed canning at up to 1000 CPM

Butter Churner

HTK-SYJ-01 · SUS304 / SUS316L

A butter churner handling 1000 L/H to 5000 L/H in SUS304 or SUS316L, used on dairy production lines to make butter from cream. Different capacities are available within the range, with a minimum order of one unit and a monthly production capacity of 100 units.

Specification

Product Model	HTK-SYJ-01
Working Capacity	1000 L/H to 5000 L/H, customised
Material	SUS304 / SUS316L
Function	Making butter products on a dairy production line
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Sized for Real Dairy Volumes. 1000 L/H to 5000 L/H is the range a working dairy actually churns at, rather than a laboratory scale or a commodity plant scale.

Stainless Throughout. SUS304 or SUS316L construction, which is what allows the fat-contact surfaces to be cleaned properly between runs.

Long Service Life. A churner is mechanical equipment running under load. Service life and ease of maintenance are the design priorities rather than peak output.

Capacity Selected at Order. Different capacities are available so the churner matches the cream volume the separator produces.

Where it is used

Producing butter from separated cream • Value-adding surplus cream at a dairy • Farm dairy butter production • Butter production within a larger milk plant • Seasonal butter making from peak milk • Producing butter alongside cheese on the same site

Plastic Cup Filling Machine

HTK-SLBGZ-01 · SUS304

A plastic cup filling machine running at 1000 to 2000 cups per hour in SUS304, used mainly on yogurt filling lines. Single-cup and multiple-cup filling versions are both available, so the machine can be matched to the cup format and the required output. Minimum order is one unit with a monthly production capacity of 10 units.

Specification

Product Model	HTK-SLBGZ-01
Working Capacity	1000-2000 cups per hour, customised
Material	SUS304 stainless steel
Versions	Single-cup filling; multiple cup filling
Application	Yogurt product filling production lines
Minimum Order	One unit
Production Capacity	10 units per month

Key benefits

Single or Multiple Cup Filling. A multiple-cup head fills several cups per cycle, which is how output rises without increasing cycle speed and the spillage that comes with it.

Built for Yogurt. Yogurt is viscous and sets. A filler designed for it handles the product properly rather than being adapted from a liquid filler.

SUS304 Construction. Dairy filling areas are washed down daily. Stainless construction is what allows that without corroding the frame.

Energy-Saving Operation. For a small plant filling a few thousand cups a day, running cost matters as much as machine speed.

Where it is used

Filling set and stirred yogurt into plastic cups • Dairy dessert filling in cup format • Small-scale yogurt production lines • Filling cultured dairy products • Multiple cup sizes on one filling machine • Starting a cup-format dairy product line

Plastic Pouch Filling Machine

HTK-SLDGZ-01 • SUS304

A plastic pouch filling machine running at 1000 to 1200 bags per hour in SUS304, with a filling accuracy of plus or minus 1.5 per thousand and a choice of one or two filling heads. In one pass it completes film disinfection, bag making, filling, measuring, sealing and date printing, and it is used for pasteurised milk, drinking water, vegetable oil, milk and fruit wine.

Specification

Product Model	HTK-SLDGZ-01
Working Capacity	1000-1200 BPH, customised
Material	SUS304 stainless steel
Filling Accuracy	Plus or minus 1.5 per thousand
Filling Head	1 or 2 head
Automatic Functions	Film disinfection, bag making, filling, measuring, sealing, date printing
Products	Pasteurised milk, drinking water, vegetable oil, milk, fruit wine
Minimum Order	One unit
Production Capacity	10 units per month

Key benefits

Film to Sealed Pouch in One Machine. Film disinfection, bag making, filling, measuring, sealing and date printing all happen on one frame. There is no pre-made pouch to buy, store or handle.

Filling Accuracy of 1.5 per Thousand. Overfill is money given away on every pouch. At plus or minus 1.5 per thousand the giveaway is small enough to be worth calculating.

Film Disinfected in Line. The packaging material is disinfected as it enters the machine, which is what makes pasteurised milk in a pouch shelf-viable.

One or Two Filling Heads. A second head doubles output without a second machine, which is the usual way to grow within this format.

Where it is used

Filling pasteurised milk into plastic pouches • Drinking water in pouch format • Vegetable oil pouch filling • Fruit wine and liquid products in flexible packaging • Low-cost packaging for price-sensitive markets • Small dairies packaging milk without a bottling

line

Glass Bottle Filling Machine

HTK-BLPGZ-01 · SUS304 or SUS316L

A glass bottle filling machine running at 2000 BPH to 20,000 BPH in SUS304 or SUS316L with an organic glass door, combining rinsing, filling and capping in one three-in-one block. It is controlled by SIEMENS PLC with touch screen and achieves a qualified rotary capping rate of 99.9%. It is used on fruit juice, beverage and drinks production lines.

Specification

Product Model	HTK-BLPGZ-01
Working Capacity	2000 BPH to 20,000 BPH, customised
Material	SUS304 or SUS316L, with organic glass door
Functions	Rinsing, filling and capping three-in-one
Control	SIEMENS PLC and touch screen
Qualified Rotary Capping Rate	99.9%
Applications	Fruit juice, beverage, drinks production lines
Minimum Order	One unit
Production Capacity	10 units per month

Key benefits

Organic Glass Door on the Enclosure. Glass bottles break. A transparent door lets the operator see the filling zone without opening it, which is both a safety and a diagnosis advantage.

Three-in-One Block. Rinsing, filling and capping in one machine keeps the open bottle inside a single enclosure, which matters more with glass than with PET.

99.9% Qualified Capping Rate. Glass bottle closures are less forgiving than PET caps. A stated qualified rate is what makes line efficiency calculable.

2000 to 20,000 BPH. The range covers craft and mid-scale production, which is where most glass filling actually sits.

Where it is used

Filling fruit juice into glass bottles • Premium beverage lines using glass packaging • Returnable glass bottle filling • Drinks production requiring a glass format • Small-batch premium products at 2000 BPH • Mid-scale glass bottling at up to 20,000 BPH

Plate Heat Exchanger

HTK-PHE-01 · SUS304 / SUS316L

A plate heat exchanger handling 1000 L/H to 15,000 L/H in SUS304 or SUS316L, used on dairy and fruit juice beverage lines to heat or cool product according to the process flow. Its compact plate stack gives high heat exchange efficiency with small heat loss, and the pack opens for cleaning and inspection rather than being sealed.

Specification

Product Model	HTK-PHE-01
Working Capacity	1000 L/H to 15,000 L/H, customised
Material	SUS304 / SUS316L
Function	Heating or cooling product according to the process flow
Characteristics	High heat-exchange efficiency, small heat loss, compact structure
Applications	Dairy production lines, fruit juice beverage processing lines
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Heat Exchange Efficiency in a Small Footprint. A plate pack puts far more surface area into a given volume than a shell and tube exchanger. On a crowded process floor that difference decides whether it fits.

The Pack Opens for Cleaning. Plates can be separated and inspected. On a food product that fouls, that access is what keeps the exchanger performing over years rather than months.

Small Heat Loss. Compact construction means less exposed surface, which means less heat going into the room instead of into the product.

Capacity Selected to the Duty. 1000 L/H to 15,000 L/H with different capacities available, so the plate count matches the heat load.

Where it is used

Heating product ahead of pasteurisation • Cooling product after heat treatment • Regenerative heat recovery between product streams • Chilled water cooling on a dairy line • Juice heating before filling • Temperature adjustment between process steps

CIP System

HTK-QX-01 · SUS304

A CIP system handling 1000 L/H to 30,000 L/H in SUS304, for cleaning dairy, fruit juice and beverage production lines after each run. The standard sequence is acid cleaning, alkali cleaning, hot water cleaning and pure cold water cleaning, and the procedure can be designed to your production requirements. Full-auto, semi-auto and manual control are available. Standard components include a full-auto SIEMENS PLC control system and touch screen, UK Spirax Sarco steam pressure reducing and drain system, a German temperature inspection and regulation system, a German JUMO conductivity meter and German Contrinex or IFM flow rate switches.

Specification

Product Model	HTK-QX-01
Working Capacity	1000 L/H to 30,000 L/H, customised
Material	SUS304
Cleaning Sequence	Acid, alkali, hot water, pure cold water
Control	Full-auto, semi-auto, manual
PLC	Full-auto SIEMENS PLC control system and touch screen
Steam System	UK Spirax Sarco steam pressure reducing and drain system
Temperature	German temperature inspection and regulation system
Conductivity	German JUMO conductivity meter
Flow Switch	German Contrinex or IFM
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

Conductivity Meter Fitted as Standard. A JUMO conductivity meter is what distinguishes chemical from rinse water in the return line. Without it, recovery CIP is guesswork and rinse water ends up in the chemical tank.

Four-Stage Sequence, Configurable. Acid, alkali, hot water and pure cold water stages, with the procedure designed to your production requirements rather than fixed.

Flow Switches on the Circuit. Contrinex or IFM flow rate switches confirm the circuit is actually flowing. A CIP cycle that runs without flow cleans nothing and reports success.

Three Automation Levels. Full-auto, semi-auto and manual, so the capital cost matches the size and staffing of the plant.

Where it is used

Cleaning tanks and lines after a production run • Product changeover cleaning on a shared line • Daily hygiene cycles in a dairy plant • Cleaning a fruit juice processing line • Multi-circuit CIP across a beverage plant • Recovery CIP reducing chemical consumption

Conveyer

HTK-SSD-01 · Air, chain plate or spiral

A conveyer running at 15,000 to 36,000 bottles per hour in three types: air conveyor, chain plate conveyor and spiral conveyor. It carries packaged products on beer, beverage, soft drink, fruit juice, pure water, mineral water, dairy and seasoning lines, with

working speed built to the line it serves.

Specification

Product Model	HTK-SSD-01
Working Speed	15,000-36,000 BPH, customised
Types	Air conveyer; chain plate conveyer; spiral conveyer
Application	Conveying packaged products
Industries	Beer, beverage, drinks, fruit juice, pure water, mineral water, dairy, seasoning
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Three Conveyor Types for Three Jobs. Air conveyors move empty PET bottles by the neck with no contact on the body; chain plate carries filled containers; spiral gains or loses height in a small footprint. Most lines need all three.

Air Conveying for Empty Bottles. Empty PET bottles are light and unstable on a belt. Neck-handling air conveying is what moves them reliably at high speed.

Spiral Conveyors Save Floor Space. Changing level in a straight run needs metres of floor. A spiral does it in its own footprint.

Speed Matched to the Line. 15,000 to 36,000 BPH built to requirement, so the conveyor never becomes the constraint between two machines.

Where it is used

Conveying empty PET bottles from the blower to the filler • Moving filled bottles between filler and labeller • Transporting packs to the palletizer • Changing level between floors or over a walkway • Accumulation between machines with different cycle rates • Conveying on a dairy or seasoning packing line

High Speed Emulsification Tank

HTK-RHG-01 • SUS304 / SUS316L

A high speed emulsification tank from 500 L to 3000 L in SUS304 or SUS316L, built as a three layer tank with insulation and dimple jacket. The emulsifier is mounted at the bottom and runs at 1440 RPM using high shear emulsification, which is what disperses sugar, milk powder, starch, gums, colloids and stabilisers into liquid. Standard components include product inlet and outlet, ellipse manway, air ventilation cap, CIP cleaning ball, digital display thermometer and electrode liquid level instrumentation.

Specification

Product Model	HTK-RHG-01
Product Volume	500 L to 3000 L, customised
Material	SUS304 / SUS316L
Structure	Three layer tank with insulation and dimple jacket
Mixing Type	High shear emulsification, bottom mounted
Mixer Speed	1440 RPM
Ingredients	Sugar, milk powder, starch, glue and colloids, stabilisers
Standard Components	Product inlet and outlet, ellipse manway, air ventilation cap, CIP cleaning ball, digital display thermometer, electrode liquid level
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Bottom-Mounted Emulsifier. Mounting the high shear head at the bottom means it works into the batch from the moment powder is added, rather than waiting for the level to reach a top-mounted head.

Disperses Powders That Lump. Milk powder, starch, gums and stabilisers all lump when added to liquid. High shear at 1440 RPM is what breaks the lumps rather than stirring around them.

Dimple Jacket With Insulation. Many stabilisers need heat to hydrate. A three layer tank with a dimple jacket both supplies it and holds it.

Full Instrumentation Fitted. Digital display thermometer and electrode level control come as standard, so the tank integrates into a controlled process.

Where it is used

Dispersing milk powder into water for recombined milk • Hydrating stabilisers and gums into a beverage base • Dissolving sugar into syrup • Dispersing starch into a dairy formulation • Emulsifying fat into a milk or juice product • Preparing ingredient premixes for a blending tank

High Shear Tank

HTK-JQG-01 · SUS304 / SUS316L

A high shear tank from 500 L to 3000 L in SUS304 or SUS316L, built as a three layer tank with insulation and jacket, with a high shear mixer running at 3600 RPM. It mixes sugar, milk powder, milk products, juice products, beverages, starch, gums, colloids and stabilisers. Standard components include product inlet and outlet, manway, air ventilation cap, CIP cleaning ball, sight glass, sight lamp, temperature sensor, lifting ear, pull rod, baffle plate and four adjustable supporting legs.

Specification

Product Model	HTK-JQG-01
Product Volume	500 L to 3000 L, customised
Material	SUS304 / SUS316L
Structure	Three layer tank with insulation and jacket
Mixing Type	High shear mixer
Mixer Speed	3600 RPM
Ingredients	Sugar, milk powder, milk and juice products, beverages, starch, colloids, stabilisers
Standard Components	Manway, air ventilation cap, CIP cleaning ball, sight glass, sight lamp, temperature sensor, lifting ear, pull rod, baffle plate, four adjustable legs
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

3600 RPM High Shear Mixer. Two and a half times the speed of the emulsification tank's head. Where a formulation needs maximum shear to disperse, this is the tank for it.

Baffle Plate Fitted. Without baffles, a high speed mixer spins the whole batch as one body and shears nothing. The baffle plate is what converts rotation into mixing.

Sight Glass and Sight Lamp. Being able to see what is happening in the tank during a mix is how an operator knows the powder has gone in rather than sitting on the surface.

Handles Finished Products as Well as Ingredients. Milk products, juice products and beverages are named alongside raw ingredients, so the tank works on both premix and finished blend duty.

Where it is used

Mixing sugar and milk powder into a dairy base • Dispersing stabilisers into juice and beverage products • Blending starch and colloids into a formulation • Preparing concentrated premixes • Mixing finished beverage products before filling • Hydrating gum systems at elevated temperature

Homogenizer

HTK-JZJ-01 · SUS304 / SUS316L

A homogenizer handling 1000 L/H to 15,000 L/H in SUS304 or SUS316L, producing superfine liquid-liquid emulsions and liquid-solid dispersions for dairy and fruit juice beverage products. It is used on pasteurised milk, UHT milk, yogurt, soy milk, peanut milk, white milk and flavoured milk, and on orange, mango, apple, pear and coconut juice and tomato paste. Standard components include a SUS304 stainless steel cover, a named brand motor, pressure gauge, piston and piston sealing ring, high temperature resistant sealing ring, product inlet and outlet valves and a pump.

Specification

Product Model	HTK-JZJ-01
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Working Capacity	1000 L/H to 15,000 L/H, customised
Material	SUS304 / SUS316L
Function	Superfine liquid-liquid emulsions and liquid-solid dispersions
Dairy Applications	Pasteurised milk, UHT milk, yogurt, soy milk, peanut milk, white milk, flavour milk
Juice Applications	Orange, mango, apple, pear and coconut juice, tomato paste
Standard Components	SUS304 cover, motor, pressure gauge, piston and piston sealing ring, high temperature resistance sealing ring, inlet and outlet valves, pump
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

Stops Fat Separating in the Bottle. Homogenisation is what keeps cream from rising in milk and pulp from settling in juice. Without it, the product separates on the shelf regardless of how well it was pasteurised.

High Temperature Sealing Rings Fitted. Homogenisers usually run hot, immediately after or before heat treatment. High temperature resistant sealing rings are what make that continuous duty possible.

Covers Dairy and Juice in One Machine. Milk, yogurt, soy and peanut milk, and orange, mango, apple, pear and coconut juice plus tomato paste are all named applications.

Pressure Gauge on the Machine. Homogenisation quality is a function of pressure. Being able to see the working pressure is how an operator knows the product is being treated correctly.

Where it is used

Homogenising pasteurised and UHT milk • Yogurt base homogenisation for texture • Soy milk and peanut milk production • Flavoured and white milk production • Orange, mango, apple, pear and coconut juice • Tomato paste processing

Yogurt Fermentation Tank

HTK-FJG-01 · SUS304 / SUS316L

A yogurt fermentation tank from 500 L to 30,000 L in SUS304 or SUS316L, built as a vertical three layer tank with insulation and dimple jacket. It blends and ferments milk into yogurt, with frame or propeller agitators available and a scraper fitted where the recipe requires it. Standard components include product inlet and outlet, manway, air ventilation cap, conical cover, CIP cleaning ball, digital display thermometer, high and low liquid level sensors, sample valve, draw bar valve, anti-vortex plate, sight glass, lifting ears and four adjustable supporting legs.

Specification

Product Model	HTK-FJG-01
Product Volume	500 L to 30,000 L, customised
Material	SUS304 / SUS316L
Structure	Vertical three layer tank with insulation and dimple jacket
Agitator Types	Frame agitator, propeller agitator, scraper customised
Instrumentation	Digital display thermometer, high and low liquid level sensors, sight glass
Valves	Sample valve, draw bar valve
Internals	Anti-vortex plate, CIP cleaning ball
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

Dimple Jacket Holds Culture Temperature. Yogurt culture works in a narrow temperature band for several hours. A three layer tank with insulation and dimple jacket is what keeps the whole batch in that band, not just the middle of it.

Anti-Vortex Plate Fitted. A vortex pulls air into fermenting yogurt and breaks the gel structure. The anti-vortex plate is a small fitting that protects the texture of the whole batch.

Sample Valve for In-Process Checks. Fermentation is judged by pH and taste over time. A sample valve lets the batch be checked without opening the tank.

Scraper Available on the Agitator. Set yogurt clings to the wall and insulates the batch from the jacket. A scraper keeps the heat transfer surface clear.

Where it is used

Fermenting set and stirred yogurt • Producing drinking yogurt base • Culturing dairy products in batch • Blending and fermenting in one vessel • Small yogurt lines at 500 L • Production yogurt plants at up to 30,000 L

How To Enquire

Send the process rather than a model number: capacity or flow rate, the product being handled, the container format where relevant, and the utilities already on site. WhatsApp +86 150 5517 9418 or email sales@trueglowimaging.com.

Minimum order is one unit on the process, packaging, utility and crane ranges. Machined, fabricated and moulded parts are quoted from single pieces upward.