Fruit Processing Machines Specification Sheet

Intake to aseptic bag: washing, sorting, destoning, pulping, pressing, drying and filling.

Eight machines covering a fruit line from the moment the crop arrives to the moment it leaves as a sealed aseptic bag. Washing at 1 to 30 T/H, sorting at 1 to 30 T/H, destoning at 1 to 15 T/H, pulping at 1 to 15 T/H, belt pressing at 5 to 15 T/H, freeze drying from 3 kg to 5000 kg, aseptic bag filling at 1 to 30 T/H and a PET bottle filler at 2000 to 48,000 BPH.

8 products in this category. Every figure below is published on the product pages at trueglowimaging.com/categories/fruit-processing-machine.html

Fruit Sorting Machine

HTK-JGJ-01 · SUS304

A fruit sorting machine handling 1 T/H to 30 T/H in SUS304, used on fruit juice production lines to remove damaged fruit manually before processing. The machine presents the fruit to operators at a controlled rate so bad fruit is taken out before it reaches the pulper, where one rotten fruit can affect an entire batch of juice.

Specification

Product Model	HTK-JGJ-01
Working Capacity	1 T/H to 30 T/H, customised
Material	SUS304
Function	Manual sorting of bad fruit out of the line
Application	Fruit juice production lines
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

Removes Defects Before the Pulper. One rotten fruit in a pulper contaminates the batch behind it. Sorting is the cheapest quality control step in a juice line and the only one that happens before the damage is done.

Capacity Range of Thirty to One. 1 T/H to 30 T/H covers a small regional processor and a large juice plant within the same machine family.

SUS304 Throughout. The machine handles wet, acidic fruit all day. Stainless construction is what keeps it hygienic and serviceable across a season.

Capacity Chosen by the Customer. Different capacity machines are offered rather than one size, so the sorter matches the incoming fruit rate.

Where it is used

Sorting mango before pulping in a juice line • Removing damaged apples ahead of pressing • Inspecting tomatoes before paste production • Seasonal fruit intake at a processing plant • Quality inspection point after washing • Small-scale juice production at 1 T/H

Destoner

HTK-QHJ-01 · SUS304 or SUS316L

A destoner handling 1 T/H to 15 T/H in SUS304 or SUS316L, used to remove stones from mango, peach and similar fruit on juice production lines. Removing the stone before pulping protects the pulper and keeps bitter kernel material out of the juice. Different working capacities are available, with a minimum order of one unit and 50 units produced per month.

Specification

Product Model	HTK-QHJ-01
Working Capacity	1 T/H to 15 T/H, customised
Material	SUS304 or SUS316L
Function	Removes mango, peach and similar fruit stones
Application	Fruit juice production lines
Minimum Order	One unit

Production Capacity	50 units per month

Key benefits

Protects the Pulper Downstream. A stone entering a pulper damages the beater and the screen. Destoning first is what keeps the most expensive machine on the line intact.

Keeps Kernel Material Out of the Juice. Crushed kernels contribute bitterness and off-flavour. Separating the stone whole avoids the problem instead of filtering it later.

Capacity to Match the Line. 1 T/H to 15 T/H means the destoner is sized to the intake rather than becoming the constraint on it.

Material Choice for Acidic Fruit. SUS304 or SUS316L are both available, so the specification can follow the acidity of the fruit being processed.

Where it is used

Destoning mango before pulping for juice or puree • Removing peach stones on a fruit processing line • Stone fruit handling during a seasonal campaign • Preparing pulp for aseptic bag filling • Small-scale fruit processing at 1 T/H • Production-scale destoning at up to 15 T/H

Aseptic Bag Filling Machine

HTK-WJGZ-01 · SUS304 or SUS316L

An aseptic bag filling machine handling 1 T/H to 30 T/H in SUS304 or SUS316L, available with a single head or a double head. It fills sterilised juice, puree and concentrate into aseptic bags for bulk shipment, which is how processed fruit moves between processors without a cold chain. Minimum order is one unit with 10 units produced per month.

Specification

Product Model	HTK-WJGZ-01
Working Capacity	1 T/H to 30 T/H, customised
Material	SUS304 or SUS316L
Configurations	Single head or double-head
Application	Fruit juice production lines, aseptic bag filling
Minimum Order	One unit
Production Capacity	10 units per month

Key benefits

Double Head for Continuous Filling. A second head fills the next bag while the first is being changed. On a continuous steriliser upstream, that is the difference between running and stopping.

Bulk Product Without Cold Chain. Aseptic bagging is what lets concentrate and puree ship at ambient temperature, which is the entire economics of bulk fruit trade.

Capacity Range of Thirty to One. 1 T/H to 30 T/H covers small seasonal operations through to large juice plants on the same machine family.

Material Choice for Acidic Product. SUS304 or SUS316L, so the specification follows the acidity of the product being filled.

Where it is used

Filling sterilised mango puree into aseptic bags • Bulk concentrated juice for export • Tomato paste bagged in drums for industrial customers • Seasonal fruit processed and stored as aseptic bulk • Supplying beverage plants with bulk aseptic base • Small-scale aseptic production at 1 T/H

Freezer Dryer

HTK-DGJ-01 · 3 kg to 5000 kg input

A freeze dryer with batch input from 3 kg, 5 kg and 10 kg up to 1000 kg, 2000 kg and 5000 kg, used to produce instant fruit juice powder and dried fruit slices. Each machine is designed around the product: its shape, its state and its input water percentage all change the shelf and cycle design. Standard components include the dry chamber and door, trap vessels, air cooling compressor, dry filter, solenoid valve, thermostatic expansion valve, pressure controller, heating plate, temperature sensor, vacuum pump, vacuum gauge, silencer, temperature controller, recorder and control panel.

Specification

Product Model	HTK-DGJ-01
Input	3 kg, 5 kg, 10 kg to 1000 kg, 2000 kg, 5000 kg, customised
Products	Fruit juice instant powder, dry fruit slices
Design Basis	Product shape, product state, input water percentage
Chamber	Dry chamber with dry chamber door, trap vessels
Refrigeration	Air cooling compressor, dry filter, solenoid valve, thermostatic expansion valve, pressure controller
Vacuum	Vacuum pump, vacuum gauge, silencer
Control	Heating plate, temperature sensor, temperature controller, recorder, control panel
Minimum Order	One unit
Production Capacity	100 units per month

Key benefits

Cycle Designed Around Your Product. Freeze drying time is set by product shape, state and starting moisture. Designing the machine around those three rather than selling a standard chamber is what makes the cycle time predictable.

Batch Sizes From 3 kg to 5000 kg. The same technology covers a laboratory trial and a production plant. A pilot machine at 3 kg lets a recipe be proven before the capital is committed.

Recorder Fitted as Standard. A freeze drying cycle is only reproducible if it is recorded. The recorder and temperature controller come with the machine rather than being added later.

Energy-Saving Operation. Freeze drying is energy intensive by nature, so the efficiency of the refrigeration and vacuum systems is where the running cost of the product is actually decided.

Where it is used

Producing instant fruit juice powder • Drying fruit slices for snack products • Preserving high-value botanicals without heat damage • Pilot trials at 3 kg to 10 kg before scaling • Production freeze drying at 1000 kg to 5000 kg per batch • Producing shelf-stable ingredients from seasonal fruit

Fruit Washing Machine

HTK-FWM-01 · SUS304

A fruit washing machine handling 1 T/H to 30 T/H in SUS304, available as a brush washing machine, a surfing-water washing machine and other types. It is used on fruit juice production lines to remove field soil and surface contamination before sorting and processing, and the washing type is chosen by how robust the fruit is.

Specification

Product Model	HTK-FWM-01
Working Capacity	1 T/H to 30 T/H, customised
Material	SUS304
Types	Brush washing machine; surfing-water washing machine; others available
Application	Fruit juice production lines
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

Washing Type Chosen by the Fruit. Brush washing scrubs firm fruit such as apples; surfing-water washing agitates without abrasion for softer fruit. Choosing the wrong one bruises the crop.

Capacity Range of Thirty to One. 1 T/H to 30 T/H covers a small processor and a large seasonal plant within the same machine family.

SUS304 for Constant Wet Duty. The washer runs in water all day. Stainless construction is what allows the daily wash-down a food plant requires.

Protects Every Machine Downstream. Soil and grit entering a line wears pumps, pulpers and presses. Washing first is the cheapest way to protect them.

Where it is used

Washing apples before pressing for juice • Cleaning mango and stone fruit before destoning • Washing tomatoes before paste production • Removing field soil at fruit intake • Preparing fruit for the sorting station • Seasonal intake washing at up to 30 T/H

Mango/Tomato Pulping Machine

HTK-DJJ-01 · SUS304 or SUS316L

A pulping machine handling 1 T/H to 15 T/H in SUS304 or SUS316L, used to pulp mango, tomato and similar fruit into juice product on a fruit juice production line. The pulper separates usable pulp from skin and fibre, and different capacities are available so the machine matches the fruit rate feeding it.

Specification

Product Model	HTK-DJJ-01
Working Capacity	1 T/H to 15 T/H, customised
Material	SUS304 or SUS316L
Function	Pulping mango, tomato and similar fruit
Application	Fruit juice production lines
Minimum Order	One unit
Production Capacity	50 units per month

Key benefits

SUS316L Available for Tomato. Tomato is acidic and processed in long continuous campaigns. 316L on the wetted parts is what keeps the screen and beater serviceable across a full season.

Capacity Matched to the Line. 1 T/H to 15 T/H means the pulper is sized to the destoner and washer feeding it rather than becoming the line's limit.

Handles Two Very Different Fruits. Mango and tomato behave differently in a pulper. One machine family covering both is useful in a plant that runs two seasons.

Efficiency in Yield Terms. The measure of a pulper is how much pulp it recovers from the same fruit. High working efficiency is the stated design objective.

Where it is used

Pulping mango for puree and juice production • Tomato pulping ahead of paste concentration • Producing fruit pulp for aseptic bag filling • Seasonal fruit processing campaigns • Small-scale juice production at 1 T/H • Production pulping at up to 15 T/H

Apple Belt Press

HTK-DZ-01 · SUS304 or SUS316L contact

A belt press handling 5 T/H to 15 T/H with SUS304 or SUS316L on all product contact surfaces, used to extract juice from apple, pear and similar fruit on raw juice processing lines. A belt press works continuously rather than in batches, which is what makes it the standard choice for pome fruit at production scale.

Specification

Product Model	HTK-DZ-01
Working Capacity	5 T/H to 15 T/H, customised
Product Contact Material	SUS304 or SUS316L
Function	Extracting apple, pear and similar fruit juice
Application	Raw fruit juice processing lines
Minimum Order	One unit
Production Capacity	30 units per month

Key benefits

Continuous Rather Than Batch Extraction. A belt press runs the mash through continuously, so throughput is steady and predictable. Batch presses stop to load and unload every cycle.

High Juice Yield From the Same Fruit. On apple and pear, extraction efficiency is what determines the margin on the finished juice. High working efficiency is the stated design priority.

Product Contact Material Specified. SUS304 or SUS316L on every product contact surface, which is the part of the press that actually matters for food safety.

Capacity Chosen to the Line. 5 T/H to 15 T/H means the press matches the mill and the mash pump ahead of it.

Where it is used

Extracting apple juice on a raw juice line • Pear juice extraction for concentrate production • Continuous pressing during a harvest campaign • Producing juice for downstream concentration • Cider production requiring bulk juice extraction • Pressing at up to 15 T/H during peak intake

PET Bottle Filling Machine

HTK-SLPGZ-01 · SUS304 or SUS316L

A PET bottle filling machine running at 2000 BPH to 48,000 BPH in SUS304 or SUS316L, combining rinsing, filling and capping in one three-in-one block. It is controlled by SIEMENS PLC with touch screen, runs at a high degree of automation and achieves a qualified rotary capping rate of 99.9%. It is used on dairy, fruit juice, pure water and beer lines.

Specification

Product Model	HTK-SLPGZ-01
Working Capacity	2000 BPH to 48,000 BPH, customised
Material	SUS304 or SUS316L
Functions	Rinsing, filling and capping three-in-one
Control	SIEMENS PLC and touch screen
Qualified Rotary Capping Rate	99.9%
Applications	Dairy, fruit juice, pure water, beer
Minimum Order	One unit
Production Capacity	10 units per month

Key benefits

Rinsing Filling and Capping in One Block. A three-in-one block removes two transfers between machines. Every transfer on an open bottle is a contamination opportunity and a jam point.

Capping Rate of 99.9% Qualified. A rejected cap is a lost bottle plus a line stop. At 99.9% qualified the rate is stated rather than implied.

2000 to 48,000 BPH. A twenty-four-fold speed range means the same machine family covers a small juice line and a national water plant.

SIEMENS PLC Control. A named control platform means the line can be integrated with the rest of the plant and maintained by people who already know the system.

Where it is used

Bottling pure water at high speed • Filling fruit juice into PET bottles • Dairy drinks in PET format • Beer filling in PET containers • Beverage lines requiring rinse, fill and cap in one machine • Small juice lines at 2000 BPH

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.