



**Process NZ** LTD

Specialists in sanitary process equipment

# Honey process equipment

## Pumping



## Filtering



## Heating and cooling



## Extraction



## Creaming and filling



## Honey pumps

### ▶ Progressive cavity pump

- Designed for pumping honey, single stage (6 bar) or two stage (12 bar).
- Excellent suction characteristic and smooth pumping action, makes it ideal for pumping viscous and creamed honey.
- Available with VSD electrics, pressure switch and level sensor options.
- Crystal cruncher head available for breaking up honey crystals, without heating.
- Auger pre-feeding screw for pumping honey/wax slurry.



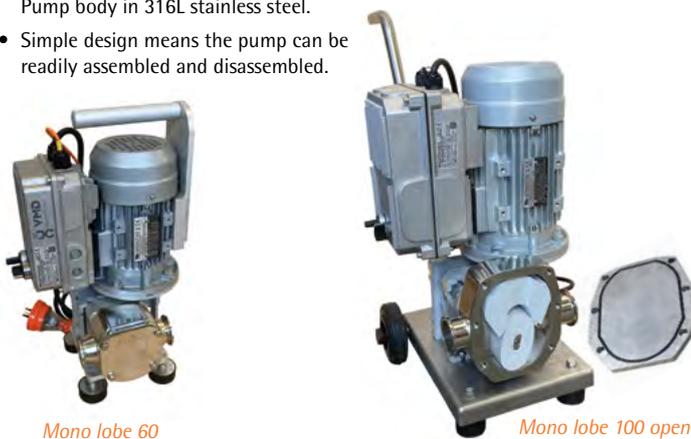
### ▶ Rotary lobe pump

- Ideal for pumping viscous honey, gently and reliably.
- All product contact parts are 316L stainless steel.



### ▶ Mono lobe pump

- Suitable for pumping honey at pressure up to 10 bar.
- Rotor and lever made in food grade plastic. Pump body in 316L stainless steel.
- Simple design means the pump can be readily assembled and disassembled.



### ▶ Flexible impeller pump

- For transferring honey at low pressure in extraction and processing plants.
- Available in 2" and 3" sizes.
- Economic with single phase variable speed electrics.



### ▶ Pump sensors

- PSD4 adjustable electronic pressure sensor, guards against over pressure.
- LMT102 product sensor, for starting and stopping pump.
- Product float switch, for hopper level control.



## Honey filters

### ▶ Right angle filter

- Coarse pre-filters available with a variety of perforated plate and wedge wire options.
- Stainless steel filter elements are easily removable for inspection and cleaning.

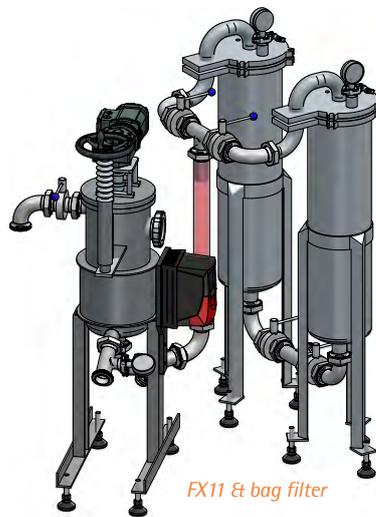


601 filter with insert



### ▶ Rotary self-cleaning filter

- Suitable as a primary filter for removal of foreign matter in honey processing and extraction lines.
- Available in various sizes and with a range of wedge wire screens, depending on the amount and nature of the foreign matter and wax to be removed.
- Can be fitted with an automatic purge system, allowing uninterrupted filtering.



FX11 & bag filter



FX11 screen



FX11 mechanism



### ▶ Top entry bag filter

- For filtering and removal of impurities during honey processing.
- Available in either size 1 (400mm long) or size 2 (800mm long) configuration.
- Nylon bag available in a range of apertures (1000 down to 50 micron) fitted inside a robust stainless steel basket.
- Can be piped in duplex (twin filter) configuration.



bag filter open



Duplex bag filters



Top entry bag filter

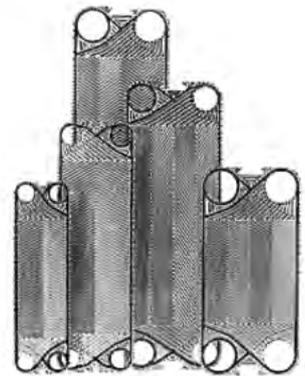
## Heat exchangers



Heating, cooling and regeneration PHE's

### ▶ Plate heat exchanger

- Designed to efficiently heat and cool honey during the filtering and pasteurising process.
- Can be configured to;
  - Heat: hot water vs honey
  - Cool: cold water vs honey and
  - Regenerate: hot honey vs cold honey.
- Various sizes and plate types available.
- Available with either painted mild steel or all stainless steel frames.



### ▶ Multi-tube heat exchanger

- Ideal for heating honey/wax slurry, prior to wax separator.
- Suitable for heating cold crystallised honey to help dissolve honey crystals.
- Fully drainable and useful for cooling honey post pasteurisation.
- Various tube sizes and lengths available depending on throughput and temperature profile required.



ML114 with gauge



Multi-tube



Tubular pasteuriser

### ▶ Scraped surface heat exchanger (SSHE)

- Ideal for heating and cooling honey, in particular rapid cooling of viscous honey prior to creaming.
- Internal rotating blades continually scrape the surface of the heat exchanger barrel, providing efficient heat transfer.
- Closed pressurised system (not open to atmosphere) reduces the chance of contamination and moisture pick-up.



Hercules SSHE

- 1 Product
- 2 Media
- 3 Insulation

## Creaming and filling

### ▶ 100kg to 300kg honey creamer

- Stirrer design ensures efficient mixing of honey without incorporating air.
- Includes double wall water jacket, allowing the use of chilled water.
- Also includes electric heater for warming the honey and a timer for controlling the stirrer.



CFM single drum creamer

CFM stirrer

### ▶ Stainless steel drums and small processing vessels

- Made in stainless steel with food grade finish.
- Can be mobile.
- Available with stirrer, handle and lid options.



Stirrer

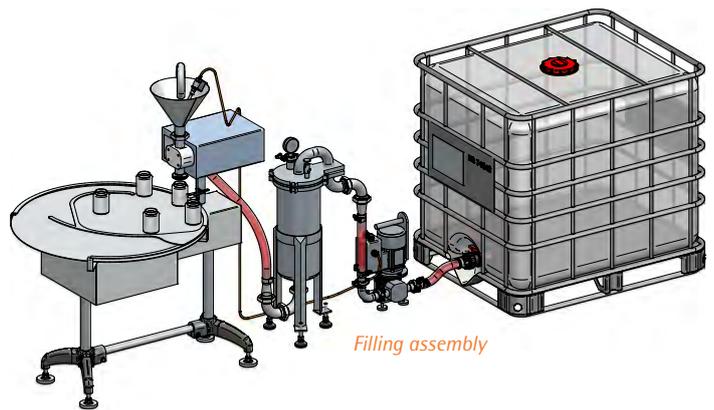
Mobile stainless tank

### ▶ Filling stations and turntables

- Swienty computer-controlled gear pump for filling honey.
- Can be supplied as a stand-alone gravity fed filling head or as an automated filling station with turntable.
- Hoppers with level switch available, ensuring increased filling accuracy.



Apimatic with turntable



Filling assembly

### ▶ Chiller units

- Providing chilled water/glycol for heat exchangers and cooling jackets on creaming tanks.
- Various capacities available, including compact single-phase and mobile units.
- Stainless construction with onboard insulated tank, re-circulation pump and control panel including electronic thermostat to regulate the coolant temperature.



Mobile chiller



1 kW chiller



### ▶ Hot water units

- For providing electrically heated hot water for heat exchangers.
- Various sized 3-phase units available depending on the thermal capacity required.
- Includes onboard insulated tank with heating elements, re-circulation pump and electronic thermostat.

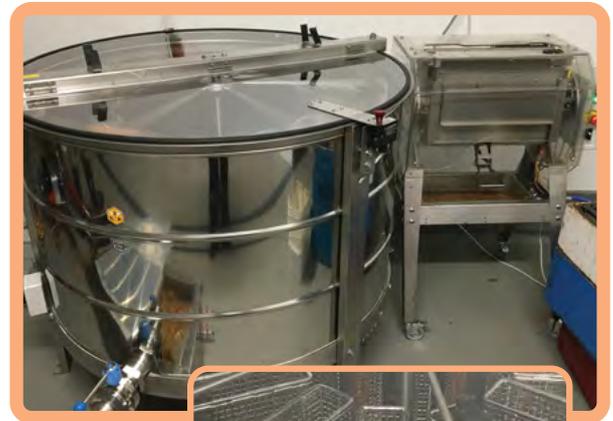


PAC 8 water heater

## Extraction equipment

### ▶ Automatic honey loosener

- European-designed honey loosener, particularly suited to mānuka honey.
- Will loosen 4-5 frames per minute with precision and minimal damage to the comb.
- Available with optical laser sensor, to start the pricking process as soon as a frame is presented.



*Extractor and loosener*



### ▶ Honey wax separator

- Designed to efficiently separate wax from honey, using centrifugal force. The separated wax is collected in two buckets inside the machine.
- The rotational speed of the separator is controlled by a variable speed drive and can be adjusted to ensure that only wax free honey exits the machine.
- A thermostatically controlled floor heater ensures the honey and wax are at an optimal temperature for separation.



*Wax separator inside*



*Separated wax/  
clean honey*

### ▶ CFM pre-filter sump

- Designed to pre-clarify and sieve coarse wax particles after honey extractor.
- Available with thermostat controlled heater.



*Pre-filter sump*

### ▶ Extractors

- CFM automatic self-turning extractor, with programmed controller, particularly suitable for efficiently extracting viscous honeys, such as mānuka and bush honeys.
- Models to take 12, 16 and 20 full depth frames, options for pockets suitable for 24, 32 and 40 x 3/4 depth frames.



*Extractor and separator*

### ▶ Bottom heating kits for extractors

- Do it yourself bottom heating kit, including trace heating, thermostat and insulation tape.
- Helps warm extractor and ensures honey flows evenly and freely out.



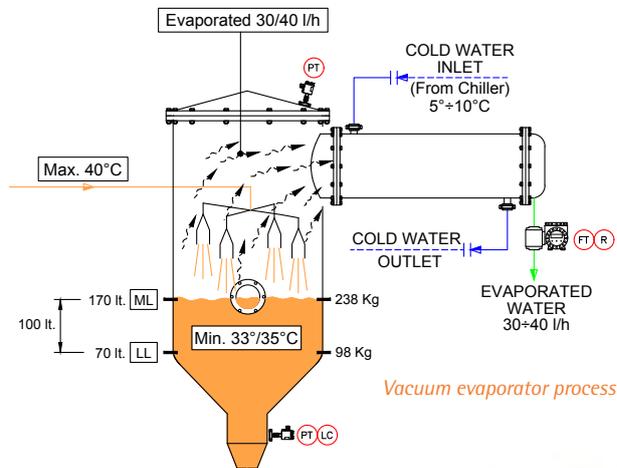
*Extractor bottom heating kit*

## Vacuum evaporation

- Plant for removal of moisture from honey, using a low temperature evaporative process, minimising the use of heat and thus any HMF rise.
- Various designs available depending on quantity of moisture to be removed and level of automation required.



Compact honeydrier



Vacuum evaporator process

## Accessories

### ▶ Flow meters

- Magnetic flow meter, suitable for metering honey flows.



### ▶ Centrifugal cleaning pump

- Efficient design offering high flow rates and pressure necessary for good cleaning.
- Mobile options with on/off or variable speed electrics.



### ▶ Drum de-heading

- Electric drum opener, for cutting lids off honey drums.
- Food-grade design, mitigates risk of contamination.



Wizard drum de-header

### ▶ Heating blanket

- Thermostatically controlled drum and IBC heating blanket.



IBC warmer



Drum warmer

## Accessories

### ► Pigging systems and components

- Product recovery components and complete systems for recovering honey from process lines.



Pig



Arc valve



### ► Digital refractometer

- For accurately testing moisture levels in honey.



### ► Valves, fittings, sight glasses and gauges

- Butterfly valves; manual and actuated.
- Ball valves; manual and actuated, 2-way and 3-way.
- Sight glasses; cylindrical and flat.
- Temperature and pressure gauges; analogue and electronic.



Hose tails



3-way ball valve



LMT102 sensor



Sight glass



Actuated butterfly valve



Compact ball valve



RJT butterfly valve



Tri-clamp butterfly valve



Pressure gauge



Temp gauge

HD Process NZ Ltd specialise in providing a comprehensive range of honey processing equipment to best suit your processing requirements. Our knowledge covers many aspects of the process, including; pumping, heating, cooling, extraction, separation and filtering. Our range of equipment is selected from leading European manufacturers along with our own locally designed and manufactured products.



► Visit our website for more product information  
[hdprocess.co.nz](http://hdprocess.co.nz)



10 Maurice Road, Penrose, Auckland, NZ  
 Ph +64 9 580 2520 Fax +64 9 580 2525  
 Email [mail@hdprocess.co.nz](mailto:mail@hdprocess.co.nz)  
[james@hdprocess.co.nz](mailto:james@hdprocess.co.nz)