

Who are Flo-Mech?

Flo-Mech is a privately owned limited company, employing highly skilled personnel with a heavy emphasis on engineering. We design and manufacture specific pieces of machinery that cannot be procured within our group.

To achieve this, our designers create manufacturing drawings, which are then passed onto a number of specialist sub-contractor workshops. This equipment is manufactured under our total supervision before it is given the Flo-Mech name.

Turnkey project management

One of Flo-Mech's strongest assets today is its ability to provide our customers with the most complete project management service. Many of our customers prefer only to deal with one company who can manage full "turnkey" projects. With many



successful installations already completed, we have secured a number of long-term partnerships with major "blue-chip" clients. From pre-engineering studies through to factory installations we can provide a "total management" solution. Our team of experienced project managers pride themselves on providing the very best service to meet our customer's requirements. By using latest computer technology and CAD drawing facilities, projects are closely controlled to ensure "milestones" are met. Each project is enhanced by implementation of a modern Health & Safety policy incorporating on-going risk assessments and regular

auditing. Production of P&ID and PFD drawings, detailed project schedules, operation and parts manuals and relevant C.E. documentation all go to help making each contract a complete success, to specification, on time and within budget.

Commitment to service

Commitment to our customers extends way beyond the sale. We understand that response times are critical in the food industry, and this is reinforced with our 24 hour a day, 7 day a week emergency service.

We ensure that members of our service team become involved with each contract at a very early stage, ensuring continued quality support long after the installation crews have left site. Our fully qualified service engineers are CORGI registered and A.C.O.P.S approved. A comprehensive range of spare parts is held at Flo-Mech House, further enhancing the commitment to our customers.

The Flo-Range

Flo-Cut

Designed for the Potato Industry

The Flo-Cut sizer halver was originally designed and built to size-grade and halve large potatoes in a crisp production facility. Today it reaches a wider audience as companies look to use its features combined with other technology to produce end products such as quarters for roast.



Flo-Therm

Frying Oil Heating Systems with Pollution Control

Flo-Therm has now been a part of our lives for the past 30 years. A proven design for gently heating frying oil and at the same time offering total pollution control, ensuring that your frying emissions to atmosphere are "clean". We are constantly reviewing our heater designs to ensure compliance with the very latest emission levels and efficiency requirements (C.C.L.). Flo-Therm, caring for our environment.

Flo-Flavour

Slurry Mixing and Application Systems

Flo-Flavour in recent times has expanded into two main areas. The systems are designed either to handle a pre-mixed slurry, keeping the components in suspension and delivering to the flavour drum, and in addition can be supplied with full mixing and holding / distribution tank facilities.



Flo-Cool Oil cooling system

The Flo-Cool oil cooling system has been developed to reduce production shut down time and maintain oil quality. The oil is

filtered prior to being cooled by water via a heat exchanger. Oil is continuously circulated until a programmed temperature is reached

and then the oil is automatically transferred to the customers required destination i.e. storage tanks.

Flo-Starch™

Starch Recovery and Water Reclaim System

Dedicated Food Processing Systems



The forefront of food processing technology

Introducing Flo-Starch™

Auxiliary systems are an integral part of food processing and Flo-Starch™ is provided, to deal with wastewater. Designed to separate non-gelatinised starch from process water, Flo-Starch™ can quickly and simply be added to any new or existing process line.



Process

The starch water is sent to the Flo-Starch™ skid system from a chosen place in the process line via a pump to the parabolic screen where debris and fines are removed either straight into a bin via a chute or into an optional compactor (for potato processing) where additional water can be recovered and the fines are compacted. This compacted mass proves ideal for animal feed.

The starch water less fines goes through the parabolic screen into the large tank ready for the centrifuge. When the levels in the tank have been reached the starch water is pumped to the centrifuge via a variable speed pump where the starch solids are separated to a dry state and deposited into a sack or lined box. The recycled water is deposited into a tank where it can be pumped back into the process line.

The Flo-Starch™ unit is completely contained within a stainless steel skid structure designed to fit into a standard container for shipment around the world. The unit is designed for easy connection on site into new or existing process lines.

Equipment Description

• Starch Water Vessel

Manufactured in stainless steel and designed to accommodate batch delivery of starch water from the main process. Gross solids debris is removed by a parabolic hydrosieve, leaving water with suspended solids ready for separation. Digital and optional analogue sensors provide intelligent flow control to the decanter.

• Feed Pump And Centrifuge

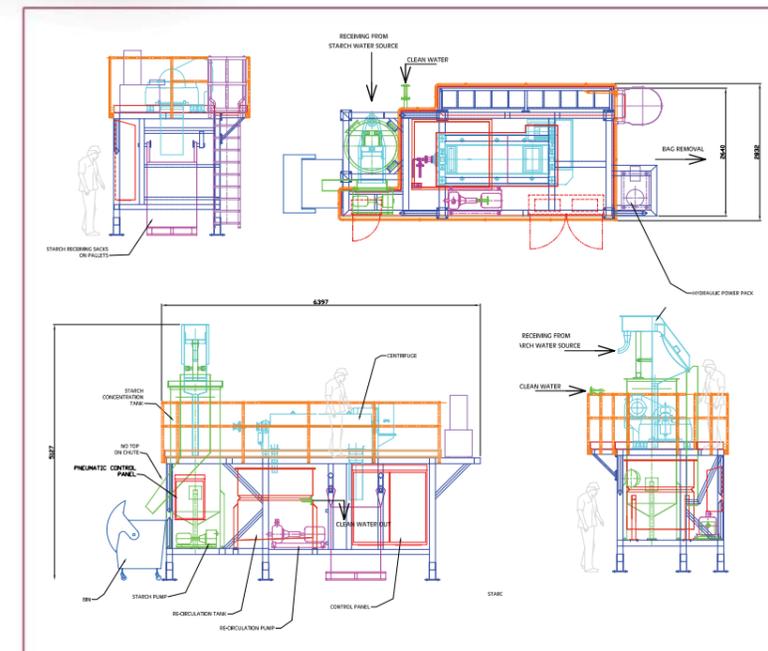
Starch water flow is measured and regulated by a flow meter and regulated pump, ensuring maximum continuous separation performance. The centrifuge is a premium unit, offering excellent performance, build quality and reliability.

Smaller capacity units use twin electric drives with inverter control. The larger unit uses an electric bowl and hydraulic scroll drive for greater separation performance at higher loads.



Flo-Starch™ Features

- Starch water accumulation vessel.
- Digital and optional analogue level control.
- Parabolic hydrosieve.
- Variable flow control to the decanter.
- Integral control panel with HMI.
- Recycle water level control.
- Recycle water pump.
- Common and integral support / access platform structure.
- Starch and other suspended solids are separated from process water.
- Recycled water pump with spill back if process line is isolated.
- Designed to fit into a standard shipping container.
- Connection flanges provided for infeed starch water and outfeed recycled water.
- All process controls are operated from PLC offering automatic and manual modes.
- Alarm monitoring and the system overview are accessible and multi language options are available.
- Capacity for Flo-Starch™ is currently either 10m³/hr or 15m³/hr, however units may be designed to suit customer requirements.



Stainless steel control panel with PLC control