

## "Anyone for ice cream?" seepex answers the call

Richmond Foods are suppliers of premium quality ice creams to supermarket chains within the UK. These ice creams come in a wide variety of flavours, many of them containing fruit pieces, toffee, chocolate, or even biscuit. During the production process, some wastage inevitably occurs creating the need to remove the waste out of the production area quickly and with the minimum effort.

### The starting situation

Waste ice cream is held for collection in a large tank some 30 m from the production area. The waste was previously transferred from the factory floor to the waste holding tank by an electrically operated diaphragm pump. This pump struggled to handle the ice cream before it had melted and also suffered blockage and damage from the fruit pieces, toffee, chocolate chips or biscuit contained within the ice cream.

### The solution

At the request of Richmond Foods, seepex visited to assess the application and recommended an open hopper progressive cavity pump from their BTH range. This pump differs to conventional open hopper pumps by incorporating a large diameter shaftless auger feed screw that rotates concentrically while the coupling rod rotates eccentrically with the pump rotor. The additional benefits are that the auger is supported by a liner which enables the auger to self clean the hopper, giving positive product feed to the pumping elements - the rotor and stator. The low shear characteristics of a progressive cavity pump can now be matched by varying the auger speed.

The above features make the pump ideal for handling very sticky cohesive products and the need for additional bridge breakers are now redundant.

To ease installation the seepex BTH pump was mounted outdoors against the wall of the production area with a large capacity extension hopper above it. A stainless chute passes through the wall allowing waste ice cream to be dumped into the pump from the production area. Level probes in the pump hopper ensures the pump runs only when there is waste to be removed. The waste is then pumped approximately 30 m into the holding tank.

### The benefit

"We are delighted", says John Allan, Engineering Manager of Richmond Foods. "The pump works beautifully - as far as the production staff are concerned, they tip the waste in the chute and it disappears without hassle or mess. The pump has taken everything given to it without a problem - the fact that it only runs when there is something to take means that energy costs are low too!"

Please visit [www.seepex.com](http://www.seepex.com) for further information and contacts.



Waste frozen ice cream entering the pump hopper.



seepex BTH range pump mounted outdoors against the wall of the production area.

### Key Facts

- Waste efficiently disposed of
- Ability to handle viscous products
- Out performs diaphragm pump
- Able to handle entrained solids without blockage

### Significant Cost Savings

- Energy saving
- No down time
- Low operating costs



### Installed Pump Type

- RangeBTH