

## Food Processing – Oranges

|                    |                                    |
|--------------------|------------------------------------|
| Application market | Food                               |
| Market segment     | Fruit & Vegetable                  |
| Pumped medium      | Carrier fluid (water) with Oranges |
| Pump product       | Bearing Frame                      |
| Country            | United Kingdom                     |



### Challenge

For the transport of orange fruits from the delivery of the product at the truck unloading station to the juicing machine fifty metres away, the customer was looking for a gentle transportation method. In particular, high demands were placed on the applied guidelines in food production processes.

### Solution

The Hidrostal F-type Screw Centrifugal Pump was selected due to its proven ability to handle and transfer delicate product with zero damage. This is due to its low velocity and low shear design hydraulics whilst retaining optimum efficiency. The Screw Centrifugal Pump is much more efficient than for example a vortex pump resulting in less energy requirement, smaller motor and smaller switch gear. In addition, the carrier liquid (water) is returned with a Hidrostal Screw Centrifugal Bearing Frame Pump type E05Q-ML1 + ECM1F, running with a belt drive at 1100 rpm.

### Benefits

The challenge was solved to the complete satisfaction of the customer.

- Gentle handling of orange fruits without damage and without loss in quality
- The high demands placed on the challenging processes in food production were fully met

|                        |   |
|------------------------|---|
| Quantity of units sold | 1   |
| Pump type              | H06F-H01 + H2M10  |
| Motor data             | 15 kW / 8 pole / belt drive with operating speed 600 rpm      |
| Material combination   | Cast iron pump body and wear parts with nodular iron impeller |
| Duty point             | Flow : 70.0 litres per second / Head : 6.5 meters             |
| In operation since     | 1998  |