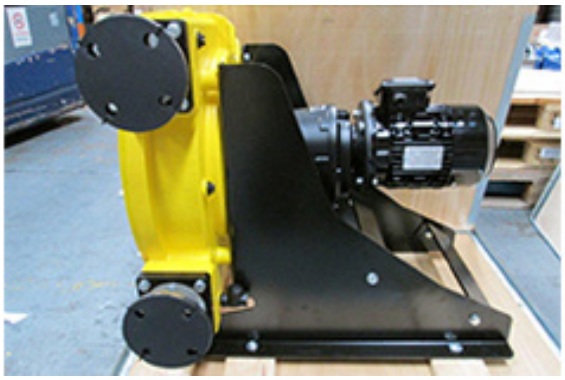
CASTLE PUMPS LTD

Fragrance Manufacturer - Case Study



Case Study Information

Customer	Scented Candle / Home Fragrance Manufacturer
Location	United Kingdom
Enquiry Received	12th October
Order Placed	21st December
Order Dispatched	20th January

Equipment Supplied:

1 x Horizontal Boyser Close Coupled Industrial Peristaltic Pump with Gear Box

Type	FMP-50
Application	Wax Transfer Pump
Fluid	Rapeseed Wax
Temperature	60°C
Viscosity	20 cP
Flow	3000 l/h
Total Head	15m
Design Pressure	8 bar
Hose	NBR (Nitrile)
Connections	Stainless Steel AISI-316
Pump Casing	Cast Iron + Polyester Powder Coating
Gear Box/Reducer	1.1 kW, 230/400v, 3 Phase, 50 Hz, 34 rpm, Protection Grade IP-55
Suction/Discharge Flange Size	DN-40

Enquiry:

✓ Our customer, one of the largest UK home fragrance manufacturers contacted us with an enquiry for transferring wax at 60°C. They were looking for a pump that could do a batch of 400 kg in 10 minutes; the pump would be running intermittently with a maximum of 3 the batches per hour.

Solution:

✓ From experience we knew that due to the viscous fluid being pumped and low flow rate required by the customer the best solution for the enquiry was a peristaltic pump, peristaltic pumps are very effective in batch transfer applications where a fixed flow rate is needed repeatedly. We supplied the customer with an industrial peristaltic pump with a 1.1 kW gear box, running at 34 rpm and a designed pressure of 8 Bar.

✓ Easy maintenance is one of the main benefits of these pumps, as the only real wear part on the pump is the hose, a relatively low cost part that can be sterilised or changed quite easy and in a very short time without having to dismantle the pump, the hose is also the only part of the pump that is in contact with the fluid.

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Ink Manufacturer - Case Study

Case Study Information

Customer	Stamps/Ink Manufacturer
Location	UK
Enquiry Received	1st March
Order Placed	4th April
Order Dispatched	11th April

Equipment Supplied:

1 x Stainless Steel Eccentric Worm Barrel Pump - Flux F550S Range

Application	Photopolymer Resin Drum Pump
Temperature	Ambient
Viscosity	30,000 cPs
Immersion Tube Length	1000 mm
Flow	15 L/min
Total Head	2 Meters
Motor	1.1 kW, 3 Phase Motor, 900 rpm
Mechanical Seal	Ceramic Oxide
O-Rings	**FKM**
Bearing Flange	**Aluminium**
Outer Tube	**Stainless Steel 316 Ti**
Torsion Shaft	Stainless Steel 316 Ti
Eccentric Worm	Stainless Steel 316 Ti

Enquiry:

✓ This UK ink manufacturer was having great difficulties finding a suitable barrel pump to transfer their highly viscous photopolymer resin from a 200 litre drum. They required a reliable pump of high quality as this application was extremely important for the daily manufacturing process of the company.

Solution:

✓ Our knowledge and many years of experience in dealing with viscous fluids applications has taught us that due to the high viscosity nature of the fluid a progressive cavity pump would be the best option for this customer. We selected an electric progressive cavity barrel pump with a 1.1 kW, 3 phase motor at a speed of 900 rpm; this drum pump transfers a minimum of 15 l/min of the high viscous resin at 2 meters head.