



Food Production - Case Study



Case Study Information

Customer	Food Production Company
Location	UK
Enquiry Received	2nd August
Site Visited	4th August
Order Placed	18th August
Order Dispatched	19th September

Equipment Supplied:

1 x Food Grade Eccentric Worm Drive Barrel Pump Kit

Model	Flux F560GS
Application	Transfer of spaghetti Bolognese sauce
Installation	Vertical with a clamp to fit to the vessel
Pump body	Stainless Steel 316 – electro polished (FDA approved)
Stator	PTFE - Version for food contact according to Regulation (EC) No. 1935/2004 and FDA conform (CFR 21 Part 177.1550)
Voltage	230V
Motor	F 457EL with no-volt release and variable speed control device
+	Air powered options available

Enquiry:

- ✓ Castle pumps received an enquiry from a new customer in the UK that wanted to increase production of spaghetti bolognese produced on site. They required a pump to transfer the hot, viscous product containing meat solids hygienically from production to packaging. The customer wanted to control the speed of delivery and also use a nozzle to dispense the fluid.

Solution:

- ✓ Using our experience with food product transfer we knew a food grade positive displacement barrel pump would be perfect for this application. The eccentric worm within the pump is able to handle the solids and viscosity of the fluid by using a positive displacement design that generates the pressure needed to move the thick fluid.

Due to the design of the pump we had to manufacture a bespoke food grade "T piece" including pressure relief valve to recirculate the fluid back to the tank. When the nozzle is closed the pump would be working against a "dead head", this would build up pressure and cause serious injury to the user.

The pump supplied is fully food grade FDA approved to meet all the rules and regulations. The body and connections of the tubeset are all stainless steel (316 Ti) electro polished. The pump has minimal areas for food to congregate and for ease of cleaning. Any material that comes in contact with the product is fully food grade.

The end product was a food grade FDA approved barrel pump including bespoke design. All the connections, hose and ancillaries were supplied by Castle Pumps. This was manufactured and delivered to our customer within 5 working weeks.