Pumps have been installed on two filling lines to transfer cheese sauce, which is heated to 75°C. Here, the sauce needs to be pumped quickly from the hoppers to the filling line at flow rates of up to 7000 L/h. If the sauce cools in the pump hose or in the transfer lines, it will solidify, causing huge cleaning issues because hot water and stronger cleaning agents would be needed to breakdown the starch and fats.

Ketchup and mayonnaise

Elsewhere on site, Bredel CIP pumps transfer ketchup through 20 metre-long suction pipework with a 7 metre delivery line. The pumps dose ketchup with a viscosity of 50,000 cP (at 30-40°C) from the hoppers to a line that fills plastic single serving sachets for fast food outlets. On the same line, plastic sachets are also filled with mayonnaise (5,000 cP), again for well-known fast food outlets.
Daily CIP

Hygiene and sterility are crucial at the plant where, depending on the production plan, CIP is often scheduled daily. For this reason, Bredel CIP 50 pumps are available with the option of externally-operated retracting shoes that release the hose so that the line is open and unobstructed for cleaning. The process takes place at full velocity using food industry standard cleaning agents such as Tarmo (1.0%) and ET (0.3-0.5%).

In addition to ease-of-cleaning, another important factor considered before selecting the gentle, low-shear capability of Bredel pumps, was shear thinning of these thixotropic sauces. Further factors included the avoidance of air entrainment which could lead the sachets to burst upon filling.

“WMFTG has a very strong competitive advantage in the quality and performance parameters of its pumps,” says the customer's Purchasing Manager “As a result, we are now standardising on Bredel pumps as the most reliable, efficient and minimal maintenance solution. This will have further site-wide benefits in terms of spares management and operator knowledge.”