

## CASE STUDY

## Nestlé Purina PetCare Sudbury Project

### PROBLEM

When S&W Process Engineering were approached by Nestlé Purina's central engineering group to bid for a substantial new slurry kitchen at their flagship Sudbury site, they knew the challenge would be significant: Pet food projects always tend to involve large scale plant, difficult materials, and tight timescales, and this project was no different - Nestlé needed to take large blocks of frozen meat and grind them into a mince that is then cooked to form the basis of a smooth gravy for incorporation into other products.

Two key parts of the challenge for S&W were to allow the cooking process to be installed in a location rather remote from the point of use, and to make sure that the transfer lines between the two locations did not generate yield loss. In the past S&W had used air purge systems to try and recover product in long delivery lines, but they knew that in this case, something more advanced would be required – the lines were more than 120m long, and needed to be contained within high level pipe routes, so access for manual interventions was all but impossible.

### SOLUTION

S & W Process Engineering therefore needed a system that was ultra-reliable, secure, automated, and CIP compatible. Their search showed that there was really only one supplier capable of meeting these challenges – Martec of Whitwell. Not only did the Martec system have a unique patented plug that gave excellent pipe cleaning, but the flexible vanes allowed us to use standard radius bends and normal fabrication techniques. This made the installation neater, faster, and more cost effective than any conventional “pigging system” would have allowed. It also meant that when the pipes acquired the inevitable minor dents over the coming years, the system would carry on working.

Nestlé needed the entire system to be PLC controlled with minimal operator intervention, so the fact that the Martec plug is captive, and that the launch and receive stations are CIP cleanable was a huge advantage, as long as we could integrate the Martec system into their automation for the wider process. Martec were very supportive here, and gave S & W Process Engineering clear and effective guidance and training: This paid off when they came to the commissioning, with the product recovery system working exactly as planned right from the start.

### BENEFITS

The project was so successful that S&W now regard Martec's system as the only viable product recovery system, and we therefore recommend them to all their clients where product recovery is an important part of the project.