

## Sweeter Smelling Solution at Grampian Prepared Meats

The manufacture, supply and installation of progressing cavity pumps by Mono® NOV has enabled Grampian Prepared Meats to comply with Pollution Prevention and Control (PPC) regulations at its Anglesey plant, and also provided effective odour control without the considerable expense of installing a large air scrubber unit.

Chicken blood was previously drawn from the collection sump in the production area, via a vacuum pump, to fill a pressure vessel. This blood was then transferred into a 30 tonne holding tank by a blower and the necessary venting of this system to atmosphere gave rise to the odour and required addressing ahead of the 2007 cut-off date for compliance with the latest regulations.

Mono's solution was to replace the first stage vacuum pump and pressure vessel with duty/standby progressing cavity pumps to transfer the blood to the holding tank. A single duty pump has also been installed to transfer the blood/water mixture to a road tanker for disposal. The new pumping system is entirely enclosed and proved the most cost-effective solution to achieve Grampian Prepared Meats' requirements and the necessary compliance.

Another important benefit for the customer was that Mono was also able to design, install and commission the pumping system, including all necessary pipework, valves and control panel. This meant a 'complete' solution giving

greater confidence that the process would operate smoothly from beginning to end, compared with a contract involving several partners.

The compact, duty/standby pumps transfer the chicken blood at a capacity of 6m<sup>3</sup>/h and a maximum delivery pressure of 0.74 bar. A larger pump operates at a capacity of 45 m<sup>3</sup>/h and maximum pressure of 0.43 bar to empty the holding tank and transfer the blood to the tanker.

Commenting on the installation, the engineering manager at Grampian Prepared Meats, Keith Taylor, said, "The Mono pumping solution has enabled us to meet PPC obligations and make the working environment more pleasant. Importantly the work was carried out during programmed shutdown to avoid disruption and after nearly a year of operation had delivered trouble-free operation as promised."



Pumps:	<b>3 x compact progressing cavity pumps</b>
Product:	<b>Chicken blood</b>
Capacity:	<b>6m<sup>3</sup>/h - 45m<sup>3</sup>/h</b>
Pressure:	<b>0.43 - 0.74 bar</b>
Pump Speed:	<b>294 - 414 rpm</b>
Drive:	<b>2.2 and 5.5kW motors</b>



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**Mono® NOV**

One Company, Unlimited Solutions