



TO WHOM IT MAY CONCERN

We are one of the largest fresh chicken producers in the UK. At our Brackley site we process over 1.3M Birds every week.

In February 2004, Hydralube were bought in to health check a large feather press gearbox that was causing concern due to a grinding noise being omitted and the unusually high gearbox casing temperature. This gearbox is critical to our production process.

Hydralube IT engineers took distress readings from the feather press gearbox using a HT Meter that measures, records and stores the levels of wear the drive mechanisms have reached in their life cycle. This data is uploaded from the meter onto Hydralube's software that is installed on a dedicated site pc. The software is designed to inform an engineer of the plasma grade required to treat worn mechanical surfaces, to prolong the working life of an asset.

The HT Meter distress readings showed a high of 27 while running on Shell Omala 320 oil; the Shell oil was drained and flushed out of the press gearbox. The Hydralube software informed our engineers to replace the oil with Hydralube "red plasma" grade. Meter readings were continued in to monitor the plasma treatment effectiveness in mechanical performance. Within 1 day, the distress readings started to come down and after 3 weeks the level of distress was down to 16 (amber band that indicates the gearbox is now in satisfactory working condition).

Hydralube's technical department have worked with our in-house management/ engineering team and recommended refurbishment of the press gearbox in July 2006. This gearbox is specially designed and parts are not readily available. By planning the refurbishment of this gearbox, it avoided any catastrophic failure or downtime and allowed sufficient time for bespoke parts to be manufactured.

Electrical energy consumption on the feather press had been carried out on a regular basis when running on the Shell Omala 320 oil. After the introduction of the red plasma grade, within 3 weeks the electrical energy readings being taken from the 55kW electric motor driving the press were reduced by 14%, and the high temperature readings from the gearbox casing were reduced to 5-10 degrees above ambient. The Hydralube diagnostics and plasma treatment extended the working life of the feather press for 2 years.

After proving effective in the feather press we exclusively used Hydralube products in all the gearboxes in critical areas of our plant. Downtime due to mechanical failure of drives in these areas has been eliminated. Similar energy savings are being achieved on these albeit smaller motors. The lubricants are now being rolled out to other specialist areas of our production process.

A handwritten signature in blue ink that reads 'Colin Trotman'.

Colin Trotman
Engineering Manager, Brackley
18/07/2007