

CASE STUDY: MILLICLEAN 1000T



Milliclean 1000T with Millers Oils Fluid Management Services

Overview

The Millers Oils Fluid Management team was asked to complete a clean-out and refill of five injection moulding machines (including Wittman Battenfeld 2000T, Wittman Battenfeld 1300T, 2x Wittman Battenfeld 850T and Toshiba 650T) at an accredited Tier 1 supplier to the automotive sector.

The Challenge

Access to the machine sumps was limited, meaning a full manual system clean would be very difficult and involve a long period of down-time.

The injection moulding machines run at high capacity, so any cleaning down-time would come at a cost to production and had to be kept to a minimum.

The machines were approximately 12 years old, and due to production demands suffered from heavy varnishing and sludge build-up. One of the machines had previously experienced overheating issues which had resulted in accelerated oxidation of the oil. If not resolved, varnishing and sludge build-up can cause valve sticking and pump failures, meaning not only costly equipment replacement, but also unplanned down-time.

The Solution

Milliclean 1000T was the ideal product to use to help overcome these challenges.

Added to the existing hydraulic oil at 20% of the sump capacity, Milliclean 1000T was then circulated for 48 hours while the machine was in operation. Milliclean 1000T acted fast to remove lacquer, varnish and sludge in the hydraulic systems pipework, couplings, hoses, tanks, valves and pumps – without any production down-time.

The Fluid Management team then drained the tanks, cleared any residue and flushed the system, before replacing the filters, refilling the tanks and filtering the new oil down to the recommended OEM ISO cleanliness code.

The Results

Each machine had a deep clean, and down-time was kept to a minimum, saving the company both significant time and money.

The first image shows the machine sight glass before the clean: the heavy build-up of varnish is clearly visible. After running Milliclean 1000T through the system for 48 hours, the varnish build-up was removed, as can be seen in the second image. The third image shows the machine sight glass refilled with the new, filtered oil.

The customer was very impressed with the result and the service from our team, so much so that the Toshiba machine was added to the job after seeing the results first hand.



IMAGE 1



IMAGE 2



IMAGE 3

“Historically we could have hours of down-time and heavy manual labour with strong chemicals to clean out hydraulic sumps and components. Milliclean 1000T and the Fluid Management team dramatically reduced down-time and since the Millers Oils Milliclean 1000T project was completed the machines are now running better than ever and we are delighted with the results and would highly recommend Millers oils products and services”
- Production Manager