



Hydraulic Oil Plastic Injection Moulding Machine

CJC™ Application Study

CUSTOMER

NEYR PLASTIQUES ESPAGNE produce plastic components for the self-propulsion sector and the printer / photocopier sector (Hewlett-Packett).



THE SYSTEM

12 injection moulders of 320 to 1,800 tons, mark BILLION.

The injection moulders have deposits between 600 to 1,950 L of hydraulic oil, MOBIL DTE 25 (ISO VG 46).

THE PROBLEM

The customer wanted to reduce his maintenance costs (repairs and stoppage costs) and lost time at unplanned stoppages.

Among other things the company had spent EUR 480 on in-line filters every 6 months without obtaining clean oil. It meant that the customer had contaminated oil with particles (ISO Code 22/19/17 - further information on cleanliness classes are available on request).

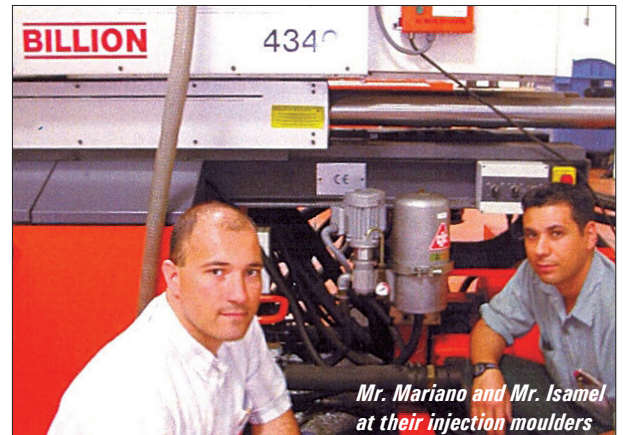
Every year it was necessary to clean the tanks of the injection moulders. NEYR spent every year EUR 6,280.58 per machine on maintenance.

THE SOLUTION

CJC™ Fine Filter units 15/25 with CJC™ Fine Filter inserts BG 15/25 were installed in all injection moulders with a filtration ratio corresponding to 3 µm absolute and a flow of 300 L/h. Water and resins (the final products from oxidation of the oil) were eliminated. Dirt holding capacity: approx. 1.1 kg
Water absorption capacity: approx. 400 mL

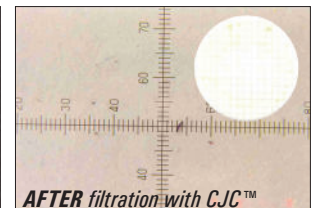
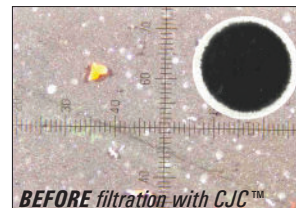
THE RESULT

The maintenance expenses were reduced by up to 60 % with the CJC™ Filters. Furthermore NEYR have reduced unplanned stoppages by up to 15 %. This means a 15 % increase in productivity.



Mr. Mariano and Mr. Isamel at their injection moulders

OIL SAMPLES



THE RESULT

	BEFORE	AFTER 6 months
Particles (ISO Code)	22/19/17	12/9/7
Water, ppm	230 ppm	41 ppm
Resins level (oxidation)	Black	White
Maintenance costs per machine	EUR 3,140.28	EUR 277.15
Unplanned stoppages, hours	(3,500 x 0.05) = 175 hours	(2,500 x 0.02) = 70 hours
Lifetime of the oil	8,000 hours	Has not been changed yet *)
Cleaning of the tank	Every year	Never

According to the oil analyses, the oil was in good condition both chemically and in terms of the contamination level. As the presence of particles, water and resins is small, the oil will age slowly.

COMMENTS

Mr. Mariano Parede, Maintenance Manager, NEYR (Igalada):
"... before the installation of the CJC Filters in all our injection moulders, we had to change the oil and the in-line filters very often, and still the system remained contaminated. We spent a lot of hours on maintenance of every engine because of the contamination, which we at that time did not think so important. A short while after installation of the CJC Filters, we noticed a reduction in the stoppages as the oil no longer was contaminated by particles, resins and water. It has been one of the best maintenance investments until today."