



Hydraulic Oil Aluminium Injection Moulder

CJC™ Application Study

CUSTOMER

RUFFINI, S.A, a company making moulding of pressure cast pieces made of aluminium alloys, mainly intended for the car industry.

THE SYSTEM

24 Injection machines, makes ITALPRESSE, PRETRANSA and IDRAPRESSE, from 500 up to 2,500 tons.

THE PROBLEM

RUFFINI, S.A. wanted a suitable oil quality for the hydraulic system, general servo systems and critical systems of these machines that would be within category ISO 16/14/10.

RUFFINI, S.A. also wanted to reduce breakdowns and unplanned stoppage hours, as well as to make longer the life of the oil that was replaced every year and avoid the complicated cleaning of the tanks of the injection machines, too.

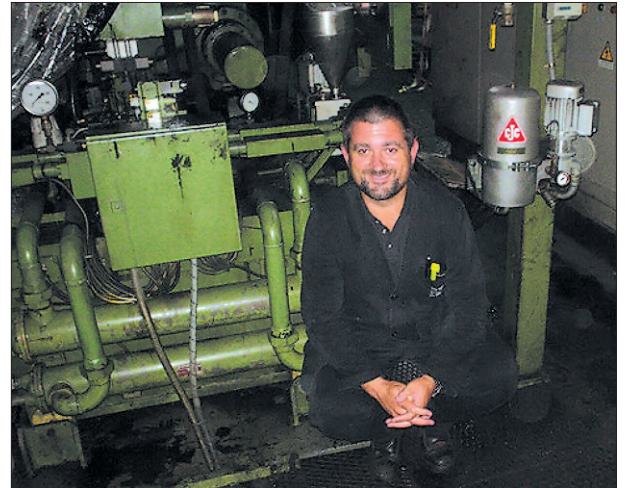
THE SOLUTION

CJC™ Fine Filter units 15/25 with CJC™ Fine Filter inserts BG 15/25 (3 µm absolute) were installed. Thanks to the qualities of these filter inserts water and particles up to 1 µm were removed, and water and resins were absorbed, which are the end products of oxidation of oil. Dirt holding capacity: approx. 1.1 kg Water absorption capacity: approx. 400 mL

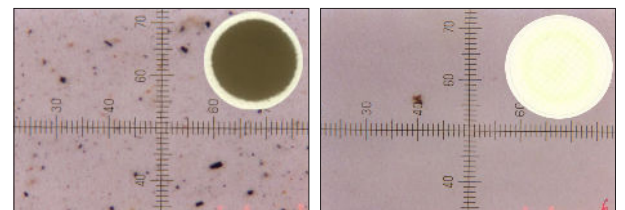
THE RESULT

In 1 month the contamination level was reduced by 90 % and in 3 months by 99 %, getting an ISO code twice under the recommended level, what helped to make life of hydraulic parts longer. Contamination of injection machines resulting from obstruction was reduced, as well as that of servo valves that from 18 stoppages has been reduced down to 2 stoppages per injection machine yearly.

The process removed not only abrasive particles, but also resins and moisture. As it is no longer necessary to clean the tank, and as the oil life time has been prolonged, the customer has obtained a saving of € 17,424 yearly.



Mr. Medir de RUFFINI with a CJC™ Fine Filter unit 15/25



BEFORE CJC™ filtration

AFTER CJC™ filtration

THE RESULT

	Before Filtration	After 1 months	After 3 months
Particles > 2µm	565,924	50,024	5,684
ISO Code *)	20/17/12	16/15/9	13/12/8
Water	40 ppm	26 ppm	19 ppm
Resins (oxidation)	Brown	White	White
OIL CHANGE			
BEFORE Filtration	Each year		
AFTER filtration	No change in 4 years		

*) Further information on cleanliness classes are available on request.

COMMENTS

Mr. Medir Lecha, Maintenance Chief of RUFFINI, S.A.:

"...After knowing CJC Filters and having installed them on our injection machines, we have got the suitable oil quality and reduction of yearly unplanned stoppages from 18 to 2 times. At present we are certain to work with oil in very good conditions and suitable at all times for our facilities. The investment to install CJC Filters was a right decision and a pro-assets good maintenance tool..."