OIL FILTRATION SYSTEMS

CJC™ Application Study

Hydraulic Oil - Aluminium Injection Moulder

INDUSTRY

Application Study written by:
Stefan Molborg
C.C.Jensen Ibérica, S.L.

In co-operation with:

Mr. Medir Lecha Puig
Maintenance Chief
RUFFINI, S.A.

2000

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

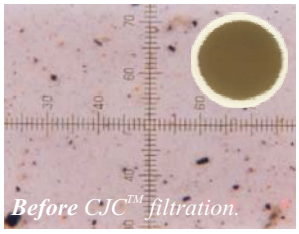
CJC™ Depth FineFilters LG 15/25 L with **CJC™ FilterInserts BG 15/25** of 3µm absolute were installed. Thanks to the qualities of these FilterInserts water and particles up to 1 µm were removed, and water and resins were absorbed, which are the end products of oxidation of oil.

THE RESULT

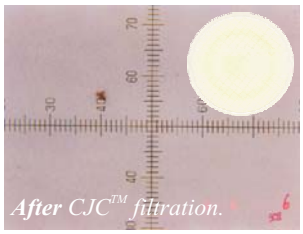
In a month the contamination level was reduced by 90% and in three months by 99%, getting an ISO code twice under the recommended level, what helped to make life of hydraulic parts longer. Contamination of injection machines resulting from obstruction was reduced, as well as that of servo valves that 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. Not being necessary to clean the tank and the longer life of oil have allowed for a saving of € 17,424 yearly.

Mr. Medir de RUFFINI With a CJC™ FineFilter LG 15/25 L.



Before CJC™ filtration.



After CJC™ filtration.

THE RESULT

	Before Filtration	After 1 month	After 3 months
Solid 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.		

COMMENTS

Mr. Medir Lecha, Maintenance Chief of RUFFINI, S.A.:
"...After knowing C.C.Jensen 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..."

C.C.Jensen A/S
Løvholmen 13 DK-5700 Svendborg
Denmark
Phone: +45 63 21 20 14 Fax: +45 62 22 46 15
E-mail: filter@cjc.dk Web: www.cjc.dk