



CLEAN OIL
BRIGHT IDEAS

Hydraulic Oil HL 46

PONAR ŻYWIEC Plastic Injection Moulder

CJC™ Application Study

Application Study
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CUSTOMER

ZMM MAXPOL Sp. z o.o. Rzeszów, Poland.
User of PONAR ŻYWIEC plastic injection moulders for many years.

THE SYSTEM

Twelve PONAR ŻYWIEC plastic injection moulders machine-manufacturer-equipped with CJC™ off-line Fine Filters LG 15/25 L with electric pressure switches controlling pressure drop on the filter insert.

Machine types:

UT50H, UT90H, VT135T, VT175T, UT175T, UT230T, UT280T, UT340T.



THE PROBLEM

In order to prolong the life of oil in plastic injection moulders and their components, as well as to minimize the failures of hydraulic systems, PONAR ŻYWIEC decided to equip all of their production of moulders with CJC™ off-line Fine Filters. The clear goal was to reduce the maintenance costs for their clients.

THE SOLUTION

A CJC™ Fine Filter LG 15/25 L was mounted in each plastic injection moulder. The filter was equipped with a 3 µm absolute CJC™ Filter Insert BG 15/25 with a 1.5 litre dirt holding capacity and up to 50% water absorption capability.

THE RESULT

ZMM MAXPOL bought the first plastic injection moulder equipped with a CJC filter in 2000. Since then the moulder has worked continuously with the CJC filter. The oil in this machine has not been changed since the machine's start-up, and the oil analysis made in December 2003 proved the oil was ISO class 13/12/9. It has been observed that one filter insert is sufficient for an average of 3,500 hours. The oil temperature never exceeds 40°C.



THE RESULT

Date	Particles			ISO Code	Water ppm
	2 µm	5 µm	15 µm		
01.10.2002	30,058	12,682	1,624	15/14/11	93.7
17.12.2003	5,286	2,350	447	13/12/9	55.8
05.11.2004	6,734	2,405	233	13/12/8	26.0

COMMENTS

Wiesław Lubiński, Production Director in ZMM Maxpol:
Since the start-up of all twelve plastic injection moulders machine-manufacturer-equipped with CJC off-line filters, no breakdowns of hydraulic systems of any of the machines have been noted. At the same time, we have observed a prolonged life-time of pumps and proportional valves.