



# Hydraulic Oil PONAR ŻYWIEC Plastic Injection Moulder

## CJC® Application Study



### 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 15/25 with electric pressure switches controlling pressure drop on the filter insert.

#### Machine types:

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

### THE CHALLENGE

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 plastic injection moulders with off-line filters. The clear goal was to reduce the maintenance costs for their clients.

### THE SOLUTION

A CJC® Oil Care System 15/25 was mounted in each plastic injection moulder. The filter was equipped with a CJC® Fine Filter Insert BG 15/25.

Dirt holding capacity: approx. 1.1 kg

Water absorption capacity: approx. 400 mL

Filtration degree: 3 µm absolute, 1 µm nominal

Filter material: 100 % renewable raw material

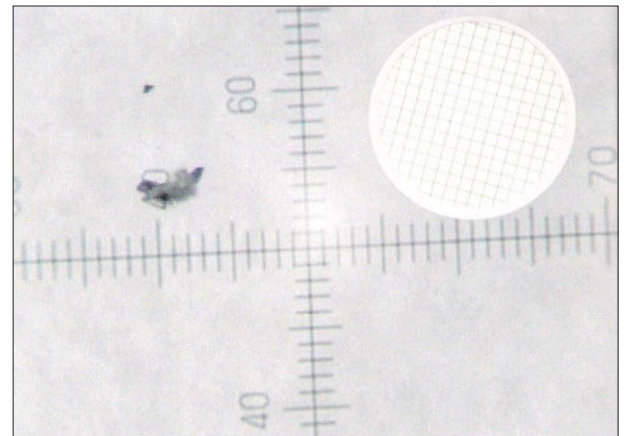
### THE RESULT

ZMM MAXPOL bought the first plastic injection moulder equipped with a CJC® Oil Care System in 2000. Since 3 years the injection moulders 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 after three years proved that the oil cleanliness was improved to 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.



PONAR ŻYWIEC Plastic Injection Moulders  
with CJC® Off-line Fine Filters



Oil Sample after 2 years

### THE RESULT

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

### COMMENTS

**Wiesław Lubński, 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.