

# CJC Application Study

# Plastic Injection Moulding Machine - Hydraulic System



Application Study written by Christian Juul Thomsen C.C. Jensen A/S

### **CUSTOMER**

Wavin Metalplast-Buk Ul. Dobieży ńska 43 64-320 Buk, Poland

# THE SYSTEM

STORK Plastic Injection Moulding Machine type SX 3000/2100, each with approximately 720 L of Shell Tellus ISO VG 46 oil.

# THE SOLUTION

A **CJC**<sup>TM</sup> **Fine Filter** was installed, type HDU 27/27 P (stationary filter with a **pump** flow of 400 L./h), using one **CJC**<sup>TM</sup> **Filter Insert**, type B 27/27, 3 micron absolute, i.e. 98.7% of all solid particles  $\geq$  3  $\mu$ m and approximately 50% of all particles  $\geq$  0.8  $\mu$ m will be retained in one pass.

The CJC<sup>™</sup> Filter Insert is capable of absorbing both oxidation products, solid particles and water. The dirt holding capacity is 4 L.

#### THE TEST

The Fine Filter unit was installed on the machine in 1993, when the machine was set up at the Wavin premises in Buk. Wavin have CJC<sup>TM</sup> Filters on all their machines.

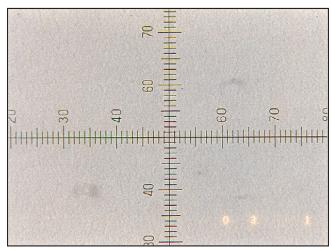
The oil samples were taken through a sampling point before the  $CJC^{TM}$  Filter.

The oil on this machine has not been changed since october 1997 and the condition of the oil is still excellent.

The filter inserts are replaced once a year.



At Wavin Metalplast in Buk, Poland all STORK plastic injection moulding machines are equipped with  $CJC^{TM}$  Fine Filters.



The oil analysis were performed by Filtrex Services, Hoorn, The Netherlands. For further information on test results and  $CJC^{TM}$  Oilcare Units, please contact C.C.Jensen A/S, Filter Sales Dept.

#### **RESULTS**

| Hydraulic System on STORK Plastic Injection Moulder |           |           |            |
|---|-----------|-----------|------------|
|   | >2 micron | >5 micron | >15 micron |
| No. of particles/100 mL                             | 4874      | 2693      | 513        |
|   |           |           |            |
| ISO 4406 Class                                      |           | 13/12/10  |            |
| NAS 1638 Class                                      |           | 4         |            |
| Colour of membrane                                  |           | White     |            |
| Water content                                       |           | 46 ppm    |            |

