



# Hydraulic Oil Mitsubishi Lathe Lubrication System

## CJC® Application Study

### CUSTOMER

TIMKEN POLSKA, Sosnowiec - producers of roller bearings.

### THE SYSTEM

Drive lubricating system of Mitsubishi 8-spindle automatic lathe type 100 MRC-8 with 60 litres of hydraulic oil type L-HM 32/AZ.

### THE PROBLEM

The pumping chamber of the cooling fluid is located next to the chamber of the lubricating system. This causes a permanent threat of cooling fluid and large amounts of mechanical particles entering the oil. The oil will be emulsified when contaminated with the cooling fluid. This will interrupt the machine operation and can cause sudden unplanned down time due to clutch blockage. The damaging ingress of cooling fluid into the oil is usually a result of operator failure and as such cannot be totally eliminated.

### THE SOLUTION

A **CJC® Oil Care System 15/25** is installed off-line on the machine. The filter is equipped with a **CJC® Fine Filter insert BG**.

Filter material: 100 % natural fibres

Filtration degree: 3 µm absolute, 1 µm nominal

Dirt holding capacity: approx. 1.1 kg

Water absorption capacity: approx. 400 mL

### THE TEST

The test criteria included measurement of water absorption and replacement interval of the filter insert.

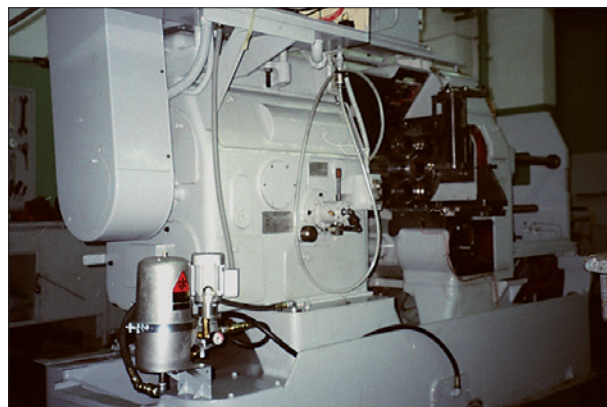
### THE RESULT

A stable water level below 100 PPM in the oil was achieved (independent analyses carried out by the Filtrex Laboratory). Since the filter installation the automatic lathe has worked without problems. No more clutch blockades in the drive system have been observed.

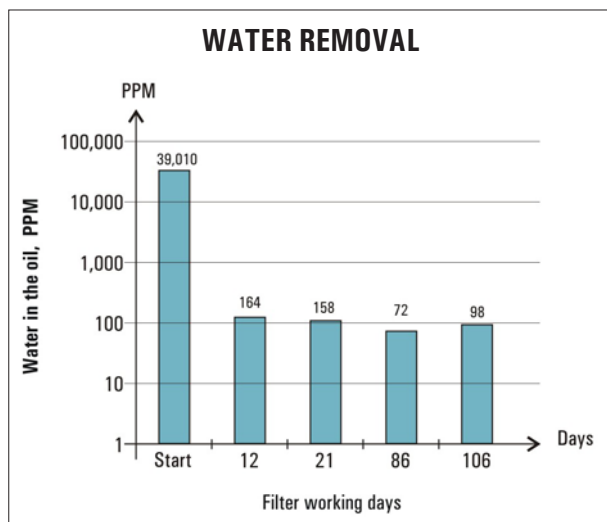
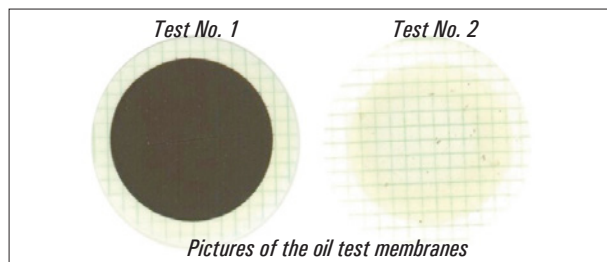
### COMMENTS

**Michał Korek, PM Department  
Maintenance Manager:**

*"Thanks to the CJC Off-line filter, the automatic lathe works more effectively. The frequency and costs of system failures have been reduced. The CJC filtration has been invaluable even though we are only protecting 60 litres of oil".*



*Mitsubishi Automatic Lathe type 100 MRC-8 with a 15/25 CJC® Off-line Filter.*



### THE RESULT

	ISO Class *)
Test No. 1, 20th August, <b>BEFORE</b>	23/20/17
Test No. 2, 01st September, <b>AFTER</b>	19/18/14

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