

OIL FILTRATION SYSTEMS



Application Study written by Ulf Bertelsen C.C. Jensen Ibeica, S. L. (Spain)

CJCTM Application Study

Automotive Industry Lube oil system on clutch brake on excenter press

CUSTOMER

Nissan Motor Manufacturers Iberica, S. A., Barcelona (Spain) Contact person: Mr. Carlos Sala, Press Shop Maintenance Manager

THE SYSTEM

The clutch brake lube oil system on a HITACHI XX ton Excenter Press. Fitted with 25 μ m pressure filter. System Volume: 200 litre. - ISO VE 220 oil.

THE PROBLEM

The clutch brake system is continuously exposed to overheating from the breaking process as well as high ingress of abrasive particles from the wearing break rads. This leads to resin formation in the oil, and short lifetime. Even the new oil is heavily contaminated.

THE SOLUTION

The installation of an off-line Fine Filtration System. The CJC HDU 15/25 PV-P with a 45 l/h flow was installed. The filter is fitted with the BG 15/25 cellulose insert filtering to 3 μ m absolute. The insert also removes resin and condensation water by absorption.

THE TEST

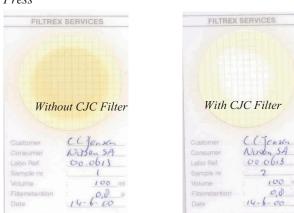
The filter was installed after a major overhaul at which new oil was installed. The first oil sample was taken directly from the oil drum, the second from the lowest point of the oil system after one months operation.

THE RESULT

The filtered oil is 40 times cleaner than the new oil. Theoretically this is equivalent to the mechanical component lifetime being extended more than 4 times.

After this test it has been decided to install CJC filters on all 18 presses in the Barcelona plant. Successful tests such as this have also been conducted on the hydraulic systems.





THE RESULTS

Particle size	New oil	After one month
2 m	1,339,104	33,199
5 m	26,512	15,667
15 m	38,149	427
Water	167 ppm	60 ppm
Resin colour	Yellow	White



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