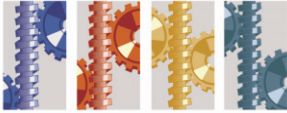




OIL FILTRATION SYSTEMS

CJC™ Application Study

Hydraulic System on Container Straddler.



INDUSTRY

Application Study written by
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CUSTOMER

Piraeus Port Authorities, Greece, operate more than 200 Container Straddlers.

THE SYSTEM

Hydraulic System on a Preussag Container Straddler. The system volume is approximately 250 litres.

THE PROBLEM

The oil on the hydraulic system, which controls the movement of the Container Straddler and the lifting of the container itself, was heavily contaminated with particles and water. The water comes from condensation and is causing oxidation of the oil. Due to this, the life time of the oil and components is seriously reduced.

THE SOLUTION

The filter was installed on the top of the of the Container Straddler. The filter was a **CJC™ Fine Filter HDU 15/25 PM** with a 24V motor. The CJC™ Filter unit was equipped with a **BG 15/25 Filter Insert**. This will remove approximately 2 kilo of dirt and 2 litres of water from the oil.

THE TEST

The filter runs while the Container Straddler is in operation. It was agreed to take oil samples with following intervals 24, 48, 72 and 150 hours.

THE RESULT

The achieved reduction in ISO 4406 Codes after only 150 hours of operation will result in a considerably increase in lifetime of oil and components of approximately 4 times.



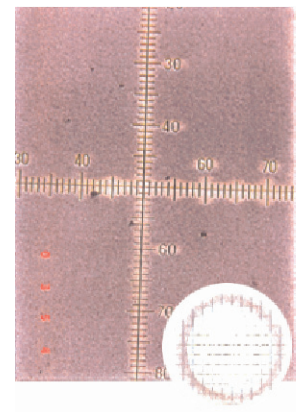
Container Straddler



CJC™ Fine Filter 15/25 PM



Before filtration



After filtration

THE ANALYSIS RESULTS

Particle size	0 hours	24 hours	48 hours	72 hours	150 hours
Particles 2 m	2,160,698	70,365	68,139	65,412	40,375
Particles 5 m	354,056	33,190	40,447	21,648	28,141
Particles 15 m	125,322	3,249	3,884	2,699	2,448
ISO 4406 Code	22/19/17	17/16/12	17/16/12	17/15/12	16/15/12
Water Content, ppm	909,5	80,1	73,9	72,2	90,4



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