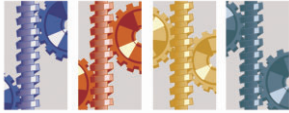




OIL FILTRATION SYSTEMS

CJC™ Application Study

Hydraulic Oil - Mine Drilling Machine



INDUSTRY

*Application Study
written by:*
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2002

CUSTOMER

Compañía Minera Disputada -
"El Soldado", Chile.
Contact Person: Augusto Morales,
Superintendent, Maintenance,
Mining Area.

THE SYSTEM

A Drilltech drilling machine for the
copper production site with a
hydraulic system of 900 litres ISO
VG 46 oil.

THE PROBLEM

The cleanliness level of the
hydraulic system in the drilling
machine was 2½ times above the
recommended level for economical
and reliable operation. The conta-
mination also had a destructive
effect on the additives and entailed a
great number of problems as britt-
leness of ball bearings, increased
fatigue wear, corrosion due to
sulphuric acid and hydrogen
sulphide, decrease of viscosity and
increase of the TAN value. All the
above lead to increased wear and
reduced lifetime on both system
components and oil

THE SOLUTION

A **CJC™ FineFilter HDU 27/27
PH** was installed off-line on the
system tank. The Fine Filter is
equipped with a **CJC™ Filter-
Element B 27/27**, 3 micron abs.
with a dirt holding cap. of 4 litres.

THE RESULT

Before installation of the filter the
number of particles >2 micron
measured in 100 ml of oil was as
high as 201.000 and the water level
209 ppm. After 15 days of contin-
uous operation of the CJC™
FineFilter the particle amount had
decreased to 41.000 particles per
100 ml of oil corresponding to ISO
class 16/15/10 and 118 ppm of
water. The oil is today cleaner than
new oil supplied by oil companies
and recommended cleanliness
classes for the hydraulic systems.

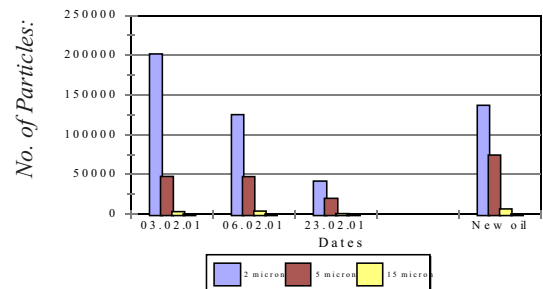


The Drilltech Drilling Machine.



The Installation of the CJC™ Fine Filter.

Disputada El Soldado, Drilling Machine
Particle Removal



Disputada El Soldado, Drilling Machine
Water Removal

