



Oil & Gas

Reference study



Photo: Dag Myrestrand, StatoilHydro



GAS COMPRESSORS

CUSTOMER **StatoilHydro**

StatoilHydro ASA in Norway
Site: Kollsnes Gas
Contact: Odd Nilsen, Engineer

SYSTEM

Gas Compressors, Dresser Rand, 43MW
Qty:5
Offline Installation year:1998
Oil volume: 30000 ltrs of Statoil Hydraway HVXA 32



CHALLENGE

We had a problem with operational reliability on our gas compressors. The source was soon traced to be the cleanliness level of the lub oil of the 5 compressors during operation (NAS1638 CLASS 12). We regularly every 3rd month had to dismantle each of the 10 Frank Mohn, 1500 ltrs/min., screw pumps for maintenance and service.

SOLUTION

Europafilter, Kidneyloop oil filtration unit was assembled in a offline circuit, treating the lubricant continuously while the compressors is operation. This is done by cleaning the oil from the oilre-sevoir with return to the oilre-sevoir.

RESULT

Considerably less wear, very little oilconsumption and no change of oil, -so far.
NAS1638 CLASS 0 to 1 is common
The system now has regular good operating conditions. It has now been 9 years since we maintained the pumps. The oil has not been changed since we started with the Europafilter cleaning.



Installation site

The red ring shows the compressor trains where the Europafilter are installed. The microscope pic. are reference to the NAS1638 class 12, cleanliness level before filtration.



Europafilter offline cleaner installation

Picture of the Europafilter installation. The microscope pic. are reference to the NAS1638 class 0, cleanliness level after filtration.

“An unsheduled stop in any of our compressors costs us 1.million NOK each hour. With this kind of oil cleaning we do not get any surprises”

Arild Undheim, Production Manager
StatoilHydro Kollsnes Gas