

SPINNER II[®] *PROFIT BUILDER*

You'll Be Dollars Ahead

A Newsletter on Money-Saving Ideas From
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TURBINE LUBE OIL

PB No. 110

Bearing Wearout On Compressor Turbines — Centrifuge Complements Full-Flow Filters

Where high natural gas volumes can be pumped continuously, using a turbine to power a compressor becomes quite economical. Turbine controls and bearings both need clean, conditioned oil for cooling, lubrication and power transfer.

In the Rockies, along the western border of Alberta, one pipeline runs a GE Model LM1500 turbine fitted with a bank of three 20 micrometer absolute spin-on high-efficiency lube filters; these media type disposable filters are rated 50% efficient at at 2µm by the supplier, but the pipeline maintenance crew was still having bearing failures that tribology analysis related to contaminants in the lube oil. The Spinner II Distributor recommended an aggressive

high-turn rate installation built around the use of a Model 200 HD oil cleaning centrifuge. After three months of continuous operation with the centrifuge, oil cleanliness improved **three** ISO Code ranges, reducing debris counts from 17/13 to 14/10:

Test Day	>5µm	>15µm	>25µm
Day 1	648	63	14
Day 99	124	7	3

This is hard proof of performance: application of the Spinner II centrifuge complementing full-flows, you can trap dirt & wear debris high performance filters leave uncontrolled, so major turbine wear components like seals, controls and bearings maintain capability longer.

