FilClean™ Impact Story

CUSTOM STEEL MILL HIGH VISCOSITY GEAR BOX LUBRICATION SYSTEM

A contractor was tasked by one of their customers with replacing an old gear box oil lubrication system at a steel mill. The new system had to be designed to fit within a maximum space requirement, where heavy 460 weight gear oil from a large gear box would gravity drain down into the 200 gallon system, be recirculated, filtered and temperature controlled before being pumped back up to the gear box to be used for lubrication.

The system would need to be designed with

- Remote High/Low Tank Oil Level Indication
- Oil Temperature Control – Via 15KW Low Watt Density Heater and Water Cooled Tube and Shell Heat Exchanger.
- Remote Particulate Filter Plugged Indication
- Remote Pump Flow On/Off Low Flow Indication
- Remote Oil Leak Indication
- Pump Motor and Oil Heater Overload Trip Indication
- Heater Over Temperature – Provided by thermocouple and backup mechanical thermostat.
- Remote Emergency All Stop Engaged
- Remote High Water Oil Contamination Indication via water sensor
- Provide an Oil Cleanliness Spec of 16/14/12 or better

MSC Filtration Technologies was unable to visit the customer, so the system was designed using dimensional constraints and minimum and maximum operating specifications provided by the contractor. A quote was provided, an order placed, approval drawings submitted, approval given, system built and delivered and has been working flawlessly to this day. Thus proving MSC Filtration Technologies really does provide flexible and innovative small company service but with big company results.

Figure 1: FilClean Filtration System