

Schroeder Industries Recirculating Filtration System for Coal-Fired Power Plant Pulverizers

Introduction

Save costly gear boxes, downtime and maintenance by adding Schroeder's recirculating filtration system to your power station's coal pulverizers.

Because the gap between generating capacity and the demand for electricity is closing, downtime is not acceptable. Reliability is a must, which can be a challenge, given the harsh operating conditions. Periods in between scheduled service outages have become longer and components are not getting the maintenance they have in the past.

Contamination is constantly ingested during coal pulverizing. As seals deteriorate, dirt and coal dust enter the oil and move into the gearbox. It is estimated that many gearboxes operate at an ISO cleanliness level of 26/24/21. Under continuous operation, this high level of contamination will ultimately cause gearbox failure, which results in downtime and expensive repair costs. By filtering gear oil, failures can be reduced ten-fold, saving coal-fired power plants hundreds of thousands of dollars in five years' time.

The Product - Schroeder Industries' Model KLD-4021 recirculating filtration system is the contamination control solution for coal-fired power plants. It is a kidney-loop filtration package using a high efficiency, high dirt holding capacity, synthetic filter media. The package utilizes a dual filter assembly arrangement with a 1st & 2nd stage level of filtration using a common size filter element in both housings. The unit is installed with the suction line coming into the filter bank directly from the bottom of the reservoir; the outlet, or filtered discharge line, is plumbed directly into the top of the reservoir. The filter element's condition is monitored by dedicated differential pressure gauges mounted on each filter housing. Fluid compatibility includes both petroleum- and synthetic-based lube oils. Upstream and downstream sampling valves are standard, allowing the user to confirm system cleanliness without shutting down the system.

Features

- Skid mounting with a built-in drip pan.
- Integral connection between pump and motor – (without a coupling and a “C” face reduces the number of components, noise level and dimensions)
- Small envelope for ease of installation and maintenance.
- Motor size is matched to pump output, limiting dangerous pressure conditions
- Industrial, continuous operation system
- Base-ported design – easy, “mess-free” element change
- High viscosity pump is rated at 10 GPM
- Optional water removal element available. (removes free water)

The standard high viscosity pump is rated to 2,500 SUS fluid.

For further protection, Schroeder also recommends the use of its desiccant air breathers to help control moist, humid air, airborne dust, and other contaminants from being drawn into the reservoir.



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