

## **Power Generation**

### **Turbomachinery OEMs Power Up With Pall**

# Pall Ultipleat® High Flow Filters the Choice for Water Injection NOx and SOx Emission Control

#### **Problem Overview**

Wear-related component failures are major occurrences that often lead to significant turbine downtime, costly repairs, or complete engine rebuilding. For years, leading turbine manufacturers have trusted Pall Corporation to protect their most critical components, realizing optimum efficiency, availability and reliability, while reducing waste.

Turbomachinery OEMs rely on Pall's Ultipleat High Flow filters for filtration on water injection systems for NOx and SOx emission control. Pall's industry-recognized technology is a critical component in helping prevent nozzle fouling. This technology also protects against turbine blade erosion by removing the hard particulate found in the source water. Filtration of high pressure demineralized water before injection into the turbine helps control NOx and SOx emissions in turbine exhaust - a major environmental issue raised by concerns over global warming.

Water controls and NOx and SOx filtration also ensure the system functions properly, maintaining spray patterns and delivery volume.



Pall's Ultipleat High Flow system is a proprietary, large diameter, disposable filter system, and features long filter life and easy filter change-outs.

Filtration. Separation. Solution.sm

#### **The Solution**

Pall's simplex and duplex Ultipleat High Flow filter packages are compact, cost effective, and meet or exceed the original equipment manufacturer's filtration requirements. Ultipleat High Flow filter elements are available in lengths of 20", 40", and 60" for use in single-or multi-element housings to handle a wide range of flow rates from 40 gpm to 1,000 gpm. Ultipleat High Flow filter cartridges are available in a broad array of absolute removal ratings from 2 micron to 40 micron in both glass fiber and polypropylene construction.

Typical Ultipleat High Flow duplex filter systems employ a six-way transfer valve between the two filter vessels. The vessels utilize a reusable, stainless steel internal basket and inside to outside flow configuration to retain all captured dirt. The vessel design, in combination with the external piston seal construction of the element, virtually eliminates bypass of contaminants while allowing for rapid element change-out. The removed element is disposal-friendly, owing to its non-metallic components. Filter cartridges can be incinerated, shredded, or crushed.

Clients have also found Ultipleat High Flow filters to be a cost-effective solution for fogging systems, wet compression systems, ammonia injection systems, and post filtration of demineralized water treatment systems.

Let the Pall Power Generation Group show you why turbomachinery OEMs around the world trust their most critical fluid components to Pall Corporation.

#### **The Benefits**

- Smaller, more economical filters: just one six-inch diameter Ultipleat High Flow filter element can handle up to 500 gpm/1,900 lpm
- Lower waste disposal costs: up to 4 times less volume of spent Ultipleat High Flow filters to dispose of versus conventional depth filters
- Lower maintenance costs: more than 30 times fewer filters in smaller filter housings to change out versus conventional depth elements



#### **Pall Corporation**

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