

## PROCESS FILTRATION / SEPARATION

# Tubular Filters for Spray Nozzle Protection

Industry: Pulp & Paper, Corn Processing, Food & Beverage and Belt Filtration Spray Systems

Goals: Replace bag and cartridge type filters to save cost and minimize maintenance

### Project Overview:

Spray nozzles of various types and configurations are used in a host of industries for coating, cleaning and drying applications. For these nozzles to function correctly the fluid that they are used for must be filtered to protect them from plugging. Sometimes it is necessary to filter the liquid to ensure that a coating adheres correctly and has a good surface appearance.



### Critical Issues:

Provide excellent particulate removal of solids from 1 micron and larger. Typical media retention selection at 1/6th the nozzle diameter.

### Vision for Solution:

- Media is carefully selected to optimize protection.
- System sizing is based on flowrate and particle load.

### Typical Project Scope:

Complete system design  
Fabrication / integration  
Commissioning & start-up  
Detailed design engineering

### General Equipment Description:

Individual Tubes  
Complete Tubular Backwash Systems  
Automation options to meet customer needs

### Special Features:

- No changing of bags or cartridge filters.
- Wide range of media and filtration options.
- Provides worry free efficient nozzle protection without maintenance hassles.



### Technical Data:

**Application** - Protect spray nozzles from fouling due to particulate plugging and build-up.

**Equipment** - Individual tubes available in 3", 4" and 6" diameter units that are mounted on manifolds to form systems. Space and cost saving designs are available.

**Materials of Construction** - 316L Stainless Steel

### Filtration Data:

**Flow Rate** ----- Low flows to several thousand GPM

**Suspended Solids** ----- Range from 1 micron and up

**Backwash Style** ----- Manual or automatic backwash using internal (filtered water) or external backwash water source

**Element Materials** ----- Polypropylene, Nylon, Polyester, Stainless Steel Mesh or Wedgewire, TEFLON® and Cotton