

Absolute Cartridge Filtration

When Filtration Matters

WHY ABSOLUTE CARTRIDGE FILTRATION FROM WS?

Water Standard (WS) is your solution for cartridge filtration skid packages in water service because of:

- **Better filtration performance.** Absolute filtration ensures efficient performance, protecting downstream assets and decreasing plant lifecycle costs.
- **Experienced process package supplier.** Knowledge of advanced specifications and a streamlined supply chain lead to high quality at competitive CAPEX.
- **Superior after-sales support.** Fast delivery and competitive prices for replacement elements limits downtime and decreases OPEX. Lab analysis services enable efficient troubleshooting.

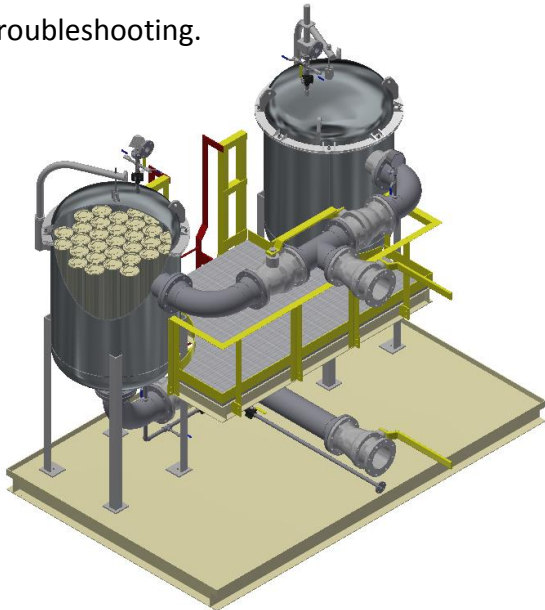


Photo: Typical WS cartridge filter skid package with housing cutaway

TRUSTED SUPPLIER OF TURN-KEY FILTRATION SOLUTIONS

In delivering filtration solutions for energy and industrial applications, WS provides:

- Laboratory diagnostic services
- On-site filter performance assessments
- Full engineering and design for skid packages
- In-house vessel manufacturing at ASME code facility
- In-house skid fabrication, inspection, testing, and delivery
- Supply of replacement WS filtration elements



Photo: WS ASME cartridge filter housing

PRODUCT DETAILS

| Model # | Housing ID | No. of Elements | Filtration Area (m ²) | Micron Rating | Removal Efficiency | Treatment Capacity (m ³ /hr) | Dirt Holding Capacity (kg) |
|-----------|------------|-----------------|-----------------------------------|---------------|--------------------|---|----------------------------|
| WSCF-400A | 18" | 9 | 38 | 0.5 - 100 | 99 - 99.98% | 46 - 166 | 11 - 17 |
| WSCF-400B | 24" | 18 | 75 | | | 92 - 331 | 23 - 34 |
| WSCF-400C | 36" | 44 | 184 | | | 225 - 809 | 56 - 82 |
| WSCF-400D | 48" | 81 | 339 | | | 414 - 1490 | 102 - 152 |
| WSCF-600A | 18" | 4 | 30 | | | 36 - 73 | 20 - 30 |
| WSCF-600B | 24" | 8 | 59 | | | 73 - 145 | 40 - 60 |
| WSCF-600C | 36" | 21 | 156 | | | 191 - 382 | 106 - 158 |
| WSCF-600D | 48" | 37 | 275 | | | 336 - 672 | 186 - 279 |

SCOPE OF SUPPLY

- ASME Section VIII code housing in carbon steel or stainless steel construction
- Vessel head with davit arm and hand wheel
- Complete vessel internals – guide rods, tube sheet, baffle plate
- Local instrumentation for performance monitoring
- Structural steel skid and access platforms
- ASME compliant piping and valves
- WS 400 and 600 Series absolute cartridge filtration elements

STANDARD OPTIONS

- Glass flake lined carbon steel housing and 2205 duplex internals for corrosive service
- Vertical or horizontal vessel configuration
- Instruments/controls for remote monitoring
- High pressure housings up to 50 bar(g)
- Compliance with hazardous area classifications
- High flow designs to minimize footprint

BENEFITS OF ABSOLUTE ELEMENTS

Each absolute rated cartridge element has a fixed pore media with a pleat designed to maximize effective surface area and dirt holding capacity while preventing particle unloading and fiber migration. The cartridge comes with a dual o-ring seal to ensure positive capture of solids with no leakage.

Absolute elements provide reliable results in critical filtration applications.

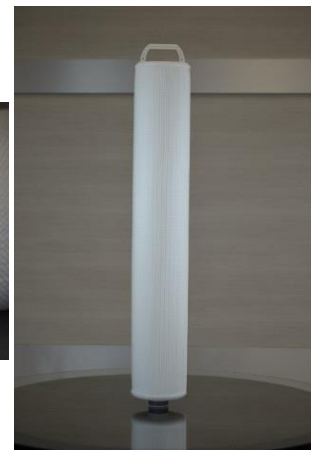


Photo: WS 400 and 600 Series absolute rated cartridge element