

AEGIS® Classic Wound Precoatable Backwashable Septa Stainless Steel Hardware

Graver's Aegis wound septa are one of the critical components in a precoat system and designed to provide an optimum surface for Gravex Powdex® resin. Aegis classic wound septa are available in a variety of sizes and hardware configurations to meet every application requirement.

2", 2¼", 2¾" Precoatable Elements

Aegis 2 – 2¾ inch (50 mm to 60 mm) wound filter elements are designed for maximum durability and strength with the optimum precoat surface. Manufactured with stainless steel core and end connections, Aegis Septa have been the standard in precoat installations for over four decades.

1" Precoatable Elements

Aegis wound septa are now also available in a 1-inch (25 mm) version that is easily installed in most top tube sheet vessels with little or no equipment modifications.

Maintenance-free after installation, Aegis Septa provide long-lasting, dependable and economical protection of steam generators in both nuclear and fossil fuel operations.

When used with precoat materials such as Graver's Powdex resins, Aegis wound septa will deliver the highest purity water under a variety of influent conditions.

Graver Technologies' patented computerized PLC, prewashed, three yarn controlled winding process assures that each element has the optimum surface and filtration characteristics with uniform low-pressure drop and surface precoatability. Each element precoats evenly throughout the vessel, providing a maximum precoat cycle time and optimum water chemistry. Manufactured in the USA under an ISO 9001:2000 quality assurance system, Aegis elements have been consistently improved by Graver for precoat condensate systems for more than 50 years and are the worldwide standard for this application.



SPECIFICATIONS 1", 2", 2¼", 2¾" WOUND FILTER ELEMENTS

| | |
|-------------------------------------|---|
| Standard Lengths | 50" to 80" (1,270 to 2,030 mm) Custom lengths also available |
| Element Construction (1" only) | Wound virgin polypropylene yarn |
| Element Construction (2", 2¼", 2¾") | Wound virgin yarns polypropylene and nylon fibers |
| Seal Mechanism (1" only) | Single Open End threaded stainless steel end fitting |
| Seal Mechanism (2", 2¼", 2¾") | Single Open End (Sealfast™/Ecoloc™) Flanged Double Open End (EPDM Flat Gaskets) |
| Hardware | Stainless steel-end fitting and a one piece core with integrated lock seam |
| Clean Pressure Drop (1" only) | 1 to 3 psid (0.1 to 0.2 bar) with precoat at rated flux at 120°F (49°C) |
| Clean Pressure Drop (2", 2¼", 2¾") | 0.5 to 4 psid (0.03 to 0.28 bar) with precoat at rated flux at 120°F (49°C) |
| Backwash (precoat service) | Recommended 20 to 22 psig differential (1.3 to 1.5 bar); maximum 27 psig (1.8 bar) |
| Recommended Flow (with precoat) | 1.5 to 4.0 gpm (5.7 to 15.1 lpm) per square foot of element surface area |
| Maximum Operating Temperature | Nylon: 150°F (66°C) Polypropylene: 180°F (82°C) Carbon: 350°F (177°C) |

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Stainless Steel Hardware

RECOMMENDED FLOW RATES PER ELEMENT (PRECOAT)

| Element | 50" (1,270 mm) | 60" (1,520 mm) | 70" (1,780 mm) | 80" (2,030 mm) |
|-----------------------------|----------------|----------------|----------------|----------------|
| 1" (25 mm) Element | | | | |
| Minimum Flow Rate (gpm/lpm) | 1.6 / 6.1 | 2.0 / 7.6 | 2.2 / 8.3 | 2.5 / 9.5 |
| Maximum Flow Rate (gpm/lpm) | 4.4 / 16.7 | 5.2 / 19.7 | 6.1 / 23.1 | 7.0 / 26.5 |
| 2" (51 mm) Element | | | | |
| Minimum Flow Rate (gpm/lpm) | 3.3 / 12.5 | 4.0 / 15.1 | 4.6 / 17.4 | 5.3 / 20.1 |
| Maximum Flow Rate (gpm/lpm) | 8.8 / 33.2 | 10.4 / 39.6 | 12.4 / 46.0 | 14.0 / 52.8 |
| 2¼" (57 mm) Element | | | | |
| Minimum Flow Rate (gpm/lpm) | 3.7 / 13.9 | 4.4 / 16.6 | 5.1 / 19.3 | 5.9 / 22.3 |
| Maximum Flow Rate (gpm/lpm) | 9.8 / 37.0 | 11.8 / 44.6 | 13.7 / 51.8 | 15.7 / 59.3 |
| 2¾" (60 mm) Element | | | | |
| Minimum Flow Rate (gpm/lpm) | 3.9 / 14.7 | 4.7 / 17.8 | 5.3 / 20.1 | 6.2 / 23.5 |
| Maximum Flow Rate (gpm/lpm) | 10.4 / 39.4 | 12.4 / 46.9 | 14.4 / 54.5 | 16.4 / 62.1 |

Features

- Stainless steel core and end fittings
- High surface area
- Designed specifically for plants that need to increase condensate flow while maintaining high purity condensate and smooth, consistent precoats
- The first large diameter septa designed for use with difficult thin-layer precoating techniques
- Manufactured in Graver's ISO certified state of the art facility with PLC controlled winding of 100% polypropylene, prewashed yarn
- Capable of supporting power upgrades by installing increased diameter septa to reduce system flux rate with increased precoat contact time and longer run length

Superior Products & Global Reach

Graver is the global leader in high purity and condensate water treatment for power generation applications. Including both ion exchange and backwashable septa and filters.

Our innovative technology and products enable our customers to consistently meet today's tougher requirements for purity.

Graver's products treat more than 6.5 billion gallons of process water every day in over 38 countries. Over 75 percent of the nuclear powered generation plants, worldwide, use our technology. Graver has achieved this by consistently delivering dependable, high performance technology and products.

Whether your business is around the corner or around the world, Graver Technologies can support you with superior products and services.

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ISO 9001:2000
FM 38860

GTX-504 4/2009