

Grand43 XL Green

Gamma Irradiated Single Use Hollow Fiber Cartridges Easy and Reliable



Designed for large scale biopharmaceutical concentration/diafiltration and clarification unit operations, the **Grand43 XL Green** hollow fiber membrane cartridge is WaterSep's largest production cartridge with surface areas of 15 m² and a flow rate of several thousand liters an hour with multi cartridge set ups.

The **Grand43 XL Green** HF cartridge is compatible with most commercially available hollow fiber cartridges of similar size (6" x 24"). The **Grand43 XL Green** cartridge can be retrofitted to existing large scale crossflow skids or designed-in to new processes where high product yield and process flux are essential.

WaterSep offers the **Grand43 XL ReUse** HF cartridge in molecular weight cut-offs (MWCO) from 3K-750K Dalton and pore sizes from 0.1 μm to 0.65 μm.

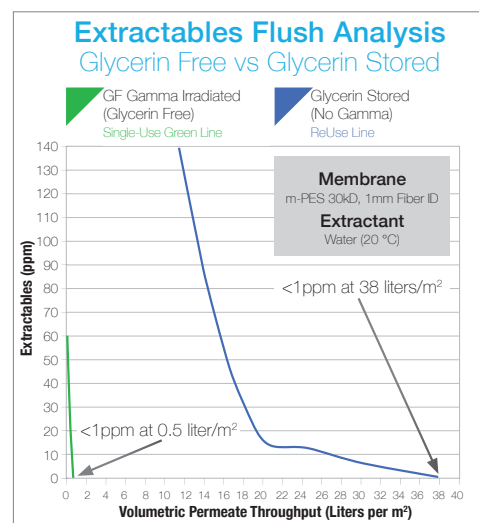
The 15 m² **Grand43 XL Green** HF cartridge can accommodate batch volumes between 400L and 1500L, with a typical permeate flow rate of 450-900 L/hr for ultrafiltration applications and 300-600 L/hr for micro filtration applications.

The **Grand43 XL Green** cartridges utilize WaterSep's antifouling, low binding, modified polyethersulfone membrane (m-PES) which provides a process flux and product recovery that typically exceeds other crossflow devices.

The **Grand43 XL Green** cartridge is also offered as part of fully integrated open architecture **single use crossflow assemblies** available with pressure sensors, flow meters, pumpheads, aseptic connectors or bags.

The **Grand43 XL Green** cartridges offer a true single use crossflow system that provides:

- Significant cost savings over traditional cassette formats.
- Gamma irradiated - ready to use - no pre-rinse.
- No humectants - 80% less extractables, see [Extractables Flush Analysis](#).
- No need for time-consuming cleaning validation.
- Reduced risk of cross contamination.
- Consistent membrane performance batch to batch.
- Self-contained – no assembly – no expensive hardware – no membrane installation.
- Every HF cartridge is integrity tested and has an individual lot number for easy traceability.



TYPICAL APPLICATIONS

- Clarification of **mammalian/CHO** cell cultures and maximizing **protein recovery**.
- **Cell-harvest**. (Excellent results have been achieved with both *E. Coli* whole cells and *E. Coli* lysates, as well as other microbial process streams.)
- Concentration and purification of **vaccines**.
- Concentration and diafiltration of **gene therapy** products.
- Concentration/diafiltration of **monoclonal antibodies, recombinant proteins, biological macromolecules** and **peptides**.

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ORDERING INFORMATION

Grand43 XL Green HF Cartridge:

1.0 mm Fiber ID
SU XXX 10GRA43 5L, 1/pkg

2.0 mm Fiber ID*
SU XXX 20GRA43 5L, 1/pkg
2.0 mm Fiber ID*

*Available in 10K, 30K, 50K, 300K - 750K and 0.1 μm - 0.45 μm

Replace XXX with:

003 for 3K	050 for 50K	750 for 750K
005 for 5K	100 for 100K	910 for 0.1 μm
010 for 10K	300 for 300K	920 for 0.2 μm
030 for 30K	500 for 500K	945 for 0.45 μm

SPECIFICATIONS

Cartridge Dimensions - with reducer adaptors (as shown)
6.015" (15.28 cm) x 51.65" (131.19 cm)

Reducer Adaptor Dimensions
6.0" TC x 2.5" TC x 4.25" long (10.80 cm)

Membrane Surface Area
161.40 ft² (15 m²)

Molecular Weight Cut-off
3K, 5K, 10K, 30K, 50K, 100K, 300K, 500K, 750K

Membrane Pore Size
0.1 μm , 0.2 μm and 0.45 μm

Fiber ID
1.0 mm and 2.0 mm

MATERIALS OF CONSTRUCTION

The cartridge as assembled is USP Class VI compliant.

Membrane:
Modified Polyethersulfone (m-PES)

Housing and Adaptors:
White Polysulfone

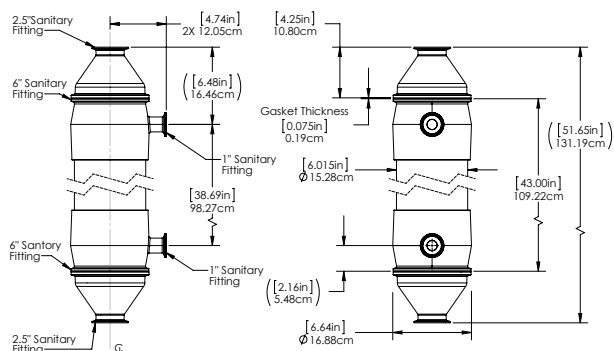
Encapsulant:
Epoxy

CONNECTIONS

Feed/Retentate
6.0" TC Standard Sanitary Fitting

Reducer Adaptors
6.0" TC Standard Sanitary Fitting x 2.5" TC Standard Sanitary Fitting

Permeate
1.0" TC Standard Sanitary Fitting



Technical Support: experttalk@watersep.net
or call 508.970.0089 x 204.