

BioProducer24 Steamer

Autoclavable, Gamma Irradiated Hollow Fiber Cartridges Easy and Reliable



The **BioProducer24 Steamer** is an autoclavable, gamma irradiated, re-usable hollow fiber cartridge made with WaterSep's low binding, glycerin free modified PES membrane (m-PES) which provides a process flux and product recovery that exceeds other cross flow devices. **BioProducer Steamer** cartridges are ready to use without any pre-rinse or sanitization, or can be autoclaved as is, or in an assembly.

WaterSep's **BioProducer Steamer** cartridges are true plug-and-play, crossflow filtration at its best - connect, use and discard, or clean with 0.5 - 1.0 M NaOH and re-use.

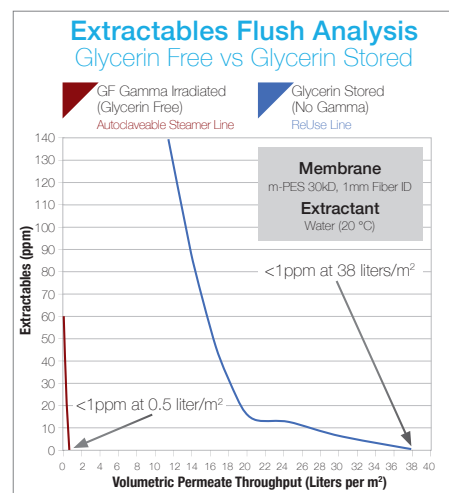
The **BioProducer Steamer** production scale hollow fiber cartridges are designed for biopharmaceutical concentration/diafiltration and clarification unit operations. With a surface area of 2.7 m², the **BioProducer24 Steamer** HF cartridge can accommodate batch volumes between 50L and 250L with a typical permeate flow rate of 81-162 L/hr for ultrafiltration applications and 54-108 L/hr for microfiltration applications.

The **BioProducer24 Steamer** hollow fiber cartridge products are in most applications superior to conventional techniques, like centrifugation, depth filters or UF/DF cassettes.

The **BioProducer24 Steamer** hollow fiber cartridges are offered with the same path length as other high performance WaterSep HF cartridges, which makes scale up and scale down easy and predictable.

The **BioProducer24 Steamer** cartridges offer a true single use crossflow system that provides:

- Autoclavable as is or in an assembly.
- Gamma irradiated - ready to use - no rinse.
- Humectant free - 80% less extractables, see [Extractables Flush Analysis](#).
- No time-consuming cleaning validation.
- At a reduced risk of cross contamination.
- Consistent, membrane performance batch to batch.
- Self-contained and requires no assembly, no expensive hardware and no membrane installation.
- Significantly less expensive than traditional cassette formats.
- Every HF cartridge is integrity tested and has an individual lot number for easy traceability.



TYPICAL APPLICATIONS

- **Cell perfusion** with an ATF system or conventional pump operated perfusion. (Bioreactor and **Steamer** hollow fiber assemblies can be autoclaved simultaneously.)
- Small to medium scale **aseptic operations** or any other sterile application requiring autoclaving.
- Rapid clarification of small volumes of **cell culture, fermentation solutions and virus/vaccine suspensions**.
- Concentration and diafiltration of **monoclonal antibodies, enzymes, blood components and other proteins**.

BioProducer24 Steamer

ORDERING INFORMATION

Place orders online at www.watersep.net, or email purchase orders to orders@watersep.net, sales order confirmation to follow.

BioProducer24 Steamer HF Cartridge

0.5 mm ID*

AU XXX 05PRO24 S3, 3/pkg

AU XXX 05PRO24 S6, 6/pkg

*Not available in 0.65 μm

1.0 mm ID

AU XXX 10PRO24 S3, 3/pkg

AU XXX 10PRO24S6, 6/pkg

AU XXX 20PRO24 S6, 6/pkg

2.0 mm ID*

AU XXX 20PRO24 S3, 3/pkg

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

Replace XXX with:

003 for 3K	100 for 100K	910 for 0.1 μm
005 for 5K	300 for 300K	920 for 0.2 μm
010 for 10K	500 for 500K	945 for 0.45 μm
030 for 30K	750 for 750K	965 for 0.65 μm

SPECIFICATIONS

Cartridge Dimensions

3.50" (8.89 cm) x 26.50" (67.30 cm)

Membrane Surface Area

29.05 ft² (2.7 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 , 0.65 μm

Fiber ID

0.5 mm, 1.0 mm, 2.0 mm

MATERIALS OF CONSTRUCTION

The cartridge as assembled is USP Class VI compliant.

Membrane:

Modified Polyethersulfone (m-PES)

Housing:

White Polysulfone

Encapsulant:

Epoxy

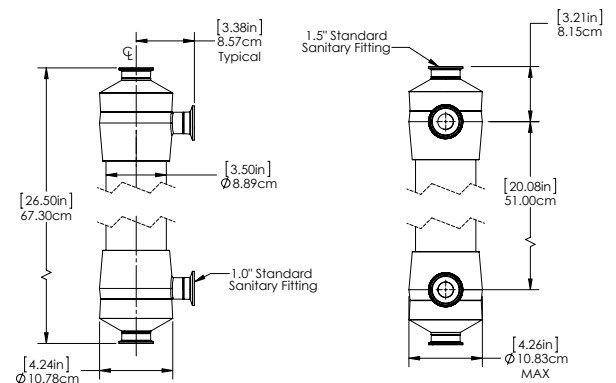
CONNECTIONS

Feed/Retentate

1.5" TC Standard Sanitary Fitting

Permeate

1.0" TC Standard Sanitary Fitting



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