

Aramus™ Cell Bank Manifold Kit

Streamlined upstream processing for higher yield and lower contamination risk

Aramus single-use manifold kits for master cell bank (MCB) and working cell bank (WCB) workflows can shorten your seed train process from weeks to days. Manifolds allow for aseptic filling, storage and seeding without requiring a sterile hood, enabling biomanufacturers considerable savings in upstream processing time, cost and space while reducing contamination risk.

Aramus cell banking manifolds allow users practicing seed train intensification to bank a much larger volume of highly concentrated cells while speeding up production runs. From bioreactor harvest to cryopreservation, Aramus complete closed-processing solutions allow convenient fill and storage in liquid nitrogen (LN₂) vapor or LN₂ submersion (-196°C) for extended periods. Once thawed, samples ranging from <20 mL to 2 L can be used to inoculate a much larger bioreactor (up to 50 L culture volume) depending on cell density achieved. This process greatly reduces contamination risks, washing steps, and saves considerable time.

The Aramus cell banking assembly kits include:

- Manifold of 5x or 10x Aramus bags
- Bags sizes of 100 mL or 250 mL (custom sizes available upon request)
- Weldable tubing for aseptic connect/disconnects enabling complete closed-system processing
- Overwrap bags providing vapor barrier and additional protection for tubing
- Optional add-on: Cassettes for handling and storage in frozen conditions

APPLICATIONS

- Cell banking for bioreactor intensification (MCB, WCB)
- Cryogenic storage of bulk drug or intermediates
- Critical product filling and dispensing
- Process sampling and archiving
- Cell line engineering
- Seed train optimization
- Adventitious agent screening and prevention

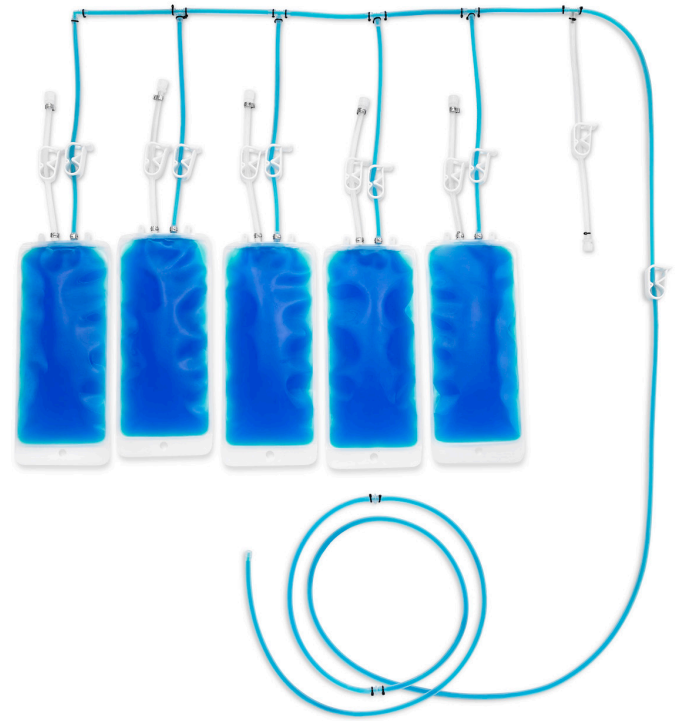


Figure 1. Aramus Cell Bank Manifold Kit, 5x 250 mL configuration.



Figure 2. 100 mL and 250 mL Aramus single-use assemblies, heat sealed in an EVA overwrap, encased in an aluminum cassette.

FEATURES & BENEFITS

Time saved in seed train expansion	Up to 2 weeks saved during inoculum/seed train compared to conventional process
Lower operating costs	Reduces staff operator hours and consumables costs per batch
Reduce contamination risk	Closed system processing with flexible options for aseptic connection and disconnection
High reproducibility	A single seed train expansion of high density cell banking (HDCB) process can be stored and then used to inoculate multiple bioreactors, eliminating variation between bioreactor runs
Increased productivity	Seed train operation no longer required before each batch, resulting in higher annual production capacity
Low temperature operating range	Reduces bag breakage and can be used in cold temperature applications to -196°C (-321°F) or lower without negatively affecting bag or boat fitment
Wide compatibility with cryo-preservants and cell lines	Aramus material properties and manifold materials of construction offer low risk with DMSO and other common cryoprotective agents, combined with commonly used bioprocessing materials with established cell compatibility

SPECIFICATIONS

Sterilization	Gamma irradiation 25 to 40 kGy
Operating temperature	-196°C to 121°C [-321°F to 250°F]
Integrity testing	All Aramus subassemblies are 100% pressure decay leak tested in production before shipment

FLUID PATH COMPLIANCE

Component	Animal derived component free (ADCF)	USP <661>	USP <85>	USP <87>	USP <88>/ Class VI	ISO-10993*
Aramus bag subassembly	Free	Pass	Pass	Pass	Pass	Pass
Tpe and silicone tubing	Free	Pass	Pass	Pass	Pass	Pass
Connectors/luers	Free	Pass	Pass	Pass	Pass	Pass

*Contact your Entegris account manager to find out which ISO-10993 subparts are applicable to each component

Aramus Cell Bank Manifold Kit, 10x 100 mL

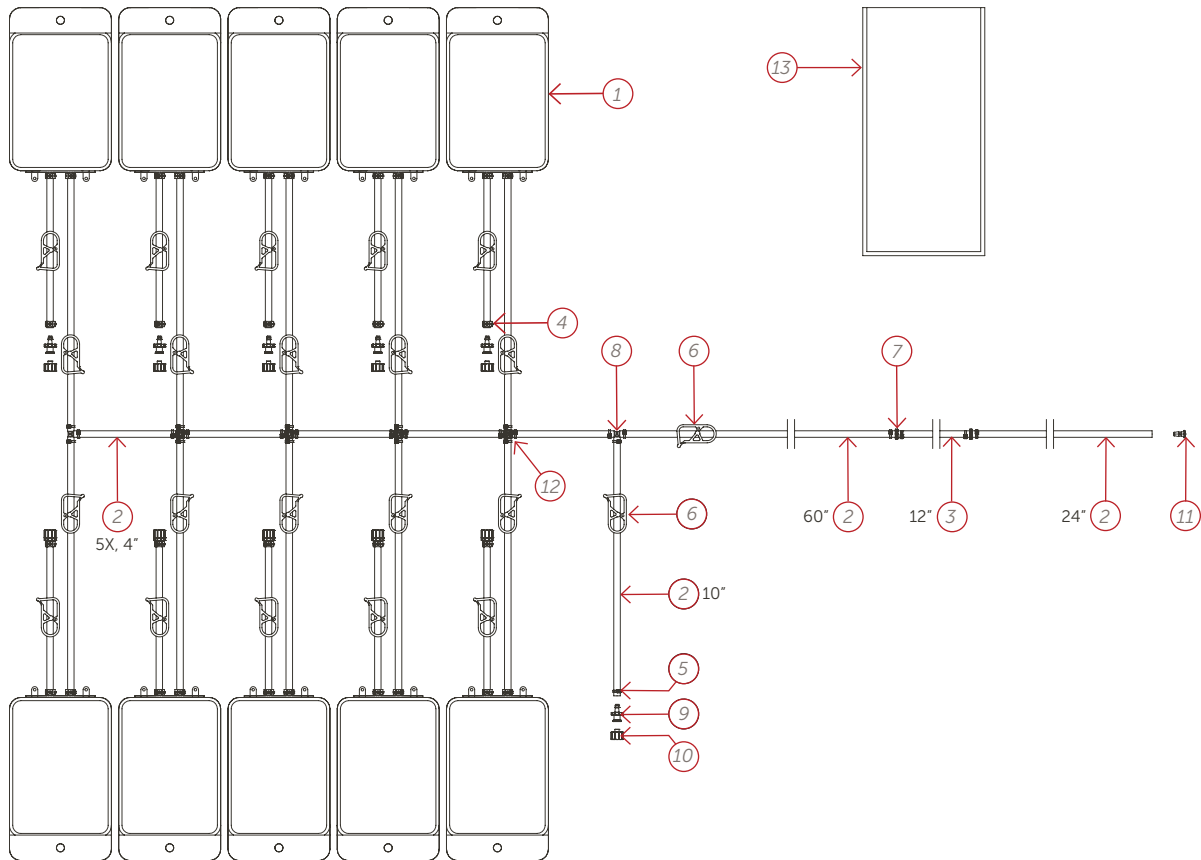


Figure 3. drawing of the Aramus Cell Bank Manifold Kit, 10x 100 mL (PN SU-ADM-000049K).

Table 1. Standard component list for the Aramus Cell Bank Manifold Kit

Item	Description
1	Aramus subassembly, 100 mL
2	Advantaflex tubing, 1/8" x 1/4"
3	APSPG pump silicone tubing, 1/8" x 1/4"
4	Oetiker, degreased, 8 mm
5	Cable tie, PA66, 1.8 mm x 71.1 mm
6	Ratchet tube clamp, PP, 12 mm ID 12
7	Fitting, coupler, PP, 1/8"
8	Fitting, tee, PP, 1/8"
9	Connector, luer, PP, female, 1/8"
10	Plug, luer, PP
11	Press-in plug, PP, 1/8"
12	Fitting, cross, PP, 1/8"
13	Bag, overwrap, EVA, 140 x 300 mm

ORDERING INFORMATION

Table 2. List of Standard Product Offerings

Part number*	Description	What's included	MOQ	Additional overwrap PN	Corresponding cassette PN
SU-ADM-000048K	Aramus Cell Bank Manifold Kit, 5x 100 mL	5-bag manifolds, 5 EVA overwraps	5	SU-OW-01-14-30-S	SU-FS-0.10-C2
SU-ADM-000049K	Aramus Cell Bank Manifold Kit, 10x 100 mL	10-bag manifolds, 10 EVA overwraps	5	SU-OW-01-14-30-S	
SU-ADM-000050K	Aramus Cell Bank Manifold Kit, 5x 250 mL	5-bag manifolds, 5 EVA overwraps	5	SU-OW-01-14-30-S	SU-FS-0.25-C2
SU-ADM-000051K	Aramus Cell Bank Manifold Kit, 10x 250 mL	10-bag manifolds, 10 EVA overwraps	5	SU-OW-01-14-30-S	

*Aramus standard manifold kit part numbers are intended as an easy starting point. Configured options including different volume Aramus bags and/or with PE holding or waste bags available upon request.

Sample kits are also available upon request.

Consult the table below for recommended accessories for configured solutions.

Table 3. List of Standard Aramus Bag Sizes and Associated Cassettes and Overwrap Options

Aramus bag chamber size	Recommended cassette PN	Aramus estimated fill volume (in cassette)	Recommended EVA overwrap
20 mL	SU-FS-0.05-C2	20 mL	SU-OW-01-14-30-S
36 mL	SU-FS-0.04-C2	36 mL	SU-OW-01-09-18-S
50 mL	SU-FS-0.05-C2	50 mL	SU-OW-01-14-30-S
80 mL	SU-FS-0.08-C2	80 mL	
100 mL	SU-FS-0.10-C2	100 mL	
250 mL	SU-FS-0.25-C2	200 mL	
500 mL	SU-FS-0.50-C2	350 mL	SU-OW-01-17-38-S
1 L	SU-FS-0001-C2	-*	SU-OW-01-20-38-S
2 L	SU-FS-0002-C2	-*	SU-OW-01-28-50-S

*Contact Entegris technical support for additional questions regarding the above information. In addition, contact Entegris to determine the optimal configurations for your specific needs as well as details on instructions for use.

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [entegris.com](https://www.entegris.com) and select the [Contact Us](#) link to find the customer service center nearest you.

TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit [entegris.com](https://www.entegris.com) and select the [Terms & Conditions](#) link in the footer.



Corporate Headquarters

129 Concord Road
Billerica, MA 01821
USA

Customer Service

Tel +1 952 556 4181
Fax +1 952 556 8022
Toll Free 800 394 4083

Entegris®, the Entegris Rings Design®, and other product names are trademarks of Entegris, Inc. as listed on [entegris.com/trademarks](https://www.entegris.com/trademarks). All third-party product names, logos, and company names are trademarks or registered trademarks of their respective owners. Use of them does not imply any affiliation, sponsorship, or endorsement by the trademark owner.

©2023-2024 Entegris, Inc. | All rights reserved. | Printed in the USA | 3750-13212ENT-0324