



**Advanced aseptic filling
+ closing equipment**



Your **trusted partner**

Automated Systems of Tacoma, LLC (AST) has over 50 years of experience designing, manufacturing and servicing flexible automated processing equipment. In 2006, AST leveraged its experience and close customer relationships to revolutionize the aseptic fill/finish industry with the launch of the ASEPTiCell®. The ASEPTiCell was the industry's first aseptic multi-format fill/finish machine capable of processing ready-to-use nested vials, syringes and cartridges on the same line. Today, AST offers a range of products and services to support drug product development, clinical, and commercial fill/finish requirements.

Mission

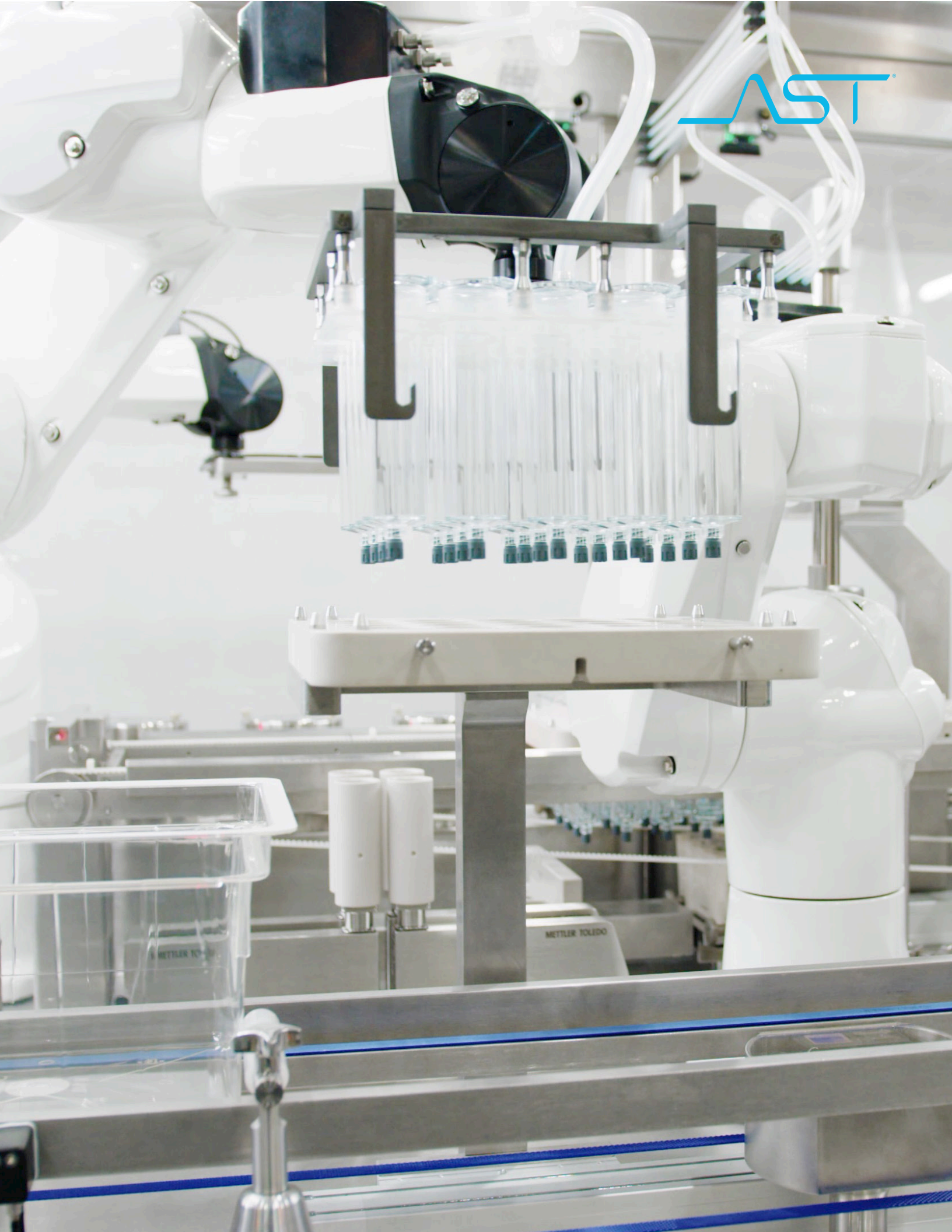
We enhance the efficiency, productivity and safety of flexible aseptic manufacturing processes for the worldwide Life Science Industry by offering innovative products, services and solutions.

Vision

By providing innovative solutions with an exceptional customer experience, AST will become the most valued partner to our customers, colleagues, business associates, investors and the communities where we work and live.



AST





Scale **up.** Scale **down.**

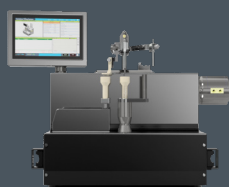
No matter where you are in the development process, we have something for you.

1 Drug
discovery

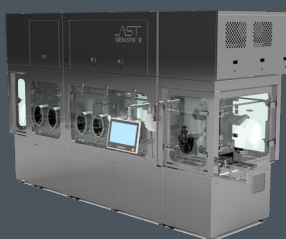
2 Process
development

3 Clinical
trials

4 Commercial



GENiSYS C



ASEPTiCell

GENiSYS Labs



GENiSYS R



AST



GENiSYS Lab

Benchtop automation

Compact

These benchtop machines come packed with features while taking up minimal space in your lab or cleanroom.

Simple

GENiSYS Lab machines feature easy, intuitive operation and direct technology transfer to larger scale AST lines.

Precise

Automate the critical operations in filling and closing for precise control over all aspects of your process.



Container Filling System (CFS)



Container Closing System (CCS)



Vial Sealing System (VSS)

Applications

- Process development
- Clinical trials
- Small-scale commercial manufacturing

Barrier options

All GENiSYS Lab machines are compatible with our fully integrated, turn-key barrier systems:

- Bio-safety cabinet
- Laminar airflow hood
- Aseptic isolator

	CFS	CCS	VSS
Containers	<ul style="list-style-type: none"> • Vials • Syringes • Cartridges 	<ul style="list-style-type: none"> • Syringes • Cartridges 	<ul style="list-style-type: none"> • Vials • Cartridges
Closing/sealing	<ul style="list-style-type: none"> • Vial stopper placement • Press-fit cap application 	<ul style="list-style-type: none"> • Vacuum • Vent-tube • Combination vent-tube/vacuum 	<ul style="list-style-type: none"> • Spinning disc
Available options	<ul style="list-style-type: none"> • In-process fill weight verification (IPC) • Inert gas overlay • Electronic Batch Records (EBR) • Single-use fluid path 	<ul style="list-style-type: none"> • Inert gas overlay • Electronic Batch Records (EBR) • 2-up processing 	<ul style="list-style-type: none"> • Applied force monitoring • Electronic Batch Record (EBR) • Screw cap application
Dimensions (LxWxH)	Up to 840mm x 500mm x 800mm		

GENiSYS C

Compact + flexible

Advanced

This system features the same options as larger scale filling lines to process nested ready-to-use (RTU) containers.

Flexible

GENiSYS C can be integrated with LAF hoods, RABS, and isolator systems to process vials, syringes, and cartridges with just a few change parts.

Reliable

Recipe-driven servos control every motion of filling and closing for repeatable results in every batch.



Applications

- Research and development
- Process development
- Engineering runs
- cGMP clinical trials
- Small-scale commercial manufacturing

Barrier options

The GENiSYS C is ideal for use in labs and clean-rooms with minimal available space. The system can be fully integrated with a range of barrier systems such as:

- Laminar airflow (LAF) hoods
- Restricted access barrier systems (RABS)
- Aseptic isolators

Containers	<ul style="list-style-type: none"> • All commercially available RTU nested vials, syringes, and cartridges • Custom formats available
Vial closing/sealing	<ul style="list-style-type: none"> • Serum or lyo stoppers • Press-fit cap application • Crimp capping available
Syringe/cartridge closing	<ul style="list-style-type: none"> • Vacuum • Vent-tube • Combination vent-tube/vacuum
Production rate	<ul style="list-style-type: none"> • GENiSYS C10: Up to 10 upm • GENiSYS C20: Up to 20 upm
Available options	<ul style="list-style-type: none"> • In-process fill weight verification (IPC) • Viable, non-viable and total particulate monitoring (EM) • Electronic Batch Records (EBR) • Pre and post fill container gas purge • Integrated barrier systems
Available machine modules	<ul style="list-style-type: none"> • Semi-automatic bag opener (SABO) • Manual tub opener (MTO) • Vial sealing module (VSM)
Dimensions (LxWxH)	1800mm x 625mm x 1725mm



GENiSYS R

A robotic system

Robotic

Robotic handling of nests and containers provides reliability, accuracy, and precision in your process.

Flexible

GENiSYS R is flexible enough to handle any of your process needs without requiring complicated changeovers between batches.

Precise

Robotic handling of containers allows you to prioritize process control without compromising process speed.



Applications

- Clinical trials
- Commercial scale manufacturing

Barrier options

The GENiSYS R is designed for full integration with barrier systems including:

- Restricted access barrier systems (RABS)
- Aseptic isolators

Containers

- All commercially available RTU nested and trayed vials, syringes, and cartridges
- Custom formats available

Vial closing/sealing

- Serum or lyo stoppers
- Press-fit cap application
- Crimp capping

Syringe/cartridge closing

- Vacuum
- Vent-tube
- Combination vent-tube/vacuum

Production rate

Up to 20 upm

Available options

- In-process fill weight verification (IPC) up to 100%
- Viable, non-viable and total particulate monitoring (EM)
- Electronic Batch Records (EBR)
- Pre and post fill container gas purge

Available machine modules

- Semi-automatic bag opener (SABO)
- Manual tub opener (MTO)
- Lyophilization integration
- Vial sealing module (VSM)
- Manual tray loader

Dimensions

Dependent on final configuration



ASEPTiCell

Fully automatic + robotic

Robotic

Robotic handling from the moment a bagged tub enters until the final product is finished ensures the risk of human error is kept to a minimum.

Flexible

Simple, recipe-driven changeover streamlines processing of different products or containers on a single machine.

Advanced

Advanced features allow hands-off operation and ensure your product is filled precisely with the highest level of quality assurance.



Applications

- Large-scale clinical trials
- Commercial scale manufacturing

Barrier options

The ASEPTiCell is designed for full integration with barrier systems including:

- Restricted access barrier systems (RABS)
- Aseptic isolators

Containers	<ul style="list-style-type: none">• All commercially available RTU nested vials, syringes, and cartridges• Custom formats available
Vial closing/sealing	<ul style="list-style-type: none">• Serum or lyo stoppers• Press-fit cap application• Crimp capping
Syringe/cartridge closing	<ul style="list-style-type: none">• Vacuum• Vent-tube• Combination vent-tube/vacuum
Production rate	Up to 100 upm
Available options	<ul style="list-style-type: none">• In-process fill weight verification (IPC) up to 100%• Viable, non-viable and total particulate monitoring (EM)• Electronic Batch Records (EBR)• Pre and post fill container gas purge
Available machine modules	<ul style="list-style-type: none">• Automatic bag opener (ABO)• Automatic tub opener (ATO)• Lyophilization integration• Vial sealing module (VSM)• Automatic tray loader
Dimensions	Dependent on final configuration



Aftermarket

Here to support you throughout your filling journey.

Support Services

We partner with our clients to ensure our equipment reliable meets their operational needs. We offer both onsite and remote options for:

- Standby support
- Training
- New recipe formulation
- New format configuration
- Preventative maintenance

New System Capabilities

As new opportunities and filling needs arise, our aftermarket team can help configure your AST machine to best suit your production goals.

Spare Parts Consultation

Our aftermarket team can help you determine the right amount of parts and materials to have in stock. We consider your machine and process to ensure a seamless operation.

Annual Maintenance

Regular servicing and preventative maintenance ensures your machine always operates at its optimal level. AST offers annual maintenance contracts to maximize your facility's uptime and ensure the best ROI on your machine.

Scale Up Support

Thinking of moving to a higher capacity AST machine? Our team can help you assess the best options to meet your aseptic filling needs.

Benefits

- US-based design and support team
- Quick response times 24/7
- Adaptable and flexible design
- Advanced remote support options
- Dedicated field service engineers
- Preventative maintenance and training plans



✉ astam@ast-inc.com

AST





 ast-inc.com

 sales@ast-inc.com

 253.475.0200

 4110 South Washington Street
Tacoma, WA USA 98409

Scan QR code

