



POD FACTORY

PARYLENE
ON DEMAND™

*Reliable, easy-to-use, in-house
parylene production*



BRING PARYLENE IN-HOUSE.

POD™ Factory is our high-volume parylene production platform designed to meet the needs of mid to large manufacturers. *POD™ Factory* helps businesses to flexibly meet large-scale demand, lower total costs and reduce product risk.

Meet Demand And Scale Up

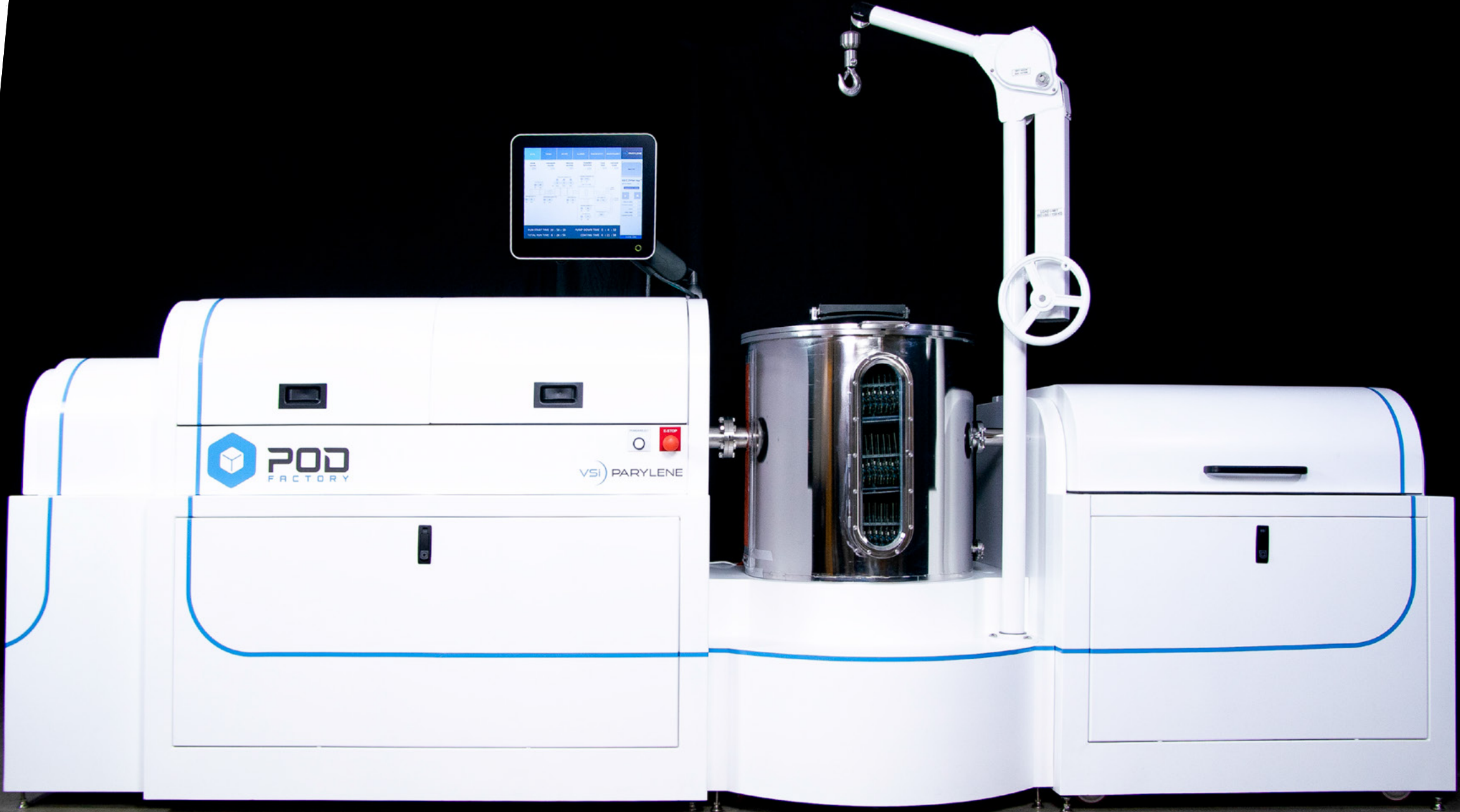
Whether you are looking to ramp-up production or streamline operations, gain complete process control and flexibility to meet your parylene demands.

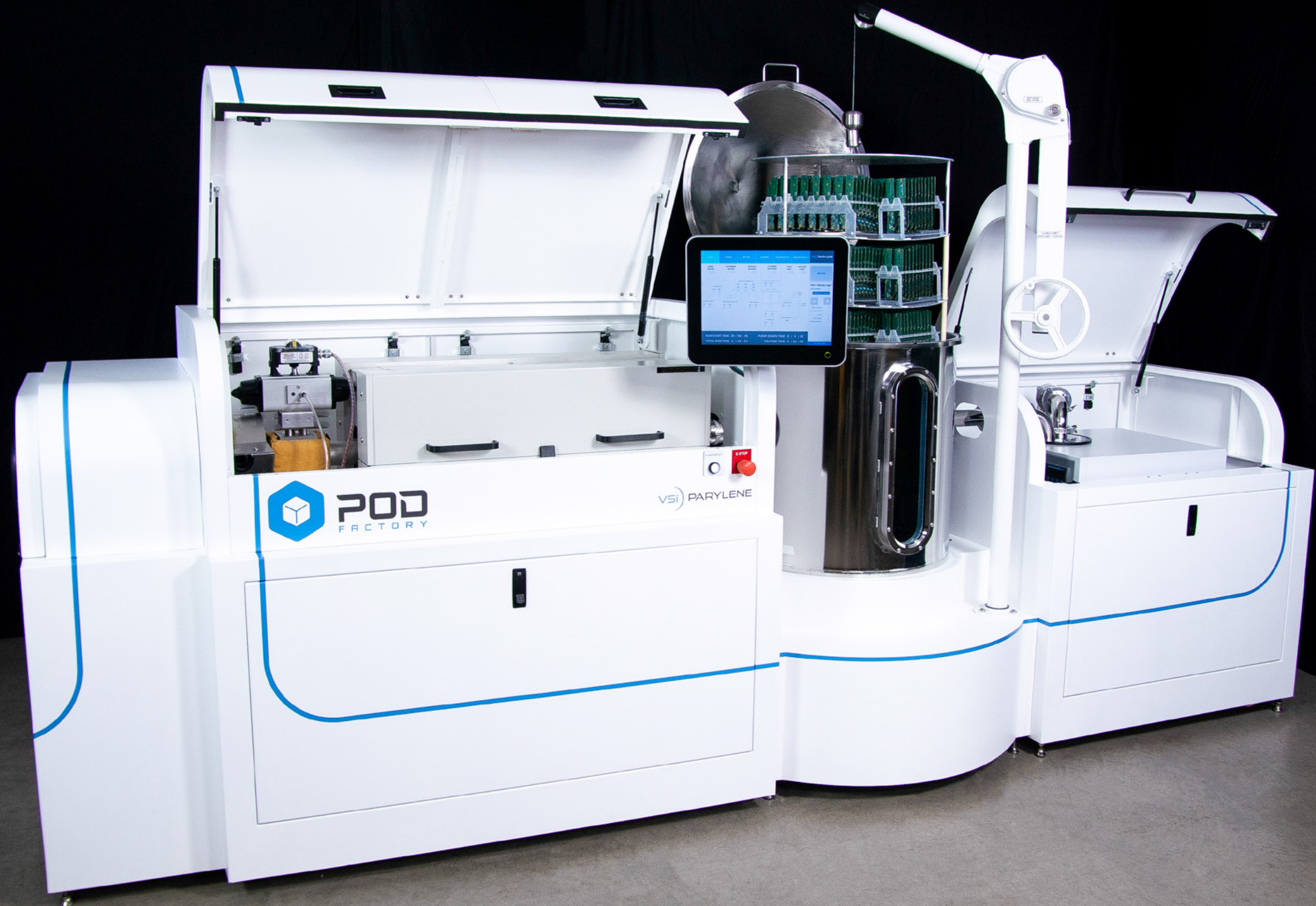
Lower Total Costs

Direct access to parylene provides the most cost and time efficient way to get parylene onto your products.

Reduce Product Risk

Sensitive parts never leave your possession, eliminating shipping and protecting IP.





PARYLENE ACCESS IN THREE SIMPLE STEPS.

Featuring available turnkey installation, POD™ Factory can be expertly installed at any OEM or CM locations in three easy steps; providing manufacturers simplified access to dependable parylene production measured in hours, not days or weeks.

- 1 Custom Process Development**
Our engineers study your application and develop a parylene deposition process custom tailored to meet your requirements.
- 2 Installation & Optimization**
The VSi team will install the machine on your factory floor and make adjustments to your custom process to optimize production.
- 3 On-Site Training**
VSi process experts will come to your facility to train your staff and transfer know-how on your process and equipment.



Equipment

VSi's POD™ Factory model is built for repeatable production and ease of use.



Dimer

Optimize your process with POD™ reliable, high-performance parylene dimers.



Support

Ongoing equipment and development support available.



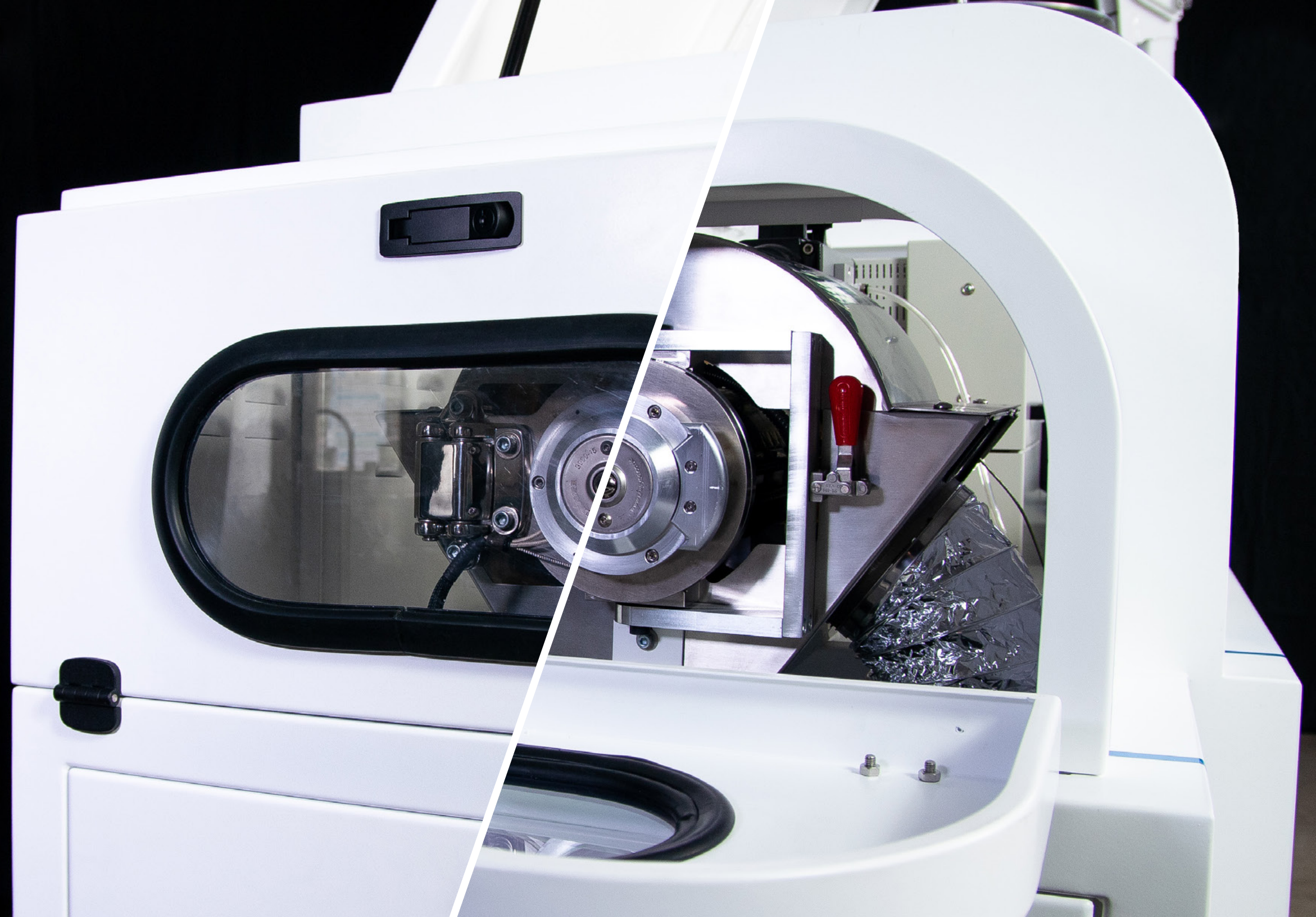
A COMPLETE PARYLENE SOLUTION.

POD™ Factory is more than just a machine; it is a stand-alone, full-scale parylene production system designed for quick and easy integration into any manufacturing process.



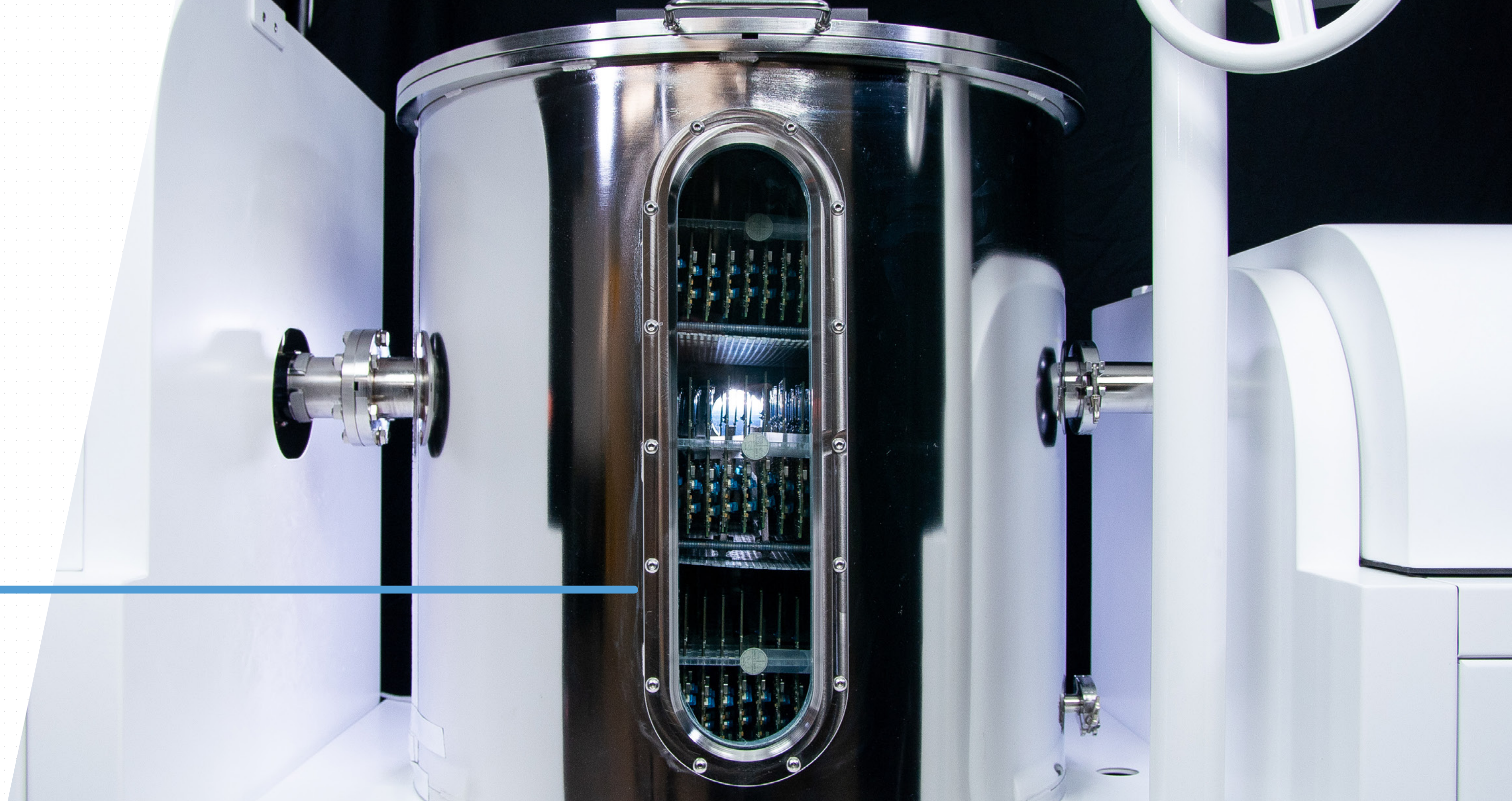
OPTIMIZED BY EXPERIENCE.

With years of in-depth experience delivering top-of-the-line parylene solutions, VSi's engineering team has gone to extraordinary lengths to build a deposition machine that delivers reliable, high quality parylene coatings in one easy-to-use, low maintenance package.



A CLOSER LOOK AT PARYLENE DEPOSITION.

The full chamber viewport provides a top-to-bottom visual access to the chamber during coating allowing loaded fixtures to be viewed instantly from a wide range of angles. Passive “walk by” monitoring happens naturally. Rotation and fixturing can be seen from across the room and closer observation provides real-time feedback on film clarity during deposition.





DESIGNED FOR EVERY USER.

The POD™ Factory's 15-inch capacitive touch screen provides an easy interface to a powerful industrial grade system. The recipe-based pressure control software combines ease of use with precise control.

For the Production Operator

With the touch of a button, the advanced logic control system automatically regulates deposition rate to optimize film quality.

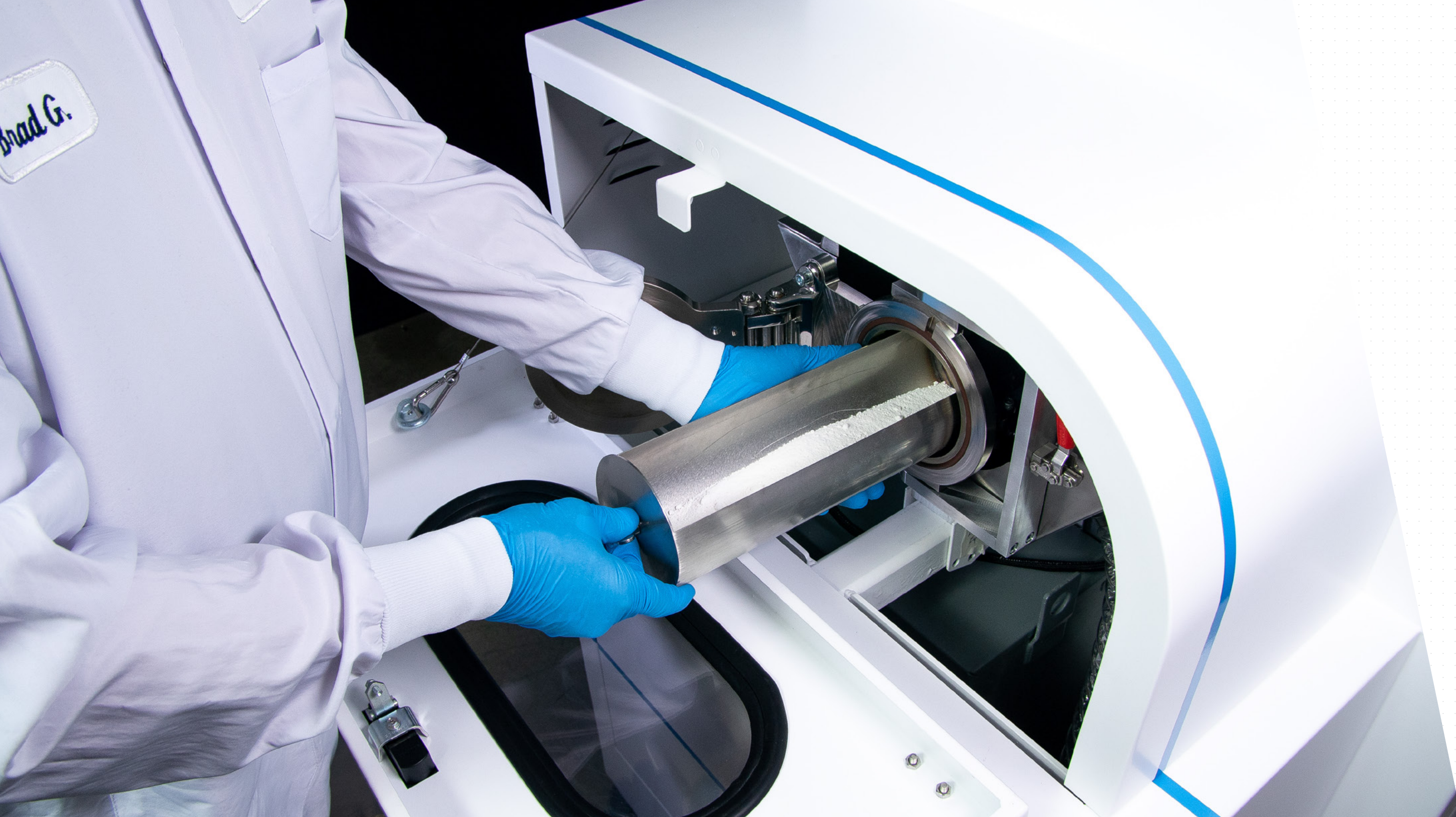
For the Engineer

Diagnostic mode allows complete control of the system for fine-tuning process development and custom experimentation.

EFFICIENT BY DESIGN.

POD™ Factory's Fixture Crane is an ergonomic lifting device allowing an operator to safely lift coating fixtures up to 300 lbs. Designed with efficiency and operator safety in mind, this unique feature gives a single operator the ability to change fixtures between coating runs without additional assistance while helping to prevent potential lifting injuries.





ENGINEERED FOR SIMPLICITY.

POD™ Factory's re-engineered reaction path integrates greater simplicity, safety and control over the chemical deposition process. By utilizing the latest in alloy material technology and an inline process shut-off valve, the POD™ Factory requires less maintenance and fail-safe control architecture.

No Quartz Liner

Advanced pyrolysis tube construction protects against damage without the need for cumbersome quartz tube liners.

Process Protection

Integrated emergency-close valve safely terminates system's reaction process to safeguard parts in the event of power failure or a necessary stop in the process.

TECHNICAL DATA

Coating Chamber

- + Large viewport allows full view of load for easy, continuous monitoring.
- + Standard dimensions: 24 inches diameter X 28 inches deep. Custom chambers available.
- + Adjustable, single piece baffle.
- + Separate pressure calibration port for easy and repeatable verification.
- + Vapor silane port (Silane vaporizer is an optional add-on)
- + Auxiliary 2.5" diameter viewport adds the ability to integrate optional horizontal tumbler or other feedthrough tools.
- + Variable speed, direct drive fixture rotation.
- + Built to accommodate fixture weight loads up to 300 pounds.

Control System

- + Easy to use interface with functions designed for operators, technicians and engineers.
- + Stores recipes for different applications for repeatability and control.
- + 15" capacitive touch screen interface.
- + Monitors usage and indicates when maintenance is needed.
- + Industrial PLC control and computer ensure long term reliability and allow for integration.
- + Allows for remote support and internal network access.
- + Real time data viewing.

Reaction Path

- + No quartz liner required with pyrolysis tube design.
- + Heated loading door.
- + Vaporizer allows for 1,000g dimer capacity.
- + Vaporizer valve allows the ability to stop the reaction and protect loaded chamber in the event of a power failure or intentional stop.

Vacuum Pump and Cold Trap

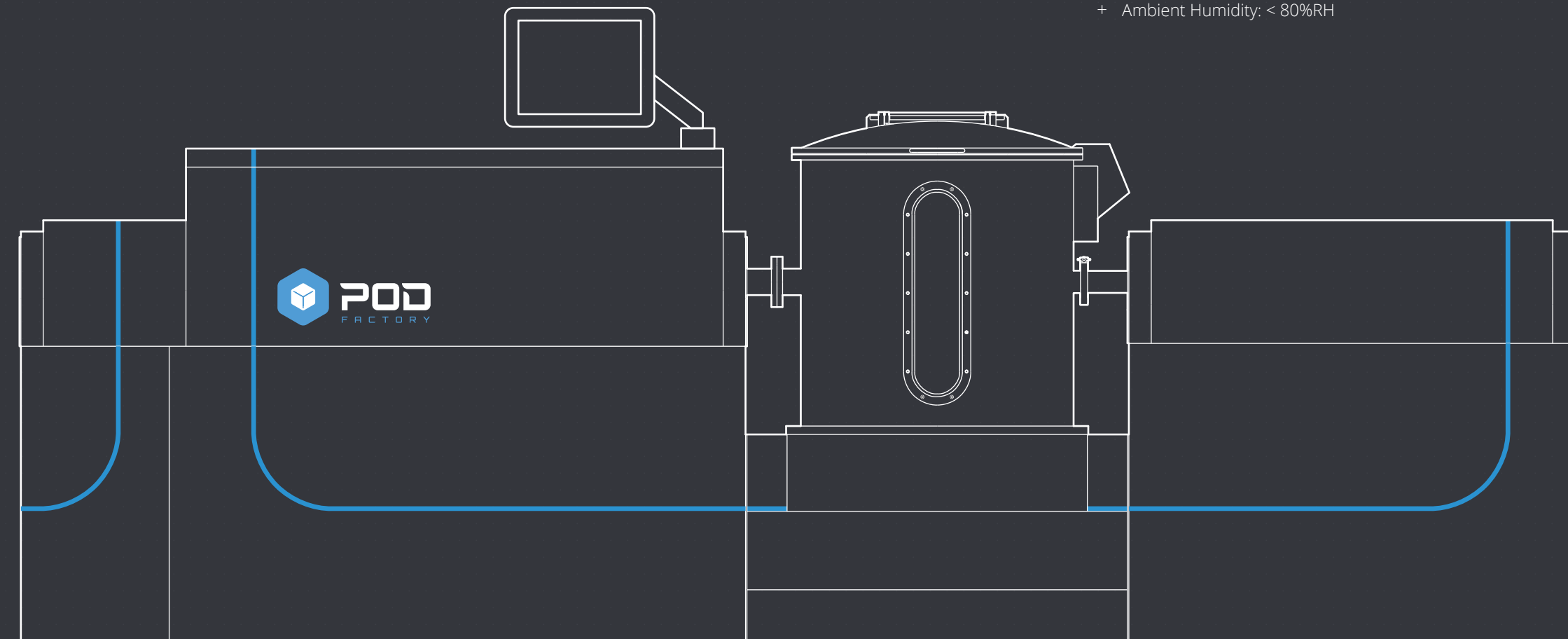
- + Low noise, direct drive, dual stage mechanical pump with exhaust filter.
- + Cold trap is mechanically refrigerated with no expendable refrigerants used. Designed for long-life, easy maintenance and quick turnover.
- + Pump valve closes the system to protect chamber and pump in the event of a power failure or intentional stop.
- + Two stage pump valve reduces chamber disturbance when pumping down.

Enclosure

- + Three module enclosure design: Reactor Module, Chamber Module, Pumping Module. Independent Chamber Module allows different size chambers to be attached.
- + Modules are custom fabricated out of steel and powder coated to ensure a safe, durable, and attractive system.
- + Panels throughout for easy access to all mechanical and electrical systems.

Installation Data and Operating Conditions

- + Voltage: 208 V 60Hz 3 Phase, 45A largest load (Optional: 400V 50Hz 3 phase, 25A custom configurations upon request).
- + Compressed Air: 6 bar/ 80 psi
- + Assembled Machine Footprint: 12 ft X 4 ft (each module fits through 36" doorways)
- + Net Weight: approximately 1,800 pounds
- + Ambient Operating Temperature: 60-85 degrees Fahrenheit
- + Ambient Humidity: < 80%RH



Request a Free Economic Analysis

To get started, visit vsiparylene.com/parylene-coating-equipment to request your custom economic analysis and find out if in-house parylene is the right fit for your production.

Financing options available.

A product of **VSi** PARYLENE

325 Interlocken Pkwy, Building C
Broomfield, CO 80021

info@vsiparylene.com | +1 866 767 5633

