

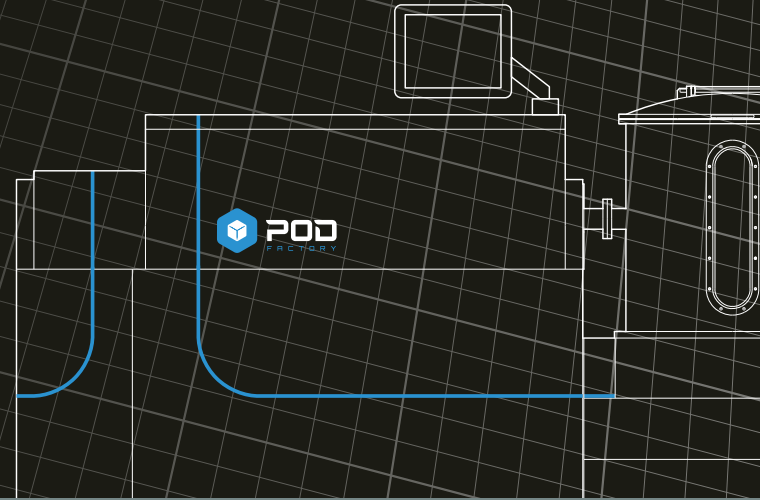
FATHOM.

DIGITAL MANUFACTURING. REIMAGINED.

Case Study //

VSi Parylene

Technology // Precision Sheet Metal Fabrication



Fathom's integrated, technology-agnostic approach and rapid response team **enabled a customer to condense its product development cycle in half.**

50%
Shorter Product
Development Cycle

Problem //

VSi Parylene (VSi) provides advanced protective coating technologies for various industrial and consumer electronics, aerospace and medical applications. In developing its next generation parylene conformal coating system, VSi sought a unified partner with extensive manufacturing capabilities, engineering expertise, and quality assurances for the launch of its robust POD Factory machine that utilizes a specialized vapor deposition process.

VSi's places significant emphasis on the form and function of their Equipment. They wanted the aesthetic design of the POD machines to reflect the sophistication, precision and quality of its equipment and brand. However, the digital design file presented some manufacturing challenges which hindered the physical production of the system and did not lend itself to volume manufacturability. VSi insisted on preserving the inspiring and unique aesthetics of the design and was looking for an advanced manufacturing partner that could help them provide beautiful and scalable machines.

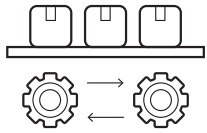
Solution //

Fathom drew upon its highly trained technical staff to provide timely feedback on the geometry of the CAD file to ensure the design for manufacturability. In examining the needs of the customer, Fathom collaborated with VSi to validate the engineering aspects of the new system and defined which of its manufacturing processes would best achieve the desired outcome.

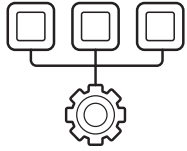


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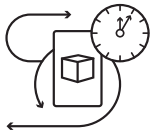
Results //



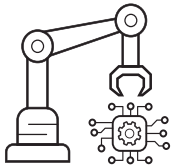
Speed Time to Market – Fathom’s integrated, technology-agnostic approach and rapid response team enabled VSi to take delivery of the entire mechanical portion of the system within 8 weeks, condensing the product development cycle by approximately 50%.



Supplier Consolidation – VSi was able to consolidate their supply chain by sourcing through a single certified supplier. This adaptive, one-stop solution significantly increased operating efficiencies and provided a differentiated customer experience.



Accelerate Manufacturing Innovation – Multiple fast iterations in developing the industrial-sized POD system sparked innovation of a new complementary product, the POD Access machine, enabling VSi to increase scalability and expand the size of its total addressable market.



Hybridized Manufacturing Services – In total, Fathom successfully produced and assembled more than 815 high-quality components requiring over 760 distinct manufacturing steps. VSi capitalized on the breadth of Fathom’s leading offerings, including:

- Design for Manufacturing (DFM)
- CAD Development and CNC Programming
- CNC Punching and CNC Laser Cutting
- CNC Forming
- Precision Sheet Metal
- Hardware Installation
- TIG Welding
- Sanding and Grinding
- Powder Coating
- Screen Printing
- Mechanical Assembly

Customer Testimonial //

“The broad range of manufacturing services provided by Fathom all under one roof combined with their deep technical expertise is unique. By leveraging the company’s on-demand platform, we sourced from one proven supplier that made the overall process seamless. Their flexible solutions paved the way so that we could iterate more efficiently and speed our time to market – a big advantage for us. Fathom executes at a very high level, and we intend to partner with the company on other projects going forward.” To learn more about VSi, visit vsiparylene.com.

Talk to an Expert //

Working with Fathom means easy access to Additive and Advanced manufacturing experts. Contact us today, and let’s transform the future of manufacturing together!

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