The world’s largest automotive and aerospace companies use InnovMetric’s 3D point cloud processing software in their daily point cloud digitizing, dimensional analysis, comparison to CAD, and reverse-engineering tasks.
**Market:**
Point Cloud Processing

**Product:**
3D InterOp Translators

**CHALLENGES**
InnovMetric needed an expedient way to provide their automotive and aerospace customers with the industry’s best CAD translators in their PolyWorks® inspection and modeling software.

**Solutions:**
Spatial InterOp software selected for its high-end CAD translators, particularly its ability to flawlessly exchange CATIA v4 and v5 data.

**Results:**
- Can integrate new translators in less than an hour because of the Connect API
- Frequent releases and service packs enable InnovMetric to maintain competitive edge
- Spatial’s business model enables InnovMetric to be true partner in feature enhancements most requested by their customers

**COMPANY**
Founded in 1994, InnovMetric Software Inc. pioneered the market for software that transforms high-density 3D digitizers into true metrology instruments. A privately owned company, InnovMetric’s PolyWorks® inspection and modeling solutions are at work daily in more than 30 countries, providing users such as BMW, Boeing, Daimler-Chrysler, Ford, Porsche and Toyota with the most complete, accurate, and robust 3D point cloud processing software solution on the market.

**CHALLENGE**
InnovMetric wanted to offer the same CAD import capabilities in its products that are available from large software companies. To be competitive in the automotive and aerospace industries it’s imperative for the company to offer nearly 100% flawless import of CATIA v5. It wouldn’t be cost-effective for InnovMetric to try to develop a data exchange capability itself because commercially available products already exist to solve this problem. So it sought out a reasonably priced, effective third party tool to meet its high demands and expectations.

**SOLUTION**
In 2002, InnovMetric found the answer in 3D InterOp translator technology from Spatial and has been integrating it into PolyWorks ever since. Spatial’s InterOp components allow it to offer high-end CAD import capabilities and increased its penetration in large automotive and aerospace accounts. “Naturally we turned to Spatial,” said InnovMetric President Marc Soucy. Spatial’s InterOp translators provide InnovMetric access to stable and actively-developed high-end CAD translators, which the company is highly comfortable passing along to its customers. InnovMetric’s customers expect to have as flawless import as possible without any translation errors and full content of the files available.

Spatial’s 3D InterOp translators enable InnovMetric’s customers to easily integrate advanced 3D data interoperability capabilities into applications that use 3D information, including CAD/CAM/CAE applications; data management systems, such as PDM/PLM collaboration systems; and visualization applications.

“Spatial’s CAD translation technology has reached a great level of maturity – it’s a very, very good product,” notes Soucy. After the initial integration of the InterOp library into its PolyWorks application, InnovMetric has reached a point where adding a translator now takes less than an hour because of the Connect API.

“We are excited to be working with Spatial. We feel its InterOp translators have been a great asset to our product development and we look forward to using its translators to improve the future of PolyWorks.”

-- Marc Soucy, President InnovMetric

**RESULTS**
InnovMetric purchased Spatial InterOp so that it wouldn’t be faced with the resource, economic, and time-to-market challenges that would have come with developing the technology itself. “We’ve been working with Spatial on the development of the library since the beginning and are pleased that our recommendations and requests are continually being factored in to new releases and service packs.” Spatial’s business model is flexible and accommodating to a company such as InnovMetric that may be small in size but needs to cater to some of the world’s largest companies.
Our 3DEXPERIENCE platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes’ collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 170,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.