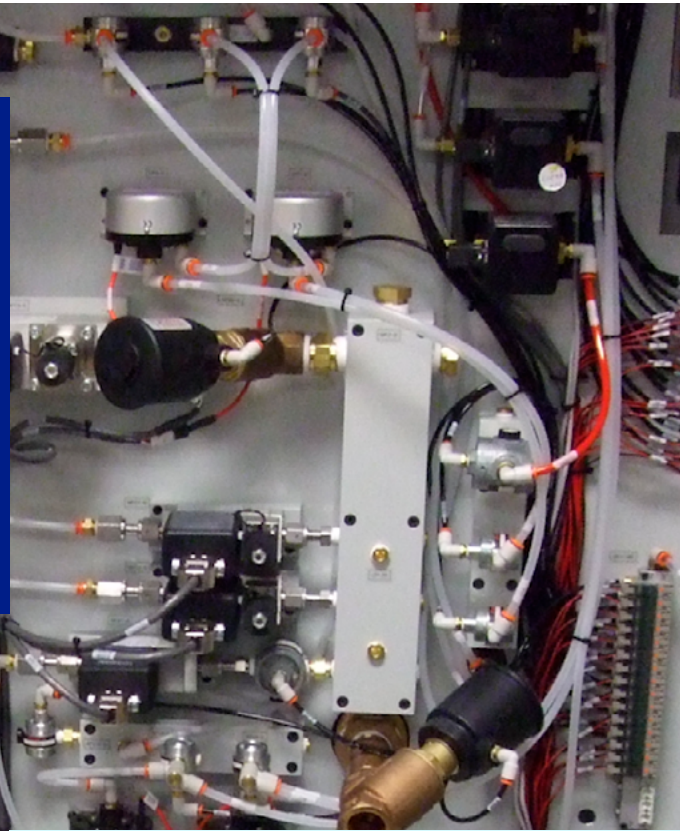


Delivering Precision and Innovation to Custom Engineered Solutions






Automated Motion, Inc. reduced costly trial and error testing by 50% with SOLIDWORKS® flow and pressure simulation on their new Dell Precision 7670 mobile workstation.



Business needs

Given their commitment to excellent customer service and rapid turnaround times, AMI faced challenges as their customers began requesting larger, more complex designs. They needed a powerful workstation to efficiently manage these demanding projects and uphold their reputation for customer satisfaction.

Business results

-  Improved Performance: significantly reduces the time required to regenerate large models.
-  Faster Load Times: Manipulating large assemblies and complex drawings are now at least twice as fast.
-  Simulation Capabilities: More advanced simulations enable more complex and resource-intensive projects.
-  Reduced Frustration: Improved performance leads to a smoother workflow and more satisfying user experience.
-  Current Technology: Upgrading to the latest technology ensures AMI can meet increasing project demands.

Solutions at a glance

- Dell Precision 7670 16" mobile workstation
 - Intel Core i9-12950HX
 - 16-inch FHD+ screen
 - 64 GB RAM
 - 1 TB SSD
- NVIDIA RTX™ A4500, 16 GB GDDR6



Opening an in-house design went from around 5 minutes to under a minute.

AMI specializes in a wide range of engineering projects, catering to industries such as aerospace, military, and custom manufacturing. Their work includes designing and building complex test equipment, like systems that certify aviation safety gear, as well as developing specialized fixtures and low-volume manufacturing solutions. AMI also handles intricate projects that require precise engineering and design, such as custom-built machines and assemblies that must meet stringent industry standards. Their expertise extends to creating highly specialized products that are often too complex or low-volume to be outsourced overseas, ensuring they deliver tailored, high-quality solutions for their clients' needs.

Enhanced Project Efficiency and Turnaround Times

The new Dell Precision 7670 workstation has drastically improved AMI's ability to manage large and complex projects. Previously, the time required to regenerate large models and multi-page drawings potentially led to delays that could affect project turnaround. Now, thanks to the upgraded hardware and advanced graphics processing, loading and manipulating these demanding files in SOLIDWORKS is at least twice as fast. The NVIDIA RTX A4500 GPU plays a critical role in this speed boost, enabling smoother and faster rendering of intricate designs. This significant improvement allows AMI to deliver projects more quickly and efficiently, ensuring that customers receive high-quality results without extended wait times—even as the complexity of customer demands grows.



Advanced Capabilities for Complex Designs

The acquisition of the new workstation significantly expanded AMI's ability to tackle more challenging and complex design projects. Previously, AMI's equipment struggled with handling intensive simulations and large-scale models, which limited the types of projects they could confidently accept. For instance, the previous workstation often faced bottlenecks when regenerating detailed assemblies or converting files between different formats. This limitation not only slowed down the workflow but also constrained AMI's ability to deliver the high level of precision and performance their clients expected.

With the new Dell Precision 7670 mobile workstation, these challenges have been effectively addressed. The NVIDIA RTX A4500 professional GPU provides increased graphics processing power, enabling AMI to render large and intricate designs more quickly and accurately. This is particularly important for projects that require high levels of detail and precision, such as those in the aerospace and military sectors. The advanced capabilities of the GPU also allow AMI to perform complex simulations that were previously beyond their reach. Some of those new simulation projects include those involving fluid dynamics, thermal analysis, and structural integrity.

The ability to handle larger data sets and complex calculations means that AMI can now take on projects with higher levels of complexity. This capability not only enhances the quality of the designs but also improves the overall efficiency of the design process. Clients benefit from faster turnaround times and higher-quality outputs, as AMI can now iterate more quickly and make more informed decisions during the design phase.

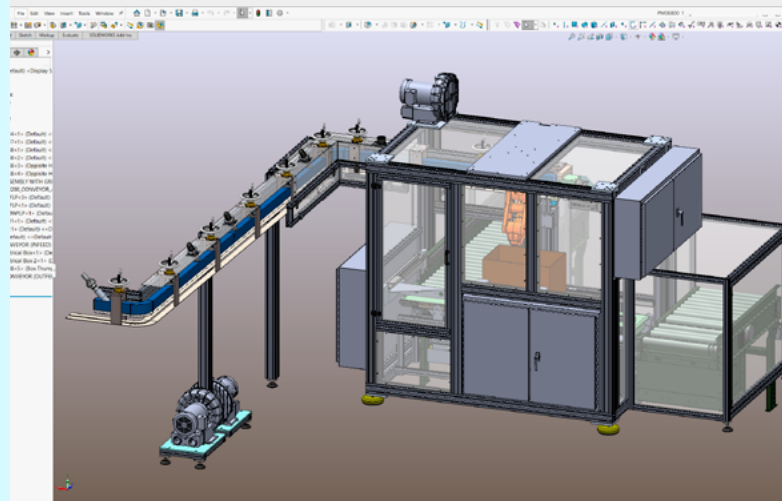


The ability to simulate flow and pressure has reduced costly trial and error testing by 50%

Mike Hutchings,
Senior Mechanical Engineer,
Automated Motion, Inc.

“ The new Dell/NVIDIA workstation definitely helps with the performance issues we had with larger assemblies and drawings in the past.”

Mike Hutchings,
Senior Mechanical Engineer,
Automated Motion, Inc.



Consistent Technological Upgrades for Future-Ready Service

AMI's strategy of regularly upgrading its technology ensures that the company remains at the forefront of industry advancements. The decision to invest in the Dell Precision 7670 mobile workstation is a testament to their commitment to staying current with the latest tools and technologies. The NVIDIA RTX professional A4500 GPU not only enhances current performance but also provides a scalable solution for future demands as increasingly complex customer needs evolve. This proactive approach means that AMI can continuously offer its customers the most efficient and effective solutions, even as their requirements become more sophisticated.

By not allowing their equipment to fall behind, AMI minimizes the risk of performance issues that could compromise project timelines or quality. This commitment to technological excellence not only improves current service offerings but also positions AMI as a reliable partner capable of adapting to future challenges, providing customers with the confidence that their projects are in capable hands.

“ The new Dell/NVIDIA workstation is amazing as it enables us to do simulations not possible before. This helps us evaluate design options and improve the final product.”

Mike Hutchings,
Senior Mechanical Engineer,
Automated Motion, Inc.

[Learn More About Dell Technologies Solutions.](#)

Connect on Social.



DELLTechnologies

