



From Manual Monotony to Rapid Compliance

How Demers automated their tariff workflows in record time

The Client: Demers Ambulances

Demers Ambulances, a leading Canadian manufacturer of emergency vehicles based in Québec, is the oldest continuous ambulance manufacturer in North America. Demers Ambulances has delivered over 25,000 units worldwide. The company is renowned for its commitment to quality, safety, and innovation, and is proudly celebrating its 65th anniversary.

The Challenge: New Tariff Requirements, Inconsistent Legacy Data, and Manual Processes

Following recent changes in U.S. tariff policies, Canadian manufacturers like Demers Ambulances faced stricter customs regulations and a significant increase in compliance paperwork for every shipment to the United States. These tariffs required Demers Ambulances to precisely track and report the weight of metals used in each ambulance. Recognizing these risks, Demers Ambulances knew they needed to act swiftly to ensure continued export of life-saving vehicles to U.S. customers.

By finding a solution that prioritized rapid compliance and operational efficiency, the company took decisive steps to protect its market share, support long-term growth, and safeguard Canadian jobs.

To achieve this, Demers needed a solution that could handle the scale and complexity of the requirements without compromising accuracy or speed.

Traditionally, the alternative to adopting SIGMAXIM relied on an arduous manual process, opening all the individual components of assemblies to extract the exact amounts of metals. The process was slow, error-prone, and unsustainable, especially as the data extracted would be static instead of being updated with the part. The resulting database would require constant manual maintenance to remain accurate.

"Our manual process was time-consuming and not scalable, particularly with the growing complexity of our designs," said Yannick Tassé, Engineering Project Manager at Demers Ambulances.

Because every ambulance is customized, the quantity of data to parse is extensive. Providing accurate information for each part is crucial.

Rather than pulling a valuable engineer from a project to take on this daunting manual task—a tedious job no one was keen to do—Demers Ambulances opted to find an automated solution.

The Solution: SIGMAXIM SmartAssembly

SmartAssembly is an automation platform that enables organizations to achieve company initiatives from design to manufacturing. It can put any or all design and process rules into Creo to eliminate non-value-added engineering work by:

Automating Design Processes: Replacing manual tasks with automation to ensure consistency and reduce errors.

Generating Deliverables: Automatically creating outputs, e.g., BOMs, drawings, and manufacturing data, optimized for production systems.

INDUSTRY

Ambulance Manufacturer

CHALLENGES

- Manual, time-consuming process for tracking metal weights
- Pressure from new tariff regulations requiring speed and accuracy
- Risk of pulling key engineers off projects for tedious data tasks

SOLUTION

SIGMAXIM SmartAssembly

BENEFITS

- Real-time material tracking and tariff calculations
- Dramatic reduction in manual workload
- Faster access to accurate material data for quoting and compliance
- No disruption to ongoing projects during project implementation
- Greater efficiency, cost savings, and productivity

Driving Data: Taking information from Creo and driving it directly into enterprise systems like Windchill, and ERP systems like Oracle and SAP.

Why SIGMAXIM SmartAssembly?

When Demers Ambulances began searching for solutions, most options not only fell short, but also involved long implementation timelines with little flexibility.

SIGMAXIM SmartAssembly stood out for its powerful, tailored capabilities, lightning-fast implementation, and seamless integration with their existing business systems.

The SIGMAXIM team was able to implement their solution in days, whereas other options would have taken weeks or even months to get up and running. *"That speed of execution was a game-changer for us,"* said Mr. Tassé.

How it Works: Automation in Action

The new SmartAssembly automation continuously feeds a live database, keeping it up-to-date and making information that had previously lived only in Creo now accessible to non-Creo users—delivering a low-maintenance, low-effort solution that:

- **Streamlined material tracking** & automated tariff calculations in real time
- **Reduced manual workload**, avoiding an increase in engineering resource costs
- **Worked collaboratively to resolve issues** quickly and adapt the solution as needs evolved

The Results: Efficiency Gains, Cost Savings, and Enhanced Productivity

Since implementing SIGMAXIM, Demers Ambulances has shifted from manual, error-prone material tracking to a fully automated process that is faster, more accurate, and far more reliable.

"We're now able to roll out data for each part automatically, making our tracking process much more efficient," said Mr. Tassé. *"The biggest win is that we've saved so much time, while avoiding tedious non-value-added tasks."*

The SmartAssembly automation not only streamlined internal operations but also enabled Demers Ambulances to deliver vehicles to U.S. customers more quickly and

reliably. By reducing manual manipulation and errors, SmartAssembly enabled Demers Ambulances to significantly improve the efficiency and reliability of its process. The automation enabled more timely and compliant shipments, providing greater transparency to customers and supporting consistent fulfillment of orders.

This implementation supports Demers Ambulances' overall commitment to honor lasting partnerships even in the most critical moments.

Customer Success: A Collaborative Partnership

Demers Ambulances expected strong results—but what impressed them most was SIGMAXIM's speed and responsiveness.

"They understood the urgency of our needs and worked quickly to implement a solution. It felt like they were an extension of our team," said Mr. Tassé.

For Demers Ambulances, that combination of **speed**, **responsiveness**, and **proactive support** reinforced their confidence that they had chosen the right partner.

Looking Ahead: Expanding Automation Success

With the success of the initial project completed, Demers Ambulances is now evaluating other business areas where they can leverage SmartAssembly automation.

 **With SmartAssembly,
we've saved so much time
while avoiding tedious
non-value-added tasks**

Mr. Yannick Tassé
Engineering Project Manager
Demers Ambulances

ABOUT SIGMAXIM

SIGMAXIM has been the leading global expert in Creo automation solutions for over 20 years. We partner with companies of all sizes to deliver low risk, efficient automation solutions for both standardization and product configuration initiatives.

CONTACT US

Learn how SIGMAXIM's Creo Automation platform can help optimize your unique design process.

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