

Case Study: Vallée Inc.

Increased quality, shorter lead times... technologies that **benefit the client**

As globalization increasingly predominates, competition and innovation are more and more played out between supply chains and less and less between companies. Even though there is still room for improvement among logistics service providers in Canada, their future appears for the moment to be highly promising in the short, medium and long term.

COMPANY PROFILE

Vallée's Research and Development Team is comprised of specialists who work to integrate not only technical but special design characteristics into Fork Lifts and Materials Handling Tools specific to individual customer needs.

All Vallée products are manufactured keeping Total Quality in mind – a Quality which is continuously put to the test in order to provide their clients with the best customer satisfaction experience. Vallée also offer warranties which have enabled them to maintain their clientele's unflinching trust over the years. Presently, Vallée sells its products in various markets including all Canadian Provinces, the United States, Mexico, South Africa, and Cuba.

NEEDS ANALYSIS

Initially, Vallée underwent the arduous process of evaluating as many customization scenarios as possible which could translate into adapting forklift tools for various vertical market needs, such as the bucket, fork arms, direct connection or quick-coupler fastener systems.

Additionally, Vallée needed the ability to be able to adapt its products to an ever-increasing number of quick-coupler fastener options. In their particular niche, for example, there are approximately 10 or so manufacturers who provide anywhere between 10 and 12 various fasteners, for a total of over one hundred possible quick-coupler fastener types. With more than one hundred or so possible loader models as well as adaptable hook types in their database, integration possibilities and adaptability are endless.

TECHNICAL FACTORS

In the past, Vallée used AutoCAD® software; however, this imposed constraints to many process development aspects. The majority of these were due to not being able to validate the various types of fasteners and the impossibility of being able to visually present the products to their customers in an adequate and precise man-

ner. It was crucial to visually display movement dynamics and swerves due to various accessory movements. Also, in order to achieve greater engineering efficiency, the specialized design resources had to be able to prepare the plans and quotations, and then transcribe the technical specifications into the supply management software so that the purchases could be made at the proper time in the manufacturing process.

SOLUTION ANALYSIS

As former AutoCAD® 2D users, it was clear that Vallée management first opted for the possibilities offered to them by the AutoCAD® Inventor® 3D Software Suite.

"My past experience in many businesses had already convinced me that SolidEdge and PRO/E solutions could not meet our true needs; we therefore examined the possibilities offered by the SolidWorks software. Our analyses allowed us to determine that SolidWorks stood out among all the other solutions offered and best met our expectations." confided Mr. Pierre Giroux, Eng., Engineering Manager for Vallée.

MANUFACTURING MANAGEMENT

Having used the Genius Solutions' Manufacturing Management Software for many years, only serves to confirm Vallée's satisfaction as to the capability of managing the various levels encountered during development processing from design to manufacturing. Further to the integration of SolidWorks®, and support from SolidXperts specialists, Genius Solutions was able to develop an integration component dedicated to data exchange between the two softwares in question so as to synchronize information and avoid repetitive manual tasks. (For example: the creation of a single parts word list.)

BENEFITS AND ADVANTAGES

Following the acquisition of tools and services offered by Genius Solutions, SolidXperts and SolidWorks®, Vallée was able to achieve effi-

cient gains by considerably reducing the risk of errors, repetitive tasks and duplication causing much lost time. Overall, design and delivery lead times have been reduced by about 60% and manufacturing productivity has doubled.

Vallée gained 100% of the benefits by being able to forecast possible interferences and assembly methods. A considerable reduction in errors was also apparent, and therewith a marked increase in product quality. The possibility to validate design and analyze movement dynamics provides the necessary confidence as to project feasibility. Project management as well as complete manufacturing process management have allowed for optimizing productivity by more than 70%. In the near future, SolidWorks and Genius Solutions tools have provided the confidence necessary in order to guarantee their customers quick and efficient service within a 24-hour work-day lead time.

SATISFACTION INDICATORS

Among the functionalities retained, the one which particularly stands out resides in the inter-communication possibility provided by the exchange module named Genius CAD2BOM and which allows for exchanging data, in real time, between the SolidWorks and Genius Solutions tools. This approach allows for eliminating task duplication and reduces the number of errors caused by manual data management.

According to Mr. Giroux, "The SolidXperts and Genius Solutions teams have precisely met all our expectations; their support, consulting and personalized training services were pertinent and adequate." When asked if Mr. Giroux would recommend Genius Solutions, SolidXperts and SolidWorks tools to other businesses with similar needs, he replied, "Yes! Without any hesitation, I would recommend these tools to many businesses who such as us, want to improve their efficiency, product quality and services." ■