

Industrial machinery and equipment • Automotive and transportation

## TYCROP

Using Teamcenter helps specialty trailer manufacturer succeed in the long haul

### Product

Teamcenter

### Business challenges

Deploy a scalable PDM solution

Provide an open system that can be used to integrate a variety of solutions

Tighten control over a growing body of data

### Keys to success

Connect engineering to business functions

Expand a CAD-based system into a PLM system

Manage data effectively in a geographically dispersed company

### Results

Increased market share by providing greater access to critical data

Reduced costs by cutting scrap and rework

Improved time-to-market by enhancing collaboration and leveraging historical data



Engineering manager James Easden reviews assembly details on the shop floor.

### Open PLM solution enables TYCROP to increase its market share

#### Equipped for rugged terrain

TYCROP Manufacturing Ltd. (TYCROP) began building specialty trailers in 1982 and has become a recognized leader in creating unique and innovative industrial transportation solutions. TYCROP, which is headquartered in Chilliwack, British Columbia, Canada, supplies some of the most technologically advanced trailers today, equipped to haul resource-based materials such as forest, mining and agricultural products as well as bulk waste and

recycling. They also produce specialized trailers and products for the oil and gas industry at their facility in Calgary, Alberta, Canada.

TYCROP trailers are used in some of the most rugged terrain on earth – such as the Arctic – and have units in the field that have been operating for over 20 years. To say they must be well designed and manufactured constitutes a pretty large understatement.

In addition to designing, manufacturing and servicing specialty trailers, TYCROP's other areas of expertise and focus include making structural repairs to trailers;

### Results *(continued)*

Facilitated productivity by working more effectively with remote facility

Enabled service department to provide accurate replacement parts

**“Teamcenter allows us to cross-pollinate, share resources and ultimately leverage the value of the second engineering group in Alberta. We now have the ability to support a geographically dispersed company. Teamcenter allowed us to put all of that together.”**

Trevor Lang  
Project Engineer  
TYCROP



Shop fabricators assembling custom piping.

designing and manufacturing mobile and skidded pressure pumping equipment, rig support equipment, proppant handling solutions and chemical transport for the energy industry; designing high-performance components for industrial applications; and manufacturing high-quality industrial control panels. The company also provides parts sales, support and service for all areas of its business.

#### **Expanding with Teamcenter**

Designing and manufacturing mobile industrial equipment is a niche endeavor, and is often conducted with fewer formal processes than in many other industries. However, TYCROP has bucked that trend, and has the rewards to show for it. It pursues continuous improvement by investing in systems, technology, people and training to ensure that they remain an innovative force in industrial transportation. Ultimately, its strength is a high level of talent and full service repeatability.

As a result, in the last five years TYCROP has grown from 50 people to 300, and the engineering department has grown from 5 people to over 20.

The use of product lifecycle management (PLM) technology – Teamcenter® software from Siemens PLM Software – has played a significant role in that growth.

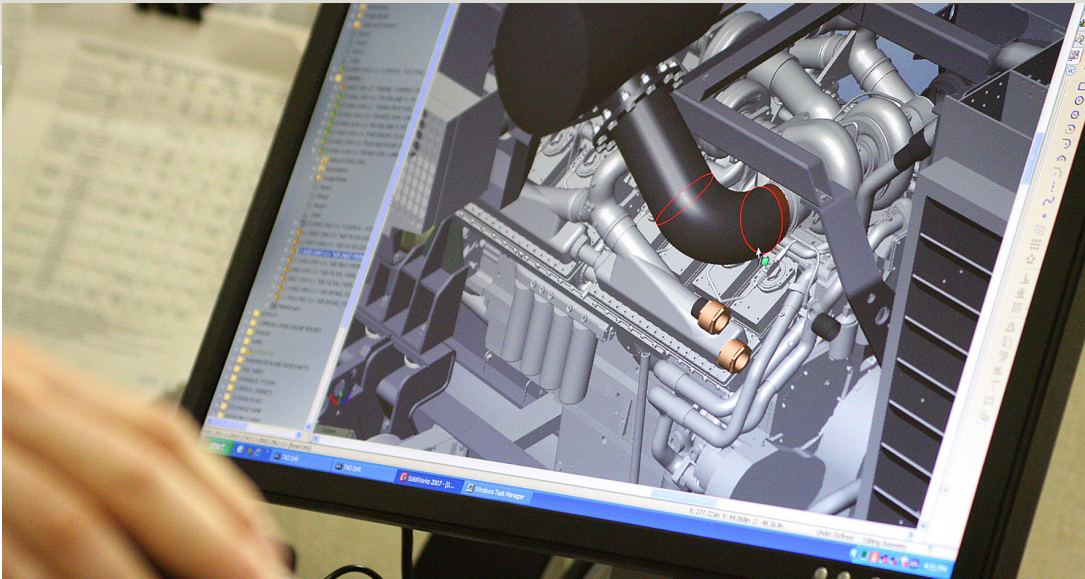
“One of the biggest advantages of Teamcenter is its expandability,” says Trevor Lang, a project engineer at TYCROP. “Having the scalability to accommodate growth was important. We started with it in engineering, but have since been able to integrate it into downstream areas such as planning, manufacturing and parts sales and service. Teamcenter enhances our capabilities for collaboration as well as concurrent engineering.

“As we grew and started to hire more people, there was more data to manage and

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Trevor Lang  
Project Engineer  
TYCROP





Pipe drawing details.

there were more hands touching the data, so we needed to standardize our processes. Teamcenter enabled us to do that.”

#### Connecting remote plants

Although the plant in Alberta is part of TYCROP, it was hard to share information in order to keep everyone on the same page.

“The presence of Teamcenter means that our plant in Calgary has access to the same information as the plant in Chilliwack,” says Lang. “So when workers in Alberta are installing electronics in a trailer, they can see and understand the intent of the design that was done in British Columbia.

“Teamcenter allows us to cross-pollinate, share resources and ultimately leverage the value of the second engineering group

in Alberta. We now have the ability to support a geographically dispersed company. Teamcenter allowed us to put all of that together.”

It also means that when a trailer that was manufactured by TYCROP needs a new part, the company has tracked the part and can fabricate and provide it. That facilitates the process of providing service and making repairs.

#### Getting to market faster

At the outset, TYCROP engineering was driven by computer-aided design (CAD), but as PLM tools matured, the company recognized that adopting this more holistic approach to product data management (PDM) would enable them to enhance the operation of the entire business, not just engineering.

“Teamcenter proved to be an open technology platform that can be used to integrate seamlessly with solutions from third parties. That enables us to streamline the management of quality issues as well as facilitate the updating of all data.”

**Trevor Lang**  
Project Engineer  
TYCROP

“Getting to market faster is on our minds every day. Expanding our data management from just a CAD system to Teamcenter has enabled us to do that.”

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TYCROP

## Solutions/Services

Teamcenter  
[www.siemens.com/teamcenter](http://www.siemens.com/teamcenter)

## Customer's primary business

TYCROP Manufacturing Ltd. is a product creation company that has been building specialized mobile equipment for over 30 years, and has become a recognized leader in creating unique and innovative industrial transportation solutions that are used to haul everything from wood chips to mining concentrates.  
[www.tycrop.com](http://www.tycrop.com)

## Customer location

Chilliwack, British Columbia  
Canada



*A crew works on the pressure pumper assembly line.*

Customers will often change specifications once a product is under construction, so it is incumbent upon TYCROP to be nimble enough with the data to make the necessary modifications quickly. That also applies to maintenance, when having access to the history of a particular part or system comes in quite handy.

"Getting to market faster is on our minds every day," says Lang. "Expanding our data management from just a CAD system to Teamcenter has enabled us to do that. We need to manage the explosive growth of data so we can manage the growth of the company, and that's where Teamcenter comes in."

## Integrating other solutions

Just as important was TYCROP's desire to have a system that would integrate seamlessly with solutions from other vendors.

The company wanted to be able to integrate its PLM solution with their enterprise resource planning (ERP) system (SYSPRO software) as well as its multi-CAD system (SolidWorks® software and AutoCAD® software) to automate the data handoff.

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By maintaining control over the entire manufacturing process – from the start of a new design through engineering to the in-house production of parts – TYCROP has earned its reputation for supplying some of the most sophisticated products available today.

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Trevor Lang  
Project Engineer  
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