



A RUAN LOGISTICS PARTNERSHIP ADDS VALUE TO BOBCAT, KEEPS COMPANY RUNNING LEAN

It seems obvious, but getting product to customers is important to any business, particularly an equipment manufacturer like Bobcat Company. Bobcat customers use the company's skid-steer loaders and compact excavators in construction, landscaping and agriculture. These customers are unable to do their work and meet their deadlines until they have their equipment on hand. To improve delivery of products to customers and improve its overall manufacturing, Bobcat has partnered with Ruan.

THE CHALLENGES

Bobcat has three manufacturing facilities in the United States. Skid-steer loaders are manufactured in Gwinner, N.D.; compact excavators and the company's one-of-a-kind Toolcat[™] utility work machine are manufactured in Bismarck, N.D.; attachments for these machines are made in Litchfield. Minn.

In the past, Bobcat shipped equipment directly from all three manufacturing facilities to dealers across the country. This was a problem for a number of reasons. First, a dealer might get three different shipments on the same day, one from each facility. The dealer staff would be tied up unloading trucks instead of attending to customers. Second, Bobcat was limited by the number of trucking carriers willing to bid on work because Bismarck and Gwinner are not transportation centers. Gwinner is a small town 40 miles from the nearest interstate. Finally, deliveries were not arriving on time and it was difficult for Bobcat to track the specific location of their deliveries.





OTHER CHALLENGES

Other challenges included trucks delivering product with less than a full load, called "less than load" (LTL) in the industry, and trucks making multiple stops. When product is delivered LTL, the carrier still charges Bobcat as if the truck were full, so the company was losing money on LTL deliveries. Every time a truck makes a stop, there is a charge. The fewer stops, the less cost to Bobcat.

This system was inefficient and not working for Bobcat or the company's dealers. "The dealers were asking for a better system," says Dean Atkinson, North American logistics manager for Bobcat. "The dealers needed better service and we needed to reduce cost and flow our product more consistently."





RUAN SOLUTIONS

As Bobcat looked to change the way it transported finished equipment, the company learned of the Ruan Consolidation and Distribution Center (RCDC) in Brooklyn Park, Minn., a suburb of Minneapolis. There, Ruan was handling transportation logistics for Polaris, a manufacturer of snowmobiles, motorcycles and other equipment, and helped Polaris overcome many of the challenges Bobcat faced.

Working with Bobcat, Ruan developed solutions that reduced costs and added value to Bobcat transportation. The concept is known as *merge in transit*.

Today, Bobcat uses the RCDC as a cross-docking facility. All Bobcat products headed to dealers east of North Dakota are routed to the RCDC, where Ruan builds loads and ships the products to dealers.

When the products arrive, Ruan scans them into an inventory system. Any time a machine is moved after it has arrived at the RCDC, it is scanned again as part of the Ruan tracking process. The inventory is then linked into other computer software programs that Ruan uses to fill dealer orders and then route the products to the dealers.

The routing software builds loads based off the inventory and dealer orders and then determines the most efficient way to transport the products to the dealers. The routing system looks at a number of different criteria to build loads, including dealership operating hours, distance between dealers, weight of product on the trailer, and payload factor, which indicates the fullness of the trailer.

Before final routes are determined, the software assesses at all the total miles and stops that day's inventory will require to make sure the routes are the most efficient. Bobcat challenged Ruan to decrease half a stop from each load. Ruan was successful, and now Bobcat loads average 2.4 stops, making the loads more profitable for Bobcat.

DECREASED COSTS

With Ruan, LTLs have been eliminated, also increasing profitability. Now, Bobcat loads have a payload factor of 117 percent. This is because attachments and the machines are cross-docked at the RCDC and loaded on the same outbound truck, instead of as different loads as in the past. Every piece of equipment has a cubic measurement, but sometimes an attachment, such as a bucket. can be slipped under a skid-steer loader, so both the attachment and the loader take up the same space on the trailer. "There's a balance that we achieve between making sure the trailer is full and that the product arrives damage-free," says John Bobleter, general manager of the RCDC, "What's most important is that the product arrives in pristine condition."

Without attachments, skid-steer loaders, excavators and other Bobcat products are useless to their owners. Before, a skid-steer loader might arrive at a dealership before an attachment, and the owner would have to wait for the attachment to arrive before the equipment could be used. Now that Bobcat products are cross-docked at the RCDC, the attachment and the machine arrive at the same time.

Bobcat owns the trucks that bring product from its manufacturing facilities to the RCDC. Instead of going back to the manufacturing plants empty, inbound raw materials to manufacture new equipment are routed to the RCDC. This material is cross-docked at the RCDC and loaded on the Bobcat trucks and hauled back to the manufacturing plants. By ensuring that trucks never move empty, Bobcat has decreased transportation costs further.

HIGHER VISIBILITY

Now that products are shipped out of Minneapolis, the number of carriers willing to bid on Bobcat transportation has increased. Bobcat still negotiates with carriers, but leaves it up to Ruan to manage the loads with the carriers who offer the best rates for the routes created by Ruan. "Ruan has the Bobcat checkbook and they're writing the check to our carriers," says Atkinson. "It's up to Ruan to save Bobcat money by tendering loads to the carrier with the lowest possible price."

Visibility has also been raised through the Ruan track and trace system. When a load is shipped, the Bobcat dealer receives an e-mail with an estimated time of delivery. The e-mail includes information for the dealer to reach Bobcat customer service if the need arises. Also, if the load is delayed for some reason, such as a truck breakdown, the carrier goes to a Web site and updates Ruan on the status. Ruan then contacts the dealer with the new delivery information. Ruan customized this service specifically for Bobcat dealers.





"The roots of Ruan are in transportation, but the RCDC shows that we succeed at logistics for our customers."

— John Bobleter, general manager, Ruan Consolidation and Distribution Center

Bobcat Challenges

- Shipments to dealers from multiple manufacturing facilities
- Dealers unsure when to expect shipments.
- High transportation costs through multiple stops and less-than-loads.
- Location needed for new product line assembly.

The Ruan Solution

- Products consolidated at RCDC before shipment to dealers.
- Communication to dealers improved with the Ruan track and trace system.
- Number of stops and less-than-loads decreased.
- Tractors assembled at RCDC and immediately put into shipment inventory.

Ruan Results

- On-time delivery rate of 99 percent.
- · Reduced transportation costs.
- Satisfied Bobcat dealers.
- Efficient management of outbound product and inbound materials.
- Bobcat and Ruan business growth through partnership.

NEW OPPORTUNITIES

In 2008, Bobcat launched a new line of compact tractors. The tractors are manufactured in South Korea, and Bobcat needed to find a place for the final assembly of the machines. After looking at various other options, the obvious choice was to ship the tractors to the RCDC and have Ruan assemble them there. Bobcat engineers designed and installed the assembly equipment, and then trained employees hired by Ruan to assemble the tractors. Assembled tractors are immediately entered into inventory to be shipped, decreasing the time it takes for tractor orders to fill.

Three years into this partnership, Bobcat continues to see that the logistics Ruan provide pays off. "As we were shipping more and more product, and our product line had grown, things were changing," says Atkinson. "It was even more important to consolidate the product and get it delivered to our dealers in more consistent shipments with less damage. Ruan has enabled us to do that."

"We're here to listen to our customers and customize solutions for them. We work shoulder to shoulder with our customers and constantly analyze what we can do to perform better."

— John Bobleter, general manager, Ruan Consolidation and Distribution Center





