

Werner Electric Supply  
Achieves **99.9% Accuracy**  
**and Zero Backlog**  
with TECSYS

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CASE STUDY

# Werner Electric Supply

## INDUSTRY

Industrial distribution

## THE CHALLENGE

Werner Electric Supply's distribution center holds some 28,000 items in inventory, with 30% of its customers are contractors, 30% industrial and 20% MROs. Having a warehouse operation that delivers value-added services & order fulfillment cycle in less than 24 hours in a fierce competitive landscape is a major challenge.

## TECSYS' SOLUTION

Warehouse Management, Transportation Management & Business Intelligence. Users are leveraging TECSYS' supply chain platform extensively to adapt the system on the go to their ever changing needs and deliver real value to their customers.

## THE BENEFITS

99.9% accuracy

Achieved a zero order backlog at the end of each day

Secondary packing process eliminated

The ability to make adjustments on the fly

The ability to continuously improve

Increase in accuracy to

**99.9%**

Order backlog at the end of each day

**0**

« As a wholesale electrical distributor, we are focused on the customer. We try to add value to products delivered to small customers or large customers. In our industry, competitors, most of the times, are selling the same products or comparable ones, so there is no competitive advantages with just selling products. What we really strive in our operation is to extend unique services that will put us ahead of our competitors. »

**Kyle Arndt**

Value-Add Engineer at Werner Electric Supply



## ABOUT WERNER ELECTRIC SUPPLY

Werner Electric Supply's story is defined by progress. From its modest beginnings in 1948, the Company has grown to serve the needs of its loyal customers and valued partners. While more than 400 employees today provide diverse, high quality products and services for businesses throughout the entire state of Wisconsin, Michigan's Upper Peninsula, and North Dakota, it all started with just one man in a small shop in Neenah Wisconsin. Werner Electric Supply provides electrical, automation, and data communication products and services for a wide range of industrial, commercial, and construction customers.

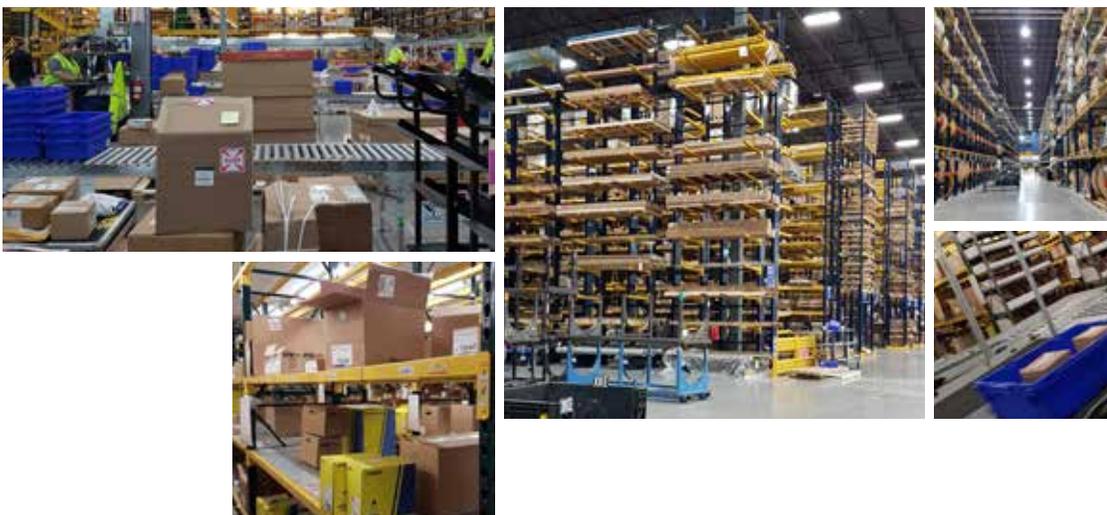
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**400**  
*employees*

**28,000**  
*items in inventory*

## WERNER ELECTRIC SUPPLY'S UNIQUE VALUE PROPOSITION

At Werner Electric Supply, the Company's customer focus helps it go above and beyond customer expectations. Werner Electric Supply invests in continuous employee training on up-to date industry trends, which allows the organization to provide innovative solutions.



## CHALLENGES

Werner Electric Supply's distribution center holds some 28,000 items in inventory. This includes everything from nuts and bolts to 20' conduit lengths and 7,000-pound reels of wire on the electrical supply part of the business. It also includes items such as drives, PLCs, actuators, push buttons, and safety equipment on the machine control automation part of the business. Having a supply chain with a warehouse operation that delivers value-added services in a fierce competitive landscape is a major challenge.

Operationally, Werner Electric Supply has two different main types of customers: contractors and industrial customers.

Contractors

**30%**

30% of Werner Electric Supply's customers are contractors. Contractors order either late in the day and want it to be delivered the same day or as early as possible in the morning to avoid any downtime. Werner Electric Supply sells a lot of 10-foot and 20-foot long sticks of pipes, or conduits and custom links of cut wire to contractors.

Industrial customers

**30%**

30% of Werner Electric Supply's customers are industrial suppliers and OEMs, and 20% are maintenance & repair operations. The rest is a mix of government entities, integrators and the like.

***“Our fulfillment cycle is getting shorter, which means we are accepting orders later and later in the day, and our customers want their orders delivered earlier the next day. Every order that we put in our system by 8 p.m., it is picked, packed and transferred to our branches where they do the local delivery. Our contractor customers are requesting delivery earlier and earlier. As for our industrial customers, typically they have a receiving department; their orders can be delivered a little bit later,”***  
***said Arndt.***

## WMS VENDOR SELECTION CRITERIA

ROBUST WMS	AGILE PLATFORM	SPECIFIC ABILITIES	NEW EMPLOYEES FRIENDLY	EXPERTISE AND SUPPORT
Robust WMS with proven track record	An agile platform that is easy to work with and use	<ul style="list-style-type: none"> <li>• Handle automation in the warehouse</li> <li>• Solve the wire cutting inventory management challenge</li> <li>• Handle multiple unit of measures for a given item</li> <li>• Support value-added services to clients</li> </ul>	A system to help Werner Electric Supply shorten the time to bring onboard new employees	Rich supply chain expertise and support services as an extension of Werner Electric Supply's organization

## WIRE CUTTING

**“The wire cutting process is very unique in the WMS world,” stated Arndt. “That was definitely an area of focus when we were looking at a WMS, where a supplier can help us systematically capture what we are trying to do with the wire cutting process.”**

Wire Cutting Challenges:

- 1.** Locate the type and grade of wire needed
  - 2.** Locate the reel available with the shortest wire closest to the customer order
  - 3.** Follow and comply with the footage marking approach
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In the WMS system, Werner Electric Supply needed a way to identify the wire that has what is called “footage marking”, so certain wires have at least two-feet labeled with a footage marking. For example, if 100-foot is needed and if the reel started at a footage marker 200, reaching a footage marker 300 is where the wire should be cut. With these markings, it reassures customers that they are getting exactly what they have ordered and enables Werner Electric Supply to achieve improved order accuracy and avoid any waste. The ability to track those footage markings within the pick is a very unique solution in the industry.



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***“Our wire cutting process is unique in the sense that we cannot ever pick a wire short. For example, if the customer orders a 100-foot wire, we cannot give them 90-feet and the next day, give them the remaining 10 feet. It is not like dealing with parts inventory that you can count and do split orders. We had to do a bit of modification in the system to be able to find the shortest length of wire across many types. Our goal is to use the shortest length of wires, the shortest one in stock that matches the customer order. So, if a customer orders brand A of a cut wire, in stock we may have 10 or more different lengths to that cut wire, and we would want the system to grab the shortest length to fulfill that required length by a customer,” commented Arndt.***

## **ITOPIA® - TECSYS' SUPPLY CHAIN PLATFORM**

Werner Electric Supply has significantly leveraged iTopia, TECSYS' supply chain platform, in their wire cutting operation. It is likely one of the best examples of how iTopia can be used to deliver real functionality and value to distribution operations.

"None of the WMS vendors solicited had a solution out of the box. When TECSYS came in for the demo, they were able to explain what the solution could look like; they showed how it could work within their system. TECSYS' ability to be creative and come up with that solution, or at least the philosophy behind the solution during the demo process was a big factor to decide in favor of TECSYS," said Arndt.

## **WHY TECSYS**

From a trend perspective, Werner Electric Supply continues to see more and more unique items that require special handling for their customers, such as packaging, information on content and special labelling, and they needed a system that can systematically handle those unique requirements

"With the TECSYS Supply chain platform, the personalization and the customization that can be done was a big factor in the solution selection process," commented Arndt.

Furthermore, Werner Electric Supply philosophy on their Information Technology department is to stay a little bit leaner than most companies. They definitely leverage the ability to have TECSYS help do some of the work, in particular the integration between TECSYS' WMS with Werner Electric Supply's ERP and Dematic's automation system.

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***"When we present an opportunity or problem to the folks at TECSYS, they are able to give us a creative solution. Their first thought is "how can we do this with iTopia" rather than suggesting a modification to the system. We have a leaner IT shop, we don't want to have many IT people in place, we would rather work within the base system as much as possible," commented Arndt.***

## MULTI-LEVEL PICK MODULE – AUTOMATION

Designed to handle some 80% of the volume, Werner Electric Supply's pick module system combines dynamic rack systems with conveyors and other flow components to increase productivity and decrease costs for broken pallet or broken carton order-filling operations. A multi-level module that allows for dense storage of products, reduced material handling, and the ability to quickly fulfill customer shipments with multiple SKUs. It is key to Werner Electric Supply's efficient distribution, it consists of reel rack, cantilever rack, selective rack, and safety guardrail, as well as rack design.

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*“Right now about 60 to 70% of the picks in the warehouse come out of the pick module. So, of our average 5,000 lines picked a day, 3,000 to 3,500 of those picks come through the conveyor in the pick module. The system is designed to pick even more and our current goal is to increase that number, as it is our most efficient way of picking,” said Arndt.*

### BENEFITS

**99.9%**

#### WIRE CUTTING ACCURACY

- One of the biggest improvements after implementation of the TECSYS solution was the wire cutting accuracy, currently reaching 99.9%. There is virtually no waste, under cuts or over shipments. All the work done with iTopia is paying big dividends.
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#### CUSTOMIZATION ON THE FLY

- The ability to make adjustments, personalization, and customization on the fly as needed. The platform gave Werner Electric Supply the ability to continuously improve.
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#### ZERO ORDER BACKLOG

- Achieve a zero order backlog at the end of each day.
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#### SECONDARY PACKING PROCESS ELIMINATED

- The zone route, pick and pass, pick module, along with TECSYS' warehouse management system and a weigh scale to capture picking errors, eliminated the need for a secondary packing process.
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## MOVING FORWARD

- A vital part of Werner Electric Supply's goal is to double sales to \$500 million by 2020; having a fluid, virtually error-free system goes a long way to help accomplish this goal.
- Same-day deliveries, expanding that even more; reaching more customers and more markets with that service is an ongoing goal, and the system provides that facility today.
- The shorter fulfillment cycles, ordering later and getting deliveries on time, and the ability to give Werner Electric Supply's sales team longer order-entry time, yet still meet the early morning deliveries.
- When a customer orders from Werner Electric Supply and their competitors, Werner Electric Supply's goal is to be the first to deliver.

***"Our vision is to be the most dynamic and customer-focused electrical distributor in the nation. Our partnership with TECSYS is providing us with the technology platform and expertise to unlock the strategic potential of our supply chain to gain significant edge in our competitive profile and achieve our vision objectives."***

***Lloyd Fabry, Director of Operations, Werner Electric Supply.***



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