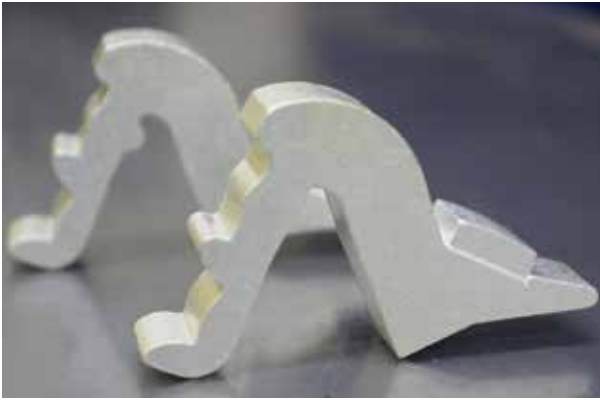


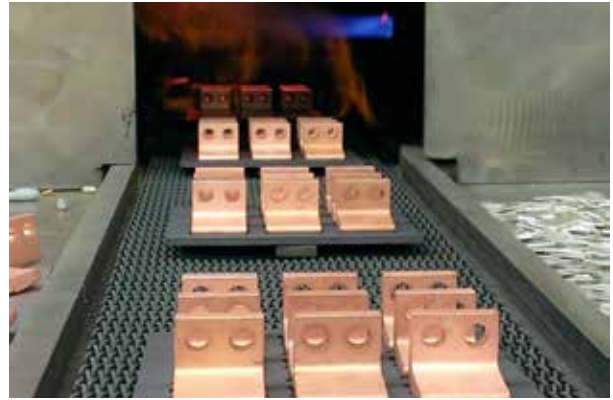
GLOBAL SHOP SOLUTIONS CASE STUDY

Hoyt Corporation

Headquartered in Englewood, New Jersey, *Hoyt Corporation* manufactures precious metal contact materials and contact assemblies for the *electrical industry*. Its main product is the production of materials consisting of silver or copper combined with high density refractory elements of tungsten or molybdenum, as well as materials containing nickel and graphite in varying compositions using powder metallurgy production processes.



Hoyt's finished silver plated electrical contact assembly.



Furnace brazing of contact assemblies on Hoyt's shop floor.

These products are generally used for low- to medium-voltage applications found in the power transmission and distribution markets, including load tap changers for voltage regulators, circuit breakers, network protectors, and substation switchgear including cutouts, disconnects and automatic circuit re-closers.

Hoyt is recognized as the largest producer of contacts used for electric propulsion and controls for diesel locomotives, mass transit subway trains, light rail vehicles and electric mining vehicles, selling direct to both OEM markets and transit agencies in North America.

To support its vertical integration philosophy for manufacturing, Hoyt also operates a copper extrusion mill in Pennsylvania, which produces specialty shaped copper bars for use in their products, as well as direct sales to outside concerns.

For years, Hoyt managed the business with an early-generation computer system that never fully integrated with their operations. It offered a rudimentary costing system, and delivered production information in batch process format rather than real time, which led to inefficient work flow, poor on-time delivery rates, and other shop floor problems. After researching multiple ERP systems, management selected Global Shop Solutions ERP software.

"We wanted better visibility of data, and we needed to improve processes in many areas," says Joe Finnerty, Vice President of Sales and Engineering. "We looked at many different ERP systems, and Global Shop Solutions kept coming to the top because it offered so many features at one fixed price, including [Document Control](#), [Advanced Planning & Scheduling \(APS\)](#) and [Business Intelligence](#) software. Overall, the software was the best fit for our type of company."

30% Increase in On-Time Delivery

Hoyt ships many of its products in kit form, with each box containing a number of separate component pieces. Not surprisingly, customers prefer to receive all the pieces in one box rather than multiple shipments. However, due

On-time delivery rates that used to hover between 50 and 60 percent, now average above 90 percent on a consistent basis.

to the lack of data visibility in their old system, Hoyt constantly struggled to coordinate workflow so all the components would arrive for shipment at the same time.

“Almost every day, we had to wait on a job because a component wasn’t finished,” says Finnerty. “Our system couldn’t tell us where the component was or what step it was on. We couldn’t identify what individual operators were working or not working on. So we spent a lot of time wandering the shop floor tracking down the missing component.”

With Global Shop Solutions ERP software, staging work orders for on-time delivery has become routine. The person issuing the work orders uses APS to schedule jobs so everyone works on the same job on the same day. Plus managers can immediately see when a job is falling behind and take steps to ensure on-time completion.

As a result, on-time delivery rates that used to hover between 50 to 60 percent, now average above 90 percent on a consistent basis. Past dues, which were long an ongoing concern, have become the rare exception rather than the norm.

“We didn’t have all this data at our disposal before,” adds Finnerty. “Now we use it daily to keep everyone up to date on what needs to be done today. Visibility of data is driving Hoyt into the 21st century.”

Purchasing to RFQs Eliminates Inventory Shortages

Many of Hoyt’s larger customers either can’t or won’t provide accurate forecasts of upcoming orders. Although they usually allow for lead times of six to eight weeks, some materials required to make the components also have long lead times. With Global Shop Solutions ERP software, Hoyt can plan ahead for these situations by ordering raw materials before placing the demand in the system with the [Inventory software](#).

When a large order comes in, Finnerty immediately goes into the system to check on the availability of raw materials. If inventory levels are questionable, he begins ordering materials ahead of time – a process the previous system would not allow.

“In our old system we couldn’t create a purchase order without having demand for the materials in the system,” he explains. “With Global Shop Solutions, we can create purchase orders against the RFQ and order the materials in advance, which is especially helpful with long lead-time materials. The system also makes it easy to communicate with purchasing so that we’re both on the same page about what to order and when.”

Simplifying Quality Control Documentation

Having gotten scheduling, purchasing and on-time delivery under control, Hoyt is now focusing on improved [quality document control](#). In particular, they are working on attaching all engineering and quality documents to the inventory system so they can print complete work order packets directly to the floor for production and quality.

“In the old days, we printed out a document, filled it out by hand, and then put it back in the folder,” says Finnerty. “Once we complete the process of attaching the documents to the work order travelers, we’ll be able to review the inspection docs at each level without having to track them down in a file folder somewhere.”

“After quality control conducts a final review, we can log the data in the system and get rid of the paper because we don’t need it anymore,” says Finnerty. “That was another key feature of Global Shop Solutions that we didn’t see in very many of the competing systems.”

Unraveling 40 Years of Bad Document Control

Global Shop Solutions ERP software’s seamless inter-connectivity between all departments and users has transformed Hoyt’s ability to efficiently process jobs as they move through the shop floor.

Material moves through the building more quickly and gets tracked more precisely. Schedulers can more accurately predict job completion dates for improved order acknowledgement and expediting. The [Shop Floor Data Collection](#) stations capture labor time with remarkable precision for more accurate job costing. On the financial side, closing the books at month’s end has become faster and more efficient.



Assorted shapes of copper Hoyt extrudes in-house.

Global Shop Solutions ERP software has even simplified the order entry and invoicing processes.

“The software is helping me unravel 40 years of bad Document Control,” says Finnerty. “When a new order comes in, the system allows me to enter it the way I want to see. This includes all the descriptions, dates, and customer information – basically anything I want to put into the BOM, routing, inventory and customer databases. Once it’s in the system, it becomes a repeat order that doesn’t require anyone to re-enter the data.”

“Also, new orders never clear my desk until I make sure all the docs are correct,” adds Finnerty. “That way, when repeat orders come in we can put them right through because we know all the correct information is in the system. This feature is solving a lot of problems for us, mainly from a quality standpoint, but also in terms of purchasing raw materials. I can see where we’re purchasing and using materials inefficiently and change the sizes to better fit what we need to do.”

Real-Time Data Drives Continual Improvement

Hoyt’s first goal with Global Shop Solutions ERP software was to be able to take an order, make an order, ship it and get the money – quickly, efficiently, and on-time. Once accomplished, the company began focusing on [higher-level process improvements](#), such as improving the routing system and engaging in more sophisticated business analysis using the Business Intelligence module.

“In terms of day-to-day shop floor operations, going from batch processing to collecting real-time data made all the difference in the world,” says Stephen Avondolio, Technical Sales Engineer. “We can see what is happening anywhere on the shop floor at any time, and after job closing, we can see the actual times from production and determine if the estimates need to be adjusted. We also do a much better job of balancing raw material demand to our shop floor processing so we can get jobs out the door on-time almost every time.”

“Global Shop Solutions lets you do so many different things to improve processes, including creating [Crystal reports](#) to format data the way you want to see it,” adds Finnerty. “It even has translation capabilities, which comes in handy because not all of our employees speak English. We’ve made tremendous strides in data accuracy and production efficiency in only a year of using the software. I’m looking forward to seeing what we can do next.”