Compressing *Quality Time*

by:

Bill Manning
for AXIS Computer Systems, Inc.
201 Boston Post Rd.
Marlborough, MA 01752 USA
www.axiscomp.com

How a wire manufacturer got on the fast track to ISO certification with help from a management software supplier with focus on the wire industry.

Some companies achieve quality. Others have quality thrust upon them. **Fisk Alloy Wire, Inc.**, headquartered in Hawthorne, NJ, USA, clearly falls into the former category, achieving the coveted *ISO 9002* designation in near-record time.

An integrated manufacturer of specialty copper alloy wire, Fisk Alloy recognized early on the need to standardize its manufacturing processes to ensure production of the highest quality wire products for worldwide customers in the electronics, automotive and telecommunications industries. That meant meeting or exceeding the international manufacturing quality parameters codified in the *ISO 9002* standard.

A formidable task for many companies, attaining *ISO 9002* certification is the equivalent of passing the bar exam, an effort that is usually more difficult than one thought and too often requiring more than one attempt.

Fortunately for Fisk Alloy Wire, the company had the foresight five years earlier to choose an Enterprise Resource Planning/Manufacturing Execution Systems (ERP/MES) system from **Progress Partner AXIS Computer Systems, Inc.**, Marlborough, MA, USA.

That decision to choose the AXIS AXIOM/mx Open solution ultimately put Fisk Alloy on the fast track to ISO certification, says Fisk Alloy Wire's MIS Manager **Mary Mahoney**, and ensured that the company's quality certification goal became a given.

13 Columns & 31 Rows

"When I first started with the company there was no computer system to manage the business," says Mahoney, now in her eighteenth year with Fisk Alloy. "I had a pencil and data pads with 13 columns and 31 rows.

"That later evolved into a rudimentary computer system to track sales, which was followed by Excel spreadsheets and then a package known as Real World. Real World handled accounting and sales, but had nothing specific for manufacturers, and especially not for manufacturers in the metals industry, which has its own unique set of process requirements that have to be monitored."

Realizing that its business applications had to become as sophisticated as its growing markets and demanding customers, Fisk in 1995 searched with the aid of an Information Technology (IT) consultant for an ERP/MES system from the few vendors whose products looked like a possible fit. After eliminating several companies with similar modular but expensive solutions, others that were less expensive but not as adaptive and still other solutions that were inexpensive but too basic, Fisk finally decided on the AXIS AXIOM/mx Open solution as the replacement for its IT infrastructure.

The new solution provided metals-specific applications that finally delivered the integrated production and sales data that was needed. It also provided all-important bar coding capabilities that would allow the company to tag and track wire at the spool ID level, with its associated heat, chemistry and quality attributes. That also helped the company track product more accurately, assign it to particular trucks and customers and generate shipping documents (or orders not to ship if batches didn't meet quality specifications).

"We liked AXIS right away," says Mahoney. "It was the only company that focused specifically on the wire industry and understood what it is and how our needs were different from discrete manufacturing."

More importantly, AXIS was extremely flexible, a major plus for Mahoney, a computer *natural* with no formal training. "The good news for AXIS was that we were willing to change our business operational methodology in order to achieve our results," remembers the MIS Manager, who moved from sales to her current position in 1995. "The bad news was this was our first installation of a fully integrated program. But AXIS was extremely good about that, encouraging us to learn new things. And AXIS was always extremely supportive and sensitive to the requirements of the customer."

ISO Documentation Built-In

With a roster of international customers, Fisk Alloy Wire was compelled to subscribe to international quality standards to do business with them. That meant being able to compile and verify the extensive documentation needed to satisfy ISO auditors.

"The key focus of *ISO 9002* is how to guarantee to customers that they're getting what they ask for in terms of product quality, and the AXIS system has made that very easy," confirms Mahoney.
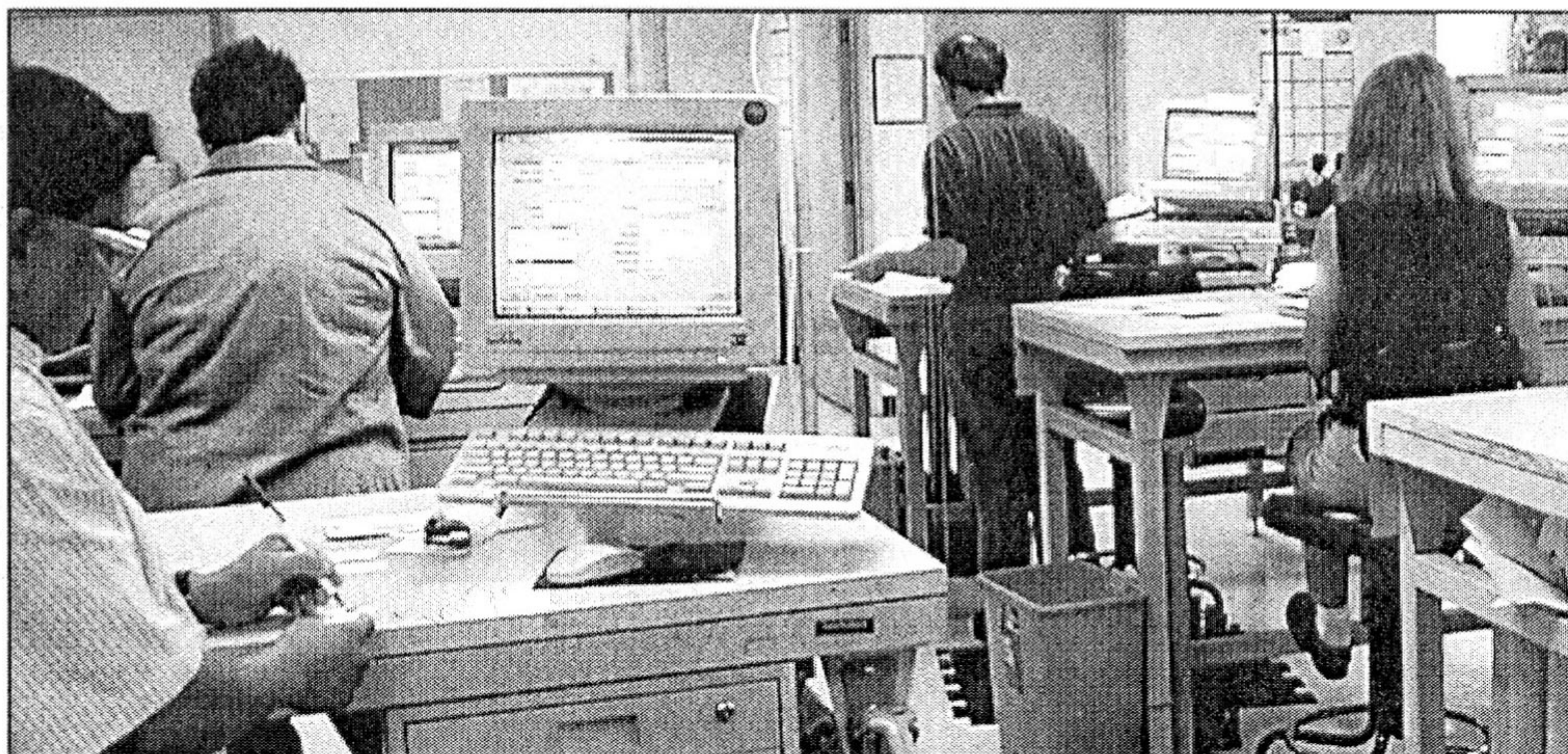
Personnel in the quality lab at Fisk Alloy Wire utilize AXIS AXIOM/MX Open.

"Because of its integrated, real-time tracking of process routings and bar coded part numbers, we can track all the critical quality parameters for customers on each of the products they order that go through our various manufacturing and testing procedures. More importantly, we can repeat it precisely.

"During the drawing operation for example, we test and verify that the wire is the correct thickness and length, and that the surfaces aren't marred. Different wire products require different tensile strengths, and the AXIS system keeps track of the results of the annealing process so that we know the hardness or softness properties of each individual spool of wire. The plated products require different plate thicknesses, which we monitor as we do many other processes using AXIOM's functionality."
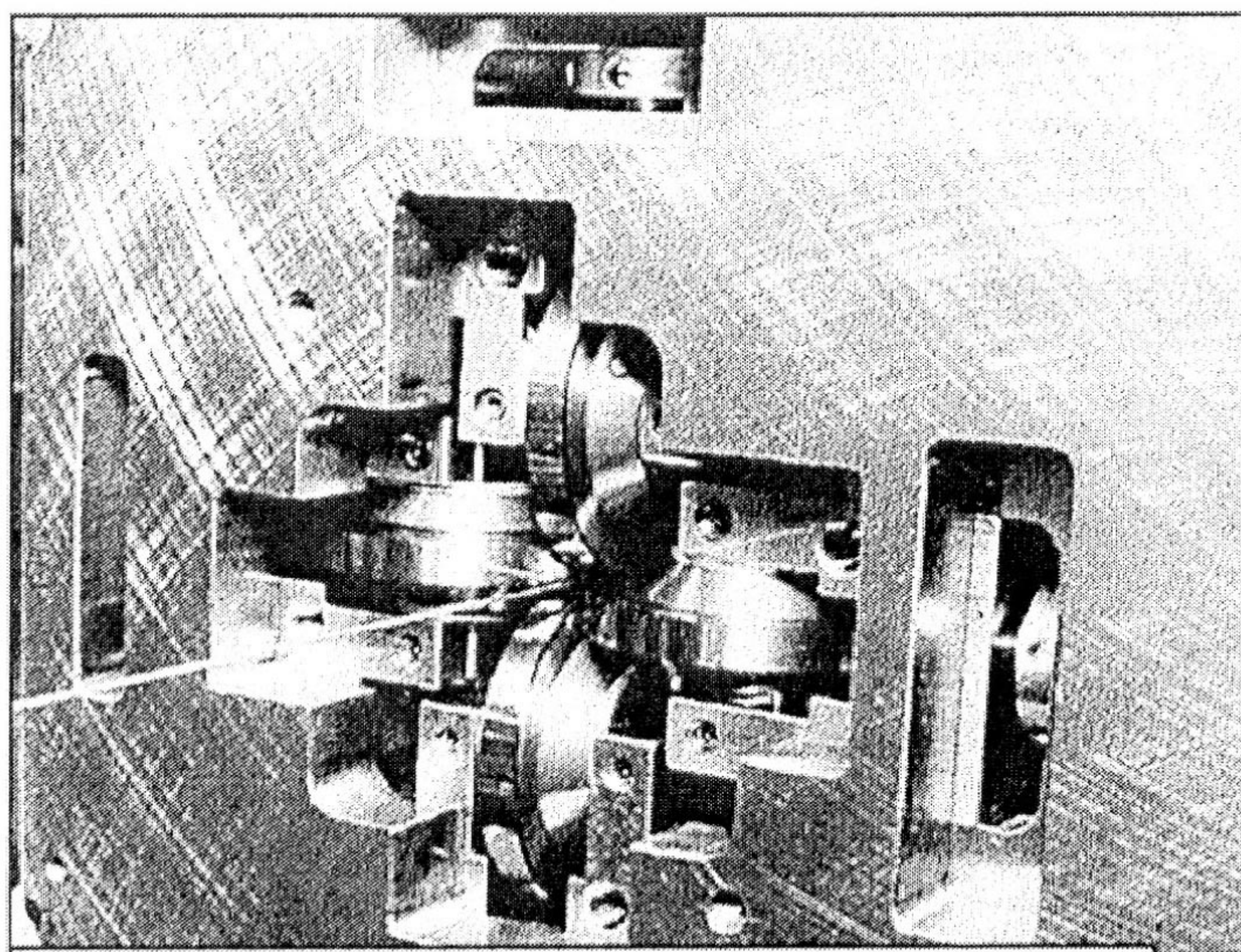
Turks head processing wire at Fisk Alloy Wire, Inc.

The extensive information that is collected on each product, contained in bar codes and consolidated in Fisk's database, turned out to be exactly the information that needed to be reported to ISO auditors. The company's procedures, work instructions and training manuals had also been entered on the AXIS system as it was being implemented, a fact that turned out to be another major timesaver that prepackaged all the necessary ISO information the company needed without hasty documentation fire drills.

"AXIS basically imposes order on our methodologies, so as a result it was fantastic in anticipating all the information and forms that would be needed to document our quality processes—we just wrote down what we knew we were doing," Mahoney remembers. "The fact that all the quality modules were already integrated into the system was, according to our Quality Assurance Consultant, in sharp contrast to other systems that only offer such modules as an add-on that may sometimes present integration problems. They were impressed and we were impressed."

And so, apparently, was the ISO auditor.

Starting in the Spring of 1999, Fisk and the Quality Assurance Consultant reviewed the company's operations and documentation. With very little fine-tuning, the company was ready for audit in May of 2000. And upon first audit, Fisk was certified to the *ISO 9002* standard.

According to Mahoney, "Prior to AXIS, we would have had to reconcile quality ratings using handwritten shop floor entries as well as run the basic business using spreadsheets from the sales and accounting departments. Now it's all integrated, automated and certified. And it was simple. AXIS does 90% of the work."

Making the Good Work Even Better

The flexibility and ease of use found in AXIS AXIOM/mx Open is in part the result of the powerful and sophisticated application development environment created by Progress development tools and the Progress 8.2b system that is now in place. That Progress technology foundation, combined with AXIS metals solutions expertise, have allowed Fisk to prosper and adapt to changing needs in a company where the MIS department is composed of one person—Mary Mahoney.

"The nice thing about Progress is that it's very user-friendly," Mahoney stresses. "When it comes to generating reports or creating ad hoc queries, it's easy to work with a person like myself who could write Excel macros, but who isn't a programmer. But I've become proficient at modifying report programs now because the code is so well written and AXIS encourages their customers to do that."

That ability to tweak applications and write customized reports has helped fine-tune the day-to-day operations at the 100-employee company that boasts a small but muscular IT infrastructure. Mahoney has created an integrated shop floor/back office network. That network connects approximately 70 employees using 25 PCs in the corporate office and eight dumb terminals strategically distributed on the shop floor and shared by plant workers. Two servers, an SCO Open Server 5 UNIX server and a Novell 4.11 server, drive the desktop systems and AXIOM/mx Open 2.5.2 application.

"The workers," recalls Mahoney, "were very supportive when the new software system was introduced. In fact, during its implementation they were an integral part of the effort that identified what worked, what didn't and what the system ultimately had to do for the company to operate more efficiently and later reach its ISO certification goals.

"They all learned that the integrity of the data is everything and they all bought into the need for a system that could protect it to ensure quality operations at every step of manufacture. And when we turn our attention to establishing an eBusiness presence, I'm sure we'll all learn that AXIS and Progress will be able to provide equally good solutions that will address our needs in that area too."

To receive additional product information on the AXIOM/mx Open solution with focus on the wire manufacturing industry, contact **Keith Berg**, Sales, at AXIS Computer Systems, Inc. or **Circle 202**.   **WCTI**

Company Profile...
AXIS Computer Systems, Inc., *provides a comprehensive business solution that integrates the management of sales orders, materials, production, scheduling, cost and finance. It is reportedly the only integrated solution designed for the unique needs of the wire and cable industry.*