



ISO 9001

# The ISO 9001 Quality Management System is well worth the effort

BY MIKE MURPHY

J.R. Clancy's team raises the bar on customer satisfaction

## What is ISO 9001?

THE INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO) is a non-governmental worldwide federation formed of the national standard bodies of its member countries. Founded in 1946, ISO is based in Geneva, Switzerland and is comprised of over 180 countries. The American National Standards Institute (ANSI) is the national standard body representing the United States to the ISO. The mission of ISO is to "promote the development of standardization and related activities in the work with a review to facilitate the international exchange of goods and services, and to developing cooperation in the spheres of intellectual, scientific, technological, and economic activity." As a result of work performed by ISO, international agreements were published as International Standards.

The two main themes of ISO 9001 are: Customer and Improvement. The ISO 9001 standard is written with a Customer Focus. The focus begins with first determining what the requirements of the product or service are, and then planning and implementing systems to deliver on those requirements each and every time.



Currently J.R. Clancy associates are sporting the "Just Try It" button and fleece as a continuous improvement reminder.

The aim of meeting these requirements is Customer Satisfaction. The second theme of improvement is throughout the entire standard. The idea behind improvement is: "let's not continue to do things the way we've always done them, just because that is the way we always did them." We want to challenge ourselves in every area of our business to find ways to make ourselves better. Whether it is in our order taking process, or our customer communications, or our drawing development, or shipping, the entire organization looks to find ways of improving our products, our processes, and our people.

## How did J.R. Clancy pursue ISO?

Bob Theis, J.R. Clancy's CEO and President, and I felt it was important for the company to have a structured quality management system in place. After attending a regional Malcolm Baldrige Award Conference and listening to companies that achieved this honor we knew we wanted to implement a quality management system. We understood that the ISO 9001 Quality Management System standard is the internationally recognized standard used in the manufacturing industry. Since we are an international company, we decided to use ISO 9001 as a model to build our quality management system. We hired an outside consultant who was knowledgeable of the ISO standard and its application to a custom design and manufacturing company to assist us in this process.

J.R. Clancy's history of producing quality equipment dates back to 1885. We knew we made a quality product, but we also knew we have areas for improvement. We spent a lot of time doing final inspections, and doing subsequent rework to ensure the products that we delivered met our quality standards. We wanted to minimize those rework costs and delays, and one of the first things we did was empower all of our associates to be responsible for their own work products. We began a "Check It" campaign throughout the entire company. At first we were trying to push the checking and verification at the production associate level. This resulted in the associates recognizing when their piece of the end product was right or wrong, and they began to learn from their mistakes, and learned to "do it right the first time."



The "Check It" button was worn by all associates to effectively launch the awareness campaign to remember to check every detail.

responsible for both making it happen, and the solution for preventing it from happening again, are brought together to brainstorm the causes for the issue and the solutions.

We instituted internal audits where a cross-functional team of associates go out and check ourselves. We check to see "are we really doing what we say in our procedures?" Sometimes we find the answer is "no." When that happens we issue a CAR to

## We want to challenge ourselves in every area of our business to find ways to make ourselves better.

This campaign fed back into the engineering design process, where each designer was responsible for checking their own work products (drawings, bill of material) to improve the quality of our engineering output. This "Check It" campaign continued through the sales and project management elements of our business. This resulted in a culture where all 50+ associates were quality conscious.

Once we established the culture, we then needed to get everyone involved in the process. All associates were involved, at one time or another, in the development, review, or revision of our documented procedures. How? We held a series of "brainstorming sessions" where the people that did the work developed their procedures. These sessions were sometimes held in the conference room, sometimes at an off-site training center, and many times, right on the floor, where the work was being performed. This created a sense of ownership in our documented procedures.

We then established a CAR (Corrective Action Report) system that we used to identify when we did not produce our product correctly or we didn't follow our own procedures. At first, the concept was a little difficult to comprehend "you mean you want me to admit when I made a mistake?" The answer was "Yes, so that you and the rest of the organization can learn from it." The success of the CAR system at Clancy was primarily due to our "safe" culture that exists that there are no personal retributions associated with a CAR. Our motto is "It's the process, not the person!" Today, when a CAR is identified, the people that are

understand why we are not following procedure and develop a plan to get ourselves back aligned with our procedures. Many times, procedures change because we make improvements and efficiencies in the way we do things, but need to get our documentation updated to keep up with that improvement. Other times, we need to conduct training or develop reminder checklists, to ensure personnel are aware of their procedures and able to follow them.

In addition to our Corrective Action System, we have additional systems to drive continual improvement throughout our organization. Our Preventive System is geared toward identifying those areas that have the potential to cause a problem in the future and taking action now to prevent them from occurring.

Our C-Power (Clancy-Power) System allows our associates to make recommendations for improvement regarding our products, their own work area or procedures, or company-wide processes or procedures. Our management team holds a monthly review of new C-Powers and assigns each a letter grade, depending upon its value and positive impact to the organization. To reward the associates for their input, they receive a monetary reward for the C-Power, depending upon the grade it receives.

Our P-Power (Partner-Power) System is used for our Dealer Partners to make suggestions for improvement to our products, our services, or our processes. These suggestions are collected through our Dealer Partner Satisfaction Surveys, comment cards, Partner visits, shipment and installation calls, etc.

Quarterly, our Management Team conducts an intensive Management Review meeting where several performance metrics are reviewed to gauge how effectively our systems are working. During this review, if the data demonstrates a trend in a particular area, preventive actions are taken by the management team to address those areas before a systemic problem occurs.

### Everyone is involved in ISO

As the ISO 9001 Management Representative, I am responsible for the development, implementation, and continual improvement of our ISO 9001 Quality Management System. Obviously, I cannot do it alone; it takes the entire organization, working together, to achieve our goals. As a requirement of ISO, I am responsible for reporting to our management team the status of our management system. This is accomplished through quarterly management review meetings. At these meetings we review detailed information about the performance of our system, including audit results, customer feedback, process performance and product conformity data, status of corrective and preventive actions. We also review changes to the system, resource needs, and recommendations for improvement to our products, our processes, and our people. As Management Rep, I am also responsible for communicating the importance of meeting customer requirements throughout the organization. We accomplish this through our company-wide lunches, departmental goals and action plans, distribution of our "quality cards," and letters to each associate's home that discusses a different "quality" topic and emphasizes our company mission of active involvement with our Partners.

We learned from our visit to the Malcolm Baldrige Awards and other companies that in order for this program to succeed we would need sustained commitment and leadership from management. This includes investments in consultants, associate training, continuous process review and refinement, and frequent and meaningful "Dealer Partner" evaluation and feedback. Our management team demonstrates this commitment by being personally involved in our quality management system, whether it is reviewing CARs or C-Powers, or communicating with our associates, to actively participating in our management review sessions.

This commitment flows throughout the entire organization by reinforcing the importance of everyone's role within our organization. In turn they understand the importance of their role within our quality system and they take pride and professionalism in their work.

Early on, we realized that in order for Clancy to be successful, our Partners needed to be successful. We re-defined our company mission as MOPS: "Making our Partners Successful." Our Partners

## This commitment flows throughout the entire organization by reinforcing the importance of everyone's role within our organization.

include our Dealers, our key suppliers, consultants, architects, and ultimately the end-users of our products. Throughout the year we solicit feedback from our Partners through the use of satisfaction surveys, comment cards, call reports, and Partner visits. Through the use of these mechanisms we ask our Partners to give us their honest feedback on how we are doing. We quantitatively measure our Partner satisfaction through our surveys.

Additionally, we recognize that a key component of Partner Satisfaction is for us to supply our Partners with on-time, complete, and correct (OTCC) products and services. When we started our ISO effort, we only measured on-time. This was pretty standard in the manufacturing industry. But what we found was that, we could be on-time, but our partners were still not satisfied if they received the wrong parts, or were missing parts, or had problems with the equipment. So, we decided to add in the "correct and complete" to our goal. This is a harder goal for us to meet, but it was important to us to "raise the bar" again. The result is that we now measure our OTCC monthly and quarterly review our results with all associates at a company lunch. If we meet our defined goals for Partner Satisfaction and OTCC for the quarter, every associate receives an equal monetary reward because we recognize that it is not just production personnel that make the OTCC and Partner Satisfaction goal. Everyone, from sales, engineering, project management, accounting, purchasing, receiving, shipping, and production all equally contribute to these company-wide goals.

Recently we established our Extraordinary Guarantee which financially reinforces our commitment to Partner Satisfaction. If our Partners are not completely satisfied with our products or services, they may alter their invoice to compensate for the issue they felt was unsatisfactory.

We recognize that for us to meet our on-time, complete, and correct (OTCC) goals, we must rely on key suppliers to provide us materials, products, and services that are on-time, complete, and correct. So, we track our suppliers' OTCC and when our suppliers

have a problem with delivery or the quality of the products they supply to us, we have a Supplier Corrective Action Report (SCAR) System to address those issues. A SCAR is issued to the supplier that describes the nature of the problem we encountered and asks them to find the cause to the problem and a permanent solution to prevent it from happening again. This system not only helps Clancy in assuring the materials we receive will be acceptable, it also drives improvements in our suppliers' organizations.

### The benefits of ISO Certification

From the start of our brainstorming sessions to our successful certification audit, our ISO effort took approximately 18 months. We are certified by an accredited registrar that makes sure, through required yearly surveillance audits, that we are in compliance with the ISO 9001 standard and that our continual improvement loop is working. Each year, we learn something new from our third-party auditor to drive further improvements in our system.

For me, the best benefit of ISO is the continual improvement element. We are constantly improving what we do. We know that we are not perfect; we know we will make mistakes, but we have a defined system to address those mistakes, and as a result, improve. Our goal is to catch those mistakes before they get to our Partners. Whether they are order errors, drawing mistakes, or product issues, we track each of those and monitor how many we caught internally, and how many we missed, and were caught by our Partners. Regardless, each of those mistakes is handled through our CAR system to prevent them from recurring.

In addition, by having our business processes defined, ISO makes us more effective and efficient. From a training perspective, new employees are guided by the documented procedures. From a management perspective, we rely on our procedures being implemented consistently, regardless of the job or the Partner.

We have absolutely seen a return on our investment in increased productivity, reduced rework, and improved customer satisfaction and loyalty; but we are not done yet. Each time we reach a level of improvement, we raise the bar. In addition, we listen to the voices of our Partners. Last year we heard from our Partners that timeliness of drawings was an issue for them. As a result, this year we are working on reducing our drawing lead times, understanding our Partner's drawing requirements, and tracking our ability to meet those agreed upon drawing submittal deadlines.

### ISO for the future

We will continue with ISO and, unlike other "Quality Management Systems," I don't think ISO fades over time if you keep up with the continual improvement loop and remain certified. I believe for us

At first, the concept was a little difficult to comprehend "you mean you want me to admit when I made a mistake?"

that ISO was a maturing process within our organization and has become the backbone to our culture and our mission of "Making Our Partners Successful." We now have a solid foundation of quality management which was our goal when putting ISO in place. From this foundation we have now begun to work on implementing lean techniques which we hope will further drive efficiencies in our process. ■



**Mike Murphy**, Executive Vice President of rigging company J.R. Clancy, has been involved with Stage Rigging for over 30 years. In addition to his many day-to-day tasks, he is also Clancy's ISO Management representative, making him responsible for the development and implementation of Clancy's quality management system. 2010 will mark J.R. Clancy's 125th anniversary.