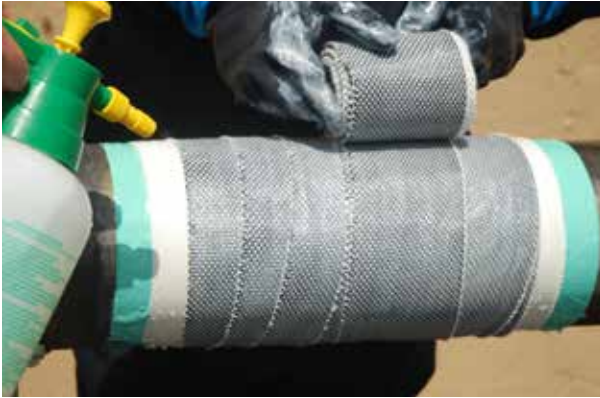# ClockSpringINRI

ClockSpringINRI is a leader in the research, development, engineering, design and manufacturing of pre-impregnated and field-saturated composite strengthening systems that restore, protect and reinforce pipes, pipelines and civil structures.

An oil & gas transmission line in the rainforests of Ecuador was hit by a falling tree. The entire Viper-Skin™ repair was completed within hours and enabled the pipeline to resume full operations.

Syntho-Glass® XT was engineered to provide structural strength and leak sealing to prevent a refinery from an unexpected shutdown.

Founded in 1982, ClockSpringINRI serves a broad range of markets, including construction, industrial, marine, military, mining, municipalities, offshore, oil and gas distribution and transmission, and refining and petrochemical. From leak repair and pipeline integrity solutions to corrosion protection, corrosion repair, coating repair and mechanical reinforcement, ClockSpringINRI solutions help restore and protect degrading or failing assets at a fraction of replacement costs.

Headquartered in Riviera Beach, Florida, with offices in Texas, Oklahoma and Poland, the privately-held company focuses on developing and engineering moisture-curable carbon fiber, fiberglass, Kevlar® and other aramid composite solutions. ClockSpringINRI can retrofit and reinforce defects and anomalies to original specifications, and can repair and reinforce pipelines or civil structures while they remain operational, saving clients millions of dollars in costs and lost revenues.

Prior to implementing Global Shop Solutions ERP software, ClockSpringINRI used an old system that offered little more than basic inventory management and financial capabilities. Lacking a comprehensive business management system, company ownership began exploring different ERP software packages. After reviewing several leading vendors, ClockSpringINRI purchased Global Shop Solutions ERP software in late 2012, and went live with the software in March 2013.

"In addition to Global Shop Solutions' robust capabilities, we really liked the simple, intuitive user interface," says Chris Lazzara, company President and son of ClockSpringINRI founder Richard Lazzara. "The screens are easy to read, and the buttons and menu options are designed to quickly get you where you want to go in the system to find the information you want."

Accurate Job Costing

Given the limitations of their old system, determining job costs with any degree of certainty presented an ongoing challenge for ClockSpringINRI. With Global Shop Solutions ERP software, it's a different story.

Global Shop SOLUTIONS
ERP SOFTWARE

Thanks to Global Shop Solutions ERP software's ability to track every aspect of a job – from the cost of raw materials to labor (direct and indirect), machine usage, overhead, and more – ClockSpringINRI can now determine the true cost of every job as soon as a product is completed. Lazzara and his team can also determine other important production management metrics, such as available capacity, time to complete a job, and inventory accuracy, with remarkable precision.

"A large part of my job involves making business decisions based on understanding where our efficiencies and inefficiencies are and how we can improve on them," he says. "Global Shop Solutions gives us solid data that we can rely on, and it does it in real time. Overall, visibility of data is by far the biggest benefit we've gotten out of the system."

Making the Invisible Visible

Visibility of data – the ability to see what ClockSpringINRI was previously unable to see – has transformed the way jobs are managed from beginning to end.

With Global Shop Solutions ERP software, ClockSpringINRI can track the entire job quoting process, from customer to conversion. Management can view conversion ratios in one-standard, all-encompassing format. The ability to see capacity utilization days or even weeks in advance enables a more proactive approach to managing incoming sales orders. On the purchasing side, visibility of historical costs has dramatically improved the ability to understand and manage gross margins.

"Running the purchase price vantage report allows us to see what we bought a part for in the past and what it costs now," explains Jordan Griffith, Vice President of Operations. "This helps us make better purchasing decisions and gives us a much clearer picture of our gross margins.

"With Global Shop Solutions, we can narrow gross margins down not just to product lines or categories, but to individual products," says Griffith. "That way, we can understand our efficiencies and either change our manufacturing methods or reduce inefficient products and focus on higher-margin products. The visibility of data in Global Shop Solutions makes us more efficient at manufacturing and gives us the ability to make those kinds of decisions."

Scar-Guard™ application on multiple welded field joints of a 24" OD natural gas pipeline located in the USA.

Integrated Quality System

According to Lazzara, integration of the system comes in a close second to visibility of data, particularly in the area of quality control. Instead of being a separate process that occurs after the fact, quality management is now an integral part of the job production process. And it all happens in Global Shop Solutions ERP software.

"For example, we create all NCFRs – whether due to a vendor or manufacturing defect – in the system through work in process and inventory," says Lazzara. "Using ISO and Global Shop Solutions, we then determine whether we need to do a cause and corrective action or a rework. If we need a cause and corrective action, we do it through Global Shop Solutions. We do root cause and analysis through Global Shop Solutions. And we do the closing of that card on corrective action through Global Shop Solutions."

"As a result, we now have increased visibility around the true cost of quality to our organization," he says. "Not just what it costs to remake a part, but our total cost of quality. Which means we now know what we're really spending to manufacture our products. In the past, we could track scrap and things like that, although not as accurately as we do now. But until we got Global Shop Solutions, we could not determine overall cost of quality."

Global Shop
S O L U T I O N S
E R P   S O F T W A R E

Employee Incentive Program

By simplifying shop floor and backroom admin processes, Global Shop Solutions ERP software helps employees at all levels of the organization work more efficiently and effectively. But as ClockSpringlNRI has discovered, Global Shop Solutions ERP software's ability to track job performance data can also assist with the development and implementation of employee incentive plans to further boost productivity.

Since implementing Global Shop Solutions ERP software, ClockSpringlNRI has instituted a three-tiered bonus program for production workers. Tier one measures quality. Tier two measures reliability (efficiency and absorption). Tier three measures integrity, defined as having no procedural or ISO errors and a clean work area. When workers hit performance goals in all three tiers, they receive a bonus at the end of the month based on how many hours they worked.

"We use Global Shop Solutions to track the quality, efficiency and absorption performance of each technician on their machine," says Griffith. "We also check their ISO procedures and make sure they use Document Control to have the right documents in place, issue the correct lot numbers to the job, and things like that."

"Employees like getting extra cash in their pockets," says Griffith. "We like it when they hit the targets because it means we're improving efficiency and productivity. And we know the data is accurate, so we don't have to worry about paying out for results we didn't actually achieve."

Competitive Focus

As senior managers, Lazzara and Griffith make extensive use of Global Shop Solutions ERP software's Dashboards, which provides a quick, high-level snapshot of the company at any given time. Lazzara focuses mainly on financial and sales data, keeping closes tabs on sales backlog, margins, and profitability. Griffith directs his attention more toward production issues, such as comparing direct versus indirect labor time and absorption rates. He also regularly reviews inventory values to keep carrying costs at a minimum.

Both agree that in today's fiercely competitive manufacturing markets it all comes down to efficiency and cost of production – both of which depend on visibility of data.

"We've always been able to turn jobs around quickly," says Griffith. "But with Global Shop Solutions, we've improved our efficiency to that point that a rush order isn't really that much of a rush anymore. And because we now know the costs associated with every job, we can take rush orders with confidence in our ability to achieve the margins we need."

Technicians apply Thermo-Wrap™CF, a custom engineered high strength carbon fiber composite, on a 20" OD elbow of an offshore oil platform located in Brazil.

According to Lazzara, visibility of data does more than just simplify operations; it also creates competitive advantage.

"Having good visibility of our margins has allowed us to identify and focus on our core competencies," he adds. "That, in turn, has allowed us to simplify our offerings in the market to 10 to 15 products. We still accommodate customer needs beyond those core products. But now we can educate the customer on what it will cost before we take the sale, and then let the customer decide whether or not to make the product."

"At the same time, the efficiencies we have developed through Global Shop Solutions allow us to reinvest more money in the business," he concludes. "The more we deploy resources to their best and highest use, the more we can grow the business. The visibility of data in Global Shop Solutions allows us to determine where to invest our money to grow the business and get the best return on that investment."

Global Shop SOLUTIONS ERP SOFTWARE