CORRIGAN COMPANY, U.S.

Key Facts
Company: Corrigan Company
Website: www.corriganco.com
Country: U.S.

Key Benefits:
• Significantly faster and more accurate generation of shop fabrication spool drawings
• BOMs produced by Intergraph Spoolgen® have proven to be very helpful in the ordering process and in separating field material from shop material

Products Used:
• Intergraph Spoolgen®

CORRIGAN COMPANY FABRICATES 11,000 FEET OF PIPE FOR BREWERY WITH INTERGRAPH SPOOLGEN®

THE CHALLENGE

In 1896, John F. Corrigan founded his neighborhood plumbing shop, Corrigan Company, in St. Louis, MO. His guiding principle was to provide customers with quality work carried out by skilled craftsmen within a designated time at a fair and reasonable price.

Today, Corrigan Company is one of Missouri's leading full-service mechanical contractors specializing in plumbing, HVAC, refrigeration, and process piping. Its steadfast commitment to exceptional performance on challenging, quick-turnaround projects of every size has helped propel the firm to high levels of experience and capability. Corrigan addresses a wide range of markets and industries, including chemical, food, manufacturing, municipal, power, health, and education.

Fabricating complex piping systems for process plants is one of Corrigan's specialties. Whenever a new project is won, a key component of the construction process is generating fabrication spool drawings for the workshop. “We used to prepare these drawings by hand or by using AutoCAD,” said Dan Abbott, vice president of Corrigan's Design Engineering Department. “Electronic data was not available at the time from design engineers. We had to obtain dimensioned vendor drawings for every component on the project to prepare shop spool drawings. It was an arduous and time-consuming process to say the least.”

PROJECT OBJECTIVES:
• Prepare drawings using the 3D method with field scanning of existing conditions
• Implement a faster, more accurate process of generating shop fabrication spool drawings using Intergraph Spoolgen®
• Enable the automatic production of bills of materials (BOMs) to assist in ordering and sorting field and shop material
THE SOLUTION

In 2005, Corrigan won a contract to assist with the construction of a new brewery in St. Louis for Anheuser-Busch, one of the largest beverage producers in the world.

“Anheuser-Busch made the decision to prepare drawings using the 3D method with field scanning of existing conditions,” said Abbott. “The job was bid with instructions to the contractors to use intergraph Smart® Review. After Corrigan was selected as the lowest bidder, Anheuser-Busch suggested we use Spoolgen to produce the spool drawings for the workshop. It was a tool their contractors had successfully used before on other major construction projects.”

URS Washington Division, the engineering, procurement, and construction (EPC) firm on this project, supplied piping data files in the form of IDFs. Corrigan used Spoolgen and these files to print out a construction drawing of each line. The construction drawing was then divided into spools using Smart Review to determine the best position for field welds and field-fit welds.

The marked-up construction drawing was returned to the Corrigan Pipe Detailer, who used Spoolgen to produce the final shop pipe spools. The field engineer shop then gave spools a final review prior to submitting them to the fabrication shop. Next, the pipefitters in the field received the construction drawing and copies of the pipe spool drawings, along with color snapshots from the 3D model, as a guide for installing the pipe spools.

Spoolgen was used to fabricate more than 11,000 feet of above-ground and underground piping for carbon dioxide transfer and utility pipe at Anheuser-Busch’s St. Louis facility.

“Spoolgen has transformed our workflow,” said Abbott. “It is a significantly faster and more accurate process of generating shop fabrication spool drawings than using AutoCAD or manual drawings. The bills of materials Spoolgen produces are very helpful in ordering and separating out field material from shop material.”

ABOUT HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across manufacturing, infrastructure, safety and mobility applications.

Hexagon’s PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.5bn EUR. Learn more at hexagon.com and follow us @HexagonAB.