CASE STUDY: BRIGGS OF BURTON, UNITED KINGDOM





FACTS AT A GLANCE

Company: Briggs of Burton

Website: www.briggsplc.co.uk

Description: Briggs of Burton PLC as part of the Briggs Group is involved in the Brewing, Distilling, Beverage, Food, Pharmaceutical, and Health & Beauty markets, providing process engineering solutions for the world's leading companies. Briggs has wide experience of projects ranging from overhauls and upgrades to complete new high-volume greenfield developments.

Employees: 124

Industry: Brewing and Distilling

Country: United Kingdom

PRODUCTS USED

- CADWorx Plant Professional
- CADWorx P&ID
- CADWorx Steel

KEY BENEFITS

- Single point of data access
- Better collaboration between all disciplines
- Less on-site changes
- Time savings
- Short learning curve

BRIGGS OF BURTON COMPLETES CRUCIAL PROJECT PHASE FOR EUROPE'S LARGEST DISTILLERY

Intergraph® CADWorx® Plant Design Suite helps Briggs to successfully deliver a complex extension project on a COMAH site with the goal to improve productivity, efficiency, and safety

IDENTIFYING GOALS

BRIGGS

Briggs of Burton PLC is part of the Briggs Group, involved in the Brewing, Distilling, Beverage, Food, Pharmaceutical, and Health and Beauty markets. It provides process engineering solutions for the world's leading companies. In the international brewing and distilling industry Briggs enjoys an outstanding reputation with an engineering heritage that goes back over 270 years. Briggs supplies total capability – from brewhouse to warehouse – by offering leading technologies in mash conversion, lautering, mash filtration, and wort boiling.

Briggs was contracted by the Diageo's Cameronbridge grain distillery in Scotland to construct crucial parts in the complex Project Forth – an undertaking to increase the capacity from an already significant 65 million, to 105 million litres of alcohol per annum.

OVERCOMING CHALLENGES

Building an extension to the existing whisky distillery and maintaining production on the COMAH site, whilst improving efficiency, working safely, and reducing the carbon footprint were some of the challenges that Briggs had to face.

Briggs delivered two of the four stages of Project Forth. Phase two included the design and construction of a new fermenting room containing 16 washbacks and two yeast optimizing vessels, a new Clean-in-Place (CIP) building to service the whole plant, a bulk chemical intake and a storage facility to service the CIP area, as well as an upgrade of a large existing fermenting room. In the next phase, Briggs had to design and build a new mash house for pre-distillation.

The Intergraph CADWorx Suite has been used successfully on a number of previous projects at Briggs and therefore was chosen again for Project Forth.

REALIZING RESULTS

The database created in CADWorx P&ID was accessible for all disciplines on the project and purchasing schedules could be produced hassle-free. Keith Poynton, Engineering Director at Briggs, said: "The accurate take-offs produced from the database resulted in cost savings from fixed prices with the supplier and we were

able to maximise discounts by ordering in bulk and with fewer deliveries."

Briggs' team of project engineers used CADWorx Plant to model the whole plant, including the vessels, the pipework, and the steelwork.

Cross sections and accurate fabrication drawings were created from the steelwork and pipework models allowing large pipe-bridge sections to be assembled complete with the pipework safely at ground floor level at site. "With space constraints and a river running through the site completing this work at high level would have been very challenging and difficult to achieve safely. The accuracy of the model and steel fabrication drawings ensured an efficient and safe process", said Keith Poynton. Briggs achieved time savings of approximately 10 to 15 percent.

The integration with Navisworks allows the project to be reviewed by all the parties involved – technical or not. Employees with previous 3D AutoCAD® experience required just half a day's training in order for them to work productively on the project. The customization capabilities of CADWorx enabled Briggs to extensively tailor the database, symbols and pipe specifications.

The bi-directional integration with Intergraph CAESAR II® meant that pipe stress analysis of the steam and condensate pipework could be carried out by a third party without the need of data migration.





MOVING FORWARD

Once again, Briggs has delivered outstanding quality on time and within budget, using Intergraph's CADWorx Plant and Process design solutions. One of the biggest benefits from using CADWorx is the possibility to deliver a substantial amount of work upfront, minimising cost overruns due to on-site design changes. Intergraph is proud to have been a partner with Briggs for many years now and is looking forward to continue this mutually beneficial relationship into the future, helping Briggs to maintain a competitive edge in today's and tomorrow's market. Here's looking forward to the next 270 years!

ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data to make processes and infrastructure better, safer and smarter. The company's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction, operation and data management of plants, ships and offshore facilities.

Intergraph SG&I provides geospatially powered solutions, including ERDAS technologies, to the public safety and security, defense and intelligence, government, transportation, photogrammetry, and utilities and communications industries. Intergraph Government Solutions (IGS) is a wholly owned subsidiary of Intergraph Corporation responsible for the SG&I U.S. federal and classified business.

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