

Murray Bridge Digital Twin

Murray Bridge 2.0: 3D Rendered Visualisation Industry 4.0 Digital Twin



Project Code 2022-1009

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Project Description

The purpose of this project is to develop a Digital Twin of the new build in order to assist in guiding key decisions related to the internal architecture, engineering, and implementation of new machinery and technologies, to demonstrate insights and outcomes to workflows throughout the complete production process. The Digital Twin also aims to facilitate the planning and design processes to clearly demonstrate the impacts and advantages of changes and alterations, without enduring the set-backs and delays, in a real world scenario.

Project Outcome

- The delivery of a 3D Rendered Visualisation Digital Twin demonstrating real-life accuracy and replication of the Murray Bridge facility when completed and operating.
- Demonstrations and recreations of actual operations and technologies within the plant being applied, and capable of various interrogations via digital demonstrations, covering from lairage through to final load-out and dispatch of a variety of TFI products.
- Production of a series of digital photorealistic visuals of the Thomas Foods International (TFI) Murray Bridge development, well before completion, with key deliverables including web-based guided tours, fixed renders for use in 3D fly-throughs, VR environments, augmented reality demonstrations and opportunity for provider remote operation, servicing and fault finding.

Benefit for Industry

The benefits of the Digital Twin for the broader industry include

Stakeholder engagement – broader community support of meat processing industry

Showcase the modern and high technology features incorporated into the design of the facility that minimse the impact of the facility on the way of life of broader community.

Employee recruitment and retention strategies

Demonstrate the high class working environment for new employees to the industry (how roles have evolved over time thanks to innovation and technology) and to build enthusiasm within the current workforce to aid in retention. The Digital Twin also supports worker training and on-boarding.

Facility design

Identify design flaws and test the impact of updated facility designs on the functionality of the finished plant

Useful resources

Examples images and stills can be seen at https://thomasfoods.com/bigger-better-stronger/