

+ UTAH POINT BERTH PROJECT

DAD - System Information Modelling



+ PROJECT OVERVIEW

The Port Hedland Port Authority Utah Point Berth Project is a multi-user ore stockpiling and ship-loading facility. There are thirteen individual stockpiles receiving ore from quad trailer roadtrains. Ore is reclaimed from the stockpiles onto a series of six conveyors and a shiploader. All the conveyors are variable speed to allow for handling of the different ore types. The maximum loading rate is 7500 tph.

+ OUR SERVICES

I&E Systems provided electrical engineering services for the entire facility from initial concept through to commissioning and operational support. The scope of work included the design, engineering, coding, testing and commissioning for the call electrical distribution and control, PLC/SCADA, Communications Network, CCTV and VOIP telephone system.

DAD – System Information Modelling software was used during the design phase to create a single digital model of the electrical, control and communication systems. The digital representation commonly referred to as a System Information Model has a 1:1 relationship with the physical systems that it represents. The System Information Model created by the design team used on site during construction and commissioning as the only source for systems information.

+ THE RESULTS

By using DAD, I&E Systems was able to eliminate most of the traditional CAD work, and the associated QA and document management.

We were able to work in smaller teams and to enhance collaboration and communication.

The accuracy of the systems design in DAD greatly reduced the need for modifications and contract variations on site. The reduction in documentation errors & omissions and information redundancy meant that there were no significant changes to the SIM and therefore no substantial changes to the physical system during construction. Site queries were easily resolved without significant cost or delay.

For example, changes to the cable schedule on site affected less than 5% of the cables. The total length of cables installed was within 10% of the original “issue for tender”. The changes made on site were typically to do with the final positioning of lights.

From the time the substations were commissioned and the 6.6kV system energised, the whole ore handling system was commissioned in only five weeks. The first ship was loaded with ore on the date originally scheduled.

Utah Point Berth Project was awarded the 2011 Engineers Australia Excellence Award for Resource Development. I&E Systems is proud to have been part of the engineering design and construction team that achieved this outstanding result.

+ CONTACT US

For more information about DAD please visit our website at:

www.dad.net.au

For further information about I&E Systems or the DAD software please contact our Business Development Managers:

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