

HALL HUB

MTK-0000-FCT-QA-0010 Engineering & Design Fact Sheet

CLIENT:

FORTESCUE

PROJECT OWNER:

FORTESCUE

PROJECT VALUE:

\$150M

LOCATION:

PILBARA, WA

DATE COMPLETED:

2023 – 2024

Key Project Components

- Engineering Management, Project Management and Project Controls
- SMP Engineering and Design
- DEM Modelling for all chutes in-house
- Static and dynamic analysis in-house
- Civil Engineering and Design
- Electrical Engineering and Design
- Control Systems, including Communication Systems
- Shop Detailing
- Procurement Support of Long Lead Items
- Commissioning
- Handover and Ongoing Support

Project Overview

EMtek were engaged by FMG to conduct the engineering, and design works for the Hall Hub Overland Conveyor Project.

Off the back of the Western Crushing Overland Conveyor works (3 of Conveyors over 20km in length successfully completed by EMtek in 2020), EMtek assisted FMG with several studies for the Hall Hub project and successfully identified further optimisations to reduce capital cost, improve maintenance and operability. Once approved, EMtek continued with the earthworks, mechanical, structural, concrete, electrical and control systems detailed engineering, design and shop detailing from concept to completion.

The single flight conveyor is approximately 13.5 km long, transporting primary crushed iron ore from the satellite Hall Hub mine, through to the existing Christmas Creek site. The project also included a rail and road crossing, and tie-ins to the existing plant, including the engineering and design of a 600 T surge bin and Apron Feeders.

The entire project was completed in-house by EMtek.

Major Works Included

- Engineering and design of CV112 OLC, 13.5km long
- 600 T dual output surge bin, and tie-in to the existing Christmas Creek plant
- Head end drive station and active winch take-up system
- Feed point - Impact station complete with skirts
- Flaking and splicing stations
- Design, engineering and shop detailing of more than 3000 tonnes of steel
- Engineering specifications/data sheets to enable procurement of 3rd party equipment.