

# WESTERN HUB

## MTK-0000-FCT-QA-0011 Engineering & Design Fact Sheet

### CLIENT:

Fortescue

### PROJECT OWNER:

Fortescue

### PROJECT VALUE:

\$300M

### LOCATION:

PILBARA, WA

### DATE COMPLETED:

2020 – 2023

### Project Overview

EMtek were engaged by FMG to conduct the engineering, and design works for the Western Hub crushing and conveyor project.

The Western Hub consists of 3 of Conveyors over 20km in length, loaded by 4 modular crushing plants from deposits spread along the western corridor at the Cloudbreak mine site.

EMtek's scope included the detailed engineering, design and shop detailing from concept to completion for the Overland Conveyors, the longest being 10.3 km long, including all earthworks, mechanical, structural, concrete, electrical and control systems elements.

The entire project was completed in-house by EMtek.

### 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

### Major Works Included

- Engineering and design of 3 OLC's, the longest being 10.3 km long
- 600 T surge bin, and tie-in to the existing Cloudbreak plant
- High speed change-out rotatable transfer chutes
- Belt maintenance equipment, including flaking and splicing stations
- Design, engineering and shop detailing of more than 5000 tonnes of steel