



Train Load Out Project

Pilbara, Western Australia

PROJECT OVERVIEW

Project Scope:

- EDC was engaged to provide an independent third-party review of the new Jimblebar Train Load Out (TLO) design, which included dynamic load verification based on measurement data from an existing TLO in operation.

Challenge:

- TLO's traditionally have complicated dynamic responses and loading scenarios. This project presented larger than expected horizontal loads measured on the existing asset, which required expertise, advanced simulation, and team collaboration to interpret the measurement results.

- To quantify load assumptions in all conditions for the new design, utilising the existing asset measurement information.

Success:

- Utilising the following:
 - Motion Amplification Camera.
 - Multichannel data acquisition.
 - Strain gauges.
 - Accelerometers.
 - Lazer displacement transducers.
 - Advanced simulation.
- EDC was able to verify and provide design loading parameters to be used for the new TLO.
- In addition, EDC was able to provide insight into the dynamic motion of the system for the existing TLO.

CLIENT: BHP

SITE: Jimblebar / South Flank

DURATION: 2021 – 2023

