

Engineering & Mining

Advitech has provided mechanical and structural engineering services to the mining and mine services industry for many years.

Mechanical Engineering Projects

- Design analysis and provision of construction drawings for new operating cabins for shiploaders 1 and 2 at PWCS Carrington (project value \$1.3 M).
- Design layout and structural analysis for track width extension on a Caterpillar 308C excavator performed for Hinton Engineering.
- Design, project management and site coordination of the replacement for the 450CV01 chips conveyor at the Delta EMD finishing end.
- Mine Fuel Facility design, Cement Australia (Project Value \$0.5m).
- Detailed design and project management for the improvement of guarding and access at the Ropeway Conveyor Loading and Unloading Stations for Australian Cement Holdings, Kandos (Project Value \$0.8M).

Structural Engineering Projects

- Detailed structural assessment of a powered drift winder for Berrima Coal Pty Ltd which included finite element modelling of the drum, drive train components and main brake. The assessment related primarily to MDG33 requirements. Steve also reviewed the hydraulic brake hold off circuit design for MDG33 compliance.
- Design and structural analysis of a range of fire suppression system large cylinder mounts. The analysis included finite element transient dynamic and modes analysis to ensure the mounts would meet AS 5062 – 2006 shock and vibration requirements.
- Design, project management and site coordination of repair to trusses and replacement of roof purlins and sheeting in the galvanizing building at OneSteel Pipe and Tube Newcastle.

Engineering Analysis Projects

- Finite element based fatigue analysis of a coal conveyor return belt stringer support attachment to the trough upright and redesign of the attachment to eliminate the fatigue cracking that had been experienced in service, for GT Engineering at Mudgee.
- FEA and frame analysis of coal stackers to assess their integrity for an extended service life.
- FEA design of AN emulsion tanker bodies for Orica Explosives.
- Dynamic analysis of conveyor transoms for Tyton Conveyors.



Advitech Pty Limited

Head Office

1 Elizabeth Street, Tighes Hill
(Newcastle) NSW 2297

PO Box 207
Mayfield NSW 2304

Telephone: 02 4961 6544

Sydney Office

Suite 17, Level 6, 91 Phillip St
Parramatta NSW 2150

Telephone: 0438 832 403

Email

mail@advitech.com.au

Website

www.advitech.com.au