

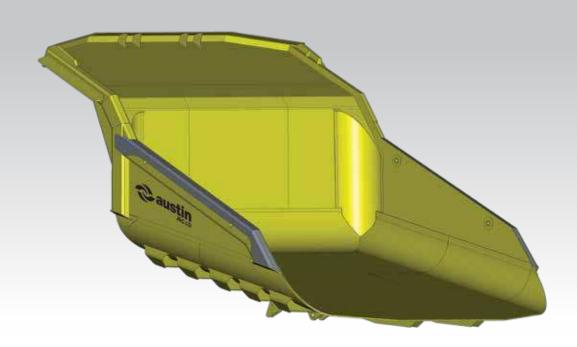
JEC-LD BODY

FOR OFF-HIGHWAY DUMP TRUCKS

- Increased fatigue life
- Anti-hangup
- Increased payload
- Fully customisable





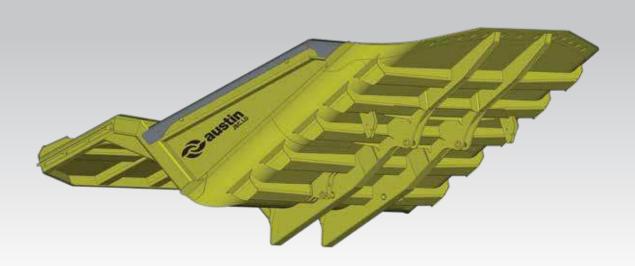


JEC-LD Body

AUSTIN ENGINEERING ACKNOWLEDGES THEIR CUSTOMERS ONGOING REQUIREMENTS FOR CONTINUOUS IMPROVEMENT OF OPERATING EFFICIENCIES WITHIN THEIR SPECIFIC MINING OPERATIONS.

This has resulted in Austin Engineering developing a unique truck body design – the JEC-LD. This body will increase productivity and reduce hang-up while also being durable and cost effective.

Austin Engineering have designed and manufactured over 500 truck bodies over the past seven years. This legacy provides us with a good knowledge base for comparison, both theoretically and practically.



JEC-LD features & benefits

Anti-hangup features incorporated in the base design - large radius transitions assist in the reduction of material carry back and provide superior impact resistance.

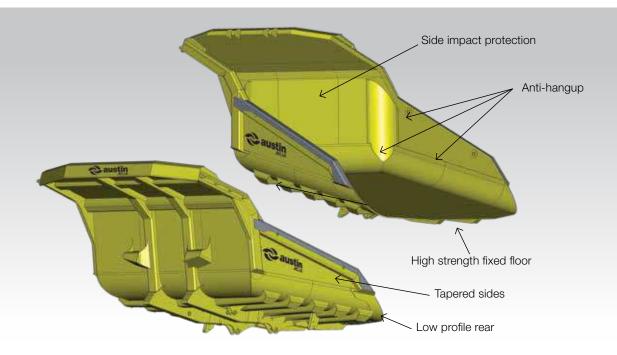
Payload advantage – a 10-15% weight saving over standard conventional bodies maximises payload depending on application. Significant payload improvements can be gained comparatively to standard designs.

Increased fatigue resistance – significantly improved fatigue resistance has been realised within results of FEA analysis.

Tapered sides over the full length of the body - minimises wear over the rear 2/3 and further assists in carry back reduction.

Constructed using high strength materials - all inner main plates consist of heat treated abrasion resistant steel plate in the 450 nominal Brinell hardness range for superior impact and wear resistance.

Largely simplified body design – results in low ongoing maintenance costs to end user.



JEC-LD features & benefits

Verified design process - designed with advanced 3D modelling software. (Pro Engineer CREO 2.0) and analysed with the latest FEA and load simulation software (ANSYS / EDEM).

Fully optimised body structure - the shape of the body has been optimised to suit real world loading conditions and better utilisation of structural material in critical areas.

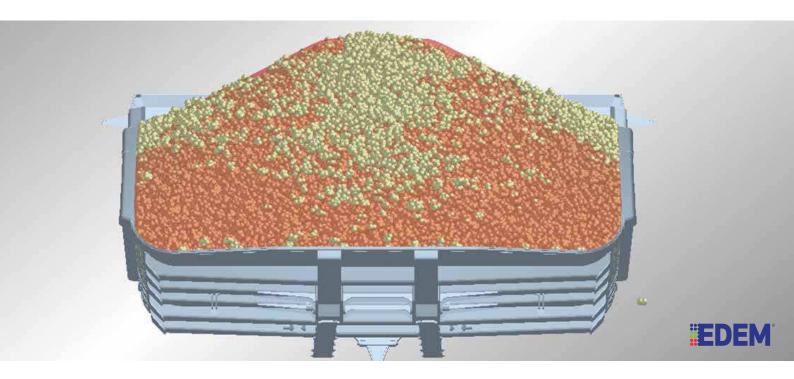
Side impact protection – impact resistant plates are incorporated into the base design and protect the upper side bolster from damage in the main loading zone.

Low profile rear floor and bolster - a low profile rear floor shape and reduced height bolster provides additional ground clearance when dumping. The laminated plate design provides additional resistance to damage from berm dragging.

Fully customisable – can be designed to suit any mine specific application. (20000 – 60000 Hours.) Available in conventional "Straight floor", "Combo" and "Gate-free" configurations to cater for fixed or varying SG.

Shipping – the segmented body design lends itself to varying shipping configurations.

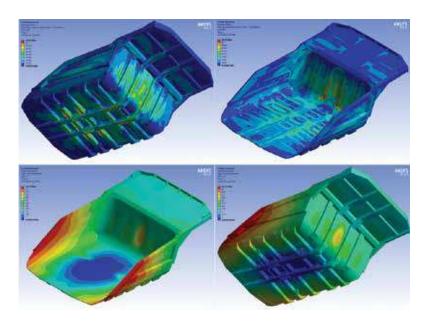
Compatible with all OEM chassis.



Design Verification

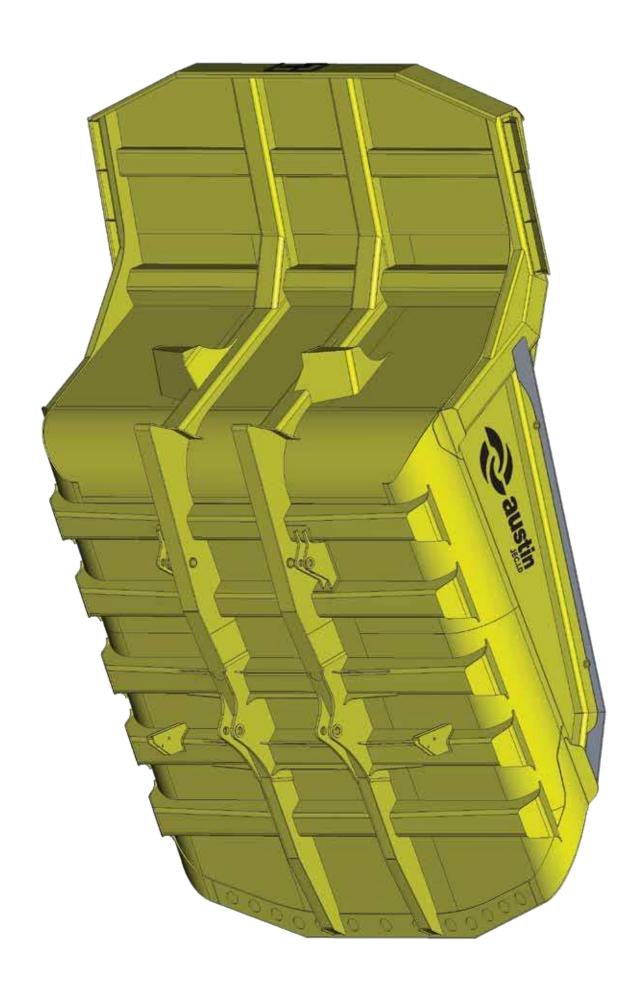
STRUCTURAL VERIFICATION - FEA ANALYSIS

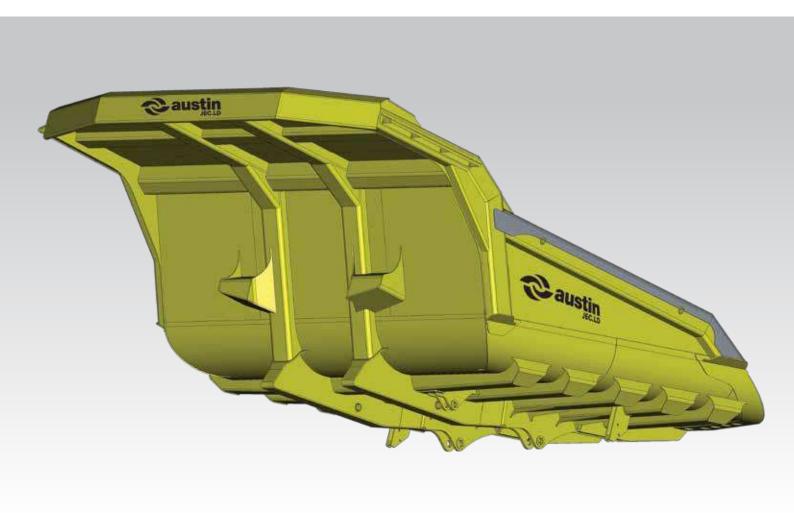
The JEC-LD truck body has been structurally verified for maximum fatigue life utilising ANSYS FEA software. The initial model is based on a three to five year life span fatigue analysis scenario.



PAYLOAD VERIFICATION - EDEM ANALYSIS

The EDEM simulation verifies that the JEC-LD truck body will achieve the theoretical target payload at nominated freeboards.







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