Customised Dump Truck Bodies

FOR DUMP TRUCKS

- Application specific engineering
- Maximise fleet capabilities
- Lower operating costs
- High quality manufacturing
Dump Truck Bodies

AUSTIN ENGINEERING IS THE DESIGNER AND MANUFACTURER OF WESTECH, JEC AND ULTIMA DUMP TRUCK BODIES AS WELL AS OEM DESIGNED BODIES.

Our dump truck bodies are custom engineered for all makes and models of trucks and applications.

We use a unique mix of steel plate during our monitored fabrication process and design and install wear liner packages to suit client applications.

Our engineering experience enables us to deliver increased payloads, increased strength and wearability and increased reliability. Austin’s ability to pass match maximises your fleet capabilities and lowers operating costs.

Experience counts – we have engineered and manufactured dump truck bodies for over 50 years.
Our WESTECH, JEC and ULTIMA dump truck bodies are engineered to suit our clients unique application requirements. We work closely with our clients to discuss the specifics of their site and operational conditions including variables such as material density, abrasiveness of material, potential for hang up and loading practices.

Our clients requirements for capacity, lifespan, maintenance and any dimensional constraints are also factored into the design.

We are able to customise a body to increase payload whilst still adhering to OEM specifications. Our engineering team is also able to pass match to maximise fleet capabilities.

Using the most advanced software packages and techniques, including EDEM and ANSYS, we prove the theory of our design model to ensure results will be replicated in the field.
WESTECH Bodies

Manufacturer of dump truck bodies. The WESTECH branded range of products is engineered and manufactured by Austin globally.

With over 50 years of proven engineering experience, WESTECH bodies offer lower operating costs due to their longevity and ability to maximise fleet capabilities.

In support of our engineering, we will provide you a written statement of customised capacity for your body upon request.

1. Strength and wearability – designed for life of truck service
2. Optimised welding techniques to improve structural integrity
3. 3 distinct body types available – rock, coal, coal/overburden combo
4. Bolsters, ribs, structural components are special grade steel
5. Customised wear packages available to suit specific applications
6. Suit latest OEM chassis specifications
7. Maximised payload potential to suit gross vehicle weight
8. Highly refined design based on proven traditional shape
9. Superior load stability and operator comfort
The WESTECH Flow Control Body® has a revolutionary floor design that controls the flow of material out of the body during dumping, ensuring that the centre of gravity of the load remains forward of the rear axle for longer during the dumping cycle. This unique design increases the stability of the truck by eliminating lift of the front axles resulting in overall safer operation. The controlled flow of material also results in improved dust control and improved body life.

The Flow Control Body® is available for all truck brands and models in combo (coal and overburden), coal or overburden designs.
The JEC body is a lighter weight modular design with the aim of improving payload, reducing material hang-up and overall operating costs.

The key features of the design are the skeletal frame which complements the innovative replaceable floor. The replaceable floor eliminates the need for heavy, maintenance intensive wear liner plates. The floor can be easily removed and replaced in less time than replacing a full liner package.

The long term benefit to the end user is an increase in payload due to the saving in overall body weight and improved carrying capacity.

1. Replaceable floor wear area
2. Replaceable canopy plate
3. Skeleton frame lasts for life of truck
4. Lighter weight
5. Improved volumetric capacity with increased payload potential
6. Curved internal transitions to reduce hang-up
7. No wear liner plates required
8. Floor and side wall thickness customised to suit loading tool
9. Individual models comply with OEM specifications
JEC-LD Body

The Austin JEC-LD body is durable and cost effective and will increase productivity and reduce hang-up.

1. **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.

2. **Increased fatigue resistance**
   - significantly improved fatigue resistance has been realised within results of FEA analysis.

3. **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.

4. **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.

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

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

7. **Largely simplified body design**
   - results in low ongoing maintenance costs to end user.

8. **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).

9. **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.

10. **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.
Austin ULTIMA Dump Truck Body

The fully customisable Austin ULTIMA dump truck body is lighter and stronger than current OEM bodies, which translates to a 10—15% weight saving without sacrificing payload.

The unique V-floor channels the payload to the centre of the tray resulting in a lower centre of gravity which improves the stability and safety along with a reduction in overall tray wear. This combination reduces dump cycle times.

The overall shape results in better material distribution within the structure while maintaining the payload / weight advantage.

The design results in an increase in the structural integrity providing superior impact and wear resistance which extends fatigue life and lowers the maintenance costs. The tapered sides run the full length of the body to minimise wear and assist in the reduction of carry back and reduces side spillage in the dumping cycle. The low-profile rear floor shape combined with a reduced height bolster provide additional ground clearance when dumping.

- Carries a greater payload
- Reduction in carry-back
- Delivers the lowest cost per tonne in the world market
- “V” profile floor channels the load to the centre of the tray
- Empty is achieved at ¾ tipping
- Available in both “straight floor” or “flow control combo”
- Meets all OEM specifications
The JEC underground mining tub has been optimised with anti-carry back features and increased payload. Tub sizing is customised to suit site specific conditions, with the base body design configured to be easily adaptable to a range of OEM trucks.

1. **Impact plates**
   - Solid impact bar to all upper surfaces with progressively curved leading edge to resist impact and wear
   - Reinforcing to high impact zones integral to body structure

2. **Innovative tub designs**
   - Shallow angular transitions to all internal joints assists in minimising initiation of material hang-up
   - Redesigned wheel arches and increased dump angle to improve material flow
   - Large radius transitions and lowered profiles to reduce material hang up

3. **Reinforced areas**
   - Single pressed piece inner side bolsters with high strength radial transitions minimise washout
   - Reinforced rear corner assembly adds structural protection to high impact areas
   - Heavy duty reinforced rear bolster adds structural support from damage while dumping in the field

4. **Chassis connection**
   - Designed to fit the OEM truck chassis utilising the OEM hoist and pivot pins
   - Reinforced rear beam and pivot structure
   - Redesigned tub guide box and tub guides to increase strength in these critical areas
   - Designed for easy installation to the OEM chassis using 4 lift points positioned at the top edge of the tub sides
OEM Bodies

Austin provides manufacturing services for OEM dump truck bodies, from total fabrication to assembly of flat packs. Our experienced technicians apply the latest welding techniques, including robotic welding, to the body during the fabrication process. This, along with adherence to Austin’s quality assurance program, ensures the OEM body is manufactured to the highest quality standards.

Our experience in working with OEMs means we can be relied on to maintain confidentiality and protect the OEM’s IP. Austin is able to partner with the OEM to design improvements to the body if required, and provide engineering support services.
Through Life Support

Our clients have confidence in partnering with Austin as we offer a comprehensive support program for our dump truck bodies. All JEC, WESTECH and ULTIMA products carry an engineering and workmanship warranty for a period of 12 months or 6,000 hours, or whichever comes first subject to warranty conditions. We can undertake on-site inspection and produce condition monitoring reports to ensure product life is maximised.

Preventative Maintenance and Repairs

Austin provides a range of on and off-site repair and maintenance services for dump truck bodies. Our services are available both for products manufactured by us and other manufacturers including OEMs. Fully equipped workshops with the latest in robotic welding systems and heavy duty overhead cranes are available for off-site maintenance and repair requirements, whilst specialised mine specced service vehicles are available for on-site work.