
Customised Mining Buckets

FOR EXCAVATORS AND LOADERS



- Application specific engineering
- Maximise productivity
- Minimise maintenance costs
- Lightweight to heavy duty options



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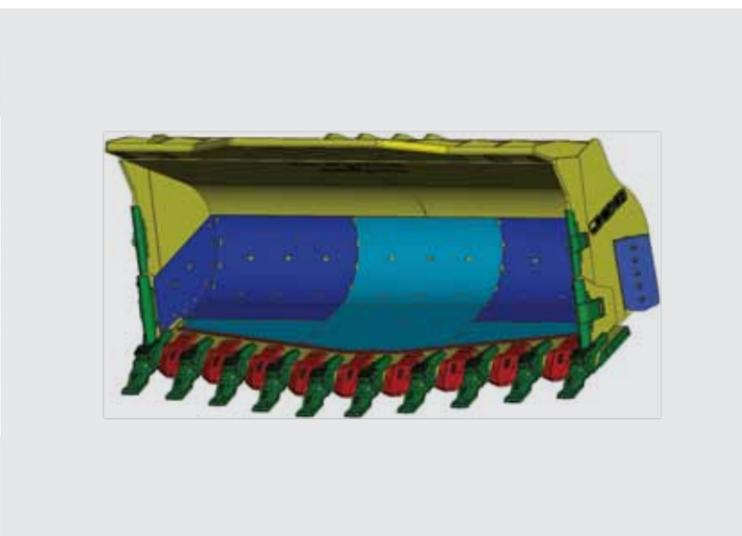
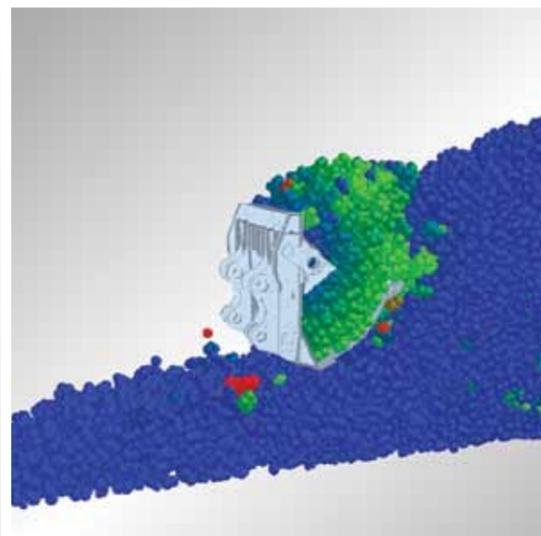
Mining Buckets

AUSTIN ENGINEERING IS AN INDUSTRY LEADER IN THE DESIGN AND MANUFACTURE OF MINING BUCKETS TO SUIT EXCAVATORS AND FRONT END LOADERS.

Our JEC designs, ranging from 4m³ to 52m³, are suitable for any application whether hard rock, iron ore, or coal.

From high production lightweight buckets through to heavy duty armoured buckets, each bucket is customised to suit your specific application.

We understand the importance of maximising machine efficiency so we engineer your bucket to capacity match bucket weight and material density. We also undertake pass matching, all whilst adhering to the machine OEM's specifications.



Engineered Solutions

Austin Engineering custom engineers each mining bucket taking into consideration application specific requirements such as loading practices, material density and abrasiveness, potential for hang up and dump height clearances.

Using the latest in engineering software, including EDEM and ANSYS, we detail designs, test the theory with finite element analysis, engineer for manufacture and conduct in-field follow ups.

Our in-depth engineering process results in productivity improvements and maintenance cost controls.

Austin Engineering's close cooperation with the major OEMs ensures we have access to the most up to date data. This ensures correct boom stick geometry, boom and stick clearance, cab and deck structure clearance and maximum suspended load, including on new model machines.

Wear Packages

Where required, Austin Engineering is able to engineer and manufacture a wear liner kit to suit your JEC or OEM bucket.

We take into consideration the site-specific material density and abrasiveness

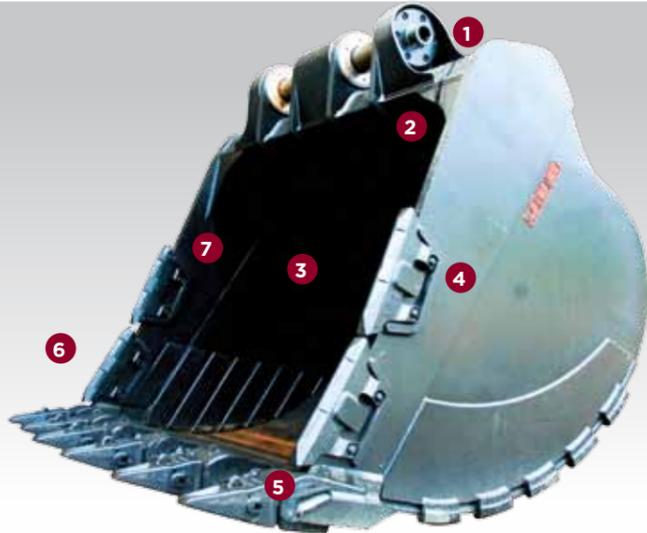
when selecting the type and thickness of steel required for your wear liner.

We are able to supply a range of wear packages covering coal applications through to highly abrasive rock environment conditions.

Ground Engaging Tools

The customer's choice of Ground Engaging Tools (GET) is available to suit a diverse range of applications and OEM specifications.

Austin Engineering is able to make recommendations as to the choice of GET based on the specific application and site conditions.



Excavator Buckets

Austin Engineering designs and manufactures mining excavator buckets to suit most OEM machines ranging from 100t to 900t class excavators, and from 5m³ to 53m³ in size.

Available for any application from hard rock to coal, our JEC designs are customised for specific applications and to meet OEM specifications such as tip radius, pin centre and maximum suspended load.

Finite element analysis and EDEM modelling is conducted on all bucket designs, with our ability to pass match your bucket with existing site equipment ensuring you get faster cycle times and maximised machine efficiency.

Experience counts - we have designed, manufactured and delivered buckets for over 25 years.

- 1 Robust hook-up design
- 2 Bucket shape custom designed to customer specific requirements
- 3 Optional liner packages available in a range of materials and styles
- 4 Correct selection of high quality material type
- 5 Customer's choice of ground engaging tools (GET)
- 6 Designed within OEM guidelines such as tip radius, breakout force and maximum suspended load
- 7 Manufactured using the latest welding techniques to ensure maximum structural integrity



Front End Loader Buckets

Austin Engineering designs and manufactures front end loader buckets from 4m³ to 40m³ with capacities to suit every OEM make and model.

Available for any application from hard rock to coal, a range of designs are available including large capacity, lightweight, high lift, stemming, high dump, skeletal and grapple.

Our JEC designs are customised for specific applications and to meet OEM specifications such as static tipping load, maximum load on pin, and dump clearance.

Our engineers capacity match bucket weight and material density resulting in faster cycle times for your site.



Stemming Buckets

Austin Engineering's stemming bucket range includes designs to suit small tool carrier type wheeled loaders up to CAT966 size, and are available in 1.5m³, 2.5m³, 3.5m³ and 4m³ sizes. The design includes quick couple lugs as standard to suit OEM quick hitches.

Stemming buckets have a funnel/chute shape that allows a loader to tilt the bucket forward to scoop

blast hole material and then tilt back. It is then positioned over a blast hole where the material is discharged into the hole via a hydraulic actuated gate valve; when the hole is full the gate valve is shut off.

This gate valve is an Austin Engineering design which moves in an "arc" so the material does not jam during discharge or when closing the gate valve.



OEM Buckets

Austin Engineering provides manufacturing services for OEM designed buckets.

Our experienced technicians apply the latest welding techniques to the bucket during the fabrication process.

This, along with adherence to Austin Engineering's quality assurance program, ensures the OEM bucket is manufactured to the highest quality standards.

Austin Engineering also modifies, upgrades and installs custom liner kits on OEM buckets.

Our experience in working with OEMs means we can be relied on to maintain confidentiality and protect the OEM's IP.

Austin Engineering is able to partner with the OEM to design improvements to the bucket if required, and provide engineering support services.



Through Life Support

You can have confidence in partnering with Austin Engineering as we offer a comprehensive support program for our mining buckets.

All JEC products carry an engineering and workmanship warranty for a period of 12 months or 6,000 hours, whichever comes first subject to warranty conditions.

Preventative Maintenance and Repairs

Austin Engineering provides a range of on and off-site repair and maintenance services for mining buckets. 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.





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