Customised Mining Buckets

FOR EXCAVATORS / LOADERS / ROPE SHOVELS

- Maximise productivity
- Minimise maintenance costs
- Lightweight to heavy duty options
PROUDLY MANUFACTURED BY

austin
AUSTIN IS AN INDUSTRY LEADER IN THE DESIGN AND MANUFACTURE OF MINING BUCKETS TO SUIT MINING EQUIPMENT.

Our custom designs, ranging from $4m^3$ to $52m^3$, 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 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’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 is able to engineer and manufacture a wear liner kit to suit your application. 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 is able to make recommendations as to the choice of GET based on the specific application and site conditions.
Excavator Buckets

Austin designs and manufactures excavator buckets to suit most OEM machines ranging from 100t to 900t class excavators, up to 50m³ in size.

The Austin excavator bucket range includes both conventional bucket designs and a dedicated two piece bucket design consisting of a defined reusable upper structure and a consumable lower structure. The lower bucket section allows for quick and efficient change-out during maintenance intervals minimising down time.

Available for any application from hard rock to coal, our 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.

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
Face Shovel Buckets

Austin designs and manufactures face shovel buckets that are compatible with all OEM machines. The buckets are designed to operate within the standard OEM specifications; Austin works closely with the OEMs to ensure their requirements are fully met.

The model capacity can be customised to suit varying values of density, mine specific application, wear kit coverage, GET requirements and more.

Austin also provides a Liner and GET Package designed for maximum wear protection. All line kits can be fully customisable to suit site specific applications.

1. Improved Austin hinge casting design for optimal strength to weight ratio
2. Replaceable bolt on wear edges to protect bottom of door
3. Heavy duty 25mm main shell plate
4. All GET lip options available
5. Reduced tip radius for improved penetration and increased breakout force, within OEM guidelines
6. Standard replaceable heel bands
7. Simplified structure to reduce maintenance
8. Full coverage headboard for maximum protection
Dippers

Austin designs and manufactures rope shovel dippers, optimised to suit mining application and improve digging efficiency. They can be constructed to suit all available brands and styles of lip and GET.

The dippers feature a fully customisable internal liner kit which can be modified to suit specific applications, along with upgraded welded connections optimised using Finite Element Analysis to increase peak lifespan. The heavy-duty fabricated door is also optimised using the FEA software to improve holding capacity. An external liner of wear plate is attached and can be customised to suit client requirements. Lip castings in the varying designs are fully gauged prior to installation to ensure correct fitment of Ground Engaging Tools (GET).

When in operation it is possible to change the angle of attack to optimise digging efficiency.

Site inspections are completed regularly to monitor performance and provide recommendations for life and operation improvement.

1. Adjustable pitch brace assembly
2. Bail arm with heavy duty construction
3. Custom Internal liner kit
4. Lip castings fully gauged prior to installation to ensure correct fitment of G.E.T.
5. Dipper door assembly with internal wear protection
6. Snubber assembly
7. Induction hardened pins and manganese bushings
8. Replaceable heal bands
Front End Loader Buckets

Austin 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 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.

- Designed for all OEM models
- Customised for specific applications
- Available sizes; 4m³ - 40m³
- Any mining application – coal to hard rock
- Large capacity, light weight, high-lift and high-dump
- Stemming, skeletal and grapple
- Customised liner-kits
- Customised to suit all types of G.E.T.
Stemming Buckets

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 design which moves in an “arc” so the material does not jam during discharge or when closing the gate valve.

Austin Engineering’s stemming bucket range includes designs to suit small tool carrier type wheeled loaders up to 21 tonnes.

- 1.5m³/ 2.5m³/ 3.5m³/ 4m³
- Quick couple lugs as standard
- Suit all OEM models
Through Life Support

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