



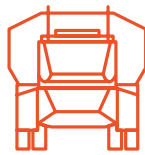
160-tonne mine haulage truck

Bis

Mine haulage reimagined

Rexx is the latest product to join the Bis haulage fleet, providing increased efficiency and productivity to our customers' operations through our integrated haulage services.

Rexx delivers:



Lower mine development costs

Rexx's 4.8m width, even weight distribution, and ability to haul efficiently on 12% gradients means it can operate on narrower and steeper haul roads and in tighter cutbacks, reducing development costs, rehabilitation and environmental disturbance.



Superior fuel efficiency

Up to 40% less fuel burn leading to significant fuel cost savings for your project.



Increased range

With the ability to efficiently travel up to four times further than conventional dump trucks.



Better safety outcomes

Rexx comes equipped with world-class fatigue detection and driver monitoring systems, and operators experience better visibility and cabin access than ever before.



Mining for the future

Rexx's smart design has the ability to house proprietary automation hardware.



Lower mine development costs

Mine development costs are optimised, thanks to Rexx's unique attributes.

Rexx has been designed with multiple steering and driving axles, enabling it to handle gradients of up to 12% when fully loaded.

At 4.8m wide, haul roads and inclines can be narrower.

The ability to haul efficiently on 12% inclines reduces incline length and significantly improves strip ratio, while Rexx's evenly-distributed weight allows for lower-specification haul road construction.

In addition, the Bis steering system enables a turning radius of less than 12.6m, which allows Rexx to easily manoeuvre in smaller spaces and turn around sharp corners.

This reduces the haul road infrastructure costs of your operations, as well as environmental disturbance and associated rehabilitation works.

The unique five-axle drive and 20-tyre design of Rexx distributes the load more evenly, delivering an increased surface area and reduced ground pressure. This enables Rexx to operate in even the toughest of terrains, including all pit environments and wet underfoot conditions.

With its superior traction, gradeability and narrow width – Rexx enables you to optimise your mine design – from concept to completion.



40% more fuel efficient

With patented on-demand power that lowers fuel consumption, Rexx is up to 40% more fuel efficient than its competitors, delivering significant cost savings to miners, as well as reduced greenhouse gas emissions.

Rexx's empty-weight advantage means less fuel is needed to move more of your product.

Rexx's design incorporates both durability and lightness. At a loaded weight of 227 tonnes, Rexx's 160-tonne payload represents 70% of gross vehicle mass. This weight advantage maximises tonnes delivered and drives big savings on fuel and related emissions.

A second source of Rexx's fuel efficiency is its dual-engine design. During sections of low power demand in a haul cycle, such as the empty leg, Rexx can operate on one engine, optimising fuel consumption.

Four times more range

Rexx is the single haulage solution that solves the niche haul-distance equation of mining projects – with the ability to efficiently transport a 160-tonne payload for 40km at a normal operating speed of 60km per hour.

This industry-leading distance is at least four times further than conventional dump trucks, which are limited in range due to tyres heating.

Rexx is equipped with heavy duty road train tyres which are smaller in size, and do not experience tyre-heating issues to the same extent.

With the power to haul directly from pit-to-plant over a much longer distance without the need for the rehandle step – Rexx delivers cost savings and a reduction in ore loss/dilution at your site.

Driving better safety in mine site haulage

The safety of our people, environment and communities is our core value at Bis and we are proud of our industry-leading safety record. Rexx has a range of proprietary safety features to keep operators safe.

Greater visibility for operators

With a large format front window and a cabin that sits at the front of the profile, operators of Rexx experience significantly greater visibility of their surrounds.

While most standard heavy vehicles of this scale would have extended blind spots in front of their windshields of up to 6m, Rexx's unique window design enables operators to see obstructions as close as 2.5m ahead. Rexx's cabin is compliant with FOPS and ROPS.

360° Biscam view

With four on-board cameras, Rexx operators have constant visibility of all sides of the vehicle.



The camera system can be customised, allowing operators to select the visual angles best suited to their mirror setup and seating position, resulting in a full 360° view of their working environment.

Improved access and egress

When compared with 6-7m access height and standard ladder-style access for conventional dump trucks – REXX has really ‘stepped up’ the game – providing significantly-improved access and egress for operators due to the reduced cab height of just 2.4m from ground, as well as pneumatically-controlled stairway access to the cab.

Vehicle monitoring

All REXX vehicles have a real-time in-cabin monitoring solution installed. This includes proprietary artificial intelligence and monitoring systems that alert drivers and fleet managers to non-compliant driving behaviour. This helps to ensure adherence to your company’s guidelines and policies, and drive safety improvement initiatives.

Smaller mechanical components and tyres

Smaller machinery components reduce the risk to safety. From hydraulic pumps and the transmission engine, to the tyres that weigh just 800kg – all the components of REXX are smaller than most, reducing the risks of injury associated with changing and working with large, heavy components.



Mining for the future

Bis has more than a century of operational experience and has developed leading monitoring and preventative maintenance systems.

We have embarked on a digital journey to improve how we manage and deliver safely throughout our operations.

Our assets are equipped with technology features with an ability to improve safety in both real-time and in the future, using data analytics techniques.

Our technology suite is proactive, using both Artificial Intelligence (AI) and human data analytics to gain meaningful and valuable insights.

This software will consolidate all of the above data sources to create and develop insights that alert managers and vehicle operators on operational risks and issues in real-time.

Bis’ monitoring technology also captures daily operational data to help identify areas for improvement and drive business efficiencies.

With REXX’s intelligent in-cab systems, you receive valuable information to optimise your production and improve on-site operational costs.

REXX’s smart design has adequate space to house automation hardware to align with your site’s pathway to automation.

REXX can be easily retrofitted for automation with the inclusion of a broad range of sensors to report on wheel stability, bin tipping, suspension control and engine operation.

Specifications

Specifications

Length	14.3m
Height	4.9m
Operating width	4.8m
Tare weight (approximate)	67 tonne
Payload capacity	160 tonne
Gross weight	< 227 tonne
Maximum speed	60km/h
Turning radius (outside wheel)	< 12.6m

Engine

Manufacturer	dual-powered Cummins 15L engine
Gross Power	1100 horsepower

Wheels

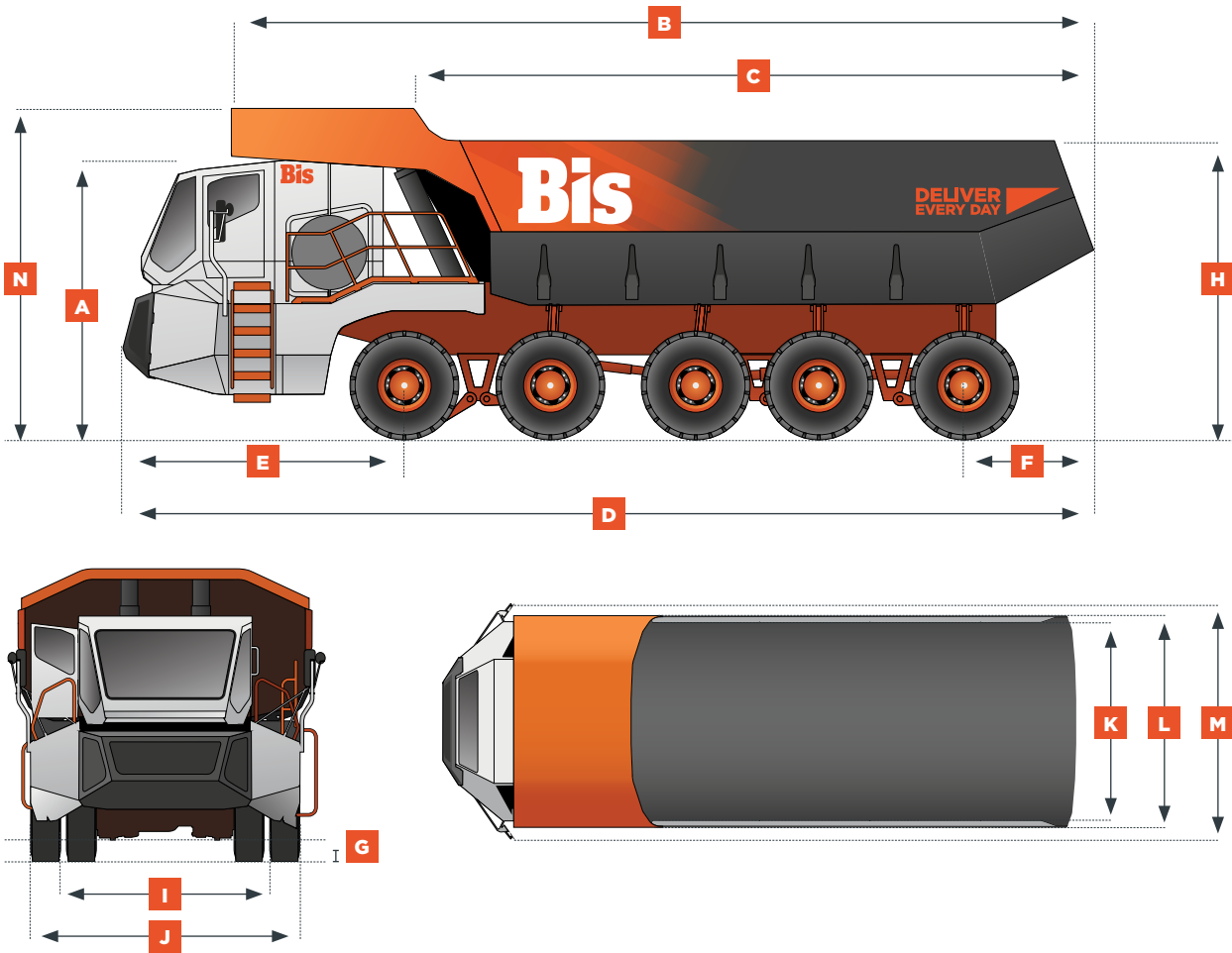
Rims	5 piece
Type	Custom bold pattern, standard size
Tyre	18.00R25

Transmission

Manufacturer	Allison
Layout	Side by side
Gears	6 speed, 1 reverse
control type	Electronic gear

Dumping system/bin

Raise time	60 seconds
Lowering time	40 seconds (Cycle time 100 seconds)
Tipping angle	50°
Rear clearance during tipping	1.4 to 1.6m (depending on bin requirement)
Bin capacity	Can be customised to suit any material between 89-130m ³
Customisation	Rexx has a range of interchangeable bins that are customisable by our in-house engineering department to suit the specific needs of your operation.
Total envelope dimensions (bins up/access panels open)	Length 17.5m Height 12.4m Width 8.4m



Dimensions (with standard 80m³ bin)

A Height to top of rops - empty	4,105mm	I Centreline tyre width	3,400mm
B Overall bin length	12,731mm	J Overall tyre width	4,500mm
C Inside bin length	10,043mm	K Inside bin width	4,476mm
D Overall length	14,331mm	L Outside bin width	4,816mm
E Front axle to front	4,167mm	M Overall width including mirrors	5,306mm
F Rear axle to tail	1,916mm	N Height to top of canopy	4,857mm
G Front axle clearance loaded height	355mm	Bin angle - fully raised	50°
Dump clearance height	1,381mm	Turning circle - inside bin clearance	(R6,650mm) 13,200mmø
H Loading height empty	4,405mm	Turning circle - inside wheels track	(R6,800mm) 13,600mmø
Inside bin depth - maximum	2,545mm	Turning circle - outside wheels track	(R12,645mm) 25,290mmø
Overall height - bin raised	12,440mm	Turning circle - inside bin clearance	(R14,145mm) 28,290mmø

About Bis

Bis is a leading resources logistics company, providing innovative logistics, materials handling and specialised equipment solutions to the global mineral resources sector.

Since 1915, Bis has built a reputation as a leader in efficiently moving large volumes of raw materials and commodities through the full mining value chain, by applying patented solutions, advanced technology and deep industry experience.

Today, we haul, transport, process and handle millions of tonnes of raw materials and commodities for our customers every year.

We have grown our business alongside yours, focusing on proprietary technology solutions designed to make your operations more productive, more efficient and reassuringly safe. Innovation and problem-solving are in our DNA.

We aspire to serve our customers globally and to innovate every day – lifting safety, productivity and sustainability.

That's how we help our customers to Deliver Every Day.

Contact Bis to discuss how Rexx can deliver efficiencies at your site as part of our integrated haulage solutions:

Contact us

Head Office

Level 1, Brightwater House
Garden Office Park
355 Scarborough Beach Road
Osborne Park WA 6017

T: (08) 9202 5800

E: enquiries@bisindustries.com

bisindustries.com

Bis