

COBRA STEMMING SOLUTIONS

Stemming Trucks



Truck Selection

TYPE	BENEFITS
High GVM	<ul style="list-style-type: none">• Less time running to stockpile and more time on the bench• About 10% more payload than closest alternative
Live PTO drive ie. flywheel drive not after gearbox	<ul style="list-style-type: none">• PTO pump permanently engaged means operator can align chute to next hole position whilst moving to hole• No need to re-engage PTO• Increased productivity

Cost Benefits

FEATURES	BENEFITS
Side chute directly over the hole	<ul style="list-style-type: none">• 100% of stemming aggregate ends up down the hole, no wastage
Single operator function	<ul style="list-style-type: none">• Only one person in vehicle, and one person to hold the cord, required for the complete operation
Large carrying capacity	<ul style="list-style-type: none">• Less trips to the stockpile• No need to relocate the stockpile as bench moves• Take a full load and return the balance to the stockpile when the bench is stemmed

Productivity

FEATURES	BENEFITS
Joystick operation by driver in cab	<ul style="list-style-type: none">• One operator for stemming (still require operator to hold cord on bench)• Less people exposed to dust and sun• Lower labour costs• Intuitive operation using joystick
Pre-settable dispense mass per hole (uses load cells under hopper for control)	<ul style="list-style-type: none">• Preset value $\pm 25\text{kg}$ is dispensed per hole• Consistent mass into each hole• Remove operator variability• Tune stemming quantity and ANFO quantity over time depending on blast results
Operator sets value on operating screen in cab	
Fast acting side conveyor behind cab	<ul style="list-style-type: none">• Used for 90% of holes – quick movement• Operator can see material dispensing – less wasted stemming
Dispensing rate in excess of 1000kg/min	<ul style="list-style-type: none">• Rapid filling of blast holes• Fewer pieces of equipment needed
Rear slew conveyor 5m long with 270° movement	<ul style="list-style-type: none">• Provides safe access to holes close to face or bench edge• Also used for tight corners• Operated by same joystick in cab• Auto deploy and stow function
16.5m ³ hopper	<ul style="list-style-type: none">• Maximise payload on truck• High productivity• Fewer machines on bench• Less maintenance on machine



Maintenance

FEATURES	BENEFITS
Unique positive belt drive mechanism	<ul style="list-style-type: none">• No belt alignment problems• Forgiving to belt jams due to oversize material• Quick to replace belt or worn components• Units in Australia are getting in excess of 3,000 hours per belt
Unique side door access	<ul style="list-style-type: none">• Operator can inspect unit for oversize material at end of shift to prevent possible belt damage
CAN Bus technology – IFM Electronics	<ul style="list-style-type: none">• Used by all major machine OEMs• Certified for vibration and shock resistance• Bus topology uses fewer cables
3G communications (optional)	<ul style="list-style-type: none">• Remote access to assist in fault-finding

Benefits of using Ausroad

FEATURES	BENEFITS
Ausroad learning through rental units in Australia	<ul style="list-style-type: none">• Ausroad has +25 units on full maintenance hire for more than 3 years• This has led to rapid improvement in problem solving
Ausroad proven design	<ul style="list-style-type: none">• Unique features for stemming units come from Ausroad's road maintenance units which Ausroad has manufactured for 30 years• ±50 units in Australia with Rio Tinto, BHP, Glencore• 12 units manufactured by Cobra to date
Cobra local support	<ul style="list-style-type: none">• Units can be manufactured rapidly in Johannesburg• Sole local manufacturer of stemming units• Spares and technicians exJohannesburg





Stemming Contour Loaders



FEATURES

- Designed to deliver stemming down the hole on steeply contoured shots
- Solution to OH&S risk on steeply contoured shots
- Remote control operation with optional “ride on” operation
- Eliminates front end loaders on contoured shots
- Remote control
- Can be paired with ANFO loader
- Staged inclinometers with visual and audible alarms
- Optional removable service hand rails

Stemming Buckets



Side tilting stemming bucket



Centre chute knife gate stemming bucket



Custom built



Heritage



Hands-on
experience



Innovation
leaders