

# UN-A-Hauler®

The Range



To ensure that the high productivity of your room and pillar equipment is maintained, Bucyrus offers a line of high capacity, highly reliable battery-powered mineral haulers and diesel-powered Coal Haulers. Whether replacing shuttle cars or current cordless haulers, Bucyrus is the most competitive choice for increased productivity.

#### **UN-A-Hauler®**

#### **Features**

- Each design maximizes the payload capacity in a given seam height.
- True tracking geometry improves maneuverability and decreases haulage cycle time.
- The Bucyrus HIPAC 10 VFD Drive System increases empty and loaded ground speed, which improves haulage cycle time, provides more work per battery discharge, and provides a machine management system.
- No trailing cables means unlimited flexibility when traversing the mine and getting to and from the face.
- Un-A-Hauler® operators are comfortably and safely enclosed in a thick steel compartment with a clear view front and back.
- Convenient scoop-type controls: to change directions, the operator simply turns their head.

### State-of-the-Art Drive Technology

Since introduction, the Un-A-Hauler® has lead the industry in "State-of-the-Art" drive technology with progressions through SCR and IGBT systems. The latest innovation by Bucyrus is the HIPAC 10 VFD control system which drives the motive traction and hydraulic systems, and provides the operator with machine management information.

The HIPAC 10 is a DC to AC variable frequency inverter control that drives high performance AC electric motors, which have superior speed torque characteristics. It operates 11% more efficient than traditional DC motors. This means loaded tram speeds can be increased; quicker more responsive hydraulic function; and ultimately, more material will be hauled per battery discharge. The HiPAC 10 machine management system speeds fault diagnosis, allowing rapid repairs and maximizing uptime. Temperature data from the individual drive units can be graphically displayed or downloaded for continuous condition monitoring. The new user interface can be tailored to user requirements, displaying such data as the distance

traveled per battery charge.



### **Ergonomically Designed Cockpits**

The operator's compartment provides a safe and comfortable working environment. Clear lines of sight are provided to the front and back, and across the machine. Convenience and controllability are enhanced with the use of the Bucyrus control stick which provides the operator with single hand intuitive control of tram direction, lights, park brake, 4 wheel assist and pump motor start. The operator's display has been upgraded to show all operating parameters at a glance with provision for fault analysis and data logging.

Model	Mining Height	Frame Height	Capacity
810C	39 – 60 in.	35 – 39 in.	344 cu.ft./10 m³
	990 – 1 524 mm	890 – 990 mm	10 tons/9 tonnes
816C	55 – 80 in.	47 – 54 in.	777 cu.ft./22 m³
	1400 – 2000 mm	890 – 990 mm	22 tons/20 tonnes
818	75 – 110 in.	50 – 54 in.	574 cu.ft./16m³
	1900 – 2800 mm	1270 – 1370 mm	15tons/13.6 tonnes

### **Frame Design**

Ruggedness and durability are the key elements in the life of a battery hauler. Through the use of FEA technology, each Bucyrus frame design is evaluated to provide maximum strength without power robbing weight restrictions. The new "C" series Un-A-Hauler® differs from its predecessors in regard to true tracking and in the orientation of the vertical articulation mechanism. The true tracking concept allows the driving wheels to be located at an equal distance from the articulation pivot allowing the front wheels to track exactly with the rear wheels. This provides a slight increase in available traction power as losses associated with wheel scuff common to trailer style articulation is eliminated. It also helps in obstacle avoidance in that the hopper section of the vehicle will fit within the same area just maneuvered in by the tractor section.

### Proven Mine Duty Drivetrain

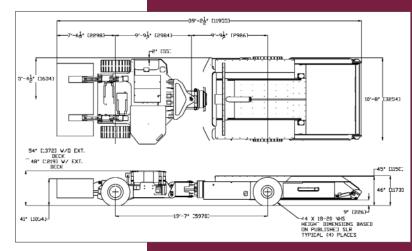
The Un-A-Hauler® features dual 75 hp / 56kw AC 3 phase motors. In addition to improved performance and power efficiency, AC motors also eliminate the need for DC commentators and brush riggings, resulting in lower operating cost and down time. Two proprietary double reduction, parallel gear reducers equipped with wet, multiple disc brakes connect to the planetary wheel ends.

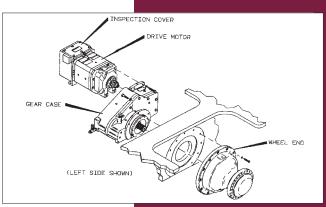
### Heavy-duty Ball Bearing Center Section

Offering the strongest center sections in the market and superior oscillation in tough conditions, the Un-A-Hauler® provides professional solutions for the toughest conditions.

The rolling element oscillation bearing provides smooth ground contour following of the driven wheels providing maximum traction in all conditions. The connecting

plates for the bearing are manufactured from high strength ASTM A514 steel, insuring a strong and reliable articulation joint. The 816C coal hauler boasts a 300% increase in bolt moment capacity.





### Deeper Cuts from Supported Roof

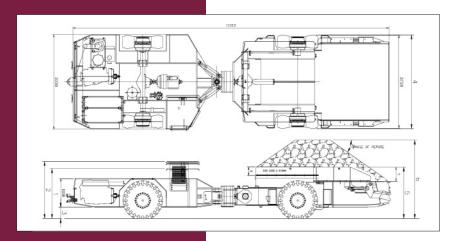
By design, the Bucyrus Un-A-Hauler® provides unsurpassed depth of cut access to the miner, allowing the latitude to take advantage of the deep cuts desired for maximum production, while maintaining a safe environment for the operators.





## Diesel Coal Hauler FBR-15

In addition to the line of battery-powered haulage vehicles, Bucyrus offers a diesel haulage vehicle designed for maximum haulage capacity on difficult floor conditions or gradients. The Bucyrus Coal Hauler FBR-15 complies with all national safety regulations pertaining to fire shutdown, exhaust emission sampling and brake standards and utilises the same power package and drive components as the range of LHD machines.



### Dimensions (nominal)

Length: 35 ft. 7.5 in. / 10 859 mm
Width: 10 ft. 11 in. / 3 330 mm
Height: 5 ft. 11 in. / 1 800 mm
Weight: 48 501 lbs / 22 000 kg

### **Optional Features**

- Wet scrubber system
- Tyres Michelin 20.5 x R25
- Bolt-on, custom height sideboards

### Five stars you can rely on



We are constantly tailoring our services to maximize:

- Safety
- Reliability
- Quality
- Know-how
- Integrity

The Bucyrus Five-Star Service ensures that mining equipment remains a highly productive asset. Get the best out of world-class Bucyrus equipment.

#### **Features**

- Up to 22 tons / 20 tonnes maximum payload
- Certified power packages available with state-of-the-art dry scrubber system and DPM filtration
- Rugged, reliable drive unit with chainless drive system
- Quick response hydraulic steering and true tracking geometry provide optimum manoeuvrability
- Fully encapsulated 6 plate wet-running disc brakes
- Cockpit positioned for optimum visibility and protection
- Electronic safety system with automatic cut-off
- Additional rear gate
- High-powered, low-emission vehicle featuring 30% lower heat generation

