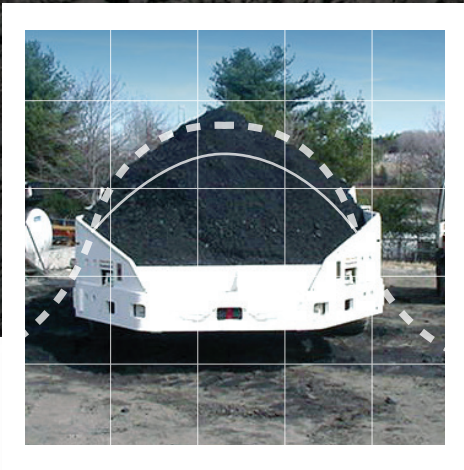


Underground Mining
Haulage Equipment



**Mine More.
Haul More.
Make More.**

More Tonnes Per Trip Equal More Profit





Global Expertise.

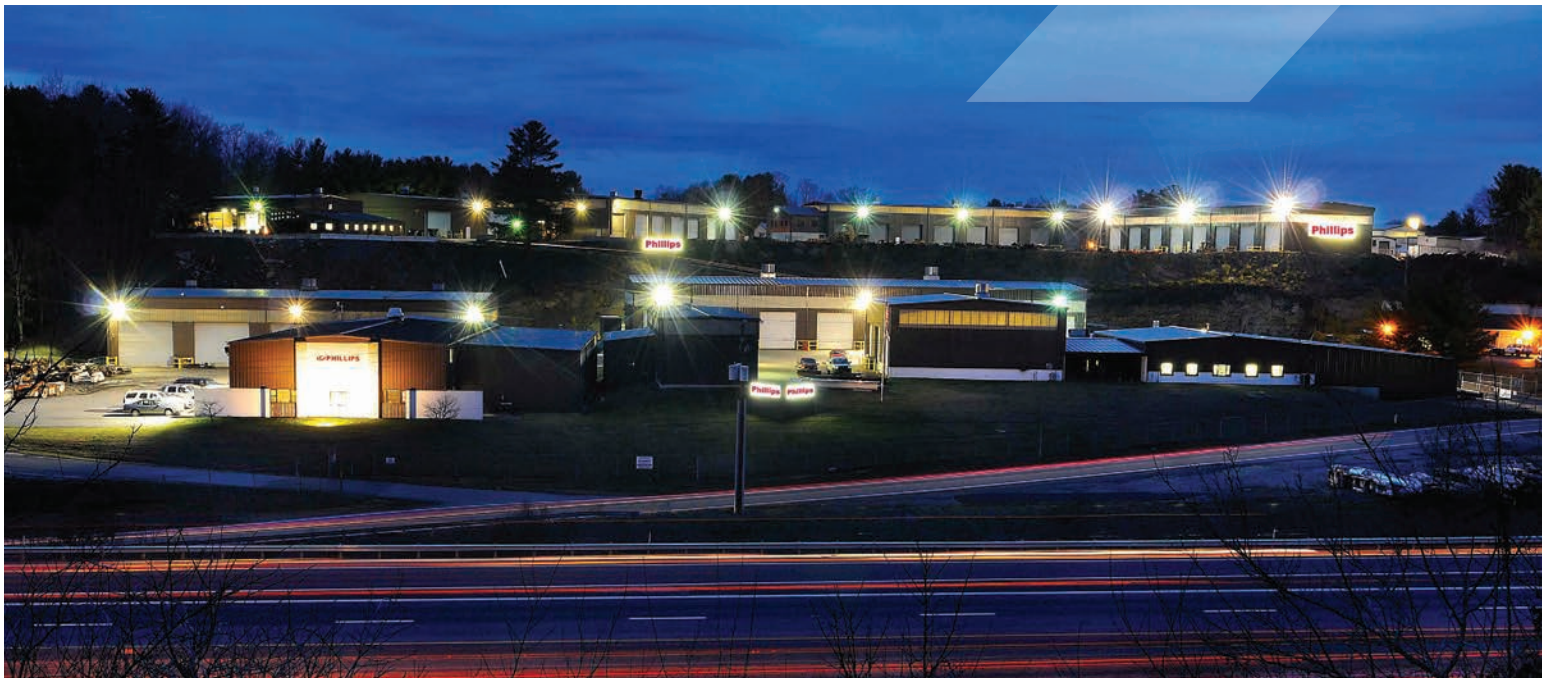
The key to service is availability and Phillips has continued to expand it's U.S. holdings with offices in West Virginia, Colorado, Tennessee, and Kentucky, and also has international operations in China, South Africa, and Australia. Our mining expertise, our teams of experienced engineers, mechanics and machinists, provide innovation and service excellence to the underground mining industry. Our deep understanding and experience in this industry and our superior products and services set us apart as a world leader serving the energy and underground mining arena.



We strive to be the #1 choice to supply shuttle cars to the underground mining industry.

A History of Excellence





Leadership. Innovation. Service.

Phillips has grown to be one of the largest full-service companies of its type in the world. Since Phillips began operation in 1976, the company has set the pace for equipment service and support. Today, Phillips has several Original Equipment Manufactured (OEM) products and is involved in the fabrication or repair of most mining equipment, including rebuilding continuous miners, shuttle cars, roof bolters, feeder breakers and scoops; repair and remanufacturing of cutter drums and a variety of service exchange components; as well as the sale of new and used equipment.

The success of Phillips is largely due to a philosophy that was initiated more than three decades ago: "To utilize the most skilled people in the industry; provide a safe working environment; and provide the best possible machine/components at the most cost-effective price." Our customers rely on Phillips' complete precision machine shop, our welding and fabrication facilities and our component exchange program to keep their machinery operating cost effectively.



Phillips Machine Service, Inc.
 ISO 9001: 2008 Certified w/o Design
 Certificate Number: 14.148.1

2008 - Phillips PM15DE Diesel Electric is introduced at the 2008 Las Vegas MineEXPO.

2009

2011 - Phillips acquires The Combs Group with locations in Kentucky and Tennessee.

2013

2014



2008 - Phillips Machine Services expands nationally and internationally in 2008.

2009 - Phillips introduces the first South Africa manufacturing facility.

2011 - Phillips employs nearly 300 people worldwide.

2013 - Phillips expands internationally, taking the lead in mining shuttle cars produced worldwide.

2014 - Phillips earns ISO 9001: 2008 w/o design certification

Future expansion of services in Surface, Industrial, Transportation and Energy Sectors

Our People & Experience



Innovation

“Innovation is at the core of our success. We take great pride in our products, our people, and the level of quality we provide to our customers.”

C.R. Allen

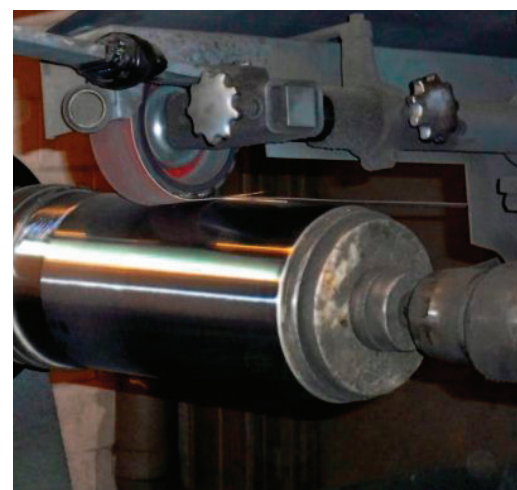
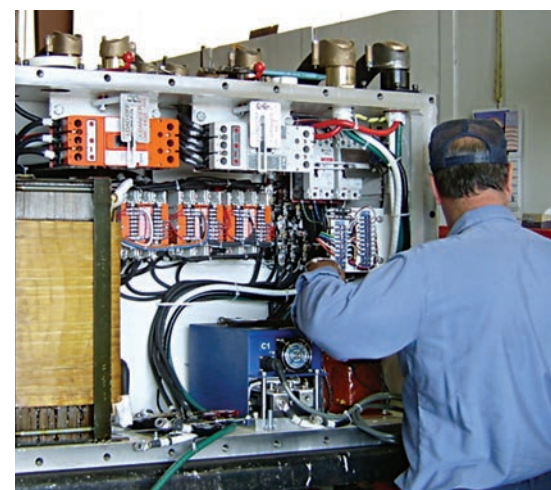
General Sales Manager

Our People & Experience

Our story starts with hundreds of years of mining experience—the fruit of our company isn’t the great service or products, but the great people that have provided that wealth of knowledge and experience to our customers. We are grateful for the personnel we have been able to attract and retain—and with their help we have equipment in operation on six out of seven continents, with employees across the U.S., South Africa, Australia, China and Mexico.

From the beginning we have repaired equipment for many of the world’s largest operations and greatest manufacturers. We have grown to know every bolt, seam, angle and weld known in the industry. We know the strengths of most all types of underground mining equipment, and we know the weaknesses as well. With this type of experience and knowledge—we believe we have the secret to what everyone needs to keep the operation running. It’s not just our great technology, our safety features and our precision work—it is our people that set us apart.

With decades of experience, great innovation, and exceptional personnel—Phillips is poised to be a leader of underground haulers (shuttle cars) and continuous miners on the planet.



Equipment & Support

Phillips has grown to be one of the largest full-service companies of its type in the world. Since our beginning in 1976, Phillips has set the pace for equipment service and support. We are involved in almost all phases of mining equipment repair, rebuild, remanufacture, and used equipment sales.

Specific areas of operation include: rebuilding continuous miners, remanufacturing shuttle cars... repairing and rebuilding of all underground mining equipment, from cutter drums to longwalls.

Service Exchange Program

In order to serve our clients better—we know that keeping your operation running is paramount to success. Through our service exchange program, we offer a wide variety of parts and components on a service exchange basis, from electronics to cutterhead gear cases, pots, and traction reducers just to name a few. Contact us about our service exchange availability.



Contact us today for more information 1-800-733-1521

Our Services



Services

- Equipment Sales
- Equipment Rebuild
- Component Rebuild
- Chrome Plating
- Welding
- Fabrication
- Machining
- Hydraulics
- Vehicle Diagnostics

Machining, Fabrication and Welding Services

Your Single Source for Precision Machining and Fabrication Services

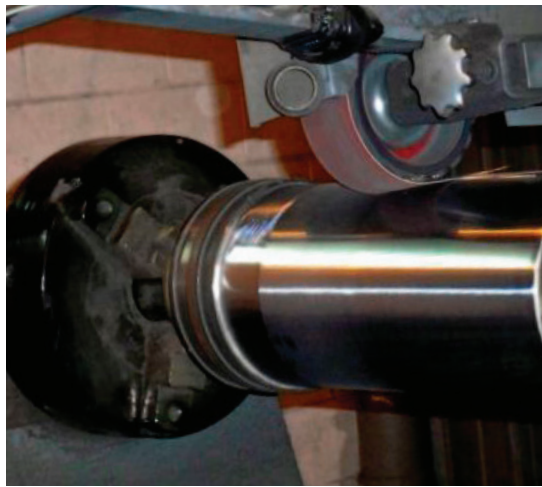
Phillips offers immediate response and efficient service, around the clock. We have nine horizontal boring mills, not one; six Kington Engine Lathes, not two. Our multi-machine concept means you'll never have to wait during an emergency.

Our large floor type horizontal boring mill is capable of whole main frame machining on one setup. The result is a distortion free main frame that allows perfect component fit and reassembly. For custom machine work, no one can match Phillips!

Our locations are staffed with certified and highly skilled Machinists, Fabricators and Welders that operate a variety of precision equipment. Lathes, Milling machines, Industrial Drill Presses, Index Machines, VTL's (Vertical Turret Lathes), Vertical Boring Mills, Shears, Engine Lathes and Pattern Torches are all operated by a team with extensive abilities to rethread, repair, and rebuild an assortment of components for your industrial equipment.



Contact us today for more information 1-800-733-1521



Chrome Plating and Hydraulics Rebuilding

Industrial chrome is utilized in industries that employ heavy equipment, or more specifically hydraulic cylinders. Plating is very beneficial for such equipment sectors because it will significantly extend the life of the hydraulic cylinder rod and/or sleeve. Hard chroming is not for decoration, but it increases surface durability, adding wear corrosion and heat resistance. Hard chrome can also completely restore a surface, reduce friction, and increase lubricity and oil retention. Chrome plating an existing rod is also generally more cost effective than procuring the raw IHC (induction hardened chrome) materials to machine a new rod.

Plating specialists have a combined 25+ years of experience.

Range Capability

Equipped with two chrome tanks; one which is a deep tank capable of plating rods up to 32' in length and 18" in diameter. We can OD plate cylinder rods and sleeves. Chrome hardness ranges up to 45 kgf with a chrome hardness guarantee; maximum thickness of 0.25 (twenty-five thousandths of an inch). CGI also has external grinding capabilities and can strip thermal or "spray-on" chrome as well.

Turnaround Time

Turnaround time is estimated at 3-5 days and depends on the amount of items being chromed, the depth of chrome being applied, the size of the plated piece(s), the need of the customer and overall workflow within the chrome department.

Phillips S.U.I.T.E. of Experience

Surface

With fabrication facilities across the U.S. and around the world we are positioned to supply replacement parts and rebuilds to keep you up and running.

Underground

Over 30 years of experience in the underground environment—our repairs are tested and proven in the most rugged conditions.

Industrial

Our goal is to provide the highest level of performance for the clients we serve. It is our passion to help you get the best return on your investment.

Transportation

Our background is rebuilding and repairing equipment on the move. From excavating and hauling—to other specialized equipment, we will keep you moving.

Energy

Our headquarters is in the heart of one of America's richest energy resources. Our proximity and years of experience in this sector—make Phillips a good fit to keep you in production.

The Phillips Shuttle Car Family

Phillips first OEM product, The Freedom® Car, a battery powered shuttle car was designed and built to the highest OEM standards and to reduce costs at the mine. An improved chassis design - now known as the High Capacity Chassis - incorporates the use of the high strength and high wearing steels to reduce weight and prolong chassis life. The weight reduction gain in the chassis design allows for larger payloads, which follows the Phillips theme, More Tonnes Per Trip Equal More Profit.

Motor Packages

Depending upon your needs and model of choice, Phillips offers a wide variety of traction and conveyor motor packages with ratings from 35Hp (26kW) to 115Hp (85kW).

Today, VFD type motor controllers are replacing SCR type motor controls. Our PMFV-85 Flux Vector Drive carries on the same tradition as its fore runners, adding the additional benefit of using an AC type motor which requires zero maintenance. Here again, Phillips has taken the lead by using encoders on the traction motors for even better speed control, more torque produced, and better diagnostic capabilities.

Full-Time 4-Wheel Drive, 4-Wheel Steering & Optional Suspension

Only the Phillips shuttle car provides full time 4-wheel drive thru the use of electric motors and at the same time provides 4-wheel steering. The 4-wheel steering works exactly like a traditional shuttle car. Turning radiuses are tight and maneuverability is good when the roadways are narrow.

Master Control Seat

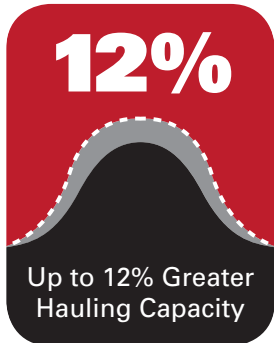
Electrical Controller

Conveyor Motor



High Capacity

Improvements to mechanical and hydraulic components along with the use of the most sophisticated electronics currently available make the Phillips' shuttle car a good choice whether battery, cable, or diesel powered haulage is required. Input power options are available to provide for DC or VFD motor controls. The Phillips' shuttle car provides infinitely variable tram and convey speed controls, electronic traction differential, single motor or dual conveyor drive, 4-wheel steering, full-time 4-wheel drive and much more. With so many available options, Phillips customers should have no problem finding a model that fits their needs and expectations.



Improved Wheel Unit Design

The castings used are thicker and denser to increase strength. We have increased the size of the kingpins and bearings to allow for larger payloads and to extend operating life. Lubrication for the kingpin has improved, and an improved seal is used in the planetary assembly.

Wide Range of Solid State Electronic Packages

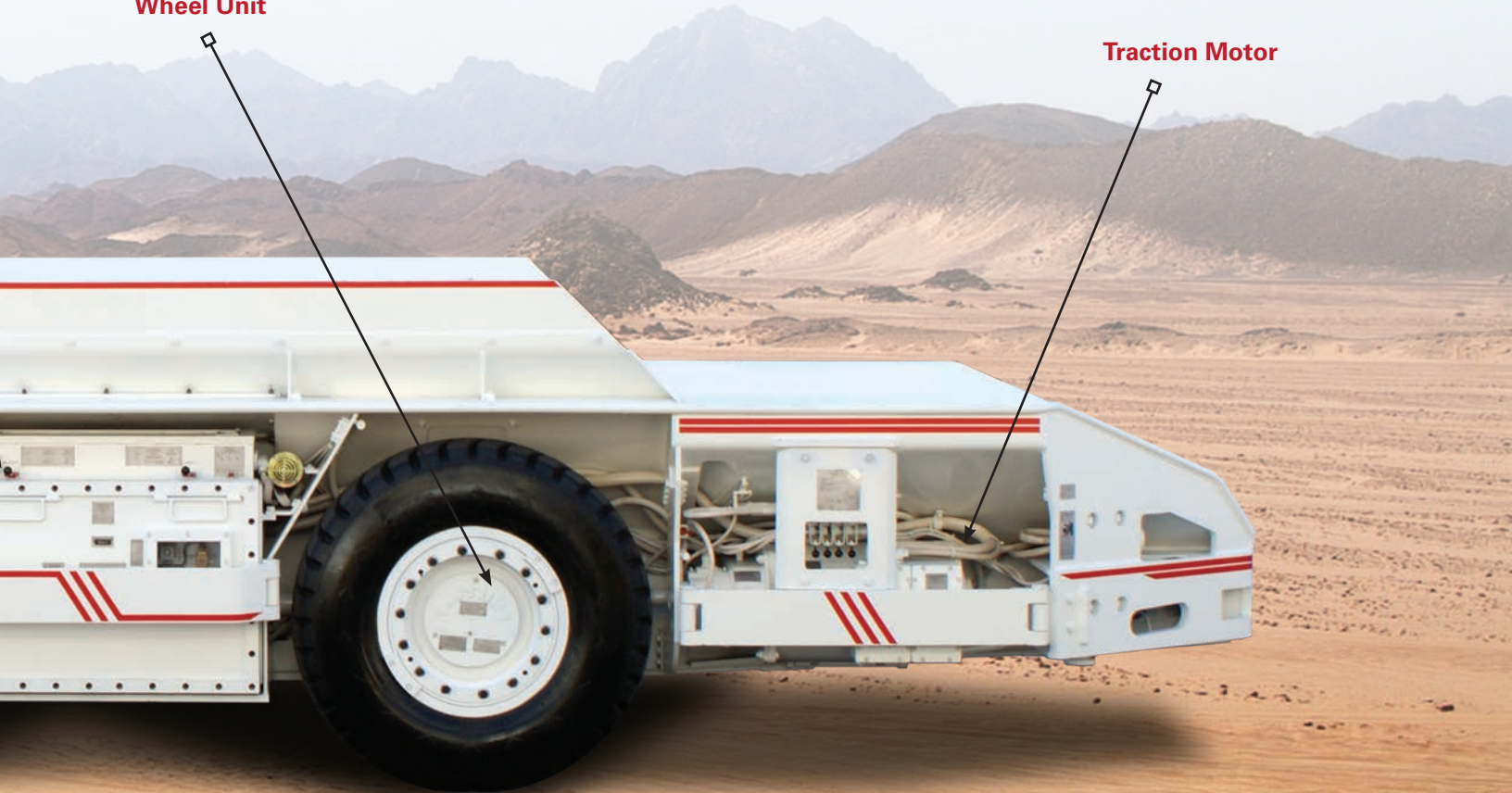
Since 1992, Phillips has offered solid-state motor controls for rebuilt shuttle cars and now for our three OEM product lines. Our motor control systems have always provided variable speed control for both, traction and conveyor motors. We were the first to offer the electronic traction differential feature, which allows for a tighter turning radius, less floor damage, and increases tire life.

Increased Payload

Now into our second decade of OEM shuttle car designs, the Phillips High Capacity Chassis, originally conceived in the Freedom® Car design, continues to gain favor with customers worldwide. Now used in five countries on three continents the High Capacity chassis continues to fulfill the original engineering concept, increased production rates yield more profit.

Wheel Unit

Traction Motor



Mine More. Haul More.

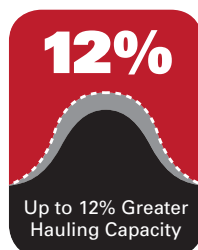
PM15DE
Diesel Electric



HC12BC
Trailing Cable Powered



FC12B
Battery Powered



Phillips is High Capacity

Proven increased payload, heavy-duty unibody chassis, and advanced wheel unit design, available in both battery and trailing cable models.

High Capacity models to suit all your mining needs.

Make More.

More Tonnes Per Trip
Equal More Profit



Remanufactured
Continuous Miners



Remanufactured
Roof Bolters

Phillips Remanufactured Quality Equipment

Used equipment remanufactured to the latest specifications and updated to suit your needs.

Cost savings versus new equipment with new machine warranties.



PHILLIPS

United States | China | Australia | South Africa



Battery Powered High Capacity Shuttle Car

Since its introduction at MINExpo 2000, the Freedom® Car has evolved to include an industry-leading payload capability, 4-wheel independent suspension, DC and VFD motor controls, along with improved mechanical, and battery components.



Nearly 3 tons more than our competition!

Model	Rated Capacity	Empty Weight	Overall Width (A)	Chassis Width (B)	Overall Length (C)	Chassis Height (D)	Ground Clearance	Tire Size	Load End Height	Ground Pressure	Minimum Seam Height
FC12B	12 Tonnes 13 Tons	28800 kg ₁ 63500 lbs ₁	3967mm 156"	3826mm 151"	9614mm 379"	1091mm 43"	214mm 8.5"	45-16X20	839mm 33"	9.91 kg/cm ² ₂ 141 psi ₂	1500mm 59"
FC16B	16 Tonnes 18 Tons	29480 kg ₁ 65000 lbs ₁	3937mm 155"	3766mm 148"	9385mm 370"	1310mm 51.5"	289mm 11.5"	14.00X20	1310mm 51.5"	11.81 kg/cm ² ₂ 168 psi ₂	1900mm 75"
FC20B	20 Tonnes 22 Tons	30300 kg ₁ 66800 lbs ₁	3918mm 154"	3734mm 147"	9684mm 381"	1448mm 57"	343mm 13.5"	14.00X24	1448mm 57"	11.10 kg/cm ² ₂ 158 psi ₂	2000mm 79"
FC30B	30 Tonnes 33 Tons	394700 kg ₁ 87000 lbs ₁	4446mm 175"	4446mm 175"	9648mm 380"	1750mm 67"	436mm 17"	18.00X25	982mm 39.5"	7.73 kg/cm ² ₂ 110 psi ₂	2845mm 112"

All specifications are subject to change without notice.
Dimensions are based on a Freedom® car with a 1625mm (64") wide conveyor.

Notes:
³ Machine weights will vary depending on options selected.
⁴ Ground pressure is shown at rated capacity and will vary depending on options selected.
⁵ When the dual loader chain option is selected, two (2) conveyor motors may be used.



Trailing Cable Powered High Capacity Shuttle Car

The evolution of the Phillips OEM Shuttle Car program has come to include our cable operated shuttle car. Our High Capacity Chassis design has redefined the standards in shuttle car payload capacity. The shuttle car has constantly been improved with the ever-changing advances in technology and safety.



Greater hauling capacity has a direct impact to your bottom line!

Model	Rated Capacity	Empty Weight	Overall Width (A)	Chassis Width (B)	Overall Length (C)	Chassis Height (D)	Ground Clearance	Tire Size	Load End Height	Ground Pressure	Minimum Seam Height
HC08B ₁	8 Tonnes 9 Tons	18000 kg ₃ 40000 lbs ₃	3378mm 133"	3099mm 122"	8305mm 327"	900mm 34"	216mm 8.5"	35-15x15	762mm 30"	8.50 kg/cm ² ₄ 121 psi ₄	1220mm 48"
HC12BC ₁	12 Tonnes 13 Tons	20500 kg ₃ 45000 lbs ₃	3754mm 148"	3232mm 127"	9258mm 365"	1092mm 43"	254mm 10"	45-16x20	865mm 34"	7.87 kg/cm ² ₄ 112 psi ₄	1350mm 53"
HC12BE ₂	12 Tonnes 13 Tons	20500 kg ₃ 45000 lbs ₃	3841mm 151"	3232mm 127"	9360mm 368"	1092mm 43"	254mm 10"	45-16x20	865mm 34"	7.87 kg/cm ² ₄ 112 psi ₄	1500mm 59"
HC14B	15 Tonnes 16.5 Tons	23100 kg ₃ 51000 lbs ₃	3581mm 141"	3179mm 125"	9042mm 356"	1139mm 45"	292mm 11.5"	14.00x20	982mm 39.5"	9.49 kg/cm ² ₄ 139 psi ₄	1600mm 63"
HC16B	16 Tonnes 18 Tons	24000 kg ₃ 53000 lbs ₃	3835mm 151"	3280mm 129"	9004mm 354.5"	1310mm 51.5"	292mm 11.5"	14.00x20	1310mm 51.5"	10.4 kg/cm ² ₄ 148 psi ₄	1900mm 75"
HC20B	20 Tonnes 22 Tons	27500 kg ₃ 60600 lbs ₃	3835mm 151"	3232mm 127"	9216mm 363"	1448mm 57"	343mm 13.5"	14.00x24	1448mm 57"	10.47 kg/cm ² ₄ 149 psi ₄	2000mm 79"
HC30B	30 Tonnes 33 Tons	32000 kg ₃ 70500 lbs ₃	3835mm 151"	3760mm 148"	9705mm 382"	1676mm 66"	445mm 17.5"	18.00x25	1676mm 66"	6.89 kg/cm ² ₄ 98 psi ₄	2845mm 112"

All specifications are subject to change without notice.
Dimensions are based on a cable car with a 1625mm (64") wide conveyor.

Notes:

₁ Machine weights will vary depending on options selected.

₂ Ground pressure is shown at rated capacity and will vary depending on options selected.

₃ When the dual loader chain option is selected, two (2) conveyor motors may be used.



Diesel-Electric Shuttle Car

Phillips' innovative Diesel Electric Shuttle Car was introduced at MINExpo 2008 in Las Vegas, Nevada. This machine was the first of two that went to one of the major potash mines of Canada. A further evolution of the prototype diesel electric car that Phillips developed nearly 20 years ago, this car features a modern, efficient, electronically controlled diesel engine and electric, variable frequency, AC traction drive.

Model	Rated Capacity	Empty Weight	Overall Width (A)	Chassis Width (B)	Overall Length (C)	Chassis Height (D)	Ground Clearance	Tire Size	Load End Height	Ground Pressure	Minimum Seam Height
PM15DE	15 Tonnes 16.5 Tons	25,719 kg ₃ 56,700 lbs ₃	2723mm 107.19"	2584mm 101.71"	9300mm 366.14"	1470mm 157.84"	336mm 13.26"	14.00x24	1469mm 57.84"	9.2 kg/cm ² ₄ 131 psi ₄	2337mm 92"

All specifications are subject to change without notice.
Dimensions are based on a car with a 915mm (36") wide conveyor.

Notes:
₃ Machine weights will vary depending on options selected.
₄ Ground pressure is shown at rated capacity and will vary depending on options selected.



Headquarters

367 George Street
Beckley, WV 25801
+1-800-733-1521
www.phillipsmachine.com

US Offices

Phillips Tennessee +1-423-869-4737
Phillips Colorado +1-888-874-9900
Phillips West Virginia +1-800-733-1521
Phillips Kentucky +1-606-248-4711

Global Offices

Phillips Australia +27-13-246-8500
Phillips South Africa +27-13-246-8500
Phillips China 018609512555
13614778899



Remanufactured Equipment

Phillips U.S Based Service Center Locations

Phillips carries the largest inventory of used underground mining machinery in the USA. The condition of this machinery will range from "Mine Ready" to "Reconditionable" to requiring "Full Rebuild." The machines can be purchased "as is" or can be reconditioned or fully rebuilt by our highly skilled and experienced employees.

Our facilities are state-of-the-art equipped with the latest machine tools, welders and electrical shop. When you have been in business as long as Phillips has, you learn a thing or two about rebuilding underground machinery.

With over 3 decades of experience; along with our remanufacturing capabilities that provides the mining industry with a one-stop shop for most of your mining machinery needs. We are committed to maximum quality to ensure that the rebuilt machine you receive from Phillips will meet the levels of productivity and reliability as expected from a new machine.

Phillips West Virginia

Phillips started in Beckley, WV in 1976 and has grown into the hub for all business activities. The West Virginia office is the home base for the sales department, engineering department and business offices, but also the backbone of knowledge in all phases of our capabilities. The company has expanded to include our regional facilities in the US, as well as internationally in South Africa, China and Australia.

Phillips Colorado

Expansion moved toward the western United States when Phillips opened a manufacturing facility in Delta, CO in 2008. Since that time, the CO facility has become an integral part of our success in the Western US. Now being located closer to many of our valuable customers, it has been an asset to saving those loyal customers time and money.

Phillips Tennessee

Our TN location specializes in rebuilding of roof bolters as well as other underground mining machinery, associated part sales, machining and fabrication. The location near the coal fields' other industrial ventures has become a vital part of Phillips' expansion into other industries as well as maintaining our presence in mining.

Phillips Kentucky

Phillips acquired The Combs Group, Inc. in 2011. The Combs Group, Inc. specializes in industrial chrome plating and hydraulic repair and rebuild. Their ability to service and repair hydraulic cylinders, pumps, motors and valves from a wide array of manufacturers is unrivaled.

built to last

Key Features

Complete Custom Rebuilds

Complete Units Available
for Service Exchange

Customer Driven Upgrades

High Horsepower
Cutterhead Gearcases

OEM Equivalent Warranties

The Phillips Philosophy

“To get our customers back in production as soon as possible. We are committed to listen to our customers needs through underground inspection and consulting.”

Remanufactured Continuous Miners

Phillips is the Mining Machinery Rebuild Specialists

Our modern machine tools, highly motivated and skilled employees, pride of craftsmanship, dedication to quality and service after the sale are what has made Phillips successful.

Our remanufacturing capabilities provide the mining industry with a one stop shop for most of your mining machinery needs.

Getting and keeping our customers in production is our #1 goal. With this in mind, a service exchange machine may meet your needs. Phillips can provide a machine with many of the same or similar specifications fully rebuilt allowing continued use of the current miner until the completed machine can be delivered.

Phillips also carries a number of exchange components to support our rebuilt equipment.



Standard Phillips Rebuilds Include:

- Each machine is disassembled into the major component parts.
- These component parts are then disassembled, cleaned and inspected.
- Fabrications are sandblasted and inspected using non-destructive techniques to determine the repair scope of work.
- Worn structural steel and wear plates are then replaced.
- Major electrical, hydraulic and mechanical components are rebuilt or replaced.
- Machine is fully tested and serviced prior to delivery.
- Phillips will work closely with mine personnel throughout the rebuild process to ensure that all aspects of the machine layout meet customer specifications.



Available Options

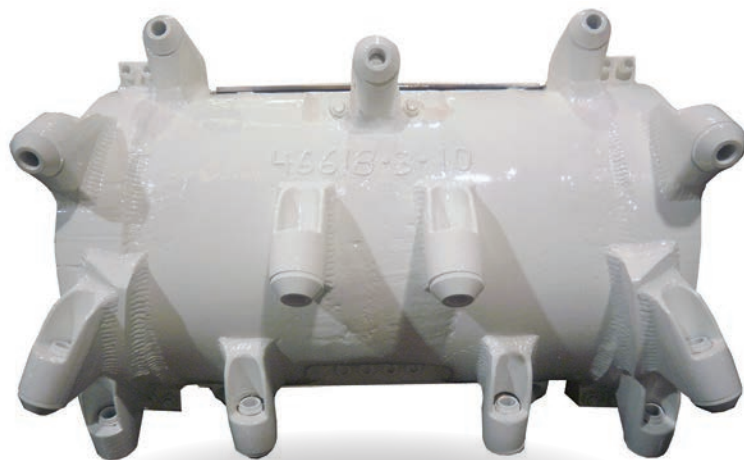
Outboard One Piece Gathering Head Torsion Arms
CCO on All Chain Paths and High Wear Areas
Manifold Water and Hydraulic System
Crawler Chains with Carbide Grousers
Bumper Cross Under Exhaust
New Style Lightweight Remote
Retrieval Type Rear Bumper
Manual Brake Override
Trailing Cable Entrance on Both Sides of the Miner

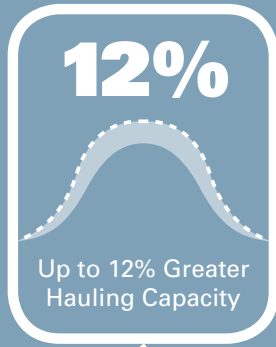


Precision Cutter Drums—New, Rebuilt, or Repaired

Phillips will custom design and make recommendations on the cutter drums for your specific operation and most continuous miners. Our experts can help you minimize fines and maximize production.

Phillips' reputation as a leader in the field of cutter drum design and quality is proven by our many satisfied customers.



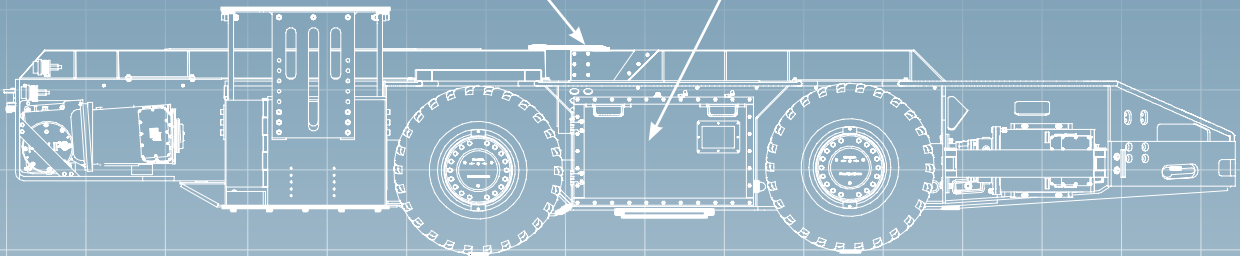


Hauling Capacity

The Phillips High Capacity Chassis design has been proven to reach payload capacities of 12% to 15% more than the competition.

Available Technology

Phillips Minelink and MineSMART Technology packages can yield more operation time through real-time monitoring, advanced electronics and improved operator safety.



Combining Hauling Capacity and Technology

More Tonnes Per Trip, Reduced Maintenance Cost & Safer Operation

Features of Phillips Newest Shuttle Car Design

VersaRide Suspension

Suspension without loss of volumetric capacity.

Heavy Duty Unibody Chassis

Increased payload = more tonnes per trip!

Advanced Wheel Unit Design

Eliminates the bell type oil seal.

Digital Diagnostics -

Equipment tracking and alarm setting for over 50 different items! These diagnostics are delivered to your computer or mobile device.

Ergonomic Operator's

Compartment— Eliminates hydraulic components

Handheld Remote

Control Operation

Wireless Data Transmission

Over the existing mine infrastructure

Two Types of 4-wheel Independent Suspension

On-board Payload Scale

Opposite Operator Side Cameras



PHILLIPS

Contact us today for more information 1-800-733-1521



MineSMART - Technology Package

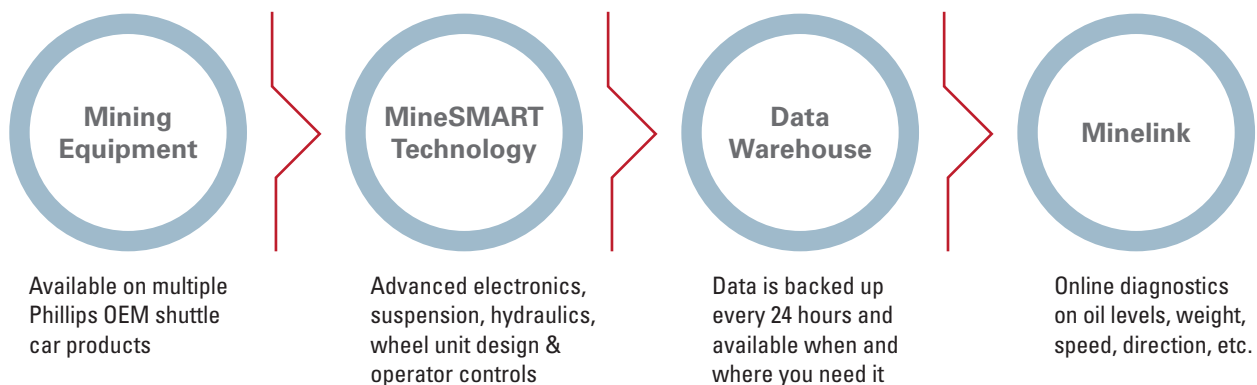
MineSMART Technology from Phillips includes new hydraulics (with centrally located valve bank and service jack actuators and a swing-out hydraulic tank assembly for ease of maintenance), VersaRide Suspension (no loss of volumetric capacity and low stress on frame sides), DuraUnit (a new Phillips wheel unit), Rotating Operator Seat (with camera monitors and diagnostics display screen and ergonomic seat for reduced operator fatigue) and upgraded electronics (PLC Controls, sensors which are reported on Minelink.com, Operator Video Monitor, Wireless Data Transmission, Electronic Brake, Wireless Remote and much more!).

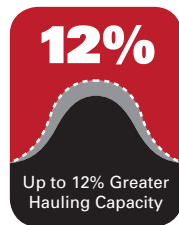
Minelink - Diagnostics

Shuttle cars and continuous miners equipped with MineSMART and Minelink Technology will have wireless access points, which will transmit data from the equipment to the mine's internet connection.

From the mine, data is transmitted to the Minelink database via the mine's internet connection. Our database is backed up daily. The Phillips' data warehouse helps data to be retrieved and displayed faster on the Minelink.com website.

Minelink.com makes it easy to understand the data that is coming off of your mining equipment and being transmitted to the Minelink databases. Simply login to access equipment details and reporting data.





More Tonnes Per Trip Equal More Profit



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US Offices

Phillips Tennessee +1-423-869-4737
Phillips Colorado +1-888-874-9900
Phillips West Virginia +1-800-733-1521
Phillips Kentucky +1-606-248-4711

Global Offices

Phillips Australia +27-13-246-8500
Phillips South Africa +27-13-246-8500
Phillips China 018609512555
13614778899