



Improving safety while increasing production.



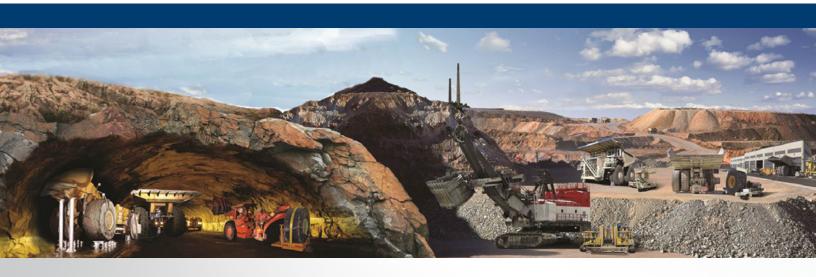
# SURFACE

**EQUIPMENT & PRODUCT GUIDE** 









**B&D Manufacturing designs, manufactures and distributes innovative** products and technologies specifically developed to increase maintenance personnel safety, reduce operating downtime, improve efficiencies and increase production.



#### **Head Office:**

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Please visit **bdmfg.com** to find a sales representative or distributor near you.

- Our OEM product line supports large haul trucks and heavy shovels at surface operations, as well as heavy equipment operating in underground mines.
- Skilled designers, engineering staff and trades personnel design and manufacture fully engineered, certified products in our state-of-the-art manufacturing facility.
- B&D Manufacturing invests significantly in new product development, manufacturing complex component handling equipment and fabricating custom-designed aluminum products to meet customers' unique needs.
- Highly qualified field services personnel can handle on-site emergency repairs and scheduled equipment maintenance, as well as all types of rebuild projects with accuracy and precision, on time and on budget.
- We have earned a solid reputation for supplying superior-quality equipment, products and aftermarket parts. Our knowledgeable sales professionals and front-line customer service teams are well-versed in a vast array of products, and committed to ensuring a positive customer experience.
- B&D Manufacturing has been exporting since 1983, and continues to enter new markets through a broad network of international distributors.

# **B&D EVOLUTION JACKS** EJ200, EJ240







When maintenance is required on your fleet of Mining Haul Trucks, the B & D Evolution Jack can lift & secure the world's largest mining haul trucks. For excellent stability when removing and re-installing tires and wheel groups from trucks.

Models: EJ200 & EJ240



This equipment is the only certified two point lifting jacking system for the 240 ton to 400 ton (217 MT to 363 MT) Mining Haul Trucks.

The B & D Evolution Jack enables maintenance personnel to perform required maintenance to your vehicles in a secure, safe manner. Easy to operate and requiring only one individual, the B & D Evolution Jack is also an Engineered Safety Stand. If you need to use the Evolution Jack to lift other vehicles before the work is complete, simply add B & D Engineered stands. The Evolution Jack uses a wireless remote that senses tonnage, tilt and limits.

The EJ200 will lift all vehicles Komatsu or Cat (240 ton to 400 ton), and the EJ240 is for customers who have dedicated CAT 797 Haul Truck Fleets.

Custom lifting attachments can be designed for lifting your specific trucks.







# **B&D MULTI HANDLER**

WMH-E-AC, WMH-E-DC, WMH-D







Increase safety, turnaround time and availability to your trucks using existing shop floor space. Designed for Caterpillar, Komatsu and Liebherr haul truck wheel motors, the B&D Multi Handler is Engineer certified and supported by B&D Manufacturing and distributors.

- Certified heavy-duty frame to hold 50 tons (45 MT)
- Complete movement of wheel motor: X, Y, Z, Yaw, Pitch and Roll including rotation on cradle cams
- Computer controlled and wireless radio remote operated
- Diesel, DC battery or AC powered models available
- 6 all-wheel drive, heavy-duty grip, aggressive traction tires
- All 3 drive assemblies steer 45 degrees both directions (left/ right) for 90 degrees in total
- Safe work platform with handrails

#### **B&D Multi Handler Attachments**

We manufacture a wide range of accessories for the removal and replacement of truck parts via the B&D Multi Handler's quick attachment connectors.

- Pedestal Boom
- Front Strut Removal Tool
- Spindle Hub Removal Tool
- Corner Group Removal Tool
- Rear Wheel Group Removal Tool

Custom designed accessories to suit your fleet.





# CORNER GROUP TOOL WMHA-CGT-U

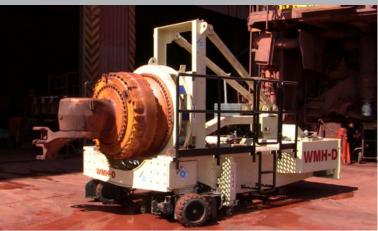


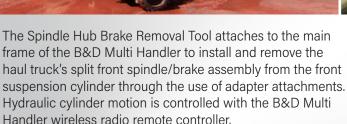
The Corner Group Tool attaches to the main frame of the B&D Multi Handler. This attachment serves as a 3-in-1 tool through the use of various adapter attachments to install and remove either the haul truck's entire front corner group (spindle/brake assembly and front suspension cylinder) as one complete unit or the spindle/brake assembly and the front suspension cylinder split from each other as two separate units. Hydraulic cylinder motion is controlled with the B&D Multi Handler wireless radio remote controller.

- Adapter attachments built with work platforms for mechanics
- Tilts spindle/brake and suspensions to accommodate balanced lift from an overhead crane
- The newly designed Corner Group Tool can pick up the corner group from a pallet sitting on the ground

Custom designed adapter ring assemblies to suit your fleet.

# SPINDLE HUB BRAKE REMOVAL TOOL WMHA-SHBRT-U







Custom designed adapter ring assemblies to suit your fleet.

SHBRT-ADP-730E, SHBRT-ADP-860E, SHBRT-ADP-960E, SHBRT-ADP-793, SHBRT-ADP-797





# FRONT STRUT REMOVAL TOOL

### WMHA-FSRT-U







The Front Strut Removal Tool attaches to the main frame of the B&D Multi Handler to install and remove any model front strut (corner group) through the use of adapter rings.

Hydraulic cylinder motion is controlled with the B&D Multi Handler's wireless radio remote controller.

Built with an integrated work platform.

Tilts strut and hub to accommodate a balance lift from an overhead crane.

Custom designed adapter ring assemblies to suit your fleet.

FSRT-ADP-793, FSRT-ADP-797, FSRT-ADP-830E, FSRT-ADP-930E

# **PEDESTAL BOOM** WMHA-PB-2

This attachment mounts to the base B&D Multi Handler and is used to install and remove rear struts and main hoist (dump body) cylinders.

Control of the Pedestal Boom functions has been integrated into the B&D Multi Handler's wireless

radio remote controller and base unit with our latest product offering.

The operator can individually control the following 7 axes of motion: base left/right, boom up/down, dipper up/down, dipper extend in/out, gripper tilt forward/back, gripper angle left/right and gripper grab hold/release functions.

Gripper assembly includes two hydraulically operated winches with straps.



# **REAR WHEEL GROUP REMOVAL TOOL**

WMHA-RWG-XXXX

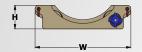


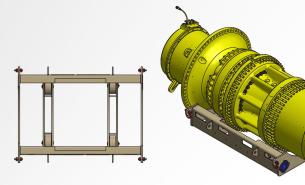


The Rear Wheel Group Removal tool attaches to the B&D Multi Handler cross slide assembly to install and remove truck wheel motor (final drive) assemblies.

Custom designed attachment to suit your fleet.







OEM TRUCK	PART NUMBER	LENGTH	WIDTH	HEIGHT	WEIGHT
Komatsu 730E	WMHA-RWG-730E	92 in (2337 mm)	66 in (1677 mm)	17 in (432 mm)	2,102 lb (954 kg)
Komatsu 830E	WMHA-RWG-830E	90 in (2286 mm)	66 in (1677 mm)	18 in (458 mm)	1,739 lb (789 kg)
Komatsu 830E-5	WMHA-RWG-5GEB36	92 in (2337 mm)	66 in (1677 mm)	17 in (432 mm)	1925 lb (873 kg)
Komatsu 860E	WMHA-RWG-860E	86 in (2185 mm)	66 in (1677 mm)	19 in (483 mm)	2,132 lb (968 kg)
Komatsu 930E-1	WMHA-RWG-5GDY85	86 in (2185 mm)	66 in (1677 mm)	17 in (432 mm)	1,900 lb (862 kg)
Komatsu 930E-4	WMHA-RWG-5GDY106	86 in (2185 mm)	66 in (1677 mm)	17 in (432 mm)	1,900 lb (862 kg)
Komatsu 960E	WMHA-RWG-960E	86 in (2185 mm)	66 in (1677 mm)	20 in (508 mm)	1,981 lb (899 kg)
Komatsu 980E	WMHA-RWG-980E	93 in (2362 mm)	66 in (1677 mm)	19 in (483 mm)	2102 lb (954 kg)
Caterpillar 785	WMHA-RWG-785	95 in (2413 mm)	66 in (1677 mm)	15 in (381 mm)	2,100 lb (953 kg)
Caterpillar 793	WMHA-RWG-793	86 in (2185 mm)	66 in (1677 mm)	19 in (483 mm)	2,130 lb (967 kg)
Caterpillar 795F	WMHA-RWG-795F	86 in (2185 mm)	66 in (1677 mm)	18 in (458 mm)	1865 lb (850 kg)
Caterpillar 797	WMHA-RWG-797B	100 in (2540 mm)	66 in (1677 mm)	27 in (686 mm)	1,607 lb (729 kg)
Hitachi 5000	WMHA-RWG-5000	92 in (2337 mm)	66 in (1677 mm)	17 in (432 mm)	2,102 lb (954 kg)
Liebherr	WMHA-RWG-T284	93 in (2362 mm)	66 in (1677 mm)	19 in (483 mm)	2102 lb (954 kg)





# **REAR ACCESS PLATFORMS FOR LARGE MINING HAUL TRUCKS**





Rear Access Platforms for Large Mining Haul Trucks.

- Engineered certified
- CAT
- Komatsu
- Liebherr

# FRAME FALL PROTECTION KIT - MINING HAUL TRUCKS

B & D makes a variety of engineered stairways and work platforms. Improving Safety while increasing production.







# **HEAVY DUTY STANDS**

HDS-XX-XX-XX







- Engineer certified
- Heavy duty stands maintain a safe working environment
- Lightweight, heavy-duty aluminum construction resists abuse from oil, salt and weather
- Heights: 12 in (305 mm) to 96 in (2439 mm)
- Capacity: 13.5 tons (12 MT) to150 (136 MT) tons
- When working on heavy machinery you need incredibly sturdy and dependable equipment.

HDS - 13.5 - XX - XX	WEIGHT	HEIGHT	BT - BALL
HDS - 30 - XX - XX	CAPACITY	RANGE	
HDS - 50 - XX - XX			TRANSFER OR
HDS - 70 - XX - XX	13.5 t - 150 t	(305 mm -	FW - FORK
HDS - 100 - XX - XX	(12247 kg -		WAYS
HDS - 150 - XX - XX	136078 kg)	2438 mm)	

# **BLOCKING KIT** A27000, A27000-100



- Engineer certified
- Lightweight cribbing for heavy equipment replaces traditional wood cribbing
- Single block stacking up to a maximum of 24 in (610 mm) can support up to 50 tons (45,000 kg)
- Crib-style blocking to the same height can support up to 100 tons (91,000 kg)





# WHEEL CHOCKS WC-XX





#### All B&D Manufacturing aluminum wheel chocks are Engineer certified.

- With the size and capacity of modern haul trucks growing continuously, so does the need for providing a safe and effective wheel chock. B&D Manufacturing offers an advanced engineering solution integrating a lightweight aluminum tubular design, providing an incredibly strong wheel chock that any individual or operator can easily lift and maneuver.
- Upon actual load testing, B&D Manufacturing's wheel chocks outperform the competition's wheel chocks on ice pack, compacted aggregates, concrete and normal construction surfaces. Our superior grip design eliminates the need for any additional rubber mats or ground preparation.
- Our high capacity wheel chocks for haul truck applications are lighter than the competition, allowing for easy handling and positioning.



#### **Considerations and Warnings**

- Improper usage may result in product failure and can cause injury or property damage. Read and understand operating instructions thoroughly before using.
- Individual end user testing required to ensure proper chock selection and function
- Always use in pairs
- Multiple pairs may be required in extreme applications
- Always use on firm surfaces
- Chock designed for normal haul road grades (WC-8, WC-10, and WC-12 do not exceed 20%)
- Chock designed for normal haul road grades (WC-15, WC-17, and WC-20 do not exceed 10%)
- Chock in direction of grade
- Chock both sides of tire if direction of grade is unknown
- Use only after parking brake is applied and tested
- Center chocks firmly and squarely against tire
- · Wheel chocks are not to be driven over



# **TIRE DIAMETER RANGE**

	UP TO 54" (137.2 CM)	UP TO 75" (190.5 CM)	UP TO 82" (203.9 CM)	UP TO 106" (269.3 CM)	UP TO 142" (360.7 CM)	UP TO 159" (404 CM)
UP TO 40,000 LB.	WC-8	WC-10	WC-12			
(18,143.7 KG)	3.7kg (8.2 lbs) (2 required)	5.7kg (12.5lbs) (2 required)	8.7kg (19.2lbs)(2 required)			
UP TO 120,000 LB.		WC-10	WC-12			
(54,451 KG)		5.7kg (12.5lbs) (2 required)	8.7kg (19.2lbs)(2 required)			
UP TO 203,000 LB.			WC-12	WC-15	WC-17	WC-17
(92,000 KG)			8.7kg (19.2lbs)(2 required)	11.3 kg (25 lbs)(2 required)	14.8kg (32.6lbs) (2 required)	14.8kg (32.6lbs)(2 required)
UP TO 403,000 LB.				WC-15	WC-17	WC-17
(182,797.7 KG)				11.3 kg (25 lbs) (2 required)	14.8kg (32.6lbs) (2 required)	14.8kg (32.6lbs) (2 required)
UP TO 860,000 LB.					WC-17	WC-17
(390,089.5 KG)					14.8kg (32.6lbs) (2 required)	14.8kg (32.6lbs)(2 required)
UP TO 1,375,000 LB						WC-17
(623,689.5 KG)						14.8kg (32.6lbs) v(4 required)
UP TO 1,375,000 LB						WC-20
(623,689.5 KG)						19.9kg (43.8lbs) (only 2 required)









# **B&D SWING SHAFT CHANGER**

SSC-3.5-PH





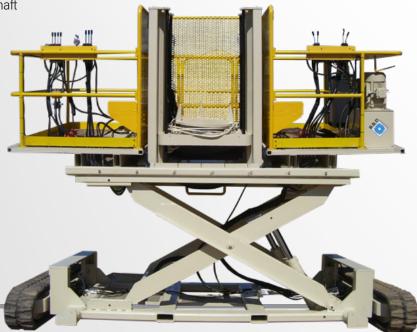


An easy, fast and safe way to replace and service the swing shafts for P&H 2300, 2800 and 4100 shovels.

- Features 7-axis of motion for swing shaft placement
- Base scissor lift extends 48 in (1219 mm)
- Main deck has 10 in (254 mm) X movement and 12 in (305 mm) Y movement
- The main tower is mechanically linked by 4 Acme threads providing 64 in (1625 mm) of stroke
- The main swing shaft table has an XY cradle movement (up to 6 degrees of motion) which gives the ability to place the shaft within a sphere
- The final axis is a 30 degree rotation of the main swing shaft table (this accommodates meshing of the gears)

- Designed to lift and support 7,000 lb (3175 kg) load
- 3 Phase AC powered direct from shovel, 10 hp electric motor
- 3 GPM 2,800 psi manual hydraulic control system
- Provides a safe work platform with hand railing
- GVW 6.25 tons (5.7 MT)
- Equipment is designed to be moved with fork style equipment and features a track drive system for final positioning





# TRACK ROLLER REMOVAL TOOL

# TRRT-FRAME, TRRT-S-XXXXX

#### **TRRT-Frame**

Forkway Frame

#### TRRT-S-HITACHI5500TR

Hitachi 5500 Track Roller Saddle Attachment

#### TRRT-S-PH4100RIR

P&H 4100 Rear Inner Roller Saddle Attachment

#### TRRT-S-PH2800RIR

P&H 2800 Rear Inner Roller Saddle Attachment

#### TRRT-S-PH4100LTR

P&H 4100 Lower Track Roller Saddle Attachment

#### TRRT-S-PH2800LTR

P&H 2800 Lower Track Roller Saddle Attachment

#### TRRT-S-RH340LTR

RH340 Lower Track Roller Saddle Attachment

#### TRRT-S-PC5500LTR

PC5500 Lower Track Roller Saddle Attachment

Custom designed and manufactured attachments available.



# **DIPPER DOOR WEDGE**

DDW-XX-SP



The B&D Dipper Door Safety Wedge is designed to secure the dipper door in place during maintenance activities.

Engineer certified

 Simple to install and comes with standard operating procedures for comprehensive personnel training

 Easy to handle because it is made of lightweight aluminum

· Safe and reliable







## **ROLLING STEP PLATFORMS**

ARSP-X-HR (X = # of steps)





- Engineer certified, with a 500 lb (227 kg) load rating
- Fabricated in lightweight, high-strength aluminum
- Hinged front and back safety bars with locking pin
- Bolt-on replaceable hand railings with all models
- 2 wheels for ease of mobility
- Superior shur-grip steps and top platform for anti-slip surface
- Grade 8 zinc-plated fasteners
- 3 to 10 steps

# **MANUALLY PROPELLED STAIRS**

AMPS-30-XXX (x = height in inches)



- Engineer certified, with a 500 lb (227 kg) load rating
- Heavy-duty design, in lightweight, high-strength aluminum
- Hinged front and back safety bars with locking pin
- Modular design, all components replaceable
- 2 swivel casters and 2 rigid casters for ease of mobility and positioning
- Heights available; 99 in (2515 mm), 108 in (2744 mm), 117 in (2972 mm), 126 in (3201 mm), 135 in (3429 mm), 144 in (3658 mm)

# **STEP PLATFORMS**

ASP-X, ASP-X-HR (= # of steps HR = Hand Railing)

B&D Manufacturing's ultra-light-duty aluminum step platforms are fabricated as a full weldment design. These can be easily moved into position with little effort. They are ideal for quick maintenance work in and around equipment. Superior shur-grip steps and top platform provide an anti-slip surface to withstand all weather conditions.

- Engineer certified, with a 300 lb (136 kg) load rating
- Fabricated in lightweight aluminum
- 1 to 5 steps available



# **FUEL TANK STAIRS**

AMPS-30-XXX-SP (x = height in inches)







B&D Manufacturing's heavy-duty aluminum fuel tank stairs have the same characteristics as our aluminum manually propelled stairs product line, but with added features. This is the industry's first stair to safely allow access to the frame of many common haul trucks by way of a hinged boarding ramp that rests on the fuel tank.

- Superior shur-grip steps and top platform provide an anti-slip surface that also withstands all weather conditions
- · Engineer certified, with a 500-lb (227 kg) load rating
- Hinged front and back safety bars with locking pin.

- Modular design, all components replaceable
- 2 swivel and 2 rigid casters for ease of mobility
- 2 front floor locks and 2 rear outriggers for stability
- 8 in (204 mm) x 4 in (102 mm) fork pockets for transporting
- 9 in (229 mm) step raise, 30 in (762 mm) wide
- 99 in (2515 mm) to 144 in (3658) tall models available
- Heights available; 99 in (2515 mm), 108 in (2744 mm), 117 in (2972 mm), 126 in (3201 mm), 135 in (3429 mm), 144 in (3658 mm)

# **HOIST CYLINDER STAIR** AMPS-19.5-88-WP-SP



B&D Manufacturing's aluminum hoist cylinder stair is a narrowdesign aluminum stair that is application specific, fitting in between the fuel/hydraulic tanks and tires to access the hoist cylinder during maintenance and repair work.

- Engineer certified, with a 500 lb (277 kg) load rating
- Fabricated in lightweight, high-strength aluminum
- 2 swivel and 2 rigid casters for easy mobility and positioning
- 2 front floor locks, 2 rear leveling outriggers for stability
- Right and left-side hinged 22 ½ in (572 mm) x 40 ½ in (1029 mm) resting platforms
- Adjustable back slide bars to contour the cylinder to prevent fall hazard
- 8 in (204 mm) x 4 in (102 mm) fork pockets for transporting
- Superior 7 in (177 mm) x 19 ½ in (496 mm) shur-grip steps and 19
  ½ (496 mm) x 48 in (1220 mm) top platform for anti-slip surface
- Grade 8 zinc plated fasteners





# **DOZER/EXCAVATOR TRACK ACCESS STAIR**

AMPS-30-90-SP



- Engineer certified, with a 500-lb (227 kg) load rating
- Fabricated in lightweight, high-strength aluminum
- Large 30 in (762 mm) x 74 in (1880 mm) cantilever top platform for over-the-track access
- Steel counterweight provides exceptional counter balance
- 2 swivel casters and 2 rigid casters for ease of mobility and positioning
- 2 front floor locks, 2 rear leveling outriggers for stability
- Right-side and left-side hinged 22 in (559 mm) x 45 in (1143 mm) ramps to access tracks
- Removable back handrail section
- Swing out handrails for ramps
- Superior shur-grip steps for anti-slip surface

# **ELEVATING PLATFORM STAIR**

AMPS-24-116-164-EP



- Engineer certified, with a 500-lb (227 kg) load rating
- Fabricated in lightweight, high-strength aluminum
- Large 30 in (762 mm) x 48 in (1220 mm) cantilever top platform with front and back gates
- Equipped with 6 in (153 mm) x 3 in (77 mm) phenolic wheel casters for low rolling resistance, which makes for easy maneuverability
- · 2 leveling outriggers for stability
- Superior shur-grip steps for anti-slip surface
- 8 in (204 mm) x 4 in (102 mm) fork pockets for transporting
- On board 110 V.A.C. Hydraulic power pack equipped with a wash-guard motor which is suitable for wet locations and capable of withstanding direct water spray
- Radio frequency control for up/down/e-stop equipment control from the upper platform area

# OIL DRIP CARTS

33454-100, 33454-200



33454-100 100 US gal (375 L), 40.5 in(103cm) x 68in(173cm) x 19in(48cm)

33454-200, 40.5 in(103cm) x 87in(221cm) x 23.5in(60cm) 200 US gal (750 L)

Eliminate spillage using these low-profile aluminum oil carts.

With heavy duty handles, 4 oil-resistant swivel casters, these oil carts are very easy to maneuver and will fit under any size of equipment. Removable bar grating top that also serves as a work platform.

Engineer certified for 300 lbs (136 kg)

# **ANTIFREEZE CART** A27337



Constructed as a sealed and vented tank to reuse the antifreeze, our 140 gal (529 L) low profile cart comes with 2 in (51 mm) intake and discharge ports, 2 clean-out ports and sight glass. A heavy duty handle, four oil resistant swivel casters make it easy to maneuver. Fits under equipment of any size.

# **BODY BLOCKS** BB-100-XXX

- Engineer certified
- Safely support the dump body by placing a Body Block between the frame and body during maintenance
- Must be used in pairs









# **B&D PORTABLE ALIGN BORING MACHINES** VARIOUS MODELS AVAILABLE



- Reliable and heavy-duty for on-site or in-shop operation
- Flow through bar design allows for set-ups between bores
- Variable speed or quick-change fixed speed power
- Adjustable mounting system for ease of operation
- Remote pendant control
- All B&D Manufacturing boring bars are chrome plated for extra hardness and straightened for improved machining
- Hydraulic and electric versions available 1.5 hp to 5 hp
- Boring range from 0.8 in (21 mm) to 24 in (610 mm) bore

# **AUTOMATED BORE WELDING SYSTEMS**



- All bore welder packages feature an exclusive pass-through drive system design enabling bore-to-bore transitions by telescoping or retracting the bore welder gun extension assembly
- Diameter adjustment is easy with the BOA torch pivot mechanism included with all BOA-408i welder systems



# **TIRE TECH WORK PLATFORM**

Tire Tech Work Platform If you are removing Mining Haul Truck Tires with a Wheel Loader or Large Capacity Forklift, then you may consider this engineered platform as a safe solution to the work area.







# **DUMP BODY LIFTING DEVICE**

DBLD-50-XXX

The Dump Body Lifting Device, is engineered to lift most Mining Haul Truck Dump Bodies. This device allows your service team to lift the rear so that maintenance can be done on the suspension and other rear components. The capacity is 100,000 lbs (45363.3 kg.)











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