

At A Glance

Operating Weights: lb. (kg.)

Model	Boom only	Complete System*
MBS10.....	2,800 (1273)	4,362 (1978) – 5,112 (2318)
MBS10HR....	2,800 (1273)	4,362 (1978) – 5,112 (2318)
MBS12H.....	4,060 (1841)	6,108 (2770) – 8,026 (3640)
MBS13HR....	4,380 (1986)	6,428 (2915) – 8,346 (3785)

* complete system from smallest to largest appropriate breaker, including electric-hydraulic power pack: (PP50 for MBS10/10HR; PP100 for MBS 12H/13HR), and controls

Dimensions: in (mm)

Model	Length x Width*	Working length**	Base (L x W)
MBS10.....	164 x 34 (4166 x 864)	130 (3307)	ø34 (ø864)
MBS10HR..	164 x 34 (7673 x 864)	130 (3307)	ø34 (ø864)
MBS12H...	174 x 34 (4420 x 864)	140 (3556)	ø34 (ø864)
MBS13HR...	186 x 34 (4724 x 864)	152 (3866)	ø34 (ø864)

* less hammer

** swing center to dipperstick / breaker mounting pin (on-center) dimension

Operating parameters

Model	Hammer Model Range: ft-lb (J)
MBS10.....	BX8: 800 (1085) thru BX15: 1500 (2034)
MBS10HR....	BX8: 800 (1085) thru BX15: 1500 (2034)
MBS12H.....	BX10: 1000 (1356) thru BX30: 3000 (4067)
MBS13HR.....	BX10: 1000 (1356) thru BX30: 3000 (4067)

MBS SERIES

Rockbreaker System



FEATURES & BENEFITS

High strength steel (bent, 4-plate) construction 65 ksi tensile strength; 50 ksi yield strength for longer service life

Reinforced pivot and mounting pin joints from improved durability

Hardened steel bushings in pivot joints and larger diameter pivot pins provide reduced bearing pressure and increased service life

Enclosed oil bath bearing system with suspended drive motor for increased useful life and improved serviceability

Increased cross sectional strength of boom and dipper where high stress is realized

All hose design allows for improved routing and ease of replacement

Valve bank positioned for improved access based on specific plant design

Legend: ● Standard ▲ Optional

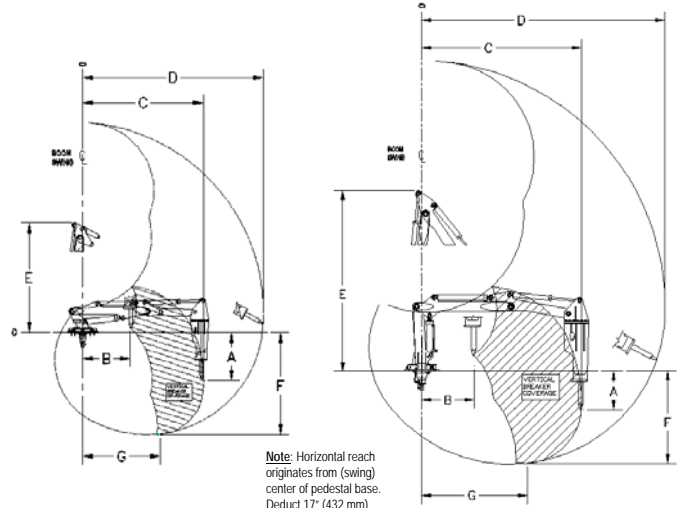
MBS Series Portable Rock Breaker System

BOOM & HAMMER COMBINATIONS

Hammer Specifications

Hammer Models:	BX8	BX10	BX15	BX20	BX30
Impact Energy Class: ft-lb (J)	800 (1085)	1000 (1356)	1500 (2034)	2000 (2711)	3000 (4067)
Operating Weight: lb. (kg.)	662 (300)	948 (430)	1212 (550)	2094 (950)	2866 (1300)
Working Length in. (mm)	64.3 (1633)	71.0 (1804)	78.8 (2001)	90.4 (2295)	99.8 (2535)
Tool Diameter in. (mm)	2.8 (70)	3.1 (78)	3.4 (85)	4.2 (105)	4.8 (120)
Operating Flow gpm (lpm)	8-15 (30-55)	12-21 (45-80)	13-27 (50-100)	24-29 (90-110)	27-37 (100-140)
Operating Pressure psi (bar)	1450-2030 (100-140)	1450-2030 (100-140)	1450-2030 (100-140)	1740-2320 (120-160)	1740-2465 (120-170)
Impact Frequency bpm (short stroke)	390-1000	450-1000	398-840	350-600	400-600
Sound / Distance* at 85 dB(A): ft. (m)	35 (11)	72(22)	76 (23)	100 (30)	121 (37)

(*): BX hammers are furnished c/w sound suppressing housing for superior noise attenuation. Noise levels may vary due to site conditions.



MBS10, 10HR & 12H

MBS13HR

Coverage

	MBS10			MBS10HR			MBS12H				MBS13HR			
ft. (m)	BX8	BX10	BX15	BXR8	BXR10	BX15	BX10	BX15	BX20	BX30	BX10	BX15	BX20	BX30
A	3'-8" (1.1)	3'-8" (1.1)	4'-4" (1.3)	1'-9" (0.53)	2'-4" (0.71)	3'-0" (0.91)	2'-10" (0.86)	3'-6" (1.1)	4'-5" (1.3)	5'-3" (1.6)	0'-7" (0.28)	1'-3" (0.38)	1'-10" (0.56)	3'-0" (0.91)
B	3'-3" (1.1)	3'-3" (1.1)	3'-3" (1.1)	2'-3" (0.69)	2'-3" (0.69)	2'-3" (0.69)	2'-0" (0.61)	2'-0" (0.61)	2'-0" (0.61)	2'-0" (0.61)	4'-0" (1.2)	4'-0" (1.2)	4'-0" (1.2)	4'-0" (1.2)
C	10'-10" (3.3)	10'-10" (3.3)	10'-10" (3.3)	11'-10" (3.6)	11'-10" (3.6)	11'-10" (3.6)	11'-6" (3.5)	11'-6" (3.5)	11'-6" (3.5)	11'-6" (3.5)	12'-10" (3.9)	12'-10" (3.9)	12'-10" (3.9)	12'-10" (3.9)
D	15'-3" (4.6)	15'-8" (4.8)	16'-4" (5.0)	16'-3" (4.9)	16'-8" (4.9)	17'-4" (5.3)	18'-2" (5.5)	18'-2" (5.5)	18'-2" (5.5)	18'-2" (5.5)	18'-8" (5.7)	18'-8" (5.7)	18'-8" (5.7)	18'-8" (5.7)
E	10'-0" (3.0)	10'-0" (3.0)	10'-0" (3.0)	11'-0" (3.4)	11'-0" (3.4)	11'-0" (3.4)	11'-4" (3.5)	11'-4" (3.5)	11'-4" (3.5)	11'-4" (3.5)	6'-5" (2.0)	6'-5" (2.0)	6'-5" (2.0)	6'-5" (2.0)
F	8'-7" (2.6)	8'-7" (2.6)	9'-3" (2.8)	8'-7" (2.6)	7'-7" (2.3)	8'-3" (2.5)	8'-10" (2.7)	9'-6" (2.9)	10'-1" (3.1)	11'-3" (3.4)	5'-0" (1.5)	5'-8" (1.7)	6'-3" (1.9)	7'-5" (2.3)
G	6'-7" (2.0)	6'-7" (2.0)	6'-7" (2.0)	7'-8" (2.3)	7'-8" (2.3)	7'-8" (2.3)	7'-5" (2.3)	7'-5" (2.3)	7'-5" (2.3)	7'-5" (2.3)	7'-6" (2.3)	7'-6" (2.3)	7'-6" (2.3)	7'-6" (2.3)

Tool Selection (for aggregate production and mining)



- Blunt is used for boulder and oversize breaking; tool impact delivers the stress wave generated by the hammer causing the material to fracture; excellent wear resistance

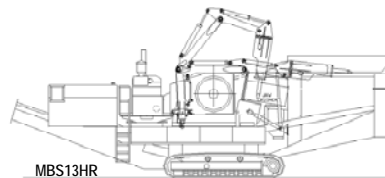
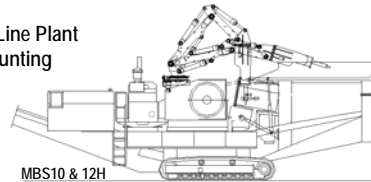


- Chisel is suitable for slabby, angular material; tool provides wedge effect impact and good penetration

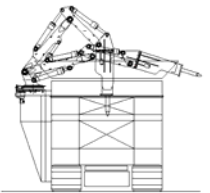


- Moil is ideal for softer, abrasive material where high penetration is needed; similar to the blunt it results in less torque in the front head

In-Line Plant Mounting



Side Mounting on Plant



Note: Most plant mountings can achieve legal transport without removal of rock breaker from plant. See more details on page 7.

MBS Series Portable Rock Breaker System

HAMMER SELECTION GUIDE FOR BLASTED MATERIAL*

IMPERIAL MEASUREMENTS

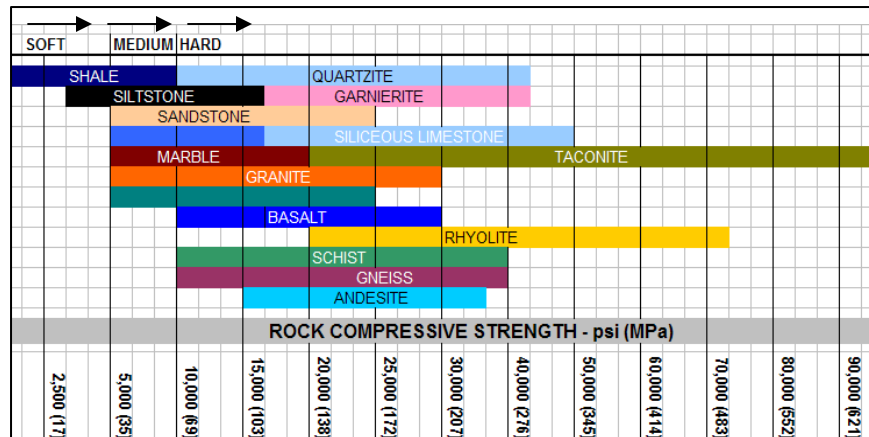
Material Hardness Compressive Strength	BOULDER SIZE - yd ³						
	< 0.5 yd ³	0.5 – 1.0 yd ³	1.0 – 2.0 yd ³	2.0 – 4.0 yd ³	4.0 – 6.0 yd ³	6.0 – 8.0 yd ³	8.0 – 10 yd ³
Very Hard..... 35-45 ksi examples: gneiss, schist, andesite, gold ore	2,000 ft-lb	3,000 ft-lb	4,000 ft-lb	5,000 ft-lb	6,500 ft-lb	8,500 ft-lb	10,000 ft-lb
Hard..... 25-35 ksi examples: siliceous limestone, basalt, granite, trap rock, copper ore	1,500 ft-lb	2,000 ft-lb	3,000 ft-lb	4,000 ft-lb	5,000 ft-lb	6,500 ft-lb	8,500 ft-lb
Medium Hard... 15-25 ksi examples: dolomite, siliceous and dolomitic limestone	1,000 ft-lb	1,500 ft-lb	2,000 ft-lb	3,000 ft-lb	4,000 ft-lb	5,000 ft-lb	6,500 ft-lb
Soft..... 10-15 ksi examples: soft limestone, gypsum	800 ft-lb	1,000 ft-lb	1,500 ft-lb	2,000 ft-lb			

(*): 1 ksi = 1,000 psi (lbs. / in.²), ranges provided due to possible layer presence and density variance.

METRIC MEASUREMENTS

Material Hardness Compressive Strength	BOULDER SIZE - m ³						
	< 0.5 m ³	0.5 – 1.0 m ³	1.0 – 2.0 m ³	2.0 – 4.0 m ³	4.0 – 6.0 m ³	6.0 – 8.0 m ³	8.0 – 10.0 m ³
Very Hard..... 241-310 MPa examples: gneiss, schist, andesite, gold ore	3,000 ft-lb	4,000 ft-lb	5,000 ft-lb	6,500 ft-lb	8,500 ft-lb	10,000 ft-lb	12,000 ft-lb
Hard..... 172-241 MPa examples: siliceous limestone, basalt, granite, trap rock, copper ore	2,000 ft-lb	3,000 ft-lb	4,000 ft-lb	5,000 ft-lb	6,500 ft-lb	8,500 ft-lb	10,000 ft-lb
Medium Hard.. 103-172 MPa examples: dolomite, siliceous and dolomitic limestone	1,500 ft-lb	2,000 ft-lb	3,000 ft-lb	4,000 ft-lb	5,000 ft-lb	6,500 ft-lb	8,500 ft-lb
Soft..... 69-103 MPa examples: soft limestone, gypsum	1,000 ft-lb	1,500 ft-lb	2,000 ft-lb	3,000 ft-lb			

(*): 1 MPa = 145 psi (lbs. / in.²), ranges provided due to possible layer presence and variance.



MBS Series Portable Rock Breaker System

DESIGN and ENGINEERING DATA – MBS10, 10HR, 12H & 13HR

Design Data: in (mm)

- Mounting bolt size: 1.0 in. dia. (ø 25) x14 thru holes @ 1.063 in. dia. (ø 27)
- Mounting bolt torque: 1450 ft-lb ()
- Swing Angle: 220° (-110° / +110°) ●
- 81CC Swing Motor – 2000 psi (138 bar) Internal Relief

Pivot Pin Data: in. (ø mm)

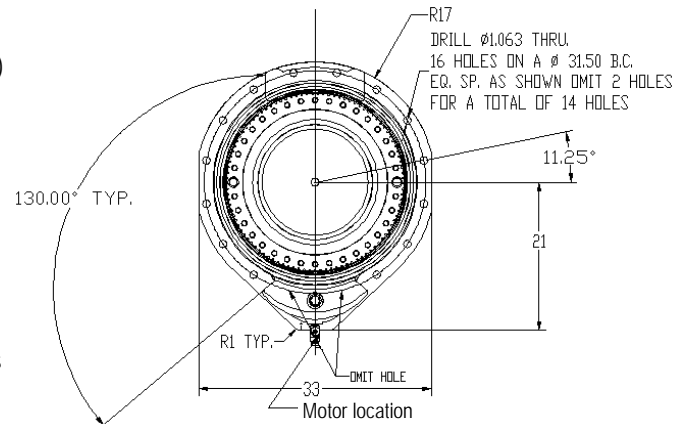
- 4.0 (ø 102) Pedestal Base-to-Hoist Boom; Hoist Boom-to-Dipperstick (Jib)
- 3.0 (ø 76): Hammer Mounting

Cylinder data: Bore ø / Rod ø / Stroke

- Hoist (lift): 6.0 / 3.50 / 48.5 (152 / 89 / 1232)
- Stick (crowd): 6.0 / 3.50 / 48.5 (152 / 89 / 1232)
- Tilt (curl): 6.0 / 3.50 / 48.5 (152 / 89 / 1232)

Cylinder mounting pins

- 3.0 (76)
- 3.0 (76)
- 3.0 (76)



Pedestal Base Dimension: MBS10, 10HR, 12H & 13HR

Engineering Data: Loads and Moments – Models MBS10 & 10HR

Imperial

Static Overturning

Moments: ft-lb (+/-)

MH*: 50,000 / 0	FS*: 1,500 / 1,500
MV: 12,000 / 12,000	FV: 0 / 4,100
MS*: 50,000 / 50,000	FH*: 4,500 / 9,000

Dynamic Overturning

Moments: ft-lb (+/-)

MH: 100,000 / 0
MV: 24,000 / 24,000
MS: 100,000 / 100,000

Swing Torque: 12,000 ft-lb

Metric

Static Overturning

Moments: kN-M (+/-)

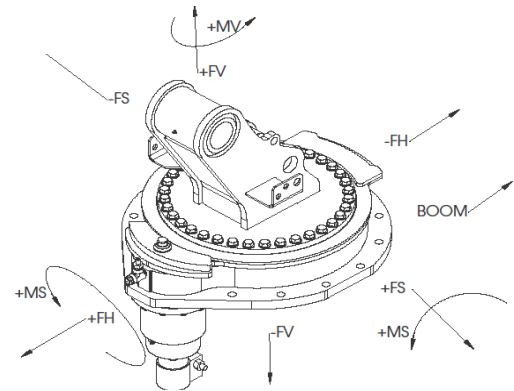
MH*: 67.8 / 0	FS*: 6.7 / 6.7
MV: 16.3 / 16.3	FV: 0 / 18.2
MS*: 67.8 / 67.8	FH*: 20 / 40

Dynamic Overturning

Moments: kN-M (+/-)

MH: 135.6 / 0
MV: 32.6 / 32.6
MS: 135.6 / 135.6

Swing Torque: 16.3 kN-M



MBS10 / 10HR

Loads and Moments – Models MBS12H & 13HR

Imperial

Static Overturning

Moments: ft-lb (+/-)

MH*: 50,000 / 0	FS*: 9,000 / 9,000
MV: 12,560 / 12,560	FV: 0 / 10,500
MS*: 50,000 / 50,000	FH*: 9,000 / 9,000

Dynamic Overturning

Moments: ft-lb (+/-)

MH: 100,000 / 0
MV: 25,120 / 25,120
MS: 100,000 / 100,000

Swing Torque: 12,560 ft-lb

Metric

Static Overturning

Moments: kN-M (+/-)

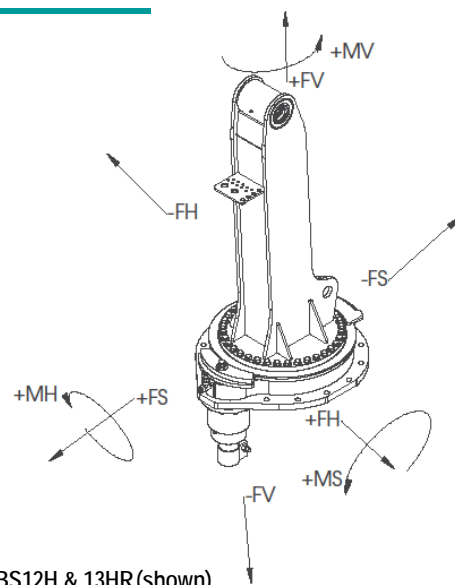
MH*: 67.8 / 0	FS*: 40 / 40
MV: 17.0 / 16.3	FV: 0 / 46.7
MS*: 67.8 / 67.8	FH*: 40 / 40

Dynamic Overturning

Moments: kN-M (+/-)

MH: 135.6 / 0
MV: 34 / 34
MS: 135.6 / 135.6

Swing Torque: 17.0 kN-M



MBS12H & 13HR (shown)

(*): FS or FH and MH or MS are swing function results and do not happen simultaneously

MBS Series Portable Rock Breaker System

DESIGN and ENGINEERING DATA – MBS10, 10HR, 12H & 13HR

Engineering Data:

Cross Sectional Data: Section Height x Width - in (mm)

	<u>Hoist / Inner Boom</u>	<u>Dipperstick / Outer (Jib) Boom</u>
MBS10/10HR.....	18.4 x 15.5 (468 x 394)	24.3 x 11.5 (616 x 292)
MBS12H.....	18.4 x 15.5 (468 x 394)	25.6 x 11.5 (649 x 292)
MBS13HR.....	18.4 x 15.5 (468 x 394)	25.6 x 11.5 (649 x 11.5)

Lifting Capacities: lb. (kg.)

MBS10 & 10HR.....	1,500 (680)
MBS12H & 13HR.....	2,500 (1134)

Calculated at full extension, value increases closer to the swing post

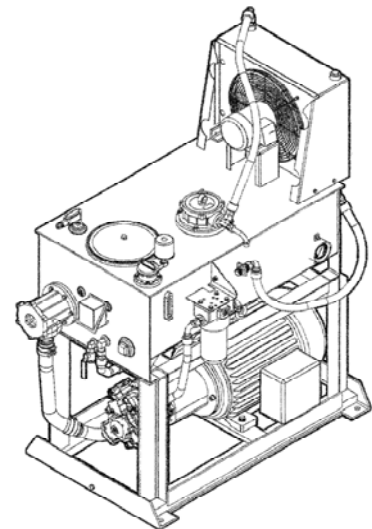


HYDRAULIC SYSTEM

Power Pack Specifications

Power Pack (PP) Model (Reservoir size - Hp)	PP50-30*	PP100-30	PP100-40	PP100-50	PP100-60
Matched w/ Hammer Model	BX8, BX10, BX15	BX10	BX15	BX20	BX30
Horsepower (kW)	30 (22)	30 (22)	40 (30)	50 (37)	60 (45)
Operating Weight: (w/o oil) lb. (kg.)	1500 (680)	1860 (844)	1960 (889)	2000 (910)	2300 (1045)
Dimensions: L x W x H in. (mm)	47 x 24x 46 (1193 x 610 x 1168)	66 x 36x 60 (1676 x 914 x 1524)	66 x 36x 60 (1676 x 914 x 1524)	66 x 36x 60 (1676 x 914 x 1524)	66 x 36 x 81 (1676 x 914 x 2057)
Max. Pump Flow - gpm (lpm)	40(150)	40(150)	40(150)	40(150)	40(150)
Regulated Pump Flow - gpm (lpm)	15 (57)	21 (79)	27 (102)	29 (110)	37 (140)
Pump Pressure - psi (bar)	3600 (250)	3600 (250)	3600 (250)	3600 (250)	3600 (250)
Pressure Filter Flow Capacity gpm (lpm)		48(180)	48 (180)	60 (227)	100 (379)
Air-to-Oil Cooler c/w ½ HP motor (56T frame)	Optional	Optional	Optional	Optional	Standard

(*) for use with MBS10 & 10HR only



Filtration-PP50	Micron	Filtration Area sq. in. (sq. mm)	Flow Capacity gpm (lpm)	By-Pass psi (bar)	Maximum Pressure Rating psi (bar)
Pressure Filter	10	69 (4450)	varies - see chart above	50 (3)	6,000 (410)
Return Filter	10	1100 (7100)	130 (490)	22 (1.5)	50 (3)
Suction Strainer	10	415 (2677)	60 (225)	75 (5)	6,000 (410)
Filtration-PP100	Micron	Filtration Area sq. in. (sq. mm)	Flow Capacity gpm (lpm)	By-Pass psi (bar)	Maximum Pressure Rating psi (bar)
Pressure Filter	10	415 (2677)	varies - see chart above	75 (5)	5075 (350)
Return Filter	10	1100 (7100)	130 (490)	22 (1.5)	50 (3)
Suction Strainer	10	415 (2677)	60 (225)	75 (5)	6,000 (410)

Note: Power Pack Assembly also includes Pressurized reservoir capacity is 100 gal. (353 liters); Vent pressure relief is 4 psi (2.8 bar); Visual indicators provided on both pressure and return filters; low-oil level cut-off switch; pressurized filler cap., tank clean-out access cover; oil level gauge; temperature gauge; pump load sense bulkhead & connector, drain port & valve

Electric Motor (C-Face Pump Drive)	30 HP	40 HP	50 HP	60 HP
TEFC (IP55) Frame Size High Efficiency ● Prem. Efficiency ▲	286T	324T	326T	364/5T
RPM / Service Factor	1800 / 1.25	1800 / 1.25	1800 / 1.25	1800 / 1.25
Efficiency & Power Factor @ 100%	93.6 / 83.0	94.1 / 83.0	94.5 / 84.0	95.0 / 87.0
AC Voltage / Phase / Hertz (other combinations available to suit site)	380 / 3 / 50 460 / 3 / 60 575 / 3 / 60	380 / 3 / 50 460 / 3 / 60 575 / 3 / 60	380 / 3 / 50 460 / 3 / 60 575 / 3 / 60	380 / 3 / 50 460 / 3 / 60 575 / 3 / 60
Current: Full Load / Locked Rotor (amps)	36.1 / 217	47.7 / 287	58.4 / 355	68.0 / 430
Torque: Full Load Torque ft-lb (N-m)	89 (121)	118 (160)	148 (201)	177 (240)

Note: NEMA Design B; Class "F" insulation; Altitude 3,300 ft. (1000 m) a.s.l.; Ball bearings; Continuous duty; Energy savings > EFF1 minimum efficiency (CC029A certification); Premium eff. meets IEEE841 standard

Power Pack (HPU) Options

Oil Tank Immersion Heater c/w thermostat; High/Low Temperature Sensor; Motor Starter Panel; Recirculation Valve; High Altitude Provision; Motor Deration Package in 3,281 ft. (1000 meters); Drip tray; Hand pump; Motor Terminal Blocks; Water-over-Air Cooler pkg.; Cold Weather Conversion Kit



MBS Series Pedestal Rock Breaker System

ROCKBREAKER SYSTEM STANDARD FEATURES

Notes:

● Standard ▲ Optional

Power Packs

- ▲ • PP50-30 for use with MBS10 or 10HR (in lieu of mobile plant PTO circuit)
- • 50 & 60 HP power pack for BX20 & BX30 respectively
- ▲ • 40 & 50 HP power pack for BX20 & BX30 respectively in lighter applications
- • High efficient grade main pump drive motor
- ▲ • Premium efficient (IEEE841) main pump drive motor (optional energy efficient)
- • Main electric motor altitude acceptance limit: 3,280 ft. (1000 m)
- ▲ • High Altitude: motor impeller charge kit > 5,000 ft (1,500 m); and
- ▲ • High Altitude: motor altitude deration, provided in 1000 m increments > 3,280 ft. (1000 m) up 16,400 ft. (5000 m)
- ▲ • Continuous oil circulation valve for high duty & temperature applications
- ▲ • High/low temperature sensor
- ▲ • Immersion heater – 2kW (circuit breaker & contactor optional with starter panel)
- ▲ • Motor Starter panel (40, 50, 60, 100 or 125 HP mounting & wiring also optional)
- ▲ • Remote power pack start / stop panel with indicator switches and lamps
- / ▲ • Air-to-oil Cooler (std. for BX30 & larger units; opt. for BX20 & smaller units)
- ▲ • Water-over-oil Cooler
- ▲ • Cold weather conversion kit (with dual immersion heaters, heat tape, etc.)
- / ▲ • 10 ft. (3 m) Supply hoses –optional longer lengths up to 25 ft. (7.6 m)

Control System:

- • Portable electro-hydraulic remote joystick controller package
- ▲ • Stand-mounted electro-hydraulic joystick remote controller package
- ▲ • Secondary Stand-mounted electro-hydraulic remote joystick controller package
- ▲ • Hand-held Radio Remote (transmitter-receiver) joystick controller package
- ▲ • 30 ft. (9.1 m) remote control cable
- ▲ • > 30 ft. (9.1 m) remote control cable – available up to 100 ft. (30 m)
- ▲ • 100 to 200 ft. (30 – 60 m) long distance cable
- ▲ • 200 to 400 ft. (60 – 80 m) long distance cable

- • **Greasing System:** (2-grease system: moly / lithium for boom, chisel past for hammer)
- ▲ • Individual / point-to-point manual greasing of boom and hammer
- ▲ • Manual-Centralized Grease system

Pedestal Boom and Hammer Units

- ▲ • Counter-balance valve package
- ▲ • Anti-Lunge provision
- ▲ • Anti-Blank fire provision
- ▲ • Fire suppression system (Ansul: manual, "Automan" or "Check-fire")
- • Hammer tool – choice of (blunt, chisel, moil; blunt std. on BX20 & larger hammers)
- ▲ • Hammer severe duty wear kit with rock claws (separate claws also optional)

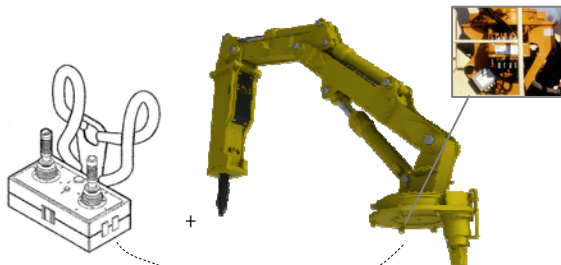
MBS Series Portable Rock Breaker System

ELECTRICAL SYSTEMS

Remote Controls

Electric-Hydraulic Control Console

- Portable Remote Controller with chest pack
- 2-Dual Axis Joysticks – R.H. Thumb Hammer Op.
- SAE Mapping / Excavator Control Pattern
- Console On/Off Button
- Pedestal EHC Enclosure
- 30 ft. (9.1 m)* cable
- Powered by local 110/115 VAC



Additional Electric-Hydraulic Control Options ▲

- Remote Control Panel for remote start/stop of power pack, c/w indicator switches / lamps
- Additional length remote control umbilical cable length > 30 ft. (9.1 m)
(See distance options below)

Control System Options ▲

Electric- Hydraulic Control Stand	Radio Remote Control (transmitter & receiver system)	Manual Control Console	Ergonomics Operator's Seat c/w Electric-Hydraulic Control

Distance Options ft. (m)

- Standard EHC configuration - 100 (30) to 200 (60)
- Deluxe EHC configuration - 200 (60) to 400 (120)

- Radio Remote option - 328 (30) max.

- Coaxial Cable (Pan-Zoom Camera) option – 1,500 (457)
- Fiber Optics (Pan-Zoom Camera) option – 7 miles (11.2K m)

OTHER SYSTEM OPTIONS

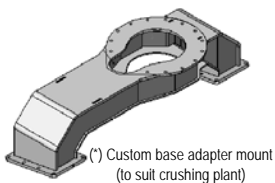
BOOM

- All hose system
- Counter balance valves
- Anti-lunge protection
- Anti-blank fire interlock
- Foundation interface mounting - concrete or steel structure
- Greasing systems - manual, hydraulic or pneumatic
- Fire Suppression (Ansul)
- Explosion proof valve/circuit
- Auxiliary hydraulic circuit
- Shock absorbent mounting
- Custom base adapter mount
- Swing stops & alt. positioning
- Expander pin provision
- Spring guard hose covering
- Start-up / commissioning svc.
- Installation supervision



POWER PACK

- Immersion heater
- High/Low temperature sensor
- Continuous circulation valve
- Premium efficient motor
- Motor Starter Panel - additional mounting & wiring
- Cooler Package (for BX20) - air-to-oil or water-to-oil
- Cold weather conversion kits
- High altitude provision
- Motor deration package
- Motor terminal blocks
- Explosion proof motor
- Hand pump / Drip tray
- Dust enclosure w/ ventilation



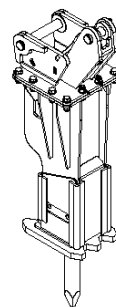
CONTROLS

- Radio remote controls
- Stand remote controller
- Remote mechanical controls
- Remote starter panel
- Secondary remote controller - stand or portable
- Longer remote cables - standard / deluxe cabling
- Ergonomic chair c/w controls *
- Coaxial cable system*
- Fiber optics system*
- PTO auxiliary hyd. circuit



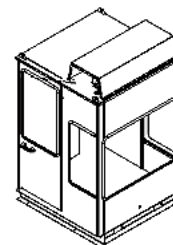
HAMMER

- Severe duty wear kit
- Rock claws kit
- Mechanic quick coupler
- Extension mounting bracket
- Spare Tools - blunt, chisel,moil
- Chisel paste - single tube or case or 5 gal. pail



MISCELLANEOUS

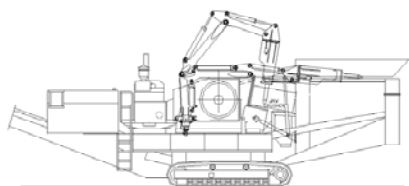
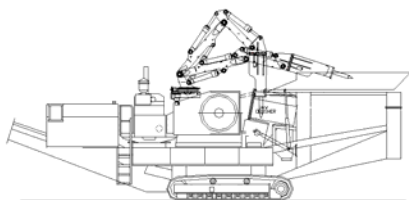
- 18 in (472 mm) bucket
- Quick Coupler-bucket
- Hydraulic positioner & circuit
- Control cabin (medium or large)*
- Control cabin options - a/c; heater; extra door/window, etc.
- Miscellaneous attachments: - picks, grapples, stone grabs



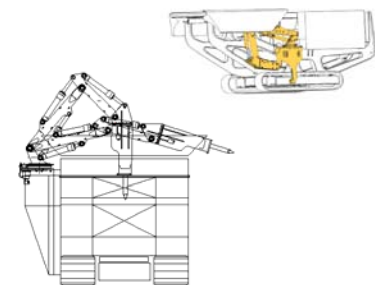
MBS Series Portable Rock Breaker System

Mounting Configurations ▲

In-Line Plant Mounting



Side Mounting on Plant



Note: Most plant mountings can achieve legal transport without removal of rock breaker from plant

A BTI representative is available to review your rock breaker project requirements and provide a site visit and assessment of your material flow conditions. BTI has a policy of continuous product improvement and reserves the right to revise or change designs and specifications at any time without obligation.

Authorized Dealer



BREAKER TECHNOLOGY an Astec Industries Company



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In an on-going effort to continually improve product, BTI reserves the right to change products and specifications without notice or obligation.



Rockbreaker Boom Systems Warranty Policy

REV 09/04

WARRANTY POLICY

1. BREAKER TECHNOLOGY INC. Company (hereinafter referred to as "BTI") warrants this product against defects in materials and workmanship for a period of twelve (12) months or 2000 hours from the date of installation, or 18 months from the date of shipment, whichever comes first. This warranty does not cover o-rings, seals, fittings, hoses, breaker tools or other items considered normal wear items. These are covered by the Limited Warranty period of thirty (30) days. Warranty for propriety items such as valves, pumps, filters, electric motors, panels and componentry that are not manufactured by BTI, will be governed by the warranty terms of their manufacturer. This warranty is void if BTI's standard installation specifications and procedures are not adhered to.
2. BTI will authorize return of any defective components or sufficient evidence of such defect to a BTI warehouse. Such components or such evidence must clearly show that the defect was caused by faulty material or poor workmanship. Warranty claim will be accepted only if it is submitted on a proper claims form with proof of purchase and received within sixty (60) days from the date of discovery of the defect. Warranty claims will be considered only if the "Installation Notice" has been duly filled in and returned to BTI within thirty (30) days from the date of installation.
3. BTI will at it's option, repair or refurbish the defective part(s) without charge to the initial user or may elect to issue full or partial credit toward the purchase of a new part(s). The extent of credit issued, which will be in the form of a "Credit Memo", will be determined by pro-rating against the normal life of the part(s) in question.
4. BTI is not responsible for mileage, travel time, travel expenses, overtime labor, and any freight expenses required to facilitate the repair.
5. This warranty does not apply if the product has been damaged by accident, abuse, misuse, misapplication or neglect, or as a result of service, disassembly or modification, without BTI's express authorization.
6. BTI assumes no liability beyond the replacement of defective parts or materials and/or the correction of such defective parts or materials.
7. BTI neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of its products other than that specifically stated herein.
8. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES. EXCEPT AS EXPRESSLY SET FORTH HEREIN, BTI MAKES NO REPRESENTATION OR WARRANTY, STATUTORY, EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCTS MANUFACTURED AND/OR SUPPLIED BY BTI, WHETHER AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER MATTER. IN NO EVENT, INCLUDING IN THE CASE OF A CLAIM OF NEGLIGENCE, SHALL BTI BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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