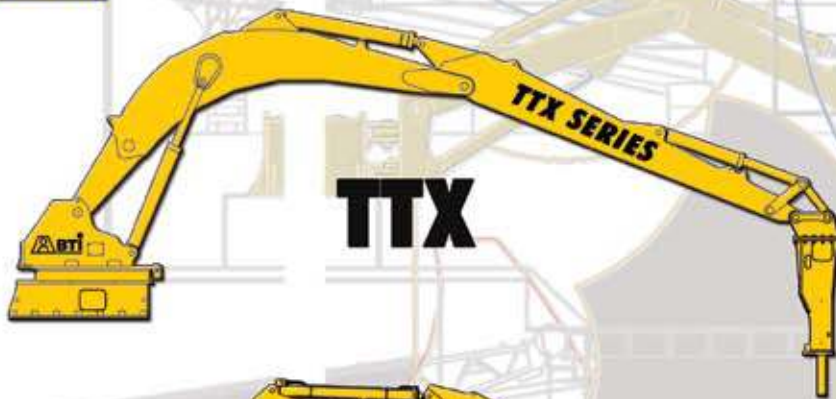




Application Driven Solutions



HYDRAULIC ROCKBREAKER SYSTEMS

SIZING THE BOOM & HAMMER

BTI (Breaker Technology) has been supplying products and services specifically designed to meet the demanding needs of mining and quarry industries since 1958. Our experience has taught us that information and partnerships combined with high quality equipment provide the best results. As such it's vital to consider several important factors when choosing your next pedestal rock breaker system.

Breaker Class

Breaker power required is determined by the hardness, toughness and size of material to be broken. The size of your crusher or grizzly also affects the selection size of breaker.

Boom Model

The boom you choose to carry the selected breaker depends on its ability to provide full coverage of the area where material will require breaking, racking or clearing.

Power Packs

Power packs are matched to the hammer and boom to achieve optimal performance and reliability, based on your particular operating circumstances.

Controls

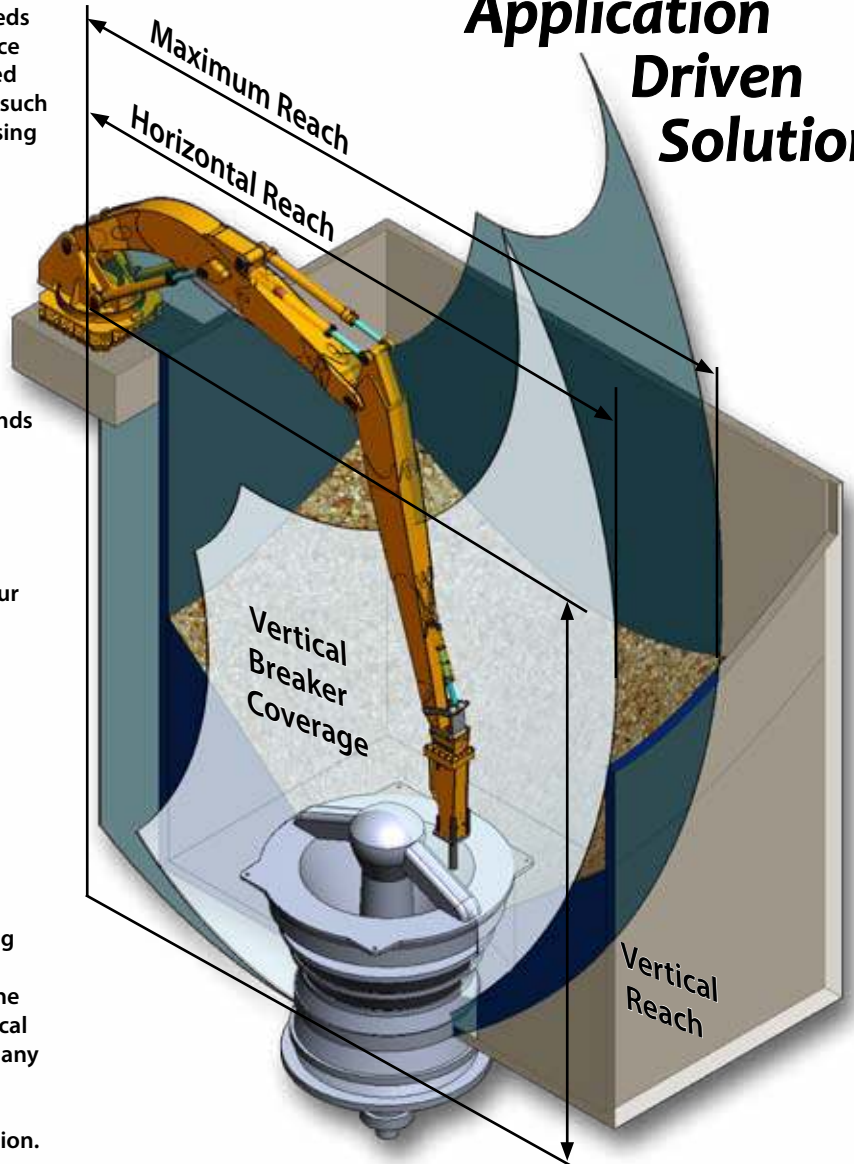
Our systems offer flexibility that allows for safe, effective operation from almost anywhere:

Electric-hydraulic controls:	200 ft. (60 M)
Radio remote control:	325 ft. (100 m)
Camera assisted coaxial cable:	1,500 ft. (457 m)
Fiber optics:	7 miles (11.2 km)





BTI will assist you in fine tuning your selection with the creation of an in-house site layout and related engineering package. To aid in good planning and cost control, our technicians can advise about service personnel, hoist crane requirements and installation considerations from electrical to hydraulic systems. In addition, BTI can recommend on any local support you may need.

Contact BTI and let us provide you with a complete solution.

Application Driven Solutions

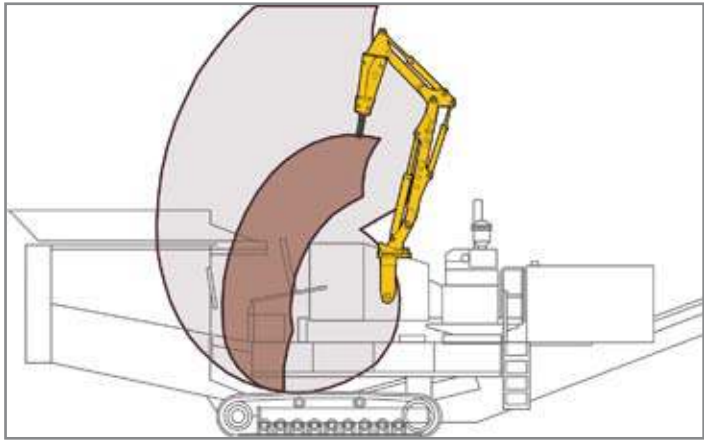


Boom Application and Sizing Matrix

								
APPLICATION		MBS12H	MBS13H	PB12H	NT12	NT16	NT20	NT24
MOBILE		MOBILE	MOBILE	MOBILE				
STATIONARY		STATIONARY	STATIONARY	STATIONARY	STATIONARY	STATIONARY	STATIONARY	STATIONARY
GRIZZLY				Lt-GRIZZLY	Lt-GRIZZLY	Lt-GRIZZLY	Lt-GRIZZLY	Lt-GRIZZLY
GYRATORY								
OPERATING WEIGHT RANGE (COMPLETE SYSTEM)	LB (Kg)	6108 - 8026 (2770 - 3640)	6428 - 8346 (2915 - 3785)	9000 - 11070 (4080 - 5020)	10396 - 12616 (4715 - 5722)	10648 - 12868 (4829 - 6434)	10900 - 13120 (4943 - 5950)	11152 - 12254 (5058 - 5557)
VERTICAL REACH*	ft-in (M)	7' 11" (2.4)	7' 2" (2.2)	11' 11" (3.6)	9' 10" (3.0)	12' 10" (3.9)	16' 2" (4.9)	22' 3" (6.7)
HORIZONTAL REACH*	ft-in (M)	11' 7" (3.5)	12' 11" (3.9)	12' 5" (3.8)	13' 2" (4.0)	15' 1" (4.6)	19' 1" (5.8)	24' 0" (7.3)
MAXIMUM REACH*	ft-in (M)	ft-in (M)	16' 5" (5.0)	18' 2" (5.5)	18' 10" (5.7)	20' 8" (6.3)	24' 8" (7.5)	30' 11" (9.4)
SWING METHOD / ARC		TURNTABLE 220°	TURNTABLE 220°	SWINGPOST 150°	SWINGPOST 170°	SWINGPOST 170°	SWINGPOST 170°	SWINGPOST 170°
RECOMMENDED HAMMER		BX10 - BX30	BX10 - BX30	BX10 - BX30	BX10 - BX30	BX10 - BX30	BX10 - BX30	BX10 - BX30

*Dimensions taken from center of swing rotation. Dimensions are based on a nominal breaker for each boom and may change based on final breaker selection.

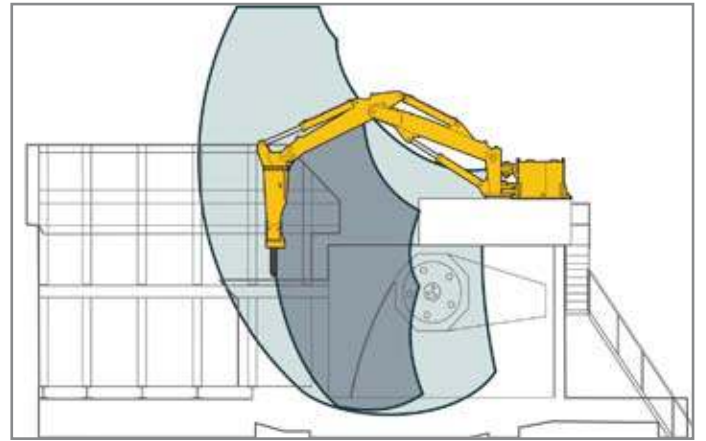
MOBILE



MBS12H
MBS13H
PB12H
BX8 to BX30

Mobile crushers are, as the name implies, designed to be moved from site to site. An appropriate sized breaker system will mount on the crusher securely so the crusher can be moved without first dismantling the breaker assembly yet be large enough to handle the raking and breaking.

STATIONARY



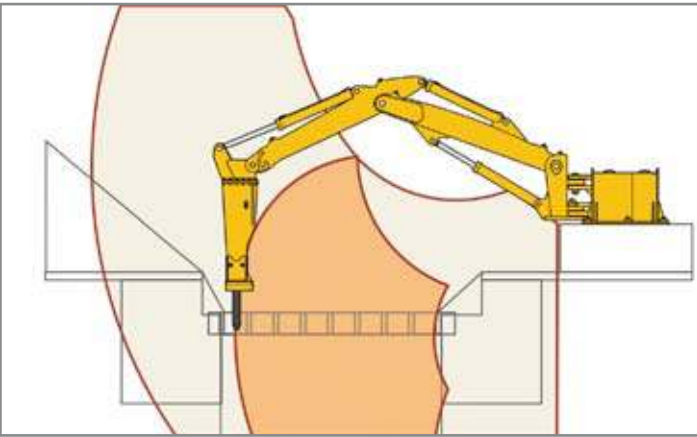
MBS12H / MBS13H
PB12H / NT
MRH / MRHT
BX15 to BX85

Jaw crushers and impact jaw crushers are most often fed from a rock box using a vibratory feeder. A rock breaker should be positioned to assist with raking rocks into the crusher, reduce oversize, and to be able to reach into the crusher to assist with processing and clearing jams.



MRH16	MRH20	MRH25	MRH30	MRHT16	MRHT20	MRHT25	MRXT24	MRXT30	MRXT36
STATIONARY	STATIONARY	STATIONARY	STATIONARY	STATIONARY	STATIONARY	STATIONARY			
Std-GRIZZLY	Std-GRIZZLY	Std-GRIZZLY		Std-GRIZZLY	Std-GRIZZLY	Std-GRIZZLY	HVY-GRIZZLY	HVY-GRIZZLY	HVY-GRIZZLY
Lt-GYRATORY	Lt-GYRATORY	Lt-GYRATORY		Lt-GYRATORY	Lt-GYRATORY	Lt-GYRATORY	Std-GYRATORY	Std-GYRATORY	Std-GYRATORY
17894 - 22300 (8115 - 10113)	18294 - 21060 (8297 - 9551)	19194 - 21300 (8705 - 9660)	24894 - 27000 (11289-12245)	18027 - 22343 (8176 - 10133)	18337 - 21103 (8316 - 9571)	19237 - 21343 (8724 - 9679)	31900-35214 (14467-15970)	33700-37014 (15283-16786)	36100-36913 (16372-16741)
14'9" (4.5)	18'0" (5.4)	21'5" (6.5)	24'7" (7.5)	13'4" (4.0)	16'7" (5.0)	20'1" (6.2)	17'3" (5.3)	21'7" (6.6)	27'5" (8.3)
16'7" (5.0)	20'6" (6.2)	25'0" (7.6)	30'1" (9.1)	16'3" (4.9)	20'1" (6.1)	24'7" (7.5)	23'2" (7.0)	28'3" (8.6)	34'10" (10.6)
23'9" (7.2)	27'7" (8.4)	33'0" (9.7)	36'5" (11.1)	23'4" (7.1)	27'2" (8.3)	31'8" (9.5)	31'6" (9.6)	36'6" (11.1)	43'8" (13.3)
SWINGPOST 170°	SWINGPOST 170°	SWINGPOST 170°	SWINGPOST 150°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°
BX20 - BXR85	BX20 - BXR65	BX20 - BXR50	BX20 - BXR65	BX20 - BXR85	BX20 - BXR65	BX20 - BXR50	BX40 - BXR85	BX40 - BXR85	BX40 - BXR65

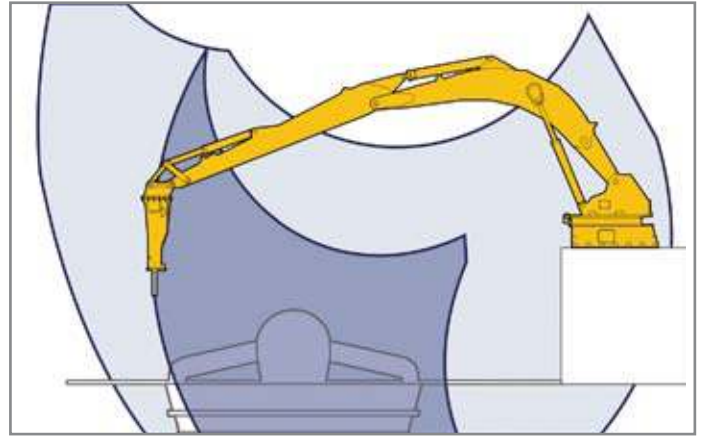
GRIZZLY



PB12H / NT
MRH / MRHT
MRXT
BX20 to BXR85

Grizzly applications are extremely harsh by nature. The boom is subject to high degrees of in-line and side raking, combined with various sizes and amounts of oversize. BTI's grizzly booms are designed with wide boom cross sections, extra large pins and reinforced high tensile steel plates. All designed to handle complex loading to the boom.

GYRATORY



MRH / MRHT
MRXT
TTX / TRX
BX40 to BX160

Big jobs need big booms and breakers. BTI's wide range of gyratory booms allow full breaker coverage within the rock box and mouth of the Crusher. BTI's complete line of large hammers are designed specifically for gyratories to quickly eliminate any bridging or clogging, restoring consistent material flow to the crusher.



TTX30	TTX36	TTX40	TTX45	TRX46	TRX52	TRX58
HVY-GYRATORY	HVY-GYRATORY	HVY-GYRATORY	HVY-GYRATORY	HVY-GYRATORY	HVY-GYRATORY	HVY-GYRATORY
45557-50407 (20661-22860)	47594-51194 (21585-23217)	49152-51452 (22291-23334)	50460-52760 (2284-23927)	93300-99200 (42320-44996)	101400-107500 (45994-48761)	109500-115600 (49668-52435)
24' 5" (7.4)	32' 4" (9.8)	36' 11" (11.3)	42' 3" (12.8)	45' 8" (13.9)	51' 9" (15.8)	55' 9" (17.0)
30' 0" (9.1)	35' 7" (10.8)	39' 0" (11.9)	43' 0" (13.4)	45' 10" (13.9)	52' 0" (15.8)	69' 0" (21.11)
38' 11" (11.8)	44' 4" (13.5)	48' 6" (14.8)	53' 6" (16.3)	57' 10" (17.6)	64' 0" (19.5)	70' 0" (21.3)
TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°	TURNTABLE 330°
BXR50-BXR120	BXR50-BXR100	BXR50-BXR85	BXR50-BXR85	BXR85-BXR160	BXR85-BXR160	BXR85-BXR160



POWER PACKS

Power Pack Model	PP 60-30	PP 60-40	PP 60-50	PP 60-60	PP 100-50	PP 100-60	PP 100-75	PP 100-100	PP 100-125	PP 100-150
Boom Match Up	MBS, PB, NT	MBS, PB, NT	MBS, PB, NT	MBS, PB, NT	MRH/MRHT	MRH/MRHT	MRH/MRHT	MRH/MRHT MRXT	MRH/MRHT MRXT	MRXT
Breaker Match Up	BX8 BX10	BX15 BX20	BX20 BX30	BX30	BX20 BX30	BX30 BX40	BX40	BX40 BXR50	BXR65 BXR85	BXR85
Reservoir Volume US Gal (Litre)	60 (227)	60 (227)	60 (227)	60 (227)	100 (380)	100 (380)	100 (380)	100 (380)	100 (380)	100 (380)
Power Requirements HP (KW)	30 (22)	40 (30)	50 (37)	60 (45)	50 (37)	60 (45)	75 (55)	100 (74)	125 (92)	150 (111)

Power Pack Model	PP 100-150	PP 200-100	PP 200-125	PP 200-150	PP 200-200	PP 200-200	PP 300-300
Boom Match Up	MRXT-HVC	TTX	TTX	TTX	TTX	TTX-HVC	TRX-HVC
Breaker Match Up	BX40 to BXR85	BXR50	BXR65	BXR85	BXR100 BXR120	BXR50 to BXR120	BXR85 to BXR160
Reservoir Volume US Gal (Litre)	100 (380)	200 (760)	200 (760)	200 (760)	200 (760)	200 (760)	300 (1140)
Power Requirements HP (KW)	150 (111)	100 (74)	125 (92)	150 (111)	200 (148)	200 (148)	300 (221)



POWER PACK OPTIONS



Standard Equipment

- Swash plate piston pumps with load sense / constant horsepower control
- Extra heavy duty all welded construction suitable from high vibration applications
- Pressurized fill cap with air filtration
- Suction strainers (on larger models)
- Full flow pressure filter with visual indicator
- Full flow return filter with visual indicator
- Flooded pump inlet
- Clean out / inspection cover
- Fluid level indication
- Fluid temperature indication

Optional Equipment

- Immersion heater
- Drip tray
- Hand pump fill kit
- Electrical filter indication
- Extreme cold weather power pack
- Extreme duty cycle and high temperature cooling
- Motor starter panel & power pack control center
- High / Low temperature Interlock
- High altitude hydraulic charging kit
- High altitude electric motor compensation
- Premium efficiency electric motor
- Explosion proofing
- Fire suppression systems
- Fire restraint fluid compatibility
- High horsepower / High flow pump motor
- Complete power pack enclosure

GENERAL OPTIONS

Boom Options

- All hose boom (no hydraulic tubes)
- Optional hose connections ORFS and SAE split flange
- Load drop counter balance valves on all boom functions
- Breaker anti-lunge interlock
- Automatic greasing systems
- All hose boom (no hydraulic tubes)
- Manual / central greasing system
- Expander pins™
- Pedestal to steel structure mounting kit
- Pedestal to concrete foundation mounting kit
- Cold weather conditioning package
- Cold weather grade steel plate construction
- Bucket and grapple attachment

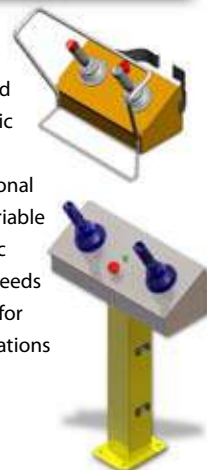


Optional Equipment

- Stand mounted electric over hydraulic joystick control
- Portable electric over hydraulic joystick control
- Remote manual hydraulic control
- Radio remote control
- IQAN (Can Bus) control system
- Control cable length
- Long distance fibre optic and co-axial upgrade
- Ergonomic chair c/w joystick control
- Secondary remote control
- Remote power pack starter / control panel
- Operator control cabins with heating, air-conditioning, cab pressurization and explosion proofing for windows

Control systems

BTI's rockbreaker booms come standard with fully proportional electro-hydraulic control from twin joysticks operating a fully proportional, load sensing directional control valve providing precise and variable control of all boom functions. The basic system can be modified to suit many needs including additional control pendants for maintenance and long distance applications



BREAKERS



BX Breakers		BX4	BX6	BX8	BX10	BX15	BX20	BX30	BX40
Energy Class	ft-lb (Joule)	400 (550)	600 (800)	800 (1080)	1000 (1350)	1500 (2000)	2000 (2700)	3000 (4100)	4000 (5400)
Impact Frequency	(BPM)	950	1000	900	900	700	550	550	500
Oil Flow	GPM (LPM)	11 (40)	13 (50)	14 (55)	21 (80)	27 (100)	29 (110)	37 (140)	42 (160)
Operating Pressure	PSI (BAR)	1740 (120)	1740 (120)	2000 (140)	2000 (140)	2000 (140)	2300 (160)	2300 (160)	2450 (170)
Working Weight	lb (kg)	420 (190)	440 (200)	735 (333)	948 (430)	1355 (615)	2050 (930)	2670 (1210)	3830 (1740)
tool Diameter	in (mm)	2.1 (53)	2.4 (62)	2.8 (70)	3.1 (78)	3.3 (85)	4.1 (105)	4.7 (120)	5.3 (135)



BXR Breakers		BXR50	BXR65	BXR85	BXR100	BXR120	BXR160
Energy Class	ft-lb (Joule)	5000 (6800)	6500 (8800)	8500 (11500)	10000 (13500)	12000 (16300)	16000 (21500)
Impact Frequency	(BPM)	561	487	426	460	413	318
Oil Flow	GPM (LPM)	58 (220)	61 (230)	66 (250)	90 (340)	106 (400)	99 (450)
Operating Pressure	PSI (BAR)	2755 (190)	2755 (190)	2755 (190)	2755 (190)	2755 (190)	2755 (190)
Working Weight	lb (kg)	4200 (1900)	4860 (2200)	6500 (2950)	7800 (3550)	9050 (4100)	12400 (5630)
tool Diameter	in (mm)	5.5 (140)	6.0 (150)	6.3 (160)	6.7 (170)	7.1 (180)	7.9 (200)



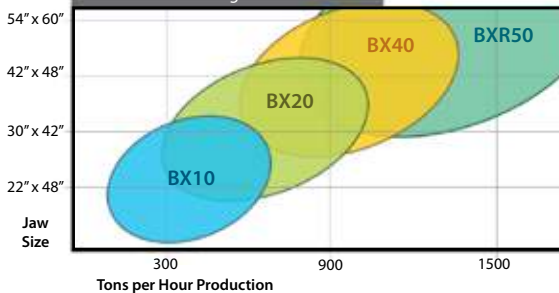
Side Mount



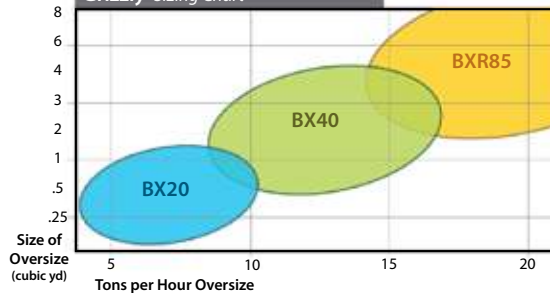
Top Mount c/w Severe Duty Box Housing & Concave Removal Tool

SIZING A BREAKER

Jaw Crusher Sizing Chart

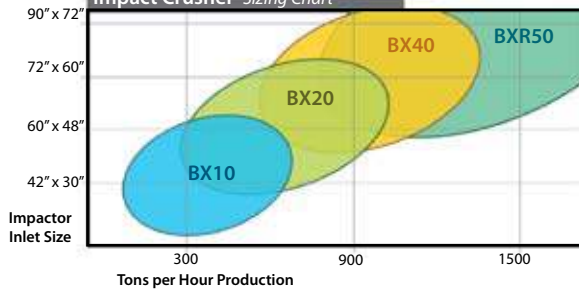


Grizzly Sizing Chart

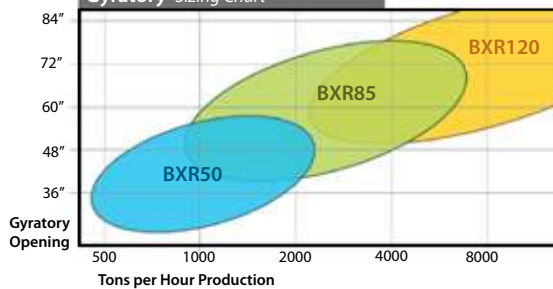


These charts provide only a rough calculation. Contact BTI for assistance in sizing your breaker.

Impact Crusher Sizing Chart



Gyratory Sizing Chart



BREAKER OPTIONS

BTI's full line of BX and BXR series breakers come standard with extra heavy-duty box housings, internal shock damping systems and rock claws configured for continuous duty mining environments.

Optional Equipment

- Extension brackets
- Mechanical or hydraulic quick couplers
- Side plate housing construction
- Severe duty, anti-abrasion wear kits
- Side mounted breakers
- Automatic greasing systems
- Choice of tools: blunt, chisel ormoil
- Extended tool lengths
- Concave removal tools
- Energy regeneration systems (BXR series)
- Anti blank fire interlock
- Two speed control



blunt chiselmoil

ISO 9001:2008
ISO 14001:2004

30101-ENG-0412