

# ROCK BREAKER SYSTEMS



# ROCK BREAKER SYSTEMS

Astec has a variety of rock breaker system models for breaking oversized material at large gyratories, grizzlies and both primary and secondary crushing applications. Designed to integrate into mobile, portable or stationary crushing plants, or at grizzly ore-pass sites, these breaker systems include boom-mounting configurations, automatic greasing packages, motor starter panels, joystick controls and easy plant integration.





### **1 Rock Breaker System Design**

Astec rock breaker systems are equipped with alloy pins, aluminum bronze bushings and thrust washers that deliver maximum service life under adverse conditions. The induction-hardened chrome cylinder rods resist damage from fly rock for reduced maintenance. Four plate variable cross-section booms are specifically designed to minimize stress concentrations that typically lead to fatigue cracks.

### **2 Pedestal Design**

Two pedestal designs are available: swing post or turntable. The cost-effective swing-post design provides 170-degrees of swivel action. Select models are equipped with a hybrid, 170-degree slew bearing with cylinder drive for maximum service life. The turntable design offers a 330-degree full rotation with a hydraulic-driven, slew bearing drive producing a constant swing torque for consistent force during operation. All models are fitted with relief functions and back drive capability to absorb shock loading from the crusher without damaging the rock breaker system.

### **3 Longer Life Span**

Astec implements many design features that contribute to the overall life of the rock breaker. Clevis-type, high-pressure hydraulic cylinders equipped with high tensile, steel-cast cylinder lugs provide maximum strength in rock breaking applications. The cylinders' self-aligning spherical ball bushings keep the equipment properly aligned and flexible during production throughout its lifespan.

### **4 System Controls**

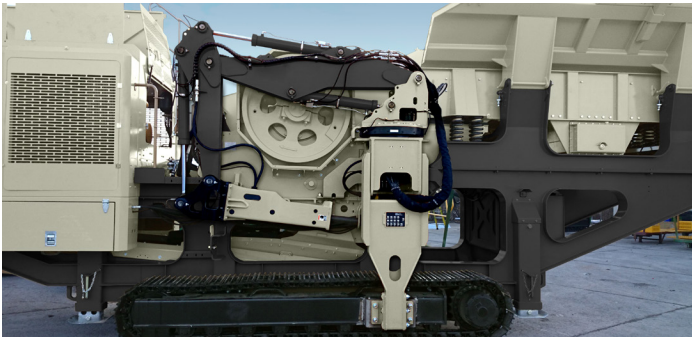
Astec rock breaker systems come standard with a hardwired proportional joystick control for local, line of sight, operation. Astec also offers its premium BreakerINTEL rock breaker controls which allows operation of single or multiple rock breakers, long distance remote operation, enhanced motion control, position feedback for collision avoidance, automated deployment and parking position movements.

### **5 Power Packs**

Rock breaker systems can be fitted with a variety of power packs ranging from 30-300 hp (22-221 kW) and reservoir volumes of 60-300 US gallons (227-1,140 L). Power packs can be designed with a variety of optional features including: immersion heater, drip tray, hand pump fill kit, cold weather package, fire suppression systems and a variety of other options.

# APPLICATIONS

Astec rock breaker systems were designed with flexibility and performance in mind. With a large range of boom sizes, two different pedestal designs, and a variety of breaker attachments, we have a system that will fit any need.



## Mobile

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

Jaw crushers and impact 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.



## Grizzly

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. Astec'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

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

# SWING POST SYSTEMS

Model	Application			
	Mobile	Stationary	Grizzly	Gyratory
NTE12				
NTE16				
NTE20				
NTE24				
MRH16				
MRH20				
MRH20/25				
MRH25				
MRH28				
MRH31				

# TURNTABLE SYSTEMS

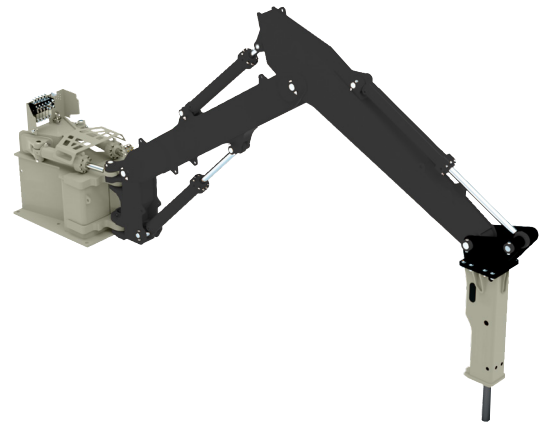
Model	Application			
	Mobile	Stationary	Grizzly	Gyratory
MBS12S				
MBS14S				
MBS12H				
MBS13H				
MBS16H				
MRHT20				
MRHT20/25				
MRHT25				
MRHT28				
MRHT31				
MRST22				
MRST25				
MRST30				
MRST35				
MRSTE25				
MRSTE30				
MRSTE35				
TTX30				
TTX36				
TTX40				
TTX45				
TTX48				

# MBS SERIES



Model	Operating Weight Range*		Vertical Breaker Reach Forward**		Vertical Breaker Reach Down**		Maximum Reach Forward**		Recommended Breaker Range
	lb	kg	ft	m	ft	m	ft	m	
MBS12S	2,896 - 3,855	1,313 - 1,748	11.25	3.4	7.91	2.4	16.33	4.9	CX6 - BX15
MBS12H	6,110 - 6,728	2,771 - 3,051	11.66	3.5	9.5	2.8	17.75	5.4	BX15 - BX30
MBS13H	6,428 - 8,346	2,915 - 3,785	13.16	4	6.66	2	19.33	5.9	
MBS14S	3,703 - 4,807	1,680 - 2,181	13.33	4	9	2.7	18.5	5.6	CX6 - BX10
MBS16H	5,467 - 7,739	2,480 - 3,511	16.25	4.9	11.66	6.8	22.41	6.8	BX15 - BX20

# NTE SERIES



Model	Operating Weight Range*		Vertical Breaker Reach Forward**		Vertical Breaker Reach Down**		Maximum Reach Forward**		Recommended Breaker Range
	lb	kg	ft	m	ft	m	ft	m	
NTE12	9,148 - 12,030	4,150 - 5,460	12.75	3.9	10.25	3.1	18.75	5.8	BX10 to BX40
NTE16	9,548 - 12,430	4,330 - 5,640	15.66	4.8	13.75	4.2	22.16	6.8	
NTE20	9,848 - 11,568	4,470 - 5,250	18.75	5.7	15.58	4.8	25.16	7.7	BX10 to BX30
NTE24	10,748 - 12,468	4,880 - 5,660	23.83	7.3	22.58	6.9	30.16	9.2	

All specifications are subject to change without notice. All results may vary.

\* Operating weight is dependent on final breaker size, power pack configuration and optional equipment

\*\* Dimensions nominal (based on BX15 breaker) and subject to change based on final breaker selection for MBS12S & MBS14S

\*\* Dimensions nominal (based on BX20 breaker) and subject to change based on final breaker selection for MBS12H, MBS13H & MBS16H

# MRH SERIES



Model	Operating Weight Range *		Vertical Breaker Reach Forward**		Vertical Breaker Reach Down**		Maximum Reach Forward**		Recommended Breaker Range
	lb	kg	ft	m	ft	m	ft	m	
MRH16	16,230 - 20,680	7,362 - 9,380	16.5	5	13.91	4.2	23	7	BX20 to BXR85
MRH20	18,280 - 21,080	8,285 - 9,555	20.5	6.2	18	5.4	27.58	8.4	BX20 to BXR65
MRH20/25	18,550 - 21,380	8,414 - 9,684	22.5	6.9	22	6.7	30.66	9.3	BX20 to BXR50
MRH25	19,150 - 21,300	8,694 - 9,669	25.08	7.6	21.41	6.5	32.08	9.8	
MRH28	16,821 - 18,601	7,630 - 8,438	25.75	7.8	22.41	6.8	33.16	10.01	BX20 to BX40
MRH31	18,364 - 18,982	8,330 - 8,610	31.33	9.5	38	11.5	38	11.5	BX20 to BX30

# MRHT SERIES



Model	Operating Weight Range *		Vertical Breaker Reach Forward**		Vertical Breaker Reach Down**		Maximum Reach Forward**		Recommended Breaker Range
	lb	kg	ft	m	ft	m	ft	m	
MRHT16	16,350 - 20,800	7,416 - 9,434	16	4.8	13.08	4.2	24	7.3	BX20 to BXR85
MRHT20	16,818 - 19,648	7,629 - 8,899	20.16	6.1	16.33	4.9	27	8.3	BX20 to BXR65
MRHT20/25	17,138 - 19,968	7,774 - 9,044	21.75	6.6	18.75	5.7	28.83	8.7	BX20 to BXR50
MRHT25	17,658 - 19,808	8,010 - 8,985	24.58	7.5	19.75	6	31	9.5	
MRHT28	17,482 - 19,262	7,930 - 8,737	27	8.2	21.58	6.5	33.75	10.2	BX20 to BX40
MRHT31	19,246 - 19,864	8,730 - 9,011	31.08	9.4	24.33	7.4	37.5	11.4	BX20 to BX30

All specifications are subject to change without notice. All results may vary.

\* Operating weight is dependent on final breaker size, power pack configuration and optional equipment

\*\*Dimensions nominal (based on BX15 breaker) and subject to change based on final breaker selection for MBS12S & MBS14S

\*\*Dimensions nominal (based on BX20 breaker) and subject to change based on final breaker selection for MBS12H, MBS13H & MBS16H

# MRST/E SERIES



Model	Operating Weight Range*		Vertical Breaker Reach Forward**		Vertical Breaker Reach Down**		Maximum Reach Forward**		Recommended Breaker Range
	lb	kg	ft	m	ft	m	ft	m	
MRST25	28,830 - 31,500	13,080 - 14,288	24.75	7.5	15.75	4.8	34	10.3	BX40 to BXR85
MRST30	29,330 - 32,000	13,307 - 14,515	29.66	9	18.91	5.7	38.5	11.7	
MRST35	29,830 - 30,880	13,533 - 13,993	34.83	10.6	21.41	6.5	43.25	13.1	
MRSTE25	12,510 - 14,110	5,674 - 6,400	24.33	7.4	20.1	6.7	34.5	10.5	BX40 to BXR65
MRSTE30	12,910 - 14,510	5,856 - 6,582	29.58	9	25.75	7.8	38.58	11.6	
MRSTE35	13,210 - 14,810	5,992 - 6,718	34.75	10.5	29.58	9	43.33	13.2	

# TTX SERIES



Model	Operating Weight Range*		Vertical Breaker Reach Forward**		Vertical Breaker Reach Down**		Maximum Reach Forward**		Recommended Breaker Range
	lb	kg	ft	m	ft	m	ft	m	
TTX30	44,570 - 49,420	20,215 - 22,410	30.83	9.1	26	7.9	40.58	12.3	BXR50 to BXR120
TTX36	48,450 - 53,300	21,975 - 24,170	35.33	10.8	33.33	10.1	45	12.3	
TTX40	49,700 - 53,300	22,543 - 24,188	38.75	14.2	35.25	10.7	46.75	14.2	BXR50 to BXR85
TTX45	52,145 - 54,445	23,653 - 24,696	43.91	14.4	42.5	12.68	53.75	16.3	
TTX48	53,700 - 56,000	24,358 - 25,401	47	14.3	44	13.3	54.83	16.7	

All specifications are subject to change without notice. All results may vary.

\* Operating weight is dependent on final breaker size, power pack configuration and optional equipment

\*\* Dimensions based referenced from center of swing rotation.

\*\* Dimensions nominal (based on BX20 breaker) and subject to change based on final breaker selection.





TTX SERIES

# BREAKERS

Astec hydraulic breakers are designed for optimal performance in a variety of applications from concrete and soft rock breaking to full demolition projects. With three size ranges and a variety of attachable tools, we have hydraulic breakers for any producer. Our breakers feature reduced noise levels, low operating costs, internal component protection and many more features to make any operation successful.





Model	Operating Weight		Overall Length		Operating Pressure		Tool Diameter		Exposed Tool Length	
	lb	kg	in	mm	psi	bar	in	mm	in	mm
BX10	948	430	71	1,800	2,000	140	3.1	78	17.5	445
BX15	1,355	615	78	1,980	2,000	140	3.3	85	18.5	465
BX20	2,050	930	88	2,225	2,300	160	4.1	105	21.3	538
BX30	2,668	1,210	97	2,455	2,450	170	4.7	120	26.5	668
BX40	3,830	1,740	109	2,760	2,450	170	5.3	135	26.5	668
BXR50C	4,200	1,910	103	2,622	2,700	186	5.5	140	25	635
BXR65C	4,860	2,200	112	2,863	2,700	186	6.0	150	26.2	665
BXR85C	6,500	2,950	128	3,241	2,700	186	6.3	160	29.3	745
BXR100C	7,800	3,540	134	3,400	2,700	186	6.7	170	30.3	770
BXR120C	9,200	4,170	138	3,500	2,700	186	7.1	180	31.9	810
BXR160C	12,100	5,490	155	3,943	2,700	186	7.9	200	36.6	930



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