



HFS SERIES

Underground Scalers

BTi's HFS (Hammer Feed Scaler) Series of Underground Scalers are engineered to provide a safe and efficient method of mine scaling. They offer flexibility to deal with virtually all scaling situations, the maneuverability to work in tight quarters, and the variable breaker power to match your scaling requirements.

Features & Benefits

The operator can use sight and sound to determine what is to be scaled; the very same criteria applied in precise manual scaling operations. Available in three models, HFS Series Scalers combine proven componentry in a simple and rugged construction.

Rugged BX8 Breaker

with adjustable blow energy, variable frequency and an oversized tool provide the ability to match breaker output to scaling conditions.

Scaler Head with Hydraulic Extension, Swing & Tilt

Three axis movement permits optimum scaler positioning to ensure only loose rock is scaled.



Unique Telescoping & Knuckle Positioner

incorporates high rigidity, torsional strength, telescoping extension and strategic guarding of hydraulic components for longer machinery life.

Infinitely Variable Control System

for both boom and breaker functions provides adaptability to site conditions; overscaling is eliminated; and "sounding" is readily achieved.

Heavy Duty Stabilizers

or optional pusher blade allow easy set-up and operation from the machine when in a parked position. The main benefit being efficient, immediate removal of scaled material from roadways.

HFS Series Underground Scaler

Breaker Technology's HFS (Hammer Feed Scaler) Series of Scalers are engineered and manufactured to handle key requirements of the scaling operation:

When testing seams or rock laminations, the tool will occasionally get wedged in the material. Withstanding the resulting prying loads requires a relatively large size breaker with a large diameter tool and heavier body. The BX8 provides a blow energy of 800 ft lbs and can be adjusted to suit the ground conditions to avoid problems from over-scaling.

The hydraulic system is a two-circuit design; one complete system for the carrier and one for the breaker operation, making it quick and easy to identify and address maintenance issues and keep downtime to a minimum.

Shock loading to a boom system is common when a large rock falls unexpectedly onto the boom arm during the scaling process. The HFS Series Underground Scaler is ruggedly built to handle 1.5 T and abnormal loads during scaling. A heavy-duty telescopic boom knuckle comfortably withstands loads. The carrier is further enhanced with four hydraulically operated stabilizers which remove any stresses on the axles during scaling. For any carrier with a boom, stability and good weight distribution play a vital role in reducing shock loads, ultimately providing longer life and reduced maintenance.

All cylinders and the hydraulics are protected to avoid damage from the loose material. All cylinders and hoses are positioned under the boom or housed to protect from falling rock. A protective canopy or cabin ensures safety while operating from the operator's seat. A remote control pendant for the boom and breaker is also available.



Standard Features:

- Dual Hydraulic System for both Boom and Breaker
- BX8 Scaler Breaker
- 4 Stabilizers
- Certified ROPS Canopy - 8' 6" (2.59 m)
- Four 12 x 20 Mine Service Tires

Options:

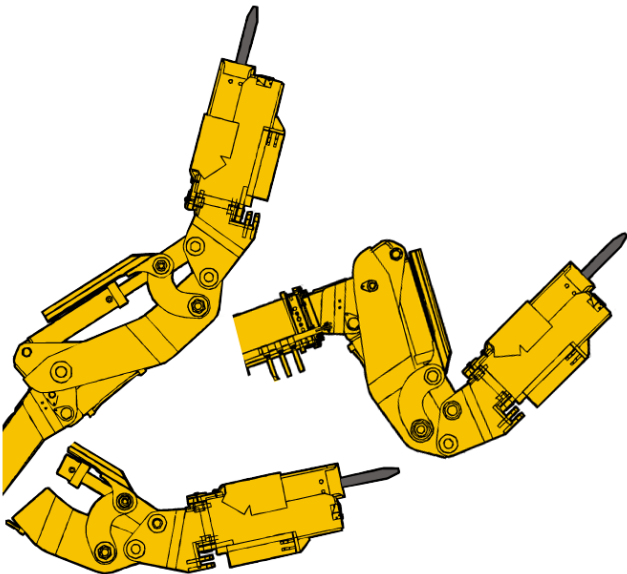
- Pusher Blade Attachment
- Fully Enclosed ROPS/FOPS Cabin
- Radio Remote
- Power Pack - 50 HP c/w Hose Reel, Starter Panel, Valving & Plumbing
- Auto Grease System or Manual Grease System

Other Options Available Upon Request



The hydraulic force-controlled breaker feed advancing along its longitudinal axis avoids jamming of the tool and provides controlled scaling of the mine ceiling.

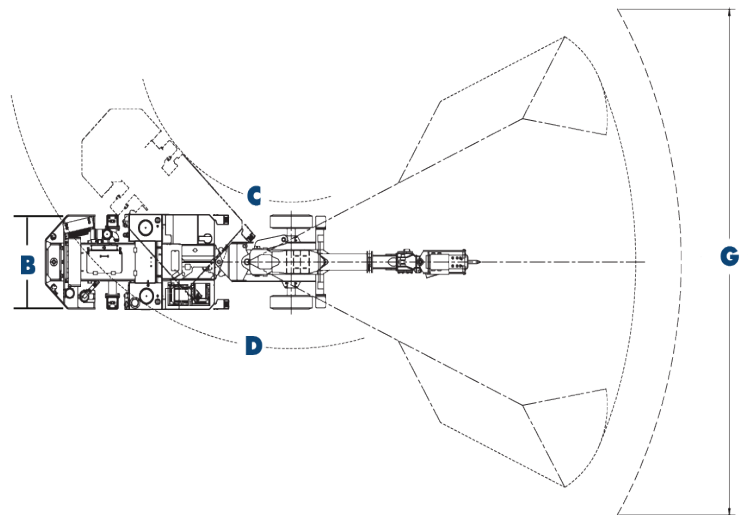
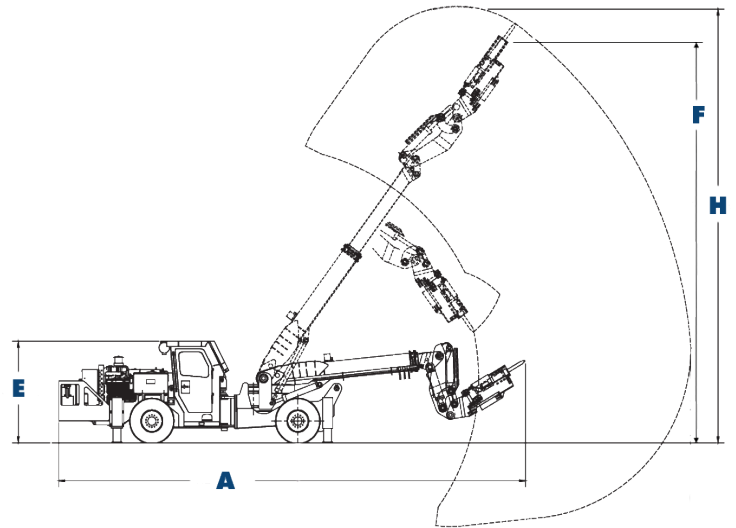
The BX8 breaker feed is capable of movement along three axes to effectively scale along the back, rib and face. Scalers without breaker feeds will jam the tool in its bushing, resulting in rapid wear and failure of the tool, bushings and piston from partial blows and recoil.



BX8 Scaler Breaker		
Impact Energy Class	800 ft lb	
Blows/Minute	350 - 900	
Oil Flow	8-14 gpm	30-55 lpm
Operating Pressure	1450 - 2000 psi	100 - 140 bar
Operating Weight	735 lbs	334 kgs
Tool Diameter	2.8"	75 mm

HFS Series Underground Scaler

Model	HFS25	HFS20	HFS16
Carrier Base	LP15ARW	LP15ARW	LP15ARW
A Tram Length	39' 2"	34' 3"	39' 1"
	11.94 m	10.44 m	11.91 m
B Tram Width	7' 1"	7' 1"	7' 1"
	2.16 m	2.16 m	2.16 m
C Turn Radius Inside	10' 10"	10' 10"	10' 10"
	3.3 m	3.3 m	3.3 m
D Turn Radius Outside	23' 9"	19' 11"	23' 7"
	7.23 m	6.08 m	7.19 m
E Tram Height with Cab	8' 2"	8' 2"	8' 2"
	2.49 m	2.49 m	2.49 m
F Optimum Coverage Height	30'	23'	28'
	9.14 m	7.01 m	8.53 m
G Coverage Width at Optimum Height	32'	26'	32'
	9.75 m	7.92 m	9.75 m
H Maximum Reach Height	35' 2"	27' 9"	29'
	10.72 m	8.46 m	8.84 m
Total Machine Weight	46,500 lb	45,900 lb	45,160 lb
	21,136 kg	20,869 kg	20,527 kg
Boom Hoist Total Arc	48°	48°	42°
Dipper Total Arc	67°	67°	N/A
Breaker Tilt Total Arc	130°	130°	118°
Boom Swing Total Arc	60°	50°	60°
Breaker Swing Total Arc	70°	70°	70°
Boom Extension Feed	84"	36"	84"
	213.3 mm	91.4 mm	208.2 mm
Breaker Extension Feed	18"	18"	18"
	45.7 mm	45.7 mm	45.7 mm
Extension Total - Boom & Breaker	8' 6"	8' 4"	8' 4"
	2.6 m	2.5 m	2.5 m



Please refer to the HFS sales manual for carrier specifications. All dimensions and specifications are approximate and subject to change without notice.

