

# MOBILE MINING



**SCALE** **BOSS**<sub>3D</sub>

*AHEAD OF THE GRADE*



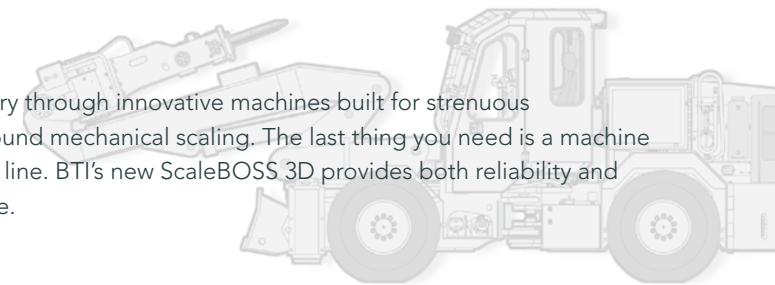
[www.rockbreaker.com](http://www.rockbreaker.com)

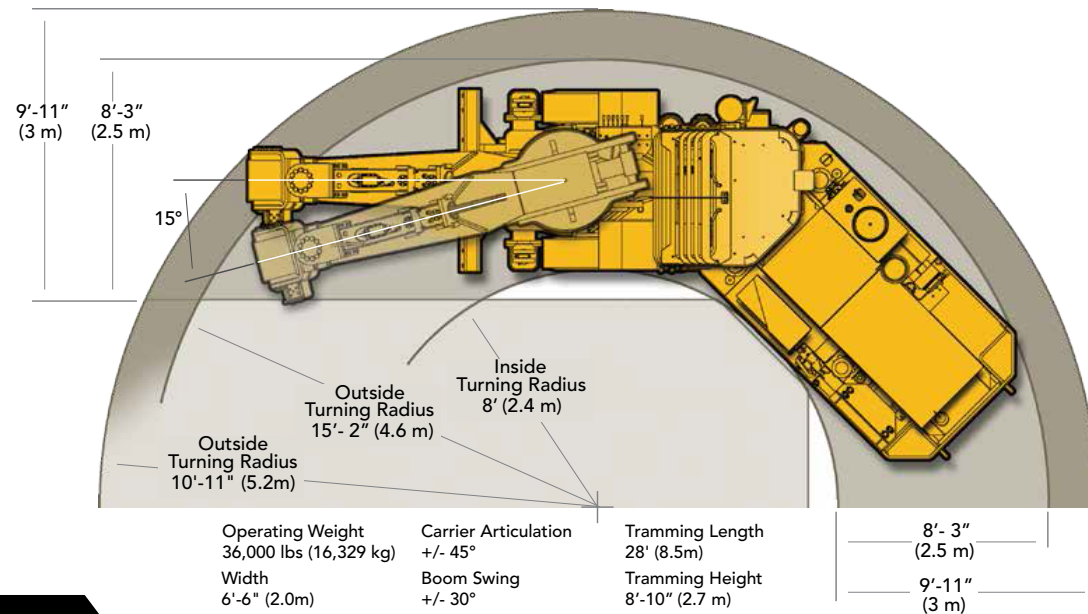
# TOUGH CONDITIONS CALL FOR TOUGH MACHINES



## MACHINES BUILT FOR THE UNDERGROUND

For over fifty years, BTI has worked to evolve the mining industry through innovative machines built for strenuous environments. And nothing is more demanding than underground mechanical scaling. The last thing you need is a machine that doesn't perform or compromises safety on the production line. BTI's new ScaleBOSS 3D provides both reliability and enhanced safety underground, keeping you ahead of the grade.





## SUPERIOR COVERAGE IN A SMALLER PACKAGE

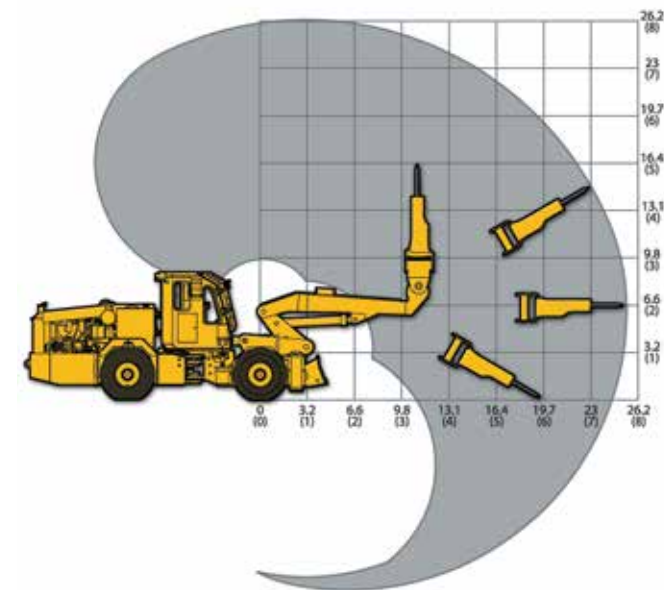
### FLEXIBILITY AND SAFETY COME STANDARD

The new ScaleBOSS 3D Scaler is for a new generation of mining productivity and safety. Its five-axis boom offers enhanced flexibility and superior coverage where other scalers fail. The heavy-duty, compact construction makes

it easy to maneuver while withstanding severe conditions. Ergonomic ROPS/FOPS certified operator cabin and HVAC system maintains excellent personnel safety while providing high visibility and comfort.

### FEATURES

- ⊕ Heavy-duty compact construction
- ⊕ Optimal for 3 x 3 to 5½ x 5½ meter headings
- ⊕ Five-axis boom for excellent maneuverability
- ⊕ Powerful and reliable Deutz diesel engine
- ⊕ Spherical roller bearing articulation joint designed for long life
- ⊕ Closed Loop Hydraulic Wheel Drive with separate reservoir, 4 wheel drive and traction control
- ⊕ Spring Apply Hydraulic Release(SAHR) parking / emergency brake in each hydraulic wheel motor.
- ⊕ Closed-loop hydraulic wheel end service brakes via
- ⊕ Pump-over-center swash plate
- ⊕ Heavy-duty mining tires
- ⊕ Load-sensing hydraulic circuit for boom and steering Functions
- ⊕ Dedicated open-center hydraulic circuit for breaker fire Function
- ⊕ 24Vdc / 80 amp electrical circuit with CANBus based system, proportional electro-hydraulic control and touch-screen human interface
- ⊕ Ergonomic ROPS/FOPS certified operator cabin with excellent visibility and operator comfort, complete with HVAC
- ⊕ Heavy duty fabricated boom structures with versatile feed, robust slew bearing, and dual rotary actuators for optimized coverage
- ⊕ CX8SB (800 ft-lb class) scaling breaker



### CLEANER AIR WITH EASY-PEASY MAINTENANCE

Built with our Hydraulic Wheel Drive (HWD) and Advanced Braking & Tramming Control System (ABT, patent pending), the ScaleBOSS 3D gains more traction and power with fewer emissions than conventional mechanical systems. Hydraulic braking means no brake pads to service or replace. With a dedicated, open-center hydraulic circuit for the breaker function, it's easy to identify and address maintenance issues. Cylinders and hydraulic components are protected to avoid damage from contamination.



# TECHNOLOGY TO STAY AHEAD OF THE GRADE

## MASTER YOUR MACHINE

Our system continually monitors your machine for improved performance and response. With real-time central monitoring and diagnostics, operator duties are simplified. The system gauges your engine, hydraulics system, traction control, wiring harness, coils, joysticks, sensors, system pressures, fluid levels and temperatures while keeping a log of machine hours, errors, faults, temperatures and pressures.

# OPERATOR COMFORT



## OPERATOR COMFORT

Our ROPS/FOPS certified cabin is fitted for complete operator comfort and safety. Every ScaleBOSS offers BTI's ergonomic seat with joystick control, HVAC system, safety glass windows with front rock guard and rubber isolators between the cabin and chassis for comfort during tramming and scaling.



# SPECS

## HYDRAULIC BREAKER

CX8SB	
Impact energy	800 ft-lbs
Impact rate	600-1500 bpm
Hydraulic pressure	2,000 psi
Oil Flow	12-24 gpm
Weight	735 lbs

## CARRIER

Engine	TCD2012L04 2V
Power rating at 2,300 RPM	129 hp
Torque	384 ft-lbs
Tramming speed on flat	14 mph
Tramming speed on 1:7	5 mph
Articulation	+/- 45°
Axle oscillation	+/- 8°
Four wheel drive, hydraulic	
Traction control system	
Tires	12.00 R20
Service brakes	hydrodynamic
Emergency/Park brakes	SAHR
Fuel reservoir, volume	50 gal
Fire extinguisher	20 lb
Dry element air intake	
Catalytic exhaust purifier/silencer	
Central lubrication system	

## BOOM

Boom swing	+/- 30°
Breaker tilt	180°
Breaker swing	+/- 90

## HYDRAULIC SYSTEMS

Hydraulic pumps	2 variable 1 fixed
Propel circuit pressure	6,175 psi
Steering/boom circuit pressure	3,400 psi
Breaker circuit pressure	2,700 psi
Propel circuit reservoir	30 gal
Steering/boom circuit reservoir	35 gal
Breaker circuit reservoir	23 gal
Filtration	10 micron
Air/oil hydraulic coolers	3
Low oil indicator on all reservoirs	
Mineral hydraulic fluid	
Manual oil fill pump	

## ELECTRICAL SYSTEM

24 Vdc 80 amp alternator	
2 X 195 Ah 12V batteries, in series	
CANBus based electronic control Health monitoring and diagnostics for engine and HWD systems	
Flame retardant wiring	
Lockable battery disconnect	
FWD/REV high output LED drive and work lights	
Rear red marker/brake lights and back-up alarm	
Horn	
12V 12.5A auxiliary power outlet	
Steer by wire, joysticks integrated into operator seat arm rest	

## OPERATOR CABIN

ROPS/FOPS Certified	
Windshield wipers/washer system	
HVAC (heating, ventilation, air conditioning)	
Safety glass windows, with rock guard over front window	
Rubber-damped for comfort during tramming and scaling	

## OPTIONS

Pusher blade	
Breaker auto-lube system w/ air flush	
Boom auto-lube system	
Dust suppression system	
Fire suppression system	
Parking brakes release system	
Radio remote control	
BX10SB (1,000 ft-lb class) scaling breaker	
Stereo system	
High altitude package	
Exhaust wrap & manifold coating	
Fuel fast fill	



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