SCALEBOSS 3D/3DE

ASTEC

Mobile Scalers



Boom

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

Carrier

- TCD2012L06 2V engine
- Hydraulic four-wheel drive
- Traction control system
- Tires: 12.00 R20 28 PR pneumatic
- Hydrodynamic service breaks
- Emergency/park brakes: SAHR
- Fire extinguisher: 20 lb
- Dry element air intake
- Catalytic exhaust purifier/silencer
- Central lubrication system

Electrical System

- 24 Vdc 100 amp alternator
- 2 x 195 Ah 12 V 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 backup alarm
- Horn
- 12 V 12.5 A auxiliary power outlet
- Joysticks integrated into operator seat armrest

Hydraulic System

- Hydraulic pumps: 2 variable, 1 fixed
- 10 micron filtration
- Three (3) air/oil hydraulic coolers
- Low-oil indicator on all reservoirs
- Mineral hydraulic fluid
- Manual oil fill pump for tram circuit

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
- Emergency egress window

Features

- Heavy-duty compact construction
- Boom coverage provides full scaling within 4 meter advance from one set up; no repositioning required
- Optimal for headings 3-5 m
- Five-axis boom for excellent maneuverability
- Deutz diesel engine
- Spherical roller bearing articulation joint designed for long life
- Closed-loop hydraulic wheel drive (HWD) with separate reservoir, four-wheel drive and traction control
- Spring applied hydraulic release (SAHR) parking/ emergency brake in each hydraulic wheel motor
- Closed-loop hydraulic wheel and service brakes via pumpover-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
- 24 Vdc/100 amp electrical circuit with CANBus-based system, proportional electro-hydraulic control and touchscreen human interface
- Ergonomic ROPS/FOPS-certified operator cabin with excellent visibility, operator comfort and HVAC
- Heavy-duty fabricated boom structures with versatile feed, robust slew bearing and dual rotary actuators for optimized coverage
- BX 10SB (1,000 ft-lb class) scaling breaker

Options

- Pusher blade
- Breaker auto-lube system with air flush
- Boom auto-lube system
- Dust suppression system
- Fire suppression system
- Backup camera
- Radio remote control
- Door/brake interlock
- High altitude package including Deutz 2013L06 engine
- Exhaust wrap and manifold coating
- Fuel fast fill
- CAT C4.4 engine
- Deutz TCD4.1 T4F engine
- Electric/hydraulic powerpack (ScaleBOSS 3DE)

Carrier

Dimension	Imperial	Metric		
Power Rating at 2,300 RPM	129 hp	93 kW		
Tramming Speed on Flat	14 mph	22 km/h		
Tramming Speed on 1:7	5 mph	8 km/h		
Articulation	+/- 45°			
Axle Oscillation	+/- 8°			
Fuel Reservoir	50 gal 189 L			

Physical/Operating Characteristics

Mobile Scaler	Operating Weight		Width		Tramming Length		Tramming Height		Boom Swing	Turning Radius			
Model Model										Inside		Outside (swing)	w/boom
	lb	kg	ft	m	ft	m	ft	m	deg	ft	m	ft	m
ScaleBoss 3D	36,350	16,500	6.5	2	29.4	9	8.8	2.7	+/-30°	8	2.4	15.3	4.7
ScaleBoss 3DE	39,500	17,920	6.5	2	30.3	9.2	8.8	2.7	+/-30°	8	2.4	16.6	5.1

Scaling Breaker Model	Energy Class		Operating Weight		Blows Per Minute	Operating Pressure		Oil Flow		Tool Diameter	
	ft-lb	J	lb	kg	ВРМ	psi	bar	gpm	lpm	in	mm
BX10SB	1,000	350	948	430	350 - 1,000	2,000	140	12 - 21	45 - 80	3.1	78

