

Heavy-Duty Hi-Rail Machines and Attachments

PRODUCT GUIDE



636.837.1354
BTEQUIP.COM

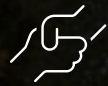
BALLAST TOOLS

WHY CHOOSE BALLAST TOOLS



TESTED

Leading innovator in track maintenance solutions.



TRUSTED

Over 60 years of field experience and expertise.



MASTERED

#1 in reliability, productivity and support.

At Ballast Tools Equipment (BTE), we are committed to excellence, delivering top-tier specialty equipment for railroad track maintenance and construction. As a global leader, we continuously innovate beyond industry standards, offering high-performance solutions that set us apart. Partner with us to craft a better tomorrow through custom engineered machines and attachments tailored precisely to your needs.



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HI-RAIL MACHINES

Tested and trusted to handle the most challenging conditions

EXPERIENCE THE BTE ADVANTAGE

Expertly engineered and backed by rigorous field testing, our heavy equipment sets the standard for dependability.

DURABLE AND DEPENDABLE HI-RAIL GEAR

Exclusively designed and built BTE tough, our hi-rail gear handles long runs, heavy lifts and tough conditions with ease.

AUTOMATIC TOOL RECOGNITION (ATR)

Hydraulic flow, pressure, and joysticks are automatically set to ensure optimal machine setup for a safe and productive work environment.

BEST PERFORMING WORK ATTACHMENTS

Our full line of innovative attachments are expertly engineered to maximize production for any maintenance of way application.

UP TO 30% MORE HYDRAULIC FLOW

BTE's Priority Hydraulic System delivers the most hydraulic flow to work attachments for peak performance and productivity.

UNMATCHED QUALITY, SERVICE AND SUPPORT

Our team of experts is committed to providing world-class quality and customer satisfaction, as reflected in our ISO-9001.

COMPARE MODELS

We offer a full line of small to medium-sized excavators and backhoes designed to tackle any hi-rail maintenance need from heavy track lifts to compact bridge and tie work.

FEATURES	308	313	M318	325	326	330	420XE	450
Horsepower	69.5 hp	108 hp	174 hp	174 hp	202 hp	273 hp	110 hp	131 hp
Power Class	N/A	10 ft undercutter	12 ft undercutter	12 ft undercutter	12 ft undercutter	15 ft undercutter	Cold Air Blower	9 ft undercutter
Max Flow	44 gpm	65 gpm	67 gpm	113 gpm	113 gpm	148 gpm	49 gpm	58 gpm
Max Pressure	4,134 PSI	5,075 PSI	5,075 PSI	5,075 PSI	5,075 PSI	5,075 PSI	3,626 PSI	3,800 PSI
Max On-Track Speed	25 mph	25 mph	25 mph	25 mph	25 mph	25 mph	25 mph	25 mph
Reach (at ground level)	26.5 ft	30.6 ft	32.4 ft	35 ft	36 ft	39.5 ft	23.6 ft	28 ft
Approximate Weight	26,000 lbs	47,000 lbs	48,000 lbs	78,100 lbs	78,200 lbs	88,500 lbs	19,500 lbs	28,000 lbs
Width/Height	7.5 x 9.2 ft	10.3 x 11.3 ft	8.3 x 12.0 ft	10.6 x 11.5 ft	10.5 x 11.8 ft	11.1 x 11.2 ft	8.4 x 12 ft	8.5 x 14 ft
Swing Radius	Compact	Conventional	Conventional	Compact	Conventional	Conventional	N/A	N/A
Rototilt	R4 high flow	R6 high flow	R6 high flow	R8 high flow	R8 high flow	R8 high flow	R4 high flow	R4 high flow



COMPARE MODELS

Scan the QR code to download the full comparison chart.

BTE-308 EXCAVATOR

Compact size, maximum efficiency

The BTE-308 Hi-Rail Mini Excavator is the ideal solution for bridge and tie work. Its lightweight and compact design enhances mobility across work sites, ensuring efficient task completion. Despite its size, the BTE-308 delivers robust power for tackling heavy duty tasks such as changing ties, tamping and ditching with ease.

MACHINE AT-A-GLANCE

Engine Power	69.5	hp	51.8	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	26.5	ft	8.1	m
Weight	26,000	lb	11,793	kg
Width x Height	7.5 x 9.2	ft	2.3 x 2.8	m
Swing Radius	Reduced/Compact			
Rototilt	R4 high flow			

FEATURES

- Rototilt 360° rotation and tilt attachment coupler
 - Two-speed drive motor for travel and towing
 - 16" extended-life hi-rail wheels
 - Heavy-duty hi-rail axles and bearings
 - Widened undercarriage to straddle rail
- Quick tow mode drive disconnects
 - Joysticks for multi-function control
 - Crawler track mobility for power and stability
 - Optional BTE Bridge Tie Configuration maximizes productivity and safety
 - Insulated axles (optional)

LIFTING CAPABILITIES

Scan the QR code to download the full specs with on and off-rail load charts.



COMPATIBLE ATTACHMENTS



Cold Air Blower



Mulcher



Tampers -
2-Motor



Tie Talon



Tube Talon



Parallel
Tie Talon



Tie Grapple



Tie Shear



Mini Culvert
Cleaner



Track Jack



Magnet



Buckets

BTE-313 EXCAVATOR

Flexibility and performance

The BTE-313 Hi-Rail Excavator offers unparalleled flexibility and performance for challenging railroad spot maintenance conditions. Its lightweight and compact design makes it easy to mobilize across work sites while being able to quickly transition on and off-rail.

MACHINE AT-A-GLANCE

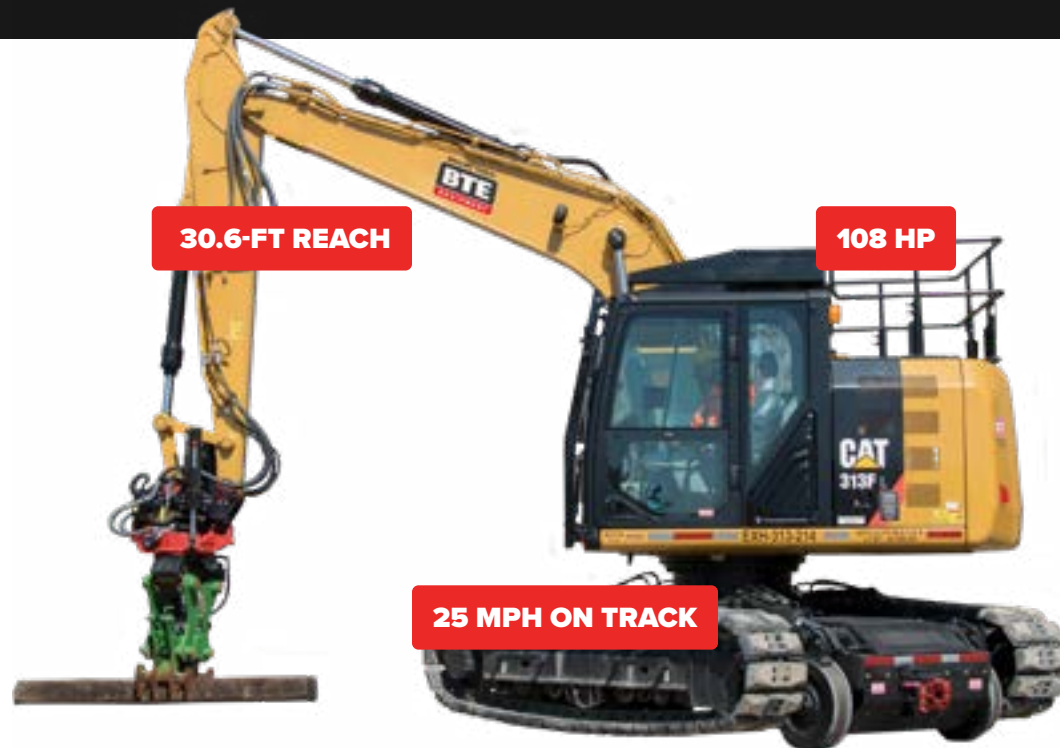
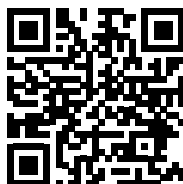
Engine Power	108	hp	80.5	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	30.6	ft	9.3	m
Weight	47,000	lb	21,319	kg
Width x Height	10.3 x 11.3	ft	3.1 x 3.4	m
Swing Radius	Conventional			
Rototilt	R6 high flow			
Power Class	10 ft undercutter			

FEATURES

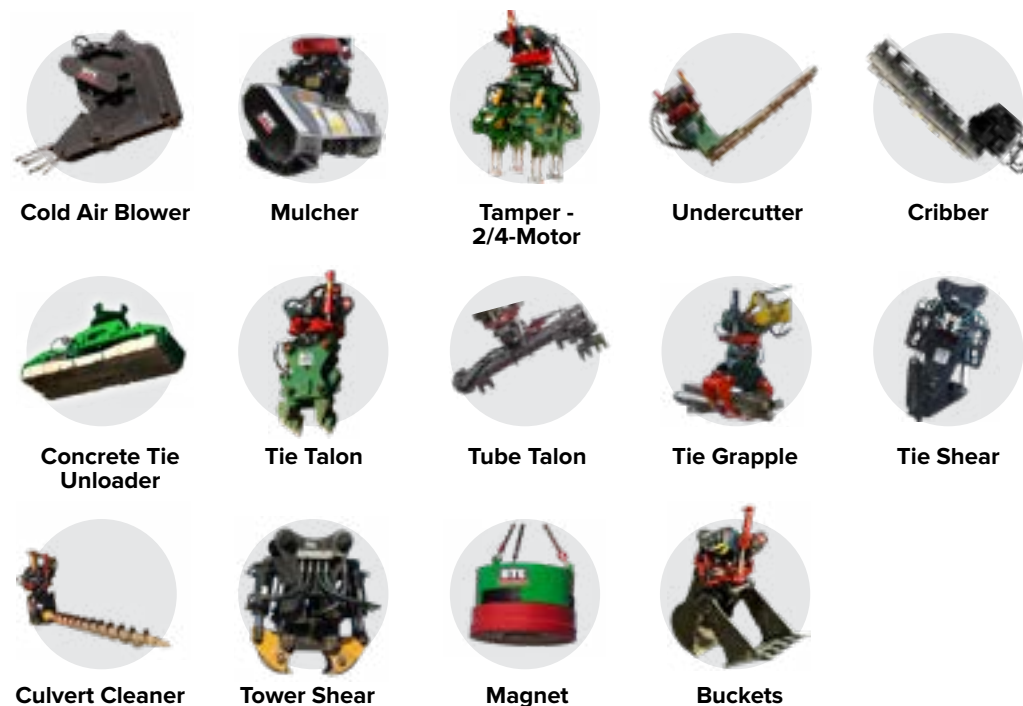
- Rototilt 360° rotation and tilt attachment coupler
- Two-speed drive motors for travel and towing
- 24" extended-life hi-rail wheels
- Chain drive, solid axle, heavy duty bearings
- Widened undercarriage to straddle rail
- Quick tow mode drive disconnects
- Joysticks for multi-function control
- Crawler track mobility for power and stability
- Insulated axles (optional)

LIFTING CAPABILITIES

Scan the QR code to download the full specs with on and off-rail load charts.



COMPATIBLE ATTACHMENTS



BTE-M318 EXCAVATOR

Mobility, power and performance

The BTE-M318 Wheeled Hi-Rail Excavator helps you get the job done more efficiently. With high-durability tires and a travel speed of up to 25 mph on the rail, it is the perfect solution for tackling jobs that require quick mobilization in challenging conditions.

MACHINE AT-A-GLANCE

Engine Power	174	hp	129.7	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	32.4	ft	9.9	m
Weight	48,000	lb	21,772	kg
Width x Height	8.3 x 12	ft	2.5 x 3.6	m
Swing Radius	Conventional			
Rototilt	R6 high flow			
Power Class	12 ft undercutter with 2-inch bi-directional chain			

FEATURES

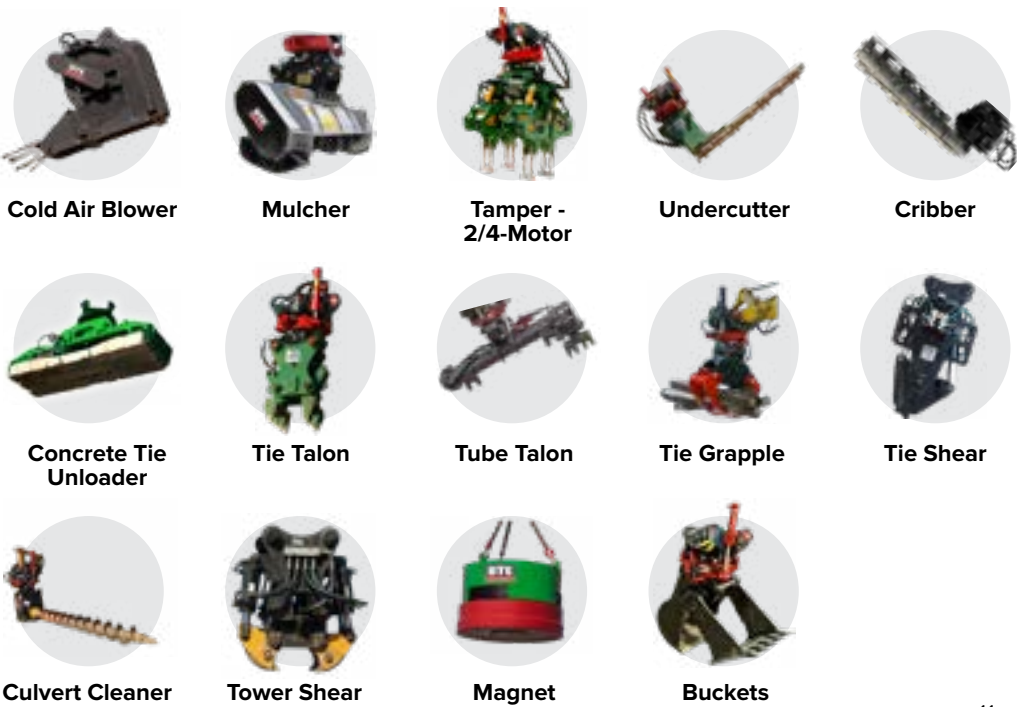
- Solid axle, cab controlled hi-rail
- BE PLC and attachment recognition ID
- R6 high flow Rototilt
- Insulated axles (optional)
- Extendable outriggers

LIFTING CAPABILITIES

Scan the QR code to download the full specs with on and off-rail load charts.



COMPATIBLE ATTACHMENTS



BTE-325 EXCAVATOR

High-performance lifting and maneuverability

The BTE-325 Hi-Rail Excavator is a reliable solution for jobs that require heavy lifting in compact areas. Combining powerful performance, increased lift capacity, and maneuverability, the BTE-325 boosts production while providing versatility to quickly move on and off-rail.

MACHINE AT-A-GLANCE

Engine Power	174	hp	129.7	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	35	ft	10.6	m
Weight	78,100	lb	35,426	kg
Width x Height	10.6 x 11.5	ft	3.2 x 3.5	m
Swing Radius	Reduced/Compact			
Rototilt	R8 high flow			
Power Class	12 ft undercutter with 2-inch bi-directional chain			

FEATURES

- Rototilt 360° rotation and tilt attachment coupler
 - Two-speed drive motors for travel and towing
 - 24" extended-life hi-rail wheels
 - Chain drive, solid axle, heavy duty bearings
 - Widened undercarriage to straddle rail
- Hi-rail wheels retract for greater ground clearance
 - Quick tow mode drive disconnects
 - Joysticks for multi-function control
 - Crawler track mobility for power and stability
 - Insulated axles (optional)

LIFTING CAPABILITIES

Scan the QR code to download the full specs with on and off-rail load charts.



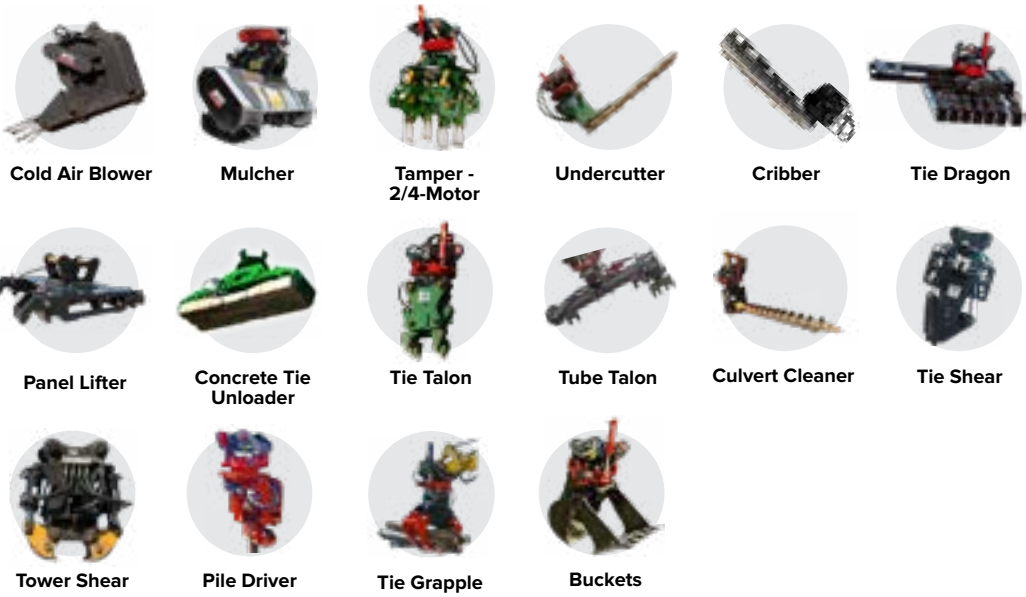
REDUCED RADIUS TAIL SWING

35-FT REACH

174 HP



COMPATIBLE ATTACHMENTS



BTE-326 EXCAVATOR

Superior strength and versatility

The BTE-326 Hi-Rail Excavator takes power up a notch from the BTE-325 with its 202 hp engine. Like the BTE-325, it offers increased lift capacity for managing heavy loads and track materials. It is also quickly deployable on rail and versatile enough to transition off-track to keep operations efficient.

MACHINE AT-A-GLANCE

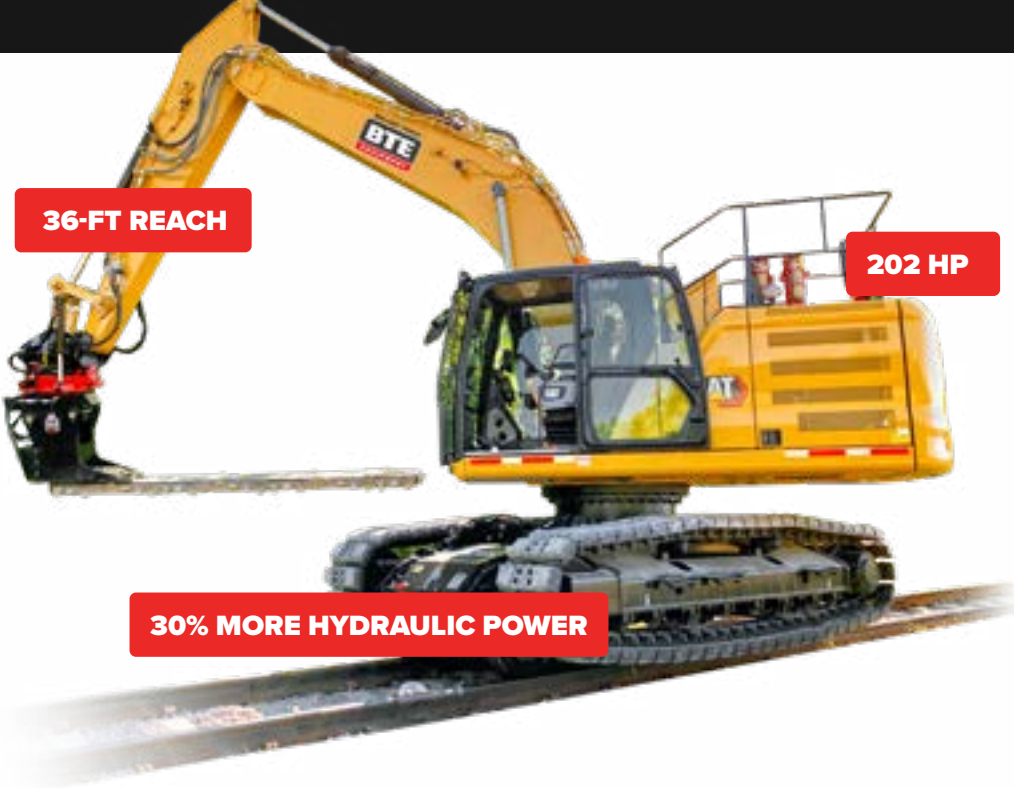
Engine Power	202	hp	150.6	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	36	ft	10.9	m
Weight	78,200	lb	35,471	kg
Width x Height	10.5 x 11.8	ft	3.2 x 3.5	m
Swing Radius	Conventional			
Rototilt	R8 high flow			
Power Class	12 ft undercutter with 3-inch bi-directional chain			

FEATURES

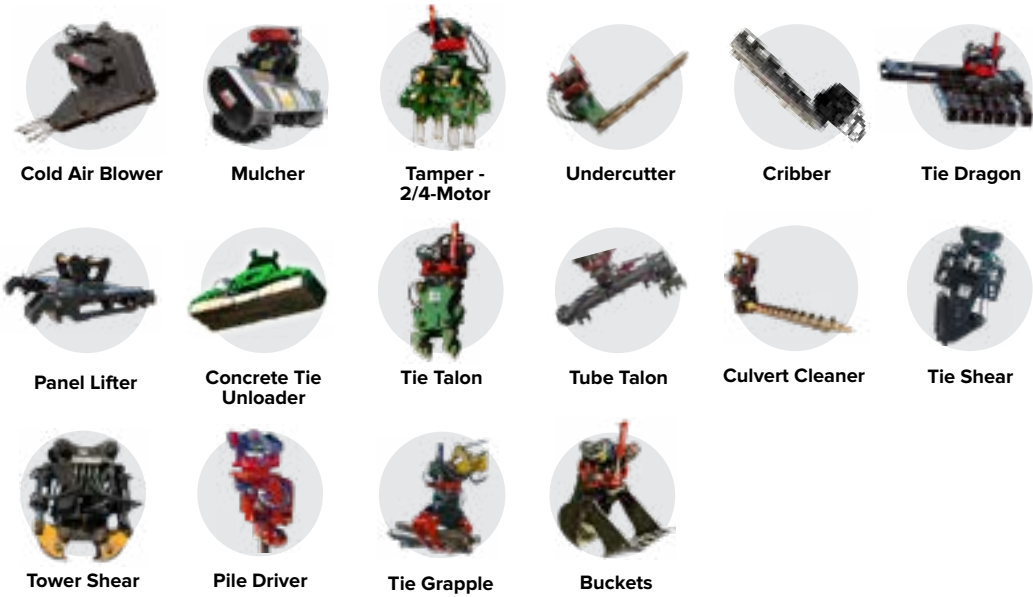
- Rototilt 360° rotation and tilt attachment coupler
- Two-speed drive motors for travel and towing
- 24" extended-life hi-rail wheels
- Chain drive, solid axle, heavy duty bearings
- Widened undercarriage to straddle rail
- Hi-rail wheels retract for greater ground clearance
- Quick tow mode drive disconnects
- Joysticks for multi-function control
- Crawler track mobility for power and stability
- Insulated axles (optional)

LIFTING CAPABILITIES

Scan the QR code to download the full specs with on and off-rail load charts.



COMPATIBLE ATTACHMENTS



BTE-330 EXCAVATOR

Ultimate powerhouse

The BTE-330 Hi-Rail Excavator provides unmatched strength, speed and efficiency to tackle the most challenging conditions. Equipped with a 273 hp engine, the BTE-330 is the largest, most powerful excavator option in the BTE line. It is compatible with a full line of attachments, making this an extremely versatile powerhouse.

MACHINE AT-A-GLANCE

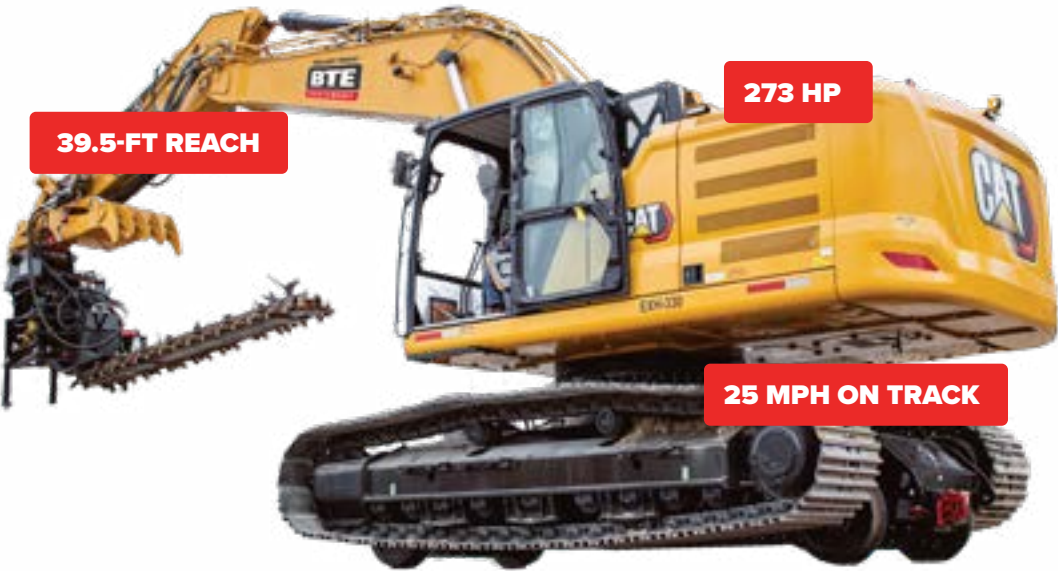
Engine Power	273	hp	203.5	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	39.5	ft	12	m
Weight	88,500	lb	40,143	kg
Width x Height	11.1 x 11.2	ft	3.3 x 3.4	m
Swing Radius	Conventional			
Rototilt	R8 high flow			
Power Class	15 ft undercutter with 3-inch conical bit chain and spoils wheel			

FEATURES

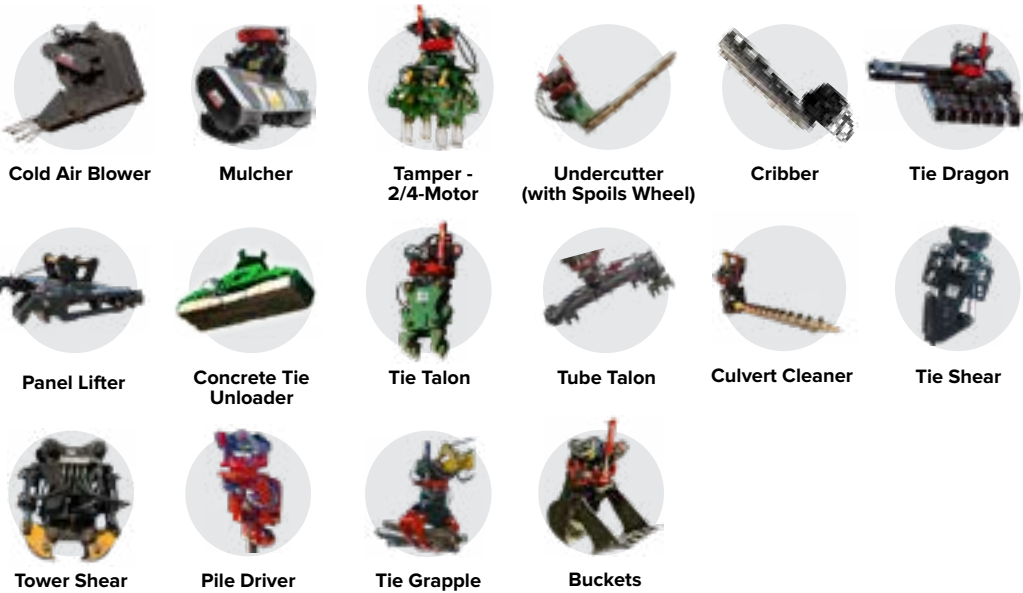
- Cat® hydraulic coupler
- Two-speed drive motors for travel and towing
- 24” extended-life hi-rail wheels
- Chain drive, solid axle, heavy duty bearings
- Hi-rail wheels retract for greater ground clearance
- Quick tow mode drive disconnects
- Ergonomic joysticks for multi-function control
- Crawler track mobility for power and stability
- Insulated axles (optional)

LIFTING CAPABILITIES

Scan the QR code to download the full specs with on and off-rail load charts.



COMPATIBLE ATTACHMENTS



BTE-420 XE BACKHOE

Maximum reliability and productivity

The BTE-420 XE Hi-Rail Backhoe is a dependable solution for spot track maintenance. Its weight and size, paired with a three-foot extendable backhoe E-Stick, make it easy to mobilize to get the job done. Its innovative cab-operated hi-rail system ensures seamless operation on and off the rail, with a pivoting front axle for enhanced stability. Achieve maximum productivity with its accompanying Rototilt that allows precise control of attachments and a hydraulic hose reel to power track-side hand tools.

MACHINE AT-A-GLANCE

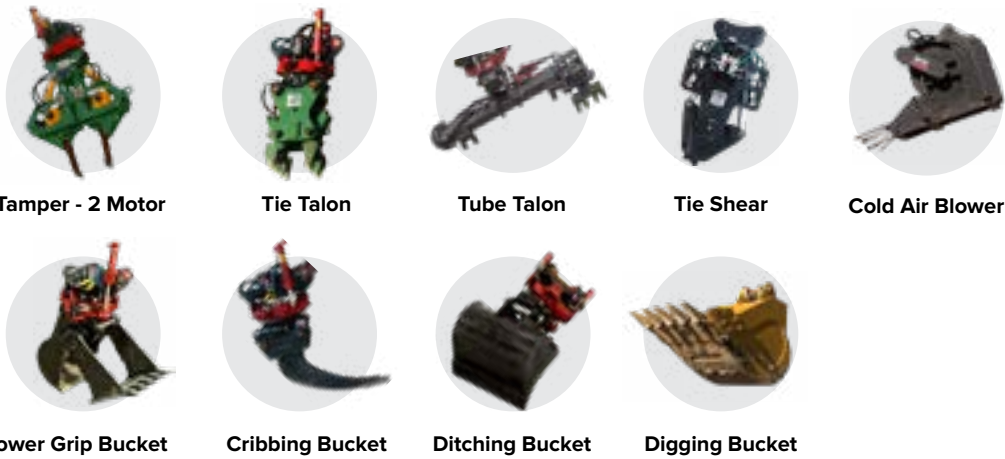
Engine Power	110	hp	82	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	23.6	ft	7.2	m
Weight	19,500	lb	8,850	kg
Width x Height	8.4 x 12	ft	2.6 x 3.7	m
Power Class	Runs cold air blower			
Rototilt	R4 high flow			

FEATURES

- Rototilt 360° rotation and tilt attachment coupler
- Three-foot extendable backhoe E-Stick
- 50' hose reel to power 5 or 10 gpm hydraulic hand tools
- Frame-mounted pivoting front axle
- Extended outrigger pads for additional stability while on rail
- Hydraulic priority valve for better attachment performance
- Insulated shunt-able rail wheels



COMPATIBLE ATTACHMENTS



COMPARE MODELS

Scan the QR code to see how the BTE-420 XE compares to our other hi-rail machines.



BTE-450 BACKHOE

Powered for undercutting precision

The BTE-450 Hi-Rail Backhoe delivers exceptional undercutting power with its high horsepower engine. This machine effortlessly handles tough track maintenance and repairs with its convenient tool carrier for attachments and ability to mobilize to jobsites. The large capacity front bucket offers a full range of motion on the rail, ensuring unparalleled performance and efficiency.

MACHINE AT-A-GLANCE

Engine Power	131	hp	98	kW
Max On-Track Speed	25	mph	40	kph
Reach (at ground level)	28	ft	8.5	m
Weight	28,000	lb	12,700	kg
Width x Height	8.5 x 14	ft	2.6 x 4.3	m
Power Class	9 ft undercutter with 7" cribber & cold air blower			
Rototilt	R4 high flow			

FEATURES

- Rototilt 360° rotation and tilt attachment coupler
- Four-foot extendable E-stick
- 50' hose reel to power 5 or 10 gpm hydraulic hand tools
- Frame-mounted pivoting front axle
- Extended outrigger pads for additional stability while on rail
- Hydraulic priority valve for better attachment performance
- Attachment tool recognition to automatically set the flows and pressures of attachments
- Insulated shunt-able rail wheels

COMPARE MODELS

Scan the QR code to see how the BTE-450 compares to our other hi-rail machines.



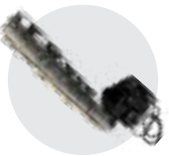
COMPATIBLE ATTACHMENTS



Cold Air Blower



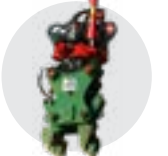
Undercutter



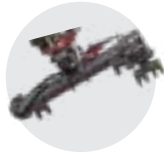
Cribber



Tammer - 2-Motor



Tie Talon



Tube Talon



Tie Shear



Tower Shear



Buckets

WORK ATTACHMENTS

Increase versatility and productivity for every hi-rail application with BTE attachments

EXPERIENCE THE BTE DIFFERENCE

Expertly engineered and backed by rigorous field testing, our maintenance of way attachments set the standard for dependability.

ENGINEERED TO LAST

Carbide BTI wear-protection outperforms competitors

INNOVATIVE VERSATILITY

for every working scenario

MAXIMUM PRODUCTION

with interchangeable use between BTE excavators and backhoes

UP TO 30% MORE HYDRAULIC FLOW

to work attachments for peak performance and productivity



Tie Handling



Vegetation and Snow



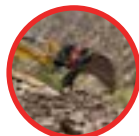
Undercutting and Tamping



Culvert Cleaning



Rail Construction



Buckets

MACHINE ATTACHMENT COMPATIBILITY

Discover how our full line of attachments can maximize your machine

ATTACHMENT	308	313	M318	325	326	330	420XE	450
Tie Talon	✓	✓	✓	✓	✓	✓	✓	✓
Parallel Tie Talon	✓							
Tube Talon	✓	✓	✓	✓	✓	✓	✓	✓
Tie Grapple	✓	✓	✓	✓	✓	✓		
Tie Shear	✓	✓	✓	✓	✓	✓	✓	✓
Tie Dragon				✓	✓	✓		
Concrete Tie Unloader		✓	✓	✓	✓	✓		
Undercutter		✓	✓	✓	✓	✓		✓
Undercutter W/ Spoils Wheel						✓		
Cribber		✓	✓	✓	✓	✓		✓
Tamper - 2 Motor	✓	✓	✓	✓	✓	✓	✓	✓
Tamper - 4 Motor		✓	✓	✓	✓	✓		
Panel Lifter				✓	✓	✓		
Pile Driver				✓	✓	✓		
Track Jack	✓							
Tower Shear		✓	✓	✓	✓	✓		✓
Mulcher	✓	✓	✓	✓	✓	✓		
Cold Air Blower	✓	✓	✓	✓	✓	✓	✓	✓
Culvert Cleaner		✓	✓	✓	✓	✓		
Mini Culvert Cleaner	✓							
Power Grip Bucket	✓	✓	✓	✓	✓	✓	✓	✓
Mantis Bucket				✓	✓	✓	✓	✓
Cribbing Bucket	✓	✓	✓	✓	✓	✓	✓	✓
Ditching Bucket	✓	✓	✓	✓	✓	✓	✓	✓
Digging Bucket	✓	✓	✓	✓	✓	✓		

TIE HANDLING

Providing more efficiency, simplicity and safety for rigorous tasks

RENEWAL SOLUTIONS

Efficient tie replacement is crucial for maintaining track structure. BTE's Tie Exchanging Work Attachments for your BTE Excavators and Backhoes are designed to make this task easier and more productive.

TIE WORK SOLUTIONS

Handling concrete ties can be a dangerous task. BTE tie work solutions simplify and streamline this process, achieving production rates of up to 1,200 concrete ties picked, spaced, and placed in a single shift.

Tie Talon

Securely grip and change railroad ties using this heavy-duty attachment for backhoes and excavators, featuring dual cylinders and carbide-tipped jaws.



SPECS	US	METRIC
Height/Length	38" x 27"	966 mm x 686 mm
Width	17.50"	445 mm
Weight	600 lbs	273 kg
Auxiliary Hydraulic Circuits Reqs.	Med. Pres. Circuit	
Squeeze Cylinder Reqs.	10 Max GPM / 3,000 Max PSI	37 l/m / 20,684 kPa

Parallel Tie Talon

Handle various bridge ties with this attachment for 5-6 ton mini excavators, featuring a built-in rotator and high clamping force for secure operation.



SPECS	US	METRIC
Height/Length	36" x 26"	915 mm x 661 mm
Width	26"	661 mm
Weight	500 lbs	227 kg
Hydraulic Flow Reqs.	10 GPM	
Hydraulic Pressure Reqs.	3,000 PSI	
Auxiliary Hydraulic Circuits Reqs.	Medium Flow Auxiliary	

Tube Talon

Remove and insert ties with this powerful attachment for backhoes and excavators, designed to reduce boom stress by leverage off the rail, while carbide-tipped jaws ensure a secure grip.



SPECS	US	METRIC
Height/Length	32" x 100"	813 mm x 2,540 mm
Width	27"	659 mm
Weight	1,450 lbs	658 kg
Extend Cylinder Reqs.	20 Max GPM / 3,000 Max PSI	75 l/m / 20,684 kPa
Hydraulic Flow Reqs.	20 GPM Hi Flow, 10 GPM Medium Flow	
Hydraulic Pressure Reqs.	3,000 PSI	
Auxiliary Hydraulic Circuits Reqs.	High and Medium Flow Auxiliary	

Tie Dragon

Handle up to seven concrete ties at once with adjustable spacing and 360-degree rotations for precise and efficient operation.



SPECS	US	METRIC
Height/Length	40" x 175"	1,016 mm x 4,445 mm
Width	117"	2,972 mm
Weight	8,000 lbs	3,629 kg
Hydraulic Flow Reqs.	10 to 20 GPM	37 to 75v l/m
Auxiliary Hydraulic Pressure Reqs.	(1) Bi-Directional Circuit	
Lift Capacity	3-7 Concrete Ties	

Tie Shear

Cut ties up to 11” wide with precision using this wood tie shear, featuring a single cutting edge and holding edge built with AR400 steel for long-lasting security.



SPECS	US	METRIC
Height/Length	66” x 36”	1,677 mm x 915 mm
Width	18”	458 mm
Weight	1,200 lbs	545 kg
Hydraulic Flow Reqs.	15 GPM / 3,000 PSI	56 l/m / 20,684 kPa

Tie Grapple

Grasp bundled or loose ties for easy movement and organizing.



SPECS	US	METRIC
Height/Length	53” x 49”	1,347 mm x 1,245 mm
Width	25”	635 mm
Weight	1,150 lbs	522 kg

Concrete Tie Unloader

Unload concrete ties securely with a high clamping force and built-in rotator for precise positioning.



SPECS	US				METRIC			
# of Ties	3 Tie	4 Tie	5 Tie	7 Tie	3 Tie	4 Tie	5 Tie	7 Tie
Height	49”				1,245 mm			
Length	116”				2,946 mm			
Width	31”	42”	53”	75”	788 mm	1,067 mm	1,347 mm	1,905 mm
Weight	2,400 lbs	2,950 lbs	3,500 lbs	4,600 lbs	1,089 kg	1,339 kg	1,588 kg	2,086 kg
Hydraulic Flow Reqs. (All models)	15 GPM / 3,000 PSI				56 l/m / 20,684 kPa			



UNDERCUTTING AND TAMPING

Attachments designed to efficiently remove and replace contaminated ballast for optimal track conditions

FOULED BALLAST SOLUTIONS

Mud spots and other fouled ballast defects that are not repaired promptly can potentially cause rapid deterioration of track components and stability. Our innovative fouled ballast solutions streamline the remediation of track defects, requiring only one operator and a BTE Hi-Rail Excavator. This system efficiently removes ballast and debris while protecting the track's rails and ties, allowing for faster, cost-effective track maintenance with less downtime.

Undercutter

Perform spot maintenance efficiently with this high-performance undercutter, featuring 9 to 12-foot bars and bi-directional carbide tip chains for cutting in tight spaces.

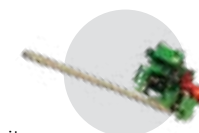


SPECS

	US			METRIC		
	9 ft	10 ft	12 ft	9 ft	10 ft	12 ft
Height	36"	34"	41"	915 mm	864 mm	1,042 mm
Length	130"	144"	180"	3,302 mm	3,658 mm	4,572 mm
Width	17.5"	18"	24"	445 mm	458 mm	610 mm
Weight	1,660 lbs	1,700 lbs	1,900 lbs	753 kg	772 kg	862 kg
Hydraulic Flow Reqs. (All models)	40 Max GPM / 5,500 Max PSI	70 Max GPM / 5,500 Max PSI	70 Max GPM / 5,500 Max PSI	151 max l/m	264 max l/m	264 max l/m
Cutter Chain Size	17.5"	17.5"	17.5"	444.5 mm	444.5 mm	444.5 mm

Undercutter w/ Spoils Wheel

Streamline switch maintenance with this high-performance undercutter, featuring 12 to 18-ft bars, a uni-directional chain with replaceable carbide bits, and a spoils wheel to eliminate trench digging.



SPECS

	US			METRIC		
	12 ft	15 ft	18 ft	12 ft	15 ft	18 ft
Height	71"	72"	72"	1,804 mm	1,829 mm	1,829 mm
Length	221"	256"	292"	5,614 mm	6,503 mm	7,417 mm
Width	54"	54"	54"	1,372 mm	1,372 mm	1,372 mm
Weight	7,600 lbs	7,600 lbs	8,900 lbs	3,448 kg	3,448 kg	4,037 kg
Chain Drive Motor Reqs.	60 Max GPM / 5,500 Max PSI	70 Max GPM / 5,500 Max PSI	70 Max GPM / 5,500 Max PSI	227 l/m / 37,921 kPa	264 l/m / 27,921 kPa	264 l/m / 27,921 kPa
Ditching Wheel Motor Reqs.	40 Max GPM / 5,500 Max PSI			151 l/m / 37,921 kPa		
Sweep/Tilt Cylinders Reqs.	15 Max GPM / 3,000 Max PSI			56 l/m / 20,684 kPa		

Cribber

Quickly clean out cribs between ties with this trencher-style undercutter, offering continuous action for faster and more efficient debris removal.



SPECS	US		METRIC	
	BTE-306422	BTE-306498	BTE-306422	BTE-306498
Height	7' bar overall	9' bar overall	2,134 mm	2,744 mm
Length	115"	139"	2,921 mm	3,531 mm
Weight	2,175 lbs	2,375 lbs	987 kg	1,078 kg
Overall Width	33"	33"	839 mm	839 mm
Overall Height	40"	40"	1,016 mm	1,016 mm
Motor Hydraulic Reqs.	40 GPM / 4,500 PSI		151 l/m / 31,026 kPa	
Chain Size	2" bi-directional		50.8 mm	

Tamper – 2-Motor

Efficiently spot tamp hard-to-reach areas of switches and diamonds with this versatile attachment.



SPECS	US		METRIC	
	Height/Length	74" x 44"	1,880 mm x 1,118 mm	
	Width	58"	1,474 mm	
	Weight	1,470 lbs	667 kg	
Rotate Motor/Squeeze Cylinder Reqs.	8 Max GPM / 3,000 Max PSI		30 l/m / 20,684 kPa	
Auxiliary Hydraulic Circuits Required	16 Max GPM / 2,000 Max PSI		60 l/m / 13,789 kPa	

Tamper – 4-Motor

Tackle spot tamping and various track maintenance tasks with this high-performance attachment, ideal for undercutting, tie replacement, and bridge approaches.



SPECS	US		METRIC	
	Height/Length	87" x 58"	2,210mm x 1,473 mm	
	Width	47"	1,194 mm	
	Weight	5,400 lbs	2,449 kg	
Rotate Motor/Squeeze Cylinder Reqs.	15 Max GPM / 3,000 Max PSI		56 l/m / 20,684 kPa	
Auxiliary Hydraulic Circuits Required	(2) Bi-Directional Circuit			
Vibratory Hydraulic Motors Reqs.	32 Max GPM / 2,000 Max PSI		121 l/m / 13,789 kPa	
Other Reqs.	Electrical Cable; Dims / Weight Include Tamper Stand			
Dims / Weight with Tamper Stand	Height: 77" Length: 58" Width: 47", Weight: 3300 lbs with Coupler top and stand		Height: 1955.8 mm Length: 1473.2 mm Width: 1193.8", Weight: 1496.86 kg with Coupler top and stand	



RAIL CONSTRUCTION

Advanced solutions for enhanced safety and productivity

BRIDGE WORK SOLUTIONS

BTE's advanced solutions for bridge maintenance make safety and productivity a priority. Providing more boom reach, visibility, and track lifting power, these work attachments make 200 tie changes an hour possible. Safety features such as Bridge Mode alert operators to instability, limiting risky movements until machine and boom are securely positioned. Additionally, Roller Rail Clamps provide stability during operations by ensuring a powerful coupling between the machine and the rail.

PANEL LIFTING AND RAIL WORK SOLUTIONS

BTE's Excavator and Panel Lifter system significantly streamline emergency track repairs, unloading up to 20 track panels in just 45 minutes. These efficient solutions minimize crew involvement while enhancing safety. Operators can effortlessly pick panels from the cab, maneuver them into place, and quickly switch attachments as needed to handle multiple track materials.

Panel Lifter

Lift wood tie panels up to 40-ft with this compact attachment, featuring four hydraulically controlled clamps for a secure grip and enhanced visibility for efficient operation.



SPECS	US	METRIC
Height/Length	38" x 27"	966 mm x 686 mm
Width	17.50"	445 mm
Weight	600 lbs	273 kg
Auxiliary Hydraulic Circuits Reqs.	Med. Pres. Circuit	
Squeeze Cylinder Reqs.	10 Max GPM / 3,000 Max PSI	37 l/m / 20,684 kPa

Pile Driver

Drive a variety of pile types with 40 tons of force using this versatile attachment, featuring side and bottom clamps for a secure hold on a variety of materials.



SPECS	US	METRIC
Height/Length	54" x 78"	1,372 mm x 1,982 mm
Width	67"	1,702 mm
Weight	5,700 lbs	2,586 kg

Track Jack

Simplify bridge tie replacement with this tool, using powerful jack cylinders to securely lift rails, all controlled from the excavator's cab.



SPECS	US	METRIC
Height/Length	49" x 34"	1,245 mm x 864 mm
Width	98"	2,490 mm
Weight	2,200 lbs	998 kg

Tower Shear

Quickly remove concrete tie towers with this high-powered shear, featuring four heavy-duty cylinders for efficiently crushing and minimal track jacking.



SPECS	US	METRIC
Height/Length	40" x 40"	1,016 mm x 1,016 mm
Width	26"	661 mm
Weight	1,500 lbs	681 kg

Magnet

Easily handle OTM tasks with this hydraulically powered, self-contained magnet, eliminating the need for an external generator on your excavator.



SPECS

	US	METRIC
Height/Length	28" x 32"	712 mm x 813 mm
Width	32"	813 mm
Weight	1,400 lbs	636 kg

Rail Threader

Thread rail into place with this heavy-duty rail threading tong, featuring two rollers per jaw for smooth operation.



SPECS

	US	METRIC
Height/Length	25" x 15"	635 mm x 381 mm
Width	12"	305 mm
Weight	130 lbs	59 kg



VEGETATION AND SNOW

Speed and reliability to stay
ahead of every season

SNOW FIGHTING AND VEGETATION SOLUTIONS

BTE's versatile attachments provide year-round effectiveness. Whether clearing snow and ice from switches during a winter storm with the BTE Cold Air Blower, or tackling heavy vegetation in the spring with the BTE Mulcher, our solutions are engineered with the power and versatility to get the job done more productively.

Mulcher

Clear land and grind trees up to 6" in diameter. Available as a turnkey solution or an attachment with modified hydraulics for mulching along right of ways and medians.



SPECS	US	METRIC
Height/Length	46" x 64"	1,169 mm x 1,626 mm
Width	64"	1,626 mm
Weight	2,400 lbs	1,089 kg
Auxiliary Hydraulic Circuits Required	(2) Circuits	
Door Cylinder Reqs.	10 Max GPM / 3,000 Max PSI	37 l/m / 20,864 kPa
Drive Motor Reqs.	40 Max GPM / 3,500 Max PSI	151 l/m / 20,864 kPa
Hydraulic Case Drain Circuit Reqs.	(1) Circuit	
Hydraulic Flow Reqs.	26 to 53 GPM	98 to 200 l/m
Hydraulic Pressure Reqs.	2,600 to 3,600 PSI	17,926 to 2,481 kPa

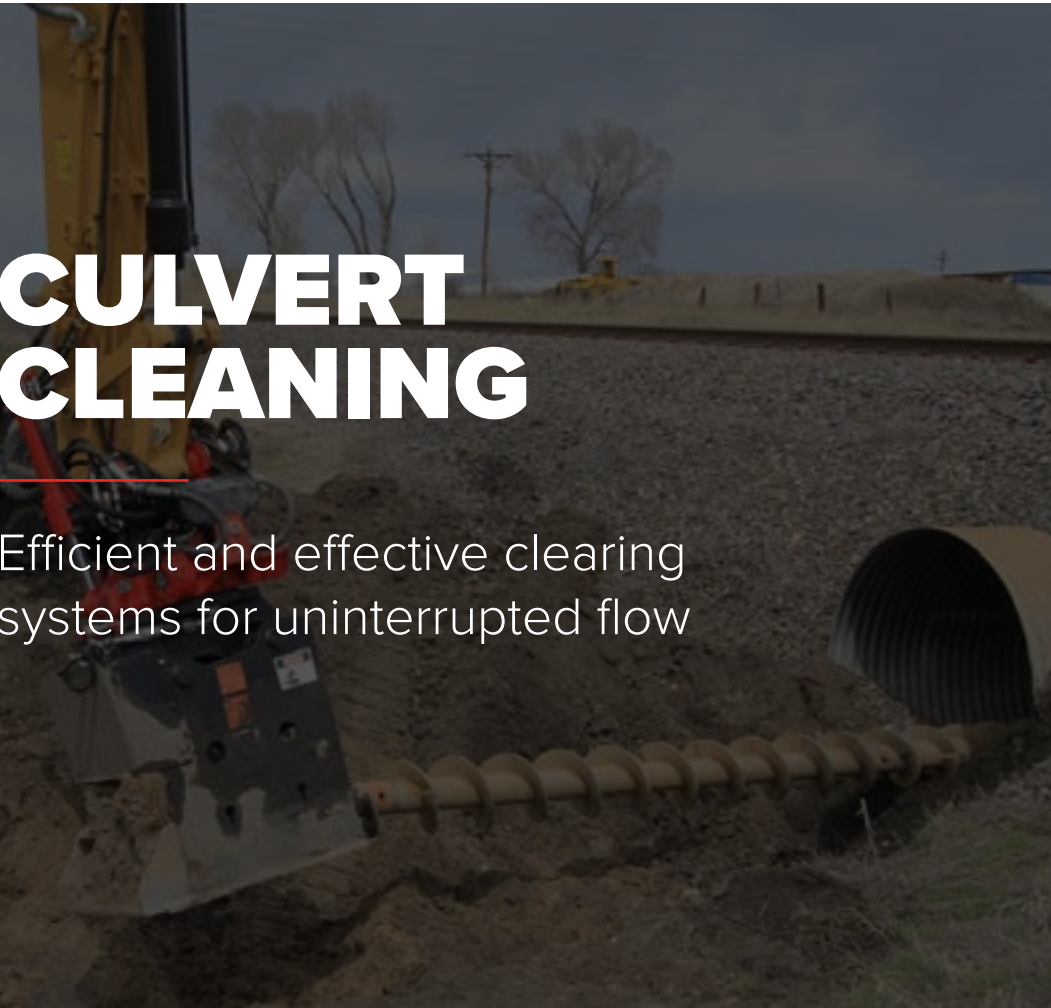
Cold Air Blower

Clear snow from switches and tracks efficiently with 200 MPH wind speed, featuring steel cable fingers to break up ice without causing refreezing.



SPECS	US	METRIC
Height/Length	60" x 93"	1,524 mm x 2,363 mm
Width	40"	1,016 mm
Weight	1,400 lbs	636 kg
Fan Drive Motor Reqs.	34 Max GPM / 4,500 Max PSI	128 l/m / 31,026 kPa

NOTE: Attachment is available in (2) additional sizes



CULVERT CLEANING

Efficient and effective clearing systems for uninterrupted flow

CULVERT CLEANING SOLUTIONS

Our Culvert Cleaning Attachment was developed in collaboration with our railroad customers to resolve issues like clogged ditches, plugged culverts, and mud spots that cause rail traffic delays. This continuous auguring attachment comes in two sizes and is compatible with our BTE HI-Rail Excavators. Capable of clearing multiple culverts in a day without water or vacuum assistance, our Culvert Cleaners operate off-track, minimizing disruptions to train traffic.

Culvert Cleaner

Clear culvert pipes from 18" to 72" in diameter and up to 140' long with this dry mechanical auguring system—no water or vacuuming needed.



SPECS	US		METRIC	
	Height/Length	37" x 64"	940 mm x 1,626 mm	
	Width	33"	838 mm	
	Weight	1,500 lbs	681 kg	

Mini Culvert Cleaner

Clear culvert pipes from 8" to 36" in diameter and up to 60' long. No water or vacuuming needed.



SPECS	US		METRIC	
	Height/Length	34" x 47"	864 mm x 1,194 mm	
	Width	23"	585 mm	
	Weight	650 lbs	295 kg	

BUCKETS

Multi-purpose solutions for tackling any type of track maintenance

SECTION MAINTENANCE SOLUTIONS

BTE's Bucket Attachments are transforming rail maintenance with their versatile, multipurpose capabilities. Engineered for efficient and non-disruptive operation, our bucket attachments enhance productivity year-round. Designed to tackle a variety of tasks—from ditching to cleanup—these attachments ensure optimal performance across extensive territories. Paired with Rototilt 360° rotation and a tilt attachment coupler for increased maneuverability, they can be easily changed out from the cab of a BTE Excavator or Backhoe with Automatic Attachment Recognition technology.



Power Grip Bucket

Tackle various track maintenance tasks with this versatile bucket, used as a thumb, clamshell, box blade, or traditional ditching bucket.

SPECS	US	METRIC
Height/Length	74" x 44"	1,880 mm x 1,118 mm
Width	58"	1,474 mm
Weight	1,470 lbs	667 kg
Rotate Motor/Squeeze Cylinder Reqs.	8 Max GPM / 3,000 Max PSI	30 l/m / 20,684 kPa
Vibratory Hydraulic Motors Reqs.	16 Max GPM / 2,000 Max PSI	60 l/m / 13,789 kPa

Cribbing Bucket

Perfect for cribbing out mud spots. Features a thin profile, additional wear plating, and replaceable teeth.



SPECS	US	METRIC
Height/Length	36" x 64"	915 mm x 1,626 mm
Width	13"	331 mm
Weight	375 lbs	171 kg

Ditching Bucket

Versatile ditching buckets in various widths and capacities, ideal for ditch cleaning when paired with a Rototilt system.



SPECS	US	METRIC
Height/Length	36" x 30"	915 mm x 762 mm
Width	36"	915 mm
Weight	520 lbs	236 kg

Digging Bucket

General-purpose toothed digging bucket, available in various widths and sizes to fit all BTE excavators and backhoes.



SPECS	US				METRIC			
	24"	36"	42"	48"	24"	36"	42"	48"
Height/Length	34"x41"	42"x55"	45"x60"	56"x67"	864mm x 1,042 mm	1,067 mm x 1,397 mm	1,143mm x 1,524 mm	1,423 mm x 1,702 mm
Width	24"	36"	42"	48"	610 mm	915 mm	1,067 mm	1,220 mm
Weight	475 lbs	890 lbs	1,500 lbs	2,530 lbs	216 kg	404 kg	681 kg	1,148 kg

Mantis Bucket

Heavy-duty thumb/bucket with strong dual claws, ideal for disaster cleanup and major track repairs.



SPECS	US	METRIC
Height/Length	60" x 72"	1,524 mm x 1,829 mm
Width	60"	1,524 mm
Weight	3,950 lbs	1,792 kg

ABOUT

Our History

Ballast Tools Equipment (BTE) was born through continued innovation, engineering hi-rail machines and specialized attachments to make railroad maintenance of way safer and more productive.

Our machines, known for their robust engineering and rigorous field-testing, ensure reliable and effective on-track operations across a diverse range of construction and maintenance operations. 'Built BTE tough' is more than a slogan—it's a commitment to performance and durability, enhanced by our equipment's swift on/off rail capabilities that maximize flexibility and productivity during limited track windows.

Our approach is not only solution-driven but customer-focused, ensuring that we provide not just the tools, but transformative solutions to support our customer's success. This is founded in our company's mission to "partner with our customers to deliver the very best," we engage closely with our partners to design and build custom solutions tailored to their unique needs.

In addition to our core offerings, Ballast Tools provides a one-stop shop for durable, high-quality parts and components through our dedicated parts division, BTI. Leveraging our expertise in carbide technology and wear-proofing, our solutions significantly

extend the life of railroad track maintenance equipment, ensuring that our customers have the dependability they need to get the job done.

BTE is headquartered in Festus, Missouri USA with five other domestic locations in Denver, Kansas City, Chattanooga, Dallas, and Houston, along with two (2) international locations in Edmonton and Toronto. From our roots to our reach, BTE embodies a history of innovation and a future of possibilities, continuing to drive the industry forward while delivering excellence and building a better tomorrow alongside our valued partners.



1964



Good Earth Tools is started in Desloge, MO as a carbide wear-protection company by Keith Williams.



1972

Keith Williams develops first Carbide Tamping Tool.



As the business continued to grow, Good Earth Tools, Inc. moved to our current location in Festus, MO.

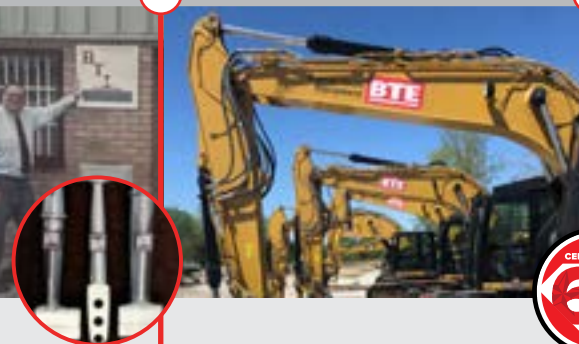


1985

Ballast Tools, Inc. (BTI) was founded to bring carbide technology and wear-proofing expertise to railroad track maintenance equipment.



2008



Ballast Tools Equipment (BTE) was born through our continuous innovation in the railroad maintenance of way industry, engineering hi-rail machines and specialized attachments for revolutionary productivity and safety.



2024



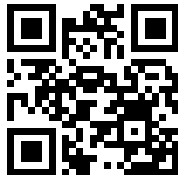
Ballast Tools has expanded its headquarters into a multi-complex campus featuring a custom BTE Test Track and two BTE-dedicated production facilities, with over 200 employees.

BALLAST TOOLS

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*All values are approximate and will change. For specific and the latest engineering machine data, please contact BTE directly.