

ROAD MINER™

ATTACHMENT

TRENCOR

by ASTEC



Eliminates the need to drill and blast — avoiding safety, noise, liability, and environmental issues associated with blasting.

Makes a clean, even cut up to 16' (4.9 m) wide and up to 5' (1.5 m) deep.

Offers both a down-cutting method for softer rock and an upcutting method for harder rock.

Converts from a mining to a trenching application if necessary.

BREAKTHROUGH SOLUTIONS

ROAD MINER™ ATTACHMENT

APPLICATIONS

The Road Miner™ attachment transforms a heavy-duty Trencor chain trencher into a high-performance excavator that tears, rips, cuts, chews, and breaks through rock in a consistent one-pass swath at a controlled grade.

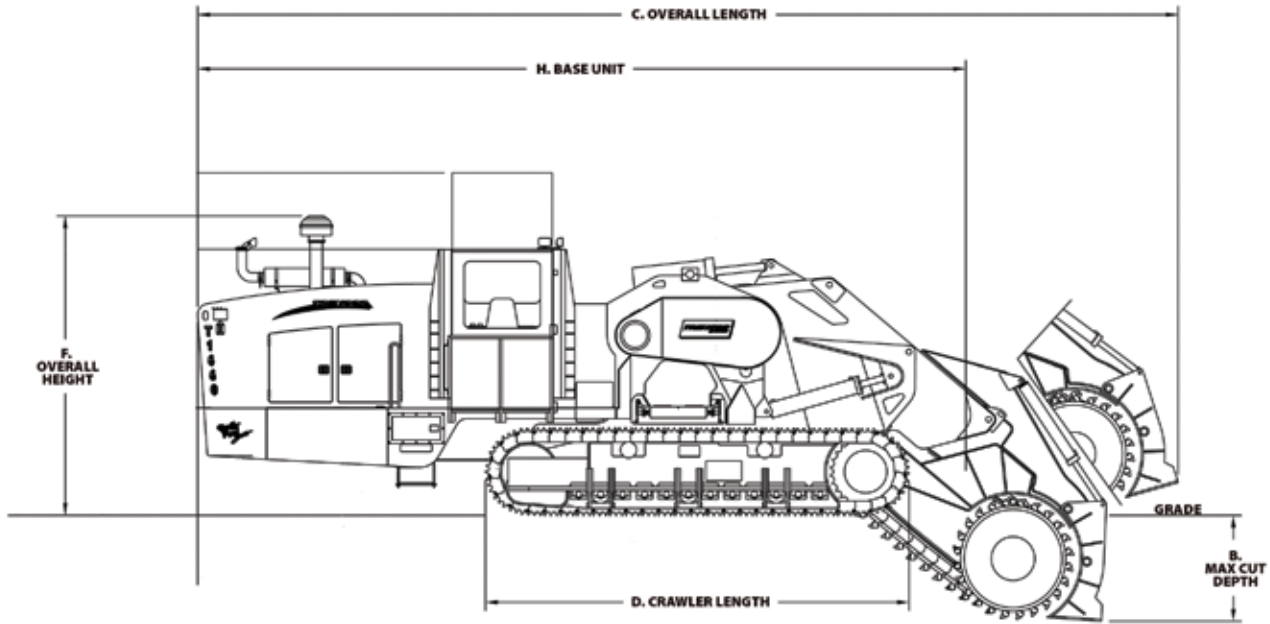
The Road Miner package consists of an application-specific boom with a heavy drum studded with carbide teeth. This attachment mounts in place of the trencher's traditional chain boom. The machine's design relies on the trencher's weight and powerful CAT® engine to muscle the roadminer attachment through the most challenging rocky conditions. The Road Miner attachment can be fitted to any Trencor T1060, T1360, T1460, T1660, T1760, or T1860 trencher.

The Road Miner is particularly well suited to tasks that require the removal of large quantities of material for site preparation, building construction, road building, soil remediation, mining, and quarrying.

BENEFITS

- Eliminates the need to drill and blast — avoiding safety, noise, liability, and environmental issues associated with blasting.
- Makes a clean, even cut up to 16 feet (4.9 m) wide and up to 5 feet (1.5 m) deep.
- Offers both a downcutting method for softer rock and an upcutting method for harder materials.
- Provides a usable spoil without the need for primary crushers.
- Produces manageable spoil during the excavating process. The spoil can be used for fill material and can easily be removed in standard-sized haul trucks. There are no big chunks or large boulders to dispose of.
- Capable of high production in demanding conditions.
- Can be easily converted to a traditional chain trencher, if necessary, for increased versatility.





T1060

CAPABILITIES

- A. Max. cut width.....8' 8" (2.6 m)
 B. Max. cut depth.....1' 6" (0.5 m)

DIMENSIONS

- C. Overall length.....31' 6" (9.6 m)
 D. Crawler length.....13' 9" (4.2 m)
 E. Overall width.....8' 2" (2.5 m)
 F. Overall height.....10' 10" (3.3 m)
 G. Track width.....24" (0.6 m)
 H. Base unit.....25' 10" (7.9 m)

APPROXIMATE WEIGHT

75,000 — 100,000 lbs. (34,020 — 45,454 kg)

ENGINE

- Caterpillar® C9 Acert turbocharged diesel, Tier 3 Stage IIIA emissions
- 350 hp (597 Kw) @ 2,200 RPM
- 1,148 ft-lbs (1,556 N-m) @ 1,400 RPM
- Fuel rate consumption: 18 Gal (68.1L)/hour at full horsepower
- 24-volt DC electrical system
- Cooling system — up to 125 F ambient (52 C)
- Heavy-duty 2-stage air cleaner

TRACK DRIVE

Infinitely variable hydrostatic/mechanical system for speeds up to 2 mph (3.2 kph). Independent proportional electric over hydraulic track control. Crawlers.....CAT® D-5 components
 Grouser.....24-inch (610 mm) wide, single grousers

CONVEYOR*

Arc type conveyor with hydraulic shift.

- Belt width.....24" (.61 m)
 Belt speed.....0 to 1,000 fpm (305 mpm)

* Used only when machine is configured for upcut method.

T1360C

CAPABILITIES

- A. Max. cut width.....10' 6" (3.2 m)
 B. Max. cut depth.....3' (.91 m)

DIMENSIONS

- C. Overall length.....33' 4" (10.2 m)
 D. Crawler length.....16' 3" (5.0 m)
 E. Overall width.....9' 8" (2.9 m)
 F. Overall height.....10' 11" (3.3 m)
 G. Track width.....24" (0.6 m)
 H. Base unit.....29' (8.8 m)

APPROXIMATE WEIGHT

138,000 — 148,000 lbs. (62,596 — 67,131 kg)

ENGINE

- Caterpillar C13 Acert turbocharged diesel, Tier 3 Stage IIIA emissions
- 440 hp (328 Kw) @ 2,100 RPM
- 1,483 ft-lbs (2,011 N-m) @ 1,400 RPM
- Fuel rate consumption: 22.8 Gal (86.3L)/hour at full horsepower
- 24-volt DC electrical system
- Cooling system — up to 125 F ambient (52 C)
- Heavy-duty 2-stage air cleaner

TRACK DRIVE

Infinitely variable hydrostatic/mechanical system for speeds up to 2 mph (3.2 kph). Independent proportional electric over hydraulic track control. Crawlers.....CAT® D-7 components
 Grouser.....24-inch (610 mm) wide, low-profile double grousers

CONVEYOR*

Arc type conveyor with hydraulic shift.

- Belt width.....30" (.76 m)
 Belt speed.....0 to 870 fpm (265 mpm)

* Used only when machine is configured for upcut method.

T1460

CAPABILITIES

- A. Max. cut width.....12' 8" (3.9 m)
 B. Max. cut depth.....5' (1.5 m)

DIMENSIONS

- C. Overall length.....40' 6" (12.3 m)
 D. Crawler length.....19' 5" (5.9 m)
 E. Overall width.....11' 6" (3.5 m)
 F. Overall height.....12' 5" (3.8 m)
 G. Track width.....30" (0.8 m)
 H. Base unit.....32' 8" (10.0 m)

APPROXIMATE WEIGHT

160,000 — 185,000 lbs. (72,727 — 84,090 kg)

ENGINE

- Caterpillar C18 Acert turbocharged diesel, Tier 3 Stage IIIA emissions
- 630 hp (470 Kw) @ 2,100 RPM
- 2,042 ft-lbs (2,768 N-m) @ 1,400 RPM
- Fuel rate consumption: 32 Gal (121L)/hour at full horsepower
- 24-volt DC electrical system
- Cooling system — up to 125 F ambient (52 C)
- Heavy-duty 2-stage air cleaner

TRACK DRIVE

Infinitely variable hydrostatic/mechanical system for speeds up to 2 mph (3.2 kph). Independent proportional electric over hydraulic track control. Crawlers.....CAT® D-7 components
 Grouser.....30-inch (762 mm) wide, low-profile double grousers

CONVEYOR*

Arc type conveyor with hydraulic shift.

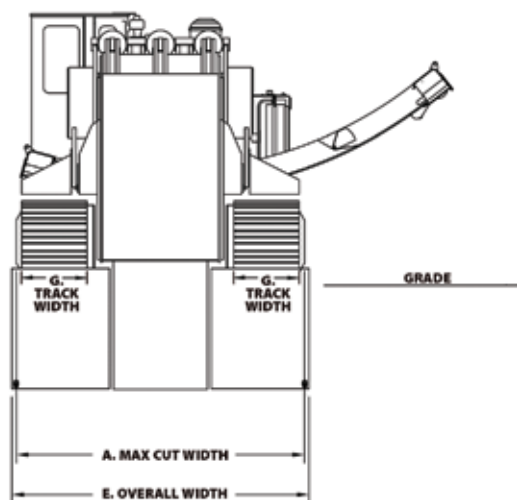
- Belt width.....36" (.91 m)
 Belt speed.....0 to 800 fpm (244 mpm)

* Used only when machine is configured for upcut method.



CE CERTIFIED

CE-CERTIFIED FOR USE IN COUNTRIES OF THE EUROPEAN UNION.



T1860

CAPABILITIES

A. Max. cut width	16' (4.9 m)
B. Max. cut depth	5' (1.5 m)

DIMENSIONS

C. Overall length	50' 6" (15.4 m)
D. Crawler length	22' 9" (6.9 m)
E. Overall width	15' 8" (4.8 m)
F. Overall height	17' (5.2 m)
G. Track width	3' (.9 m)
H. Base unit	45' (13.7 m)

APPROXIMATE WEIGHT

400,000 — 450,000 lbs. (180,000 — 200,000 kg)

ENGINE

- Caterpillar® C32 turbocharged diesel, Tier 2 Stage IIA emissions
- 1,125 hp (840 Kw) @ 2,100 RPM
- 3,793 ft-lbs (5,143 N-m) @ 1,400 RPM
- Fuel rate consumption: 57 Gal (211L)/hour at full horsepower
- 24-volt DC electrical system
- Cooling system — up to 125 F ambient (52 C)
- Heavy-duty 2-stage air cleaner

ENGINE, ACCESSORY

- Caterpillar® C13 turbocharged diesel, Tier 3 Stage IIIA emissions
- 440 hp (328 Kw) @ 2,100 RPM
- 1,483 ft-lbs (2,011 N-m) @ 1,400 RPM
- Fuel rate consumption: 22.8 Gal (86.3L)/hour at full horsepower
- 24-volt DC electrical system
- Cooling system — up to 125 F ambient (52 C)
- Heavy-duty 2-stage air cleaner

TRACK DRIVE

Infinitely variable hydrostatic/mechanical system for speeds up to 1 mph (1.6 kph). Independent proportional electric over hydraulic track control. Crawlers.....CAT® D-10 Grouser.....36-inch (914.4 mm) wide, single grousers

CONVEYOR*

Arc type conveyor with hydraulic shift. Belt width 48" (1.22 m) Belt speed..... 0 to 1,100 fpm (335 mpm) * Used only when machine is configured for upcut method.

T1660

CAPABILITIES

A. Max. cut width	13' 6" (4.1 m)
B. Max. cut depth	5' (1.5 m)

DIMENSIONS

C. Overall length	43' (13.1 m)
D. Crawler length	19' 9" (6.0 m)
E. Overall width	12' 11" (3.9 m)
F. Overall height	14' 4" (4.4 m)
G. Track width	30" (0.8 m)
H. Base unit	35' 4" (10.8 m)

APPROXIMATE WEIGHT

215,000 — 250,000 lbs. (97,522 — 113,400 kg)

ENGINE

- Caterpillar® C27 turbocharged diesel, Tier 2 Stage IIA emissions
- 801 hp (597 Kw) @ 2,100 RPM
- 2,697 ft-lbs (3,657 N-m) @ 1,400 RPM
- Fuel rate consumption: 39 Gal (148L)/hour at full horsepower
- 24-volt DC electrical system
- Cooling system — up to 125 F ambient (52 C)
- Heavy-duty 2-stage air cleaner

TRACK DRIVE

Infinitely variable hydrostatic/mechanical system for speeds up to 1 mph (1.6 kph). Independent proportional electric over hydraulic track control. Crawlers.....CAT® 245 9-inch pitch Grouser.....36-inch (914 mm) wide, low-profile double grousers

CONVEYOR*

Arc type conveyor with hydraulic shift. Belt width 42" (1.07 m) Belt speed..... 0 to 820 fpm (250 mpm) * Used only when machine is configured for upcut method.

T1760

CAPABILITIES

A. Max. cut width	14' 9" (4.5 m)
B. Max. cut depth	5' (1.5 m)

DIMENSIONS

C. Overall length	43' (13.1 m)
D. Crawler length	19' 9" (6.0 m)
E. Overall width	14' 3" (4.3 m)
F. Overall height	14' 4" (4.4 m)
G. Track width	32" (0.8 m)
H. Base unit	35' 4" (10.8 m)

APPROXIMATE WEIGHT

275,000 — 325,000 lbs. (124,740 — 147,420 kg)

ENGINE

- Caterpillar® C27 turbocharged diesel, Tier 2 Stage IIA emissions
- 950 hp (708 Kw) @ 2,100 RPM
- 3,122 ft-lbs (4,341 N-m) @ 1,400 RPM
- Fuel rate consumption: 46 Gal (174L)/hour at full horsepower
- 24-volt DC electrical system
- Cooling system — up to 125 F ambient (52 C)
- Heavy-duty 2-stage air cleaner

TRACK DRIVE

Infinitely variable hydrostatic/mechanical system for speeds up to 1 mph (1.6 kph). Independent proportional electric over hydraulic track control. Crawlers.....CAT® 245 10.25-inch pitch Grouser.....36-inch (914.4 mm) wide, single grousers

CONVEYOR*

Arc type conveyor with hydraulic shift. Belt width 42" (1.07 m) Belt speed..... 0 to 1,100 fpm (335 mpm) * Used only when machine is configured for upcut method.



RUNS COOL, LASTS LONGER

THE TRENCOR MACHINE'S HYDRAULIC SYSTEM ONLY OPERATES TRACKS, CONVEYOR, CONVEYOR SHIFT, AND BOOM LIFT TO KEEP PUMPS AND MOTORS COOLER, MAKING THEM LAST LONGER AND OPERATE MORE EFFICIENTLY. HIGH-VOLUME HYDRAULIC SYSTEM FLUID CAPACITY IS GREATER THAN THOSE ON COMPETITIVE HYDROSTATIC MACHINES.



RELIABLE DRIVE SYSTEM

PROVEN CHAIN-DRIVEN HEAD SHAFT WITH CHAIN DRIVES FULLY ENCLOSED IN AN OIL BATH FOR LONGER LIFE. THIS SYSTEM PROVIDES LOWER OPERATING COSTS THAN COMPETITIVE SYSTEMS UTILIZING HYDRAULIC PUMPS AND MOTORS.

RUGGED FRAME CONSTRUCTION

UNIBODY TRACTOR FRAME IS STRONGER THAN TUBE AND BOLT-ON SHEET METAL DESIGNS. EXTRA-LONG, WELDED, HEAVY-DUTY UNDERCARRIAGE ATTACHES TO 2-IN. THICK MAIN FRAME AND BOOM.



SEALED AND LUBRICATED

SEALED AND LUBRICATED TRACK DRIVE PROVIDES EXTENDED LIFE AND REDUCED MAINTENANCE COSTS.



CLEAN CAT® POWER

ALL MODELS FEATURE DEPENDABLE CATERPILLAR® ENGINES, MEETING EMISSIONS STANDARDS FOR THEIR TIER CLASS.



LATEST TECHNOLOGY

LOAD CONTROL SYSTEM RAPIDLY ADJUSTS TRENCHER AND TRACK SPEEDS TO MAINTAIN PERFORMANCE AND REDUCE ENGINE STALLS AND MACHINE WEAR.

More than 60 years of experience

The Trencor line of high-performance rock trenchers, surface miners, Road Miners™, and related equipment rounds out Astec Underground's broad lineup of underground construction solutions. Trencor has more than 60 years of experience in the specialized trenching industry, serving the construction and oil and gas markets. The Trencor line-up includes seven different trencher models that can be configured to meet custom applications.

Trencor products are manufactured at the company's 360,000 square-foot facility in Loudon, Tenn., along with the Astec utility trenchers and horizontal drills.

The seeds of the company now known as Trencor were sown in 1945 in Alhambra, Calif., with the establishment of the Jiffy Excavator Tooth Company, which later became known as Dallas Jetco. In 1981, Trencher Corporation of America (Trencor) was established in Grand Prairie, Tex. The company manufactured chain type trenchers, while Dallas Jetco specialized in wheel trenchers. Trencor purchased Dallas Jetco in 1984 and changed the name of the combined operation to Trencor Jetco. Four years later, Astec Industries, Inc., acquired the thriving business, and provided additional resources for capital investment and growth. The company moved to Grapevine, Tex., in 1994, and shortened its name to Trencor. Manufacturing operations moved to Loudon, Tennessee in 2003.

Trencor machines are supported through a dedicated parts and service center, available 24-hours a day to help customers minimize downtime and get needed repair parts.

Visit www.astecunderground.com to learn about the full line of Astec Underground products or to contact the company for more information.

7 ADVANTAGES

TRENCOR: THE ORIGINAL MECHANICAL POWER TRAIN

There are two types of power trains currently in use with chain trenchers. In recent years, the hydrostatic drive has been perhaps the most common method of delivering power to moving parts. But the hydrostatic drive does have some short comings, including loss of power due to heat, inherent inefficiencies with hydraulic pumps and motors, system complexity, high maintenance costs, and a short band of digging speeds. The mechanical drive found in all Trencor machines, on the other hand, offers a range of positive benefits.

● INCREASED TORQUE

More than 90% of the engine horsepower can be delivered to the cutting tool.



● INCREASED PRODUCTIVITY

The cutting tool tends to break out more and larger pieces of material thanks to the slow-moving digging tooth and the force delivered by the high torque.

● BROADER RANGE OF CHAIN SPEEDS

The transmission in the Trencor mechanical drive lets the operator choose a digging speed that matches the digging conditions.

● REDUCED FUEL COST

The additional horsepower delivered by the system gets more work done in the same amount of time.

● EASE OF REPAIR

The system is much less complex. In most cases, a simple visual inspection can lead to the diagnosis of a problem.

● LOWER REPAIR COST

The components of the system are mostly off-the-shelf parts that can be replaced at a relatively low cost. There are also fewer moving parts to wear out or break.

● LONG MACHINE LIFE

A mechanical drive system can better absorb the pounding shocks of trenching operations. The average life of a Trencor mechanical power train trencher is quite long — which permits amortization of the machine over a longer period of time.



IMPORTANT: Astec Underground reserves the right to change these specifications without notice and without incurring any obligation relating to such change. This literature has been published for world-wide circulation. Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your Astec dealer/distributor will be able to give you details of the products and their specifications available in your area. NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

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