

# T1760

MECHANICAL DRIVE  
CHAIN TRENCHER

# TRENGOR

by ASTEC



## BREAKTHROUGH SOLUTIONS



## More than 60 years of experience

**T**he 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](http://www.astecunderground.com) to learn about the full line of Astec Underground products or to contact the company for more information.

Cover photograph shows a Trencor T1660 Magnum working in Australia. This brochure was released prior to final production of the Trencor T1760.

# T1760 Mechanical Drive Chain Trencher

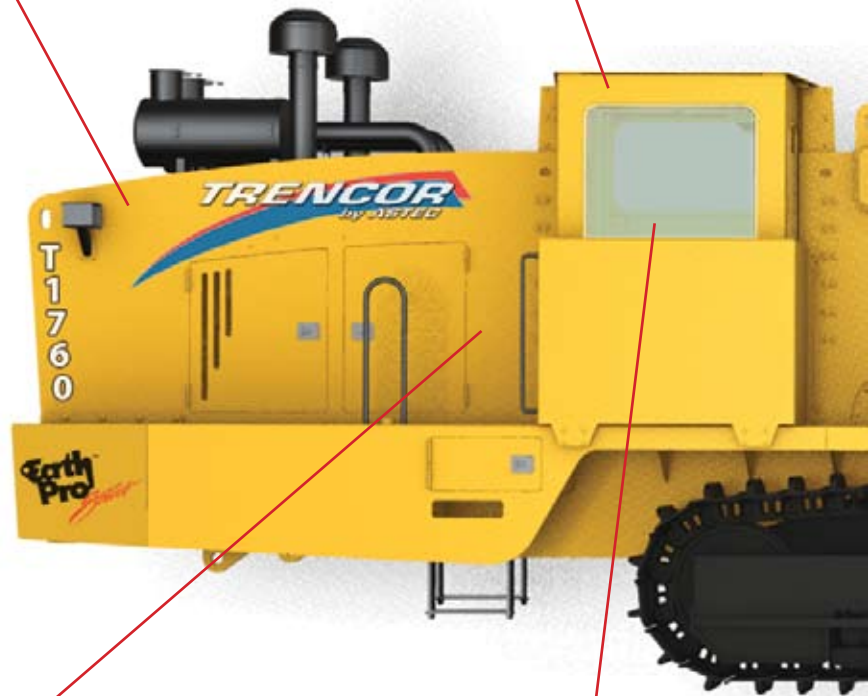


### SAFETY FIRST

LOCATION OF CAB PROVIDES OPERATOR PROTECTION FROM TRENCHING HAZARDS AND FROM CONVEYOR AND TRENCHER BOOM. CAB MEETS ISO STANDARDS FOR ROLLOVER AND CRUSH TESTS.

### MOST HORSEPOWER IN ITS CLASS

CATERPILLAR™ C-27 ACERT TURBOCHARGED DIESEL, TIER 2 STAGE IIA 950-HORSEPOWER ENGINE, TRANSMITS POWER TO THE DIGGING CHAIN THROUGH A PROVEN 4-SPEED TRANSMISSION WHICH ALLOWS MAXIMUM TORQUE IN EACH TRENCHING SPEED.



### 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.



### LATEST TECHNOLOGY

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



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

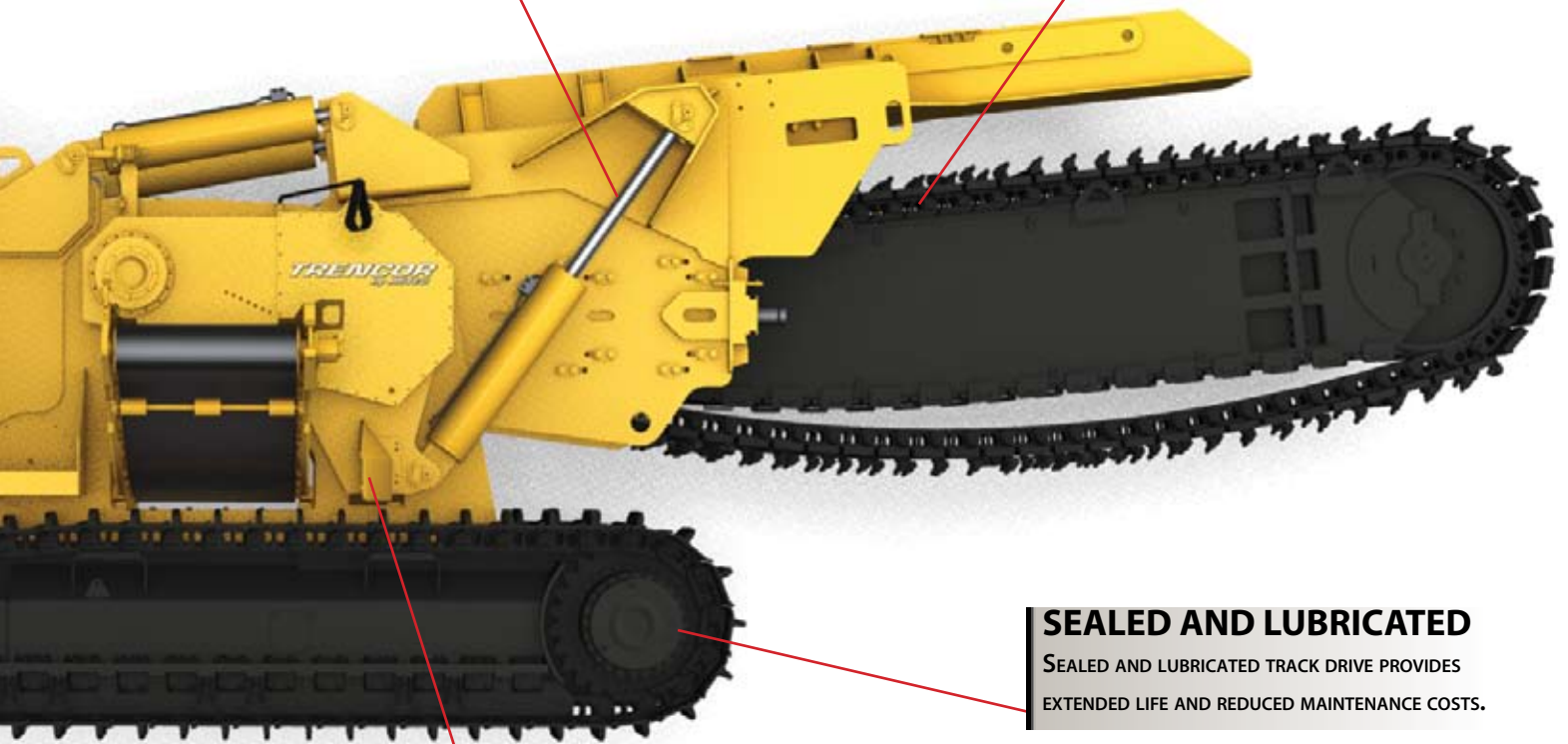
**NEW CYLINDER DESIGN**

NEW DESIGN FEATURES FOUR 10-INCH BORE BOOM RAISE CYLINDERS THAT IMPROVE PERFORMANCE AND REDUCE MAINTENANCE POINTS.



**ROAD MINER AVAILABLE**

A ROAD MINER ATTACHMENT IS AVAILABLE FOR WIDER CUTS IN A SINGLE PASS, IDEALLY SUITED FOR CERTAIN QUARRY OPERATIONS, MINING, ROAD CONSTRUCTION, BUILDING FOUNDATION WORK, AND MASS ROCK REMOVAL. MACHINE CAN BE CONFIGURED FOR UPCUTTING OR DOWNCUTTING METHODS WITHOUT STRUCTURAL CHANGES.



**SEALED AND LUBRICATED**

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

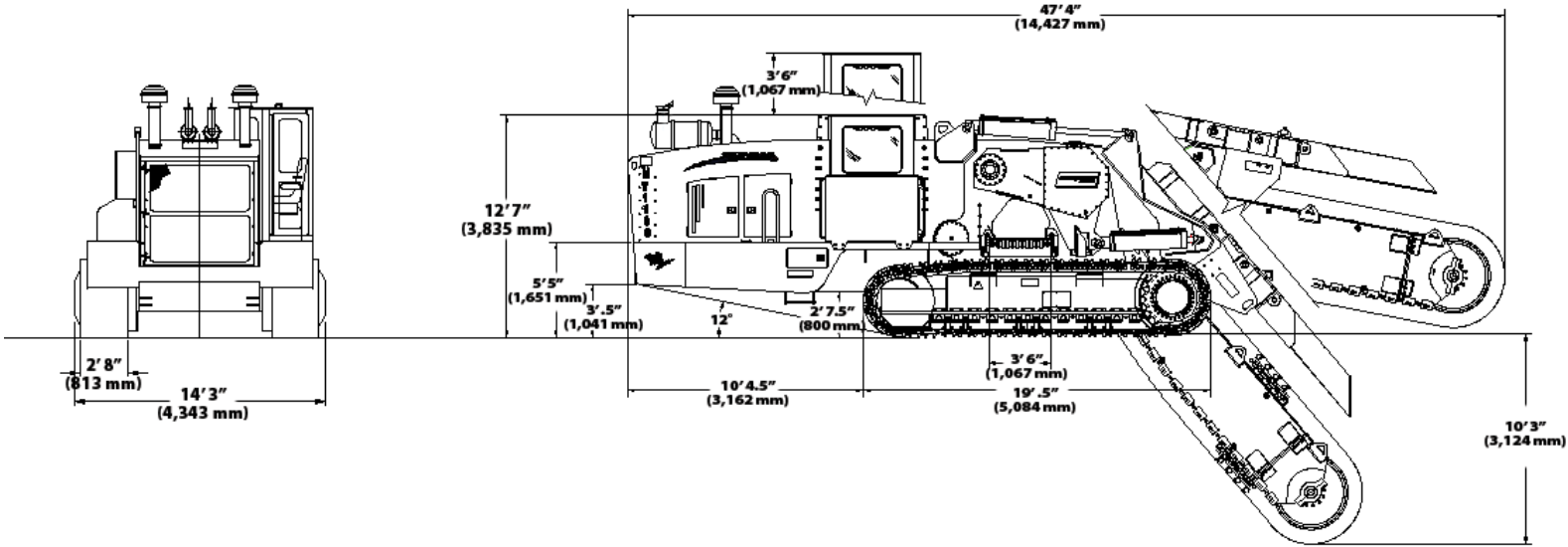
**RUGGED FRAME CONSTRUCTION**

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.



**BREAKTHROUGH SOLUTIONS**

# T1760 Mechanical Drive Chain Trencher



## ENGINE

- Caterpillar™ C27 Acert turbocharged diesel, Tier 2 Stage IIA emissions
- 950 hp (1,274 Kw) @ 2100 RPM
- 3,122 ft-lbs (4,341 N-m) @ 1400 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

## FUEL CAPACITY

Dual tanks .....	506 gal. (1,915 L)
Operation .....	11 hours at full horsepower

## HYDRAULIC SYSTEM

Single bolt-on tank .....	330 gal. (757 L)
Crawler drive .....	Closed loop piston pumps
Conveyor drive .....	Closed loop piston pumps
Accessory .....	Open loop

## TRACK DRIVE

Infinitely variable hydrostatic/mechanical	
Speed .....	1 mph (1.6 kph)
Track control .....	Independent proportional electric over hydraulic
Load control .....	Microcontroller with bypass
Crawlers .....	Cat 245 10.25-in. pitch
Grouser .....	36-in. (610 mm) wide, single grousers

## OPERATOR STATION

Fully enclosed, air conditioned, heated, and pressurized cab	
Elevation .....	42 in. (1,067 mm)

## DIGGING ASSEMBLY

Heavy-duty mechanical chain drive. Power shift transmission with four trenching speeds and reverse.  
Tailwheel: 48-in. (1219 mm) diameter **forged** (not plate welded) ring

## TRENCH DEPTH

16-, 8-, 10- and 12-ft. primaries (1,829-, 2,439-, 3,050-, and 3,658-mm)  
2-, 4-, 6-, and 8-ft. extensions (610-, 1,219-, 1,829-, and 2,438mm)

## TRENCH WIDTH

Double D8 on 12-in. (305 mm) centers — 28 to 38 in. (711 to 965 mm)  
Double D8 on 16-in. (406 mm) centers — 32 to 42 in. (813 to 1,067 mm)  
Double D8 on 20-in. (508 mm) centers — 36 to 46 in. (914 to 1,168 mm)  
Double D8 on 24-in. (610 mm) centers — 40 to 50 in. (1,016 to 1,270 mm)  
Triple D8 on 16-in. (406 mm) centers — 48 to 58 in. (1,220 to 1,473 mm)  
Triple D8 on 20-in. (508 mm) centers — 56 to 66 in. (1,422 to 1,676 mm)  
Triple D8 on 24-in. (610 mm) centers — 64 to 72 in. (1,626 to 1,830 mm)

## CONVEYOR

Arc type conveyor with hydraulic shift	
Belt width .....	42 in. (1,070mm)
Belt speed .....	0 to 1,100 fpm (335 mpm)

## ADDITIONAL STANDARD ITEMS

- Bottom tail wheel transition wear plates
- Noise abatement equipment
- Personnel guard
- Work lights (2 fore/2 aft)

## OPTIONAL EQUIPMENT

- Automatic laser control for grade
- Automatic laser control for steering
- Auxiliary truck loading conveyor
- Road Miner attachment
- Hydraulic fold-up crumpler
- Berm scrapers
- Manual lube kit
- Tail wheel weights
- Cold weather package
- CE package

## APPROXIMATE WEIGHT AND DIMENSIONS

Weight .....	275,000 - 325,000 lbs. (124,740 - 147,420 Kg)
Width .....	14 ft., 3 in. (4,343 mm)
Height .....	14 ft., 4 in. (4,369 mm)
Length w/o boom .....	35 ft., 4 in. (10,770 mm)
Transport length (with 10-foot boom) .....	47 ft., 4 in. (14,427 mm)

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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