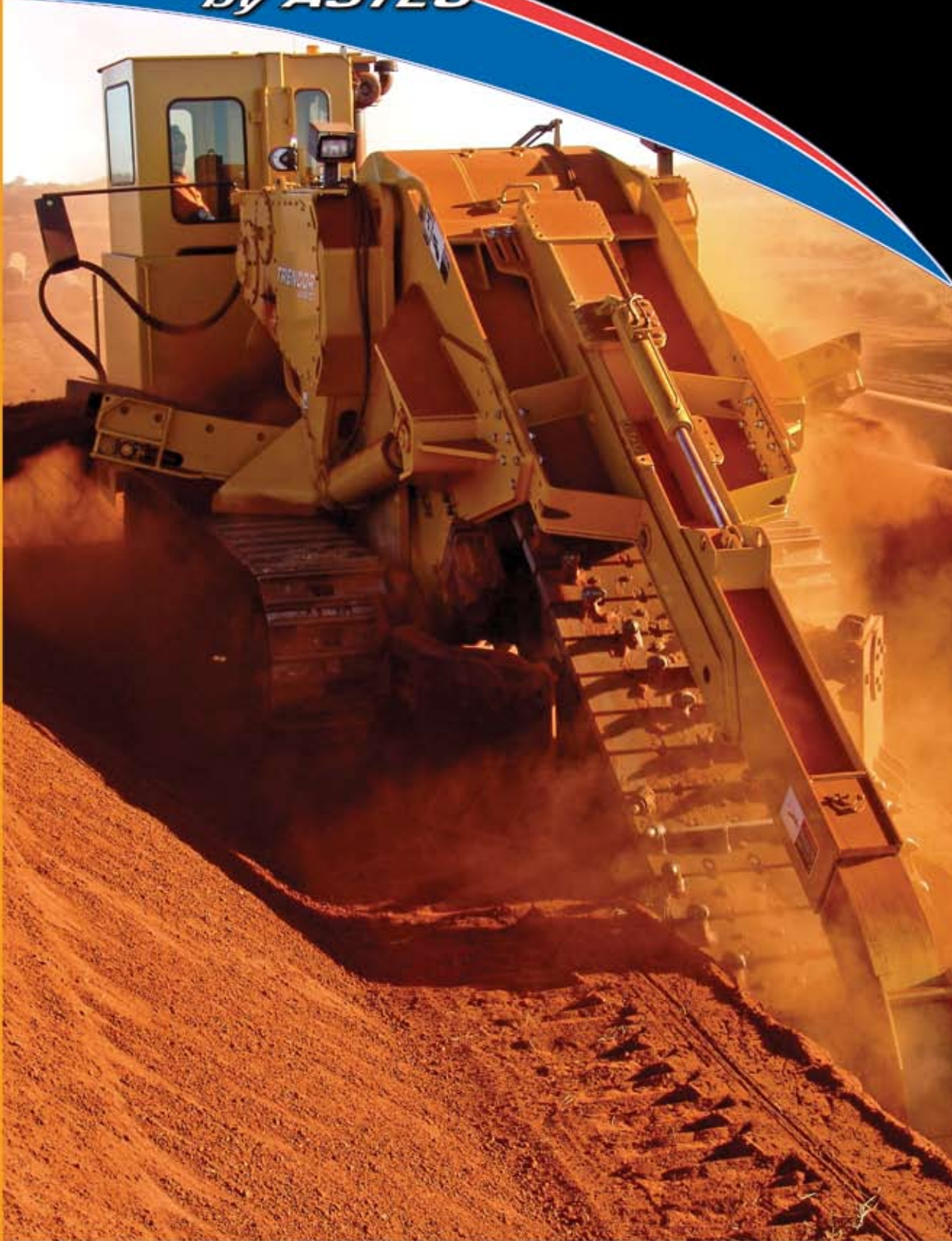


**FULL LINE**

**MECHANICAL DRIVE  
CHAIN TRENCHERS**

# **TRENGOR** *by ASTEC*



**BREAKTHROUGH SOLUTIONS**

# FULL LINE MECHANICAL DRIVE CHAIN TRENCHERS

## CLEAN, PRECISE TRENCHES

RUGGED TRENCOR MECHANICAL DRIVE CHAIN TRENCHERS CUT PRECISE TRENCHES THROUGH NEARLY ANY SOIL TYPE, INCLUDING SOLID ROCK, IN SOME OF THE MOST INTENSE WORKING ENVIRONMENTS ON EARTH. THE TRENCHES HAVE CONSISTENT DIMENSIONS SO SURROUNDING STRUCTURE IS UNDISTURBED. TRENCH WALLS ARE VERTICAL, MINIMIZING EXCAVATION AND PADDING MATERIAL. AND THE FLAT BOTTOM OF THE TRENCH IS STRAIGHT AND AT A CONTROLLED GRADE.



## LATEST TECHNOLOGY

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



## AVOID BLASTING

OUR MACHINES CAN CUT TRENCHES RIGHT BESIDE EXISTING BUILDINGS OR STRUCTURES WITHOUT RISK OF DAMAGE. THAT MEANS YOU'LL AVOID REGULATIONS, SAFETY ISSUES, LIABILITY AND COSTS ASSOCIATED WITH DRILLING AND BLASTING. WE HAVE SEVEN DIFFERENT MODELS OF MECHANICAL DRIVE CHAIN TRENCHERS. JUST CHOOSE THE MODEL YOU NEED BASED ON HORSEPOWER AND DIGGING DEPTH AND WIDTH.

## CLEAN CAT® POWER

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



## 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 HEAVY-DUTY MAIN FRAME AND BOOM.



## SEALED AND LUBRICATED

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

## 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.



## CE CERTIFIED

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



# FULL LINE MECHANICAL DRIVE CHAIN TRENCHERS



## T765

**CAPABILITIES**

Max. cut width.....	30 in (.76 m)
Max. cut depth .....	8 ft (2.44 m)

**DIMENSIONS**

Transport length w/ 6-ft (1.83-m) boom.....	28 ft, 11 in (8.81 m)
Crawler length.....	13 ft, 10 in (4.22 m)
Overall width.....	8 ft (2.44 m)
Overall height.....	10 ft, 4 in (3.15 m)
Track width .....	24 in (0.61 m)
Base unit.....	25 ft, 10 in (7.87 m)

**APPROXIMATE WEIGHT**

55,000 — 65,000 lbs. (25,000 — 29,545 kg)
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- ENGINE**
- Caterpillar® C7 Acert turbocharged diesel, Tier 3 Stage IIIA emissions
  - 250 hp (186 Kw) @ 2,200 RPM
  - 842 ft-lbs (1,142 N-m) @1,400 RPM
  - Fuel rate consumption: 14 Gal (53 L)/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-4 components  
 Grouser.....24-in (.61 m) wide, low-profile triple grousers

**CONVEYOR\***

Arc type conveyor with hydraulic shift.	
Belt width.....	24 in (.61 m)
Belt speed.....	0 to 1,000 fpm (305 mpm)

## T1060

**CAPABILITIES**

Max. cut width .....	36 in (.92 m)
Max. cut depth .....	12 ft (3.66 m)

**DIMENSIONS**

Transport length — w/ 8-ft (2.44-m) boom .....	38 ft (11.58 m)
Crawler length .....	13 ft, 9 in (4.19 m)
Overall width .....	8 ft, 2 in (2.49 m)
Overall height .....	10 ft, 10 in (3.30 m)
Track width .....	24 in (0.61 m)
Base unit .....	25 ft, 10 in (7.87 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 (261 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-in (.61 m) wide, low-profile double grousers

**CONVEYOR\***

Arc type conveyor with hydraulic shift.	
Belt width .....	24 in (.61 m)
Belt speed .....	.0 to 1,000 fpm (305 mpm)

## T1360C

**CAPABILITIES**

Max. cut width .....	42 in (1.07 m)
Max. cut depth .....	12 ft (3.66 m)

**DIMENSIONS**

Transport length w/ 8-ft (2.44 m) boom .....	38 ft (11.58 m)
Crawler length .....	16 ft, 3 in (4.95 m)
Overall width .....	9 ft, 9 in (2.97 m)
Overall height.....	11 ft (3.35 m)
Track width .....	24 in (0.61 m)
Base unit .....	29 ft, 1 in (8.87m)

**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  
 Grousers ..... 24-in (.61 m) wide, low-profile double grousers

**CONVEYOR\***

Arc type conveyor with hydraulic shift.	
Belt width .....	30 in (.76 m)
Belt speed .....	0 to 870 fpm (265 mpm)

## T1460

**CAPABILITIES**

Max. cut width .....	54 in (1.37 m)
Max. cut depth .....	16 ft (4.88 m)

**DIMENSIONS**

Transport length w/ 12-ft (3.66-m) boom .....	49 ft, .75 in (14.95 m)
Crawler length .....	19 ft, 5 in (5.92 m)
Overall width .....	11 ft, 6 in (3.51 m)
Overall height.....	12 ft, 5 in (3.78 m)
Track width .....	30 in (0.76 m)
Base unit .....	32 ft, 8 in (9.96 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-in (.76 m) wide, low-profile double grousers

**CONVEYOR\***

Arc type conveyor with hydraulic shift.	
Belt width .....	36 in (.91 m)
Belt speed .....	0 to 800 fpm (244 mpm)

# FULL LINE MECHANICAL DRIVE CHAIN TRENCHERS



## T1660

**CAPABILITIES**

Max. cut width	60 in (1.52 m)
Max. cut depth	12 ft (3.66 m)

**DIMENSIONS**

Overall length w/ 12-ft (3.66 m) boom	50 ft, 6 in (15.39 m)
Crawler length	19 ft, 9 in (6.02 m)
Overall width	12 ft, 11 in (3.94 m)
Overall height	14 ft, 4 in (4.37 m)
Track width	30 in (.81 m)
Base unit	35 ft, 4 in (10.76 m)

**APPROXIMATE WEIGHT**

215,000 — 250,000 lbs.	(97,522 — 113,400 kg)
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**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-in (.23-m) pitch
Grouser	36-in (.91 m) wide, low-profile double grousers

**CONVEYOR\***

Arc type conveyor with hydraulic shift.

Belt width	42 in (1.07 m)
Belt speed	0 to 820 fpm (250 mpm)



## T1760

**CAPABILITIES**

Max. cut width	72 in (1.83 m)
Max. cut depth	12 ft (3.66 m)

**DIMENSIONS**

Overall length w/ 10-ft (3.66-m) boom	47 ft, 4 in (14.43 m)
Crawler length	19 ft, 9 in (6.02 m)
Overall width	14 ft, 3 in (4.34 m)
Overall height	14 ft, 4 in (4.37 m)
Track width	32 in (.81 m)
Base unit	35 ft, 4 in (10.76 m)

**APPROXIMATE WEIGHT**

275,000 — 325,000 lbs.	(124,740 — 147,420 kg)
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**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-in (.26-m) pitch
Grouser	36-inch (.91 m) wide, single grousers

**CONVEYOR\***

Arc type conveyor with hydraulic shift.

Belt width	42 in (1.07 m)
Belt speed	0 to 1,100 fpm (335 mpm)



## T1860

**CAPABILITIES**

Max. cut width	96 in (2.44 m)
Max. cut depth	35 ft (10.67 m)

**DIMENSIONS**

Overall length w/ 12-ft (3.66-m) boom	50 ft, 6 in (15.39 m)
Crawler length	22 ft, 9 in (6.93 m)
Overall width	18 ft, 5 in (5.61 m)
Overall height	17 ft (5.18 m)
Track width	36 in (.91 m)
Base unit	45 ft (13.72 m)

**APPROXIMATE WEIGHT**

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

- 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-in (.91 m) 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)



## T1360 WHEEL TRENCHER

The T1360 Wheel Trencher is designed to meet the needs of contractors installing large diameter pipe for the pipeline industry or water and sewer projects.

**BENEFITS**

- High production capability
- Easy maintenance — all driveline parts are accessible without removing attachments
- Digs up to 9 ft (2.74 m) deep and 66 (1.68 m) in wide — the widest in its weight class



## ROAD MINER™ ATTACHMENT

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 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.

**BENEFITS**

- Eliminates the need to drill and blast
- Makes a clean, even cut up to 16 feet (4.9 m) wide, up to 5 feet (1.5 m) deep
- Provides a usable spoil without the need for primary crushers
- Produces manageable spoil during the excavating process

# FULL LINE MECHANICAL DRIVE CHAIN TRENCHERS



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



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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