





- Big Jobs
- Giant Machine

# Maximum Profits

The V-12 Caterpillar® diesel engine delivers 750 horsepower to the state-of-the-art powertrain for efficient and dependable operation. No other machine can outperform the 1660HDE!

For higher utilization of the 1660HDE, the chain trencher attachment can be replaced with the patented RoadMiner<sup>®</sup> attachment for bulk excavation, quarry operations or open pit mining.



## **Trencor 1660HDE Specifications**



## POWER UNIT

Caterpillar<sup>®</sup> model 3412E turbo charged and after-cooled diesel engine, rated 750 hp (559kW) @ 2,100 rpm. Two-stage air cleaner assembly; 24 volt electric start; cooling system for 125 degree (58°C) ambient temperature operation; muffler and tachometer.

## FUEL CAPACITY

Dual tanks, 520 gallon (1968 L) capacity. Twin fuel filters and cab mounted fuel gauge. Approx. 38 gallons (146 L) per hour fuel consumption at maximum load.

## HYDRAULIC RESERVOIR

330 gallon (1,250 L) capacity.

## CONVEYOR

Arc type hydraulically driven 42" (107cm) wide center-guided belt, infinitely variable in speeds from 0 to 980 fpm (300 m/min) in either direction. Hydraulically transversely shiftable for precise spoil placement selection. End sections fold up for transport

## DIGGING CHAIN DRIVE

The 11.2" (28.4cm) headshaft is driven from both sides by a roller chain arrangement directly behind a heavy duty Caterpillar<sup>®</sup> differential, which is powered by an Allison<sup>®</sup> power shift transmission with integral 3-element torque converter. Four digging chain speeds are available to suit varied digging conditions. Chain speeds: 1st gear-217 fpm (66.1 m/min); 2nd gear-298 fpm (90.8 m/min); 3rd gear-386 fpm 117.6 m/min); 4th gear-504 fpm (153.6 m/min). All shafts, chains and bearings are designed to accommodate the full output of the torque converter and transmission in the stall condition (approx. 2.3 times normal operation torque). Roller chain tension is adjustable for both stages with eccentric hubs. All drive chains and sprockets are fully enclosed and oil bath lubricated.

## DIGGING CHAIN

Caterpillar style D-7 size digging chain for triple chain and D-8 size for single and double chain applications. Boom furnished with hydroadjusters to maintain proper chain adjustment. Rectangular steel cutter bar plates of varying widths and thicknesses to which tooth holders are welded to accept rotating, conical, carbide-tipped digging teeth. Plates are bolted to digging chain. 48" (122cm) diameter tailwheels with heavy-duty seals and bearings. Boom equipped with replaceable, abrasive-resistant wear plates on top and bottom.

## COUNTERWEIGHT

Hydraulically extendable front counterweight helps maintain balance of machine while tramming or hoisting. Extends up to 56 inches (142 cm) for increased stability.

## CRAWLERS

Caterpillar type D-8 size components with 32" (81cm) low profile double grouser shoes. Track adjusters are Caterpillar type with recoil spring for constant tension. Crawler rollers are oil filled and sealed. Each crawler assembly is removable to facilitate transport, and can be mounted in one of two positions to help balance the machine with various boom options.

## CRAWLER DRIVE AND STEERING

Infinitely variable hydrostatic/mechanical system for speeds from 0 to 1 mph (1.6 km/h). Separate hydrostatic transmission for each track with electric over hydraulic steering controls and heavy-duty planetary gearbox direct coupled to track drive sprocket. Tracks may be counter-rotated for excellent maneuverability.

## OPERATOR'S CAB

Fully enclosed, pressurized with climate control. All machine controls within easy reach of the operator. Elevates hydraulically 44 inches (112cm) for increased operator visibility. Located on left hand side of the machine.

#### DIGGING BOOM

Four sizes of boom equipped depending on digging width selections:

- 14" through 18" (36 46cm): single chain arrangement
- 24" through 42" (46 107cm): double chain arrangement
- · 32" through 48" (81 122cm): double chain arrangement
- 48" through 60" (122 152cm): double or triple chain arrangement

## DIGGING CAPACITY

**Trench depths:** 8', through 25' (2.44m through 7.65m). **Trench widths:** 14" - 60" (4.26 - 18.3cm). Maximums are 48" (122 cm) wide through 25' (7.6m) depth and 60" (152cm) wide through 20' (6.1m) depth.

## OPTIONAL AND EXTRA EQUIPMENT

 Hydraulic fold-up crumber • Automatic laser control for grade • Automatic stringline control for grade and/or steering • RoadMiner® attachment • Various types and widths of track pads • Berm scrapers \* Additional hoist capacity • Air compressor and lube equipment • Additional boom weight • Top rollers on boom

## APPROXIMATE WEIGHT

#### 215,000 - 250,000 lbs. (97,610 - 113,500 kg)

Due to our contining product improvement, specifications are subject to change without notice Headquarters: 9600 Corporate Park Drive • Loudon, Tennessee 37774 USA • USA Toll Free: 800-527-6020 • Tel: 865-408-2100 • Fax: 865-458-8575 www.astecunderground.com

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