



**We are pleased to provide a quote for one (1) new Terex Commander 6060 model hydraulic rotating digger derrick with a turntable winch mounted on a Terramac RT9U rubber track carrier.**

**DESIGN CRITERIA:**

- \* Design criteria is in accordance with current industry and engineering standards applicable and accepted for structural and hydraulic design.
- \* Meets ANSI/ASSE A10.31-2013.

**ELEVATION:**

- \* From +80 degrees above horizontal to -20 degrees below horizontal.

**DUAL LIFT CYLINDERS:**

- \* Double-acting cylinders with chrome plated rods and integral holding valves. Trapezoid mounting design offers greater boom support and stability providing less wear and longer life. Either cylinder can hold the rated lifting capacity of the derrick.

**STEEL LOWER BOOM:**

- \* The boom is a fabricated box utilizing high-strength steel plates.

**STEEL INTERMEDIATE BOOM:**

- \* Fabricated box constructed of high strength steel. Powered by a double acting hydraulic cylinder equipped with integral holding valves on both extend and retract ports.

**FIBERGLASS HYDRAULIC UPPER BOOM:**

- \* Capable of lifting the hydraulic capacity of the derrick in all positions.
- \* Tested and rated for line voltage up to and including 46 KV AC.
- \* Tapered non-metallic rollers mounted at the end of the intermediate boom support the fiberglass boom under load minimizing scratches and abrasions. The sides of the fiberglass boom are supported and guided by non-metallic rollers to reduce tracking.

**CONTINUOUS AND UNRESTRICTED ROTATION:**

- \* A hydraulic rotary manifold provides a rotating oil distribution system for continuous and unrestricted rotation.

**MISCELLANEOUS:**

- \* Relief valves to protect the derrick circuits and digger-winch circuits.
- \* Hydraulic hoses are equipped with permanent type hose fittings.
- \* A custom load chart stating actual lifting capacity considering all final options, chassis, body, outriggers, and other fixed equipment with capacity based on completed unit stability is included.
- \* A boom-angle indicator and decal are mounted on each side of the lower boom.
- \* All metallic components of the complete digger derrick device are prime painted.
- \* Two complete manuals providing operational and maintenance procedures, and a replacement parts listing.
- \* Warning decals provided with unit.

**TURNTABLE WINCH INCLUDING TRANSFERABLE POLE BUDDY ASSEMBLY:**

- \* 15,000 lb. bare drum capacity planetary winch equipped with hydraulic counterbalance valve mounted on the derrick turntable. Equipped with flanged pole buddy transferable from intermediate boom to upper boom.

**BARE BOOM LIFT CAPACITIES:**

- \* Boom Angle: All Booms Retracted
- \* Maximum Elevation 38050 lbs.
- \* 10 Ft. Radius 18100 lbs.

**WORK ZONE CAPACITIES:**

- \* Median Digging Radius 26.9 ft.
- \* Digging Capacity at Median Radius 3194 lbs.

**LIFT CAPACITY AT MEDIAN RADIUS 5025 LBS.**

**Sheave Height:**

- \* With intermediate boom extended, 47.2 ft. at maximum elevation.
- \* With upper boom extended, 60.0 ft. at maximum elevation.
- \* Dimensions are based on a 40" chassis frame height.

**LOAD RADIUS:**

- \* 37.3 ft. from C/L of rotation, at 0 degree, intermediate boom extended.
- \* 50.3 ft. from C/L of rotation, at 0 degree, upper boom extended.

**LH COMMAND POST:**

- \* Glycerin filled pressure gauge is provided to monitor system pressure.
- \* Permanent type control decals are provided.
- \* Adjustable cushioned operator seat is provided as standard and includes side rails.
- \* Hydraulic foot throttle.
- \* Includes a control and horn.
- \* Stop/start at control station.

**POLE GUIDE AND INTERLOCK FOR TRANSFERABLE POLE BUDDY:**

- \* Hydraulic cylinders equipped with holding valves operate the tilt and open/close on pole guide arms.
- \* Pole guide hoses are contained in a chain type carrier, installed on the side of the boom.
- \* Transfers from the end of the intermediate boom to the end of the upper boom and vice versa.
- \* The pole guide is installed on the transferable pole buddy flange assembly.
  
- \* Protects both the pole guide and the boom from accidental damage caused by extending the upper boom while the pole guide is on the intermediate boom and tilted downward. Includes actuating plunger and two poppet valves.

**POLE CLAW ARMS:**

- \* Unique circular design of arms that handle poles up to 23 inch diameter

**EXCLUSIVE SINGLE STICK "T" CONTROL:**

- \* Control allows one hand to operate three functions: rotation, boom elevation, and intermediate boom extension.
- \* Upper boom extension and other functions have individual controls.

**LH UPPER CONTROLS FOR ROTATION, BOOM ELEVATION, WINCH, SEQUENTIAL EXTENSION OF INTERMEDIATE BOOM AND FIBERGLASS UPPER BOOM:**

- \* The control functions are full pressure, full flow, all hydraulic and incorporate individual control levers for each function. This allows individual or multiple boom function operation.
- \* Each boom function control level has an unlocking or enabling device to activate before use. All other controls will be nonmetallic lever.
- \* Includes hydraulic stop valve to stop all upper control functions.
- \* A properly maintained, fully extended fiberglass upper boom, with winch rope removed will prevent current flow from the boom tip to the vehicle and earth ground.
- \* The upper control boom extend function causes the fiberglass upper boom to extend first and then the intermediate boom. On retraction, the intermediate boom retracts first followed by the fiberglass upper boom.
- \* NOTE: ANSI/ASSE A10.31-2006; Upper controls are required when a digger derrick is equipped with a platform to work on structures or equipment with energized lines.
- \* Upper control with winch control: Combined platform and material handling load shall not exceed 3,000 pounds.

**HYDRAULIC TOOL POWER AT PLATFORM:**

- \* Hydraulic tool power at the platform designed to operate open center hydraulic tools only at engine idle speed.

**SINGLE PLATFORM SHAFT APPLICATION:**

- \* Adjustable band type brake with fiberglass locking handle, horizontal storage feature, necessary sleeve, pin and keeper for attaching to the sheave head.

**FIBERGLASS PLATFORM 24" x 24" x 42" DEEP:**

- \* Fiberglass platforms complete with inside/outside step with slip-resistant surface.
- \* Safety harness and lanyard.
- \* Rated capacity of 300-lbs.

**INSULATED PLATFORM LINER FOR 24" x 24" x 42" PLATFORM:**

- \* Tested at 50 KV AC.

**VINYL PLATFORM COVER FOR 24" x 24" PLATFORM:**

- \* Waterproof with internal elastic cord around edge.

**HYDRAULIC OVERLOAD PROTECTION FOR BOOM SYSTEM:**

- \* An Operator aid to prevent damage to the derrick by stopping selected functions if an over load occurs. The functions necessary to eliminate the overload condition remain operational, to relieve the cause of overload.
- \* Disables boom extend, winch up, and digger dig when boom lift senses an overloaded condition.
- \* The system is fully automatic relative to the operation and re-set functions.

**PLANETARY GEAR DRIVE ROTATION:**

- \* Including spring loaded hydraulically released parking brake and reversible hydraulic motor (non-slip rotation).

**12,000 FT-LB TWO SPEED DIGGER WITH HYDRAULIC SHIFT (ESK 76BA):**

- \* Planetary gear drive powered by reversible hydraulic motor.
- \* Telescopic trombone tube is provided to shift the two-speed digger hydraulically.

**RH AUGER STORAGE AND DIGGER HANGER:**

- \* Digger hanger bracket is box section and is equipped with a transfer protection system, auger stowage bracket with self-latching auger catch and hydraulic auger release.
- \* The auger stowage bracket stores up to a 36" diameter auger, in the standard position.
- \* Digger storage protection system to protect the auger storage cable from damage caused by over-winding. Oil from the digger system is returned to tank before the cable is over-stressed.
- \* Wire rope cable for auger roll-up.

**SOLID HEX AUGER SHAFT WITH COUPLER:**

- \* 60" long x 2-5/8" hex auger shaft with auger adjustment holes.

**PEDESTAL:**

- \* Square constructed pedestal has access holes for maintenance of hydraulic plumbing.
- \* Pedestal 40 inch.

**PUMP FOR USE (REQUIRED APPROXIMATE 120% PTO):**

- \* Tandem vane high efficiency 3000 psi rated hydraulic pump providing 40 gallons per minute combined flow.
- \* Provides 16 gallons per minute to boom functions and 24 gallons per minute to digger/winch functions and combines flow when boom is not in operation providing 40 gallons per minute to digger/winch at 1600 rpm engine speed, boom extension is faster than winch.
- \* Provides up to 6 gallons per minute for tools at 700 rpm engine speed.
- \* Includes pump kit.
- \* 17-11 Vane CCW pump.

**HYDRAULIC RESERVOIR:**

- \* 50 gallon hydraulic oil reservoir includes 10 micron replaceable cartridge type return line filter mounted in reservoir with bypass valve incorporated in filter to prevent restricted flow.
- \* A 100 mesh in screen in filter cap. A 40 mesh screen included in tank outlet and a 2 1/2" full flow gate type shut off valve.
- \* Relief valves to protect the derrick circuits and digger-winch circuits.
- \* Installed on top of flatbed at the front behind the cab.

**OUTRIGGERS:**

- \* 9290 Radial Main Outriggers.
- \* 9290 Radial Aux Outriggers.

**CONTROLS FOR 2-SETS OF OUTRIGGERS AND AUXILIARY TOOL OUTLETS BELOW ROTATION (DIGGERS):**

- \* Installed on top of the flatbed on each side rear for ease of view for outrigger placement.
- \* Includes protective covers over the top of the outrigger valves.
- \* Includes switches and alarm for outrigger in motion alarm.
- \* Adjustable flow divider for auxiliary tool outlets below rotation.

**OUTRIGGER INTERLOCK:**

- \* To operate the boom the outriggers must be extended.
- \* Mercury type interlocks switch part # 481114.
- \* Custom subframe for Terramac RT9 crawler carrier
- \* Custom tie down kit for Terramac RT9 crawler carrier.

**REMOTE SENSOR BRACKET:**

- \* Bracket to be used with the Williams remote sensor. Installed to supply sensor to work with truck engine.
- \* Clevis for two part line attachment.

**BODY & ACCESSORIES:**

- \* Custom flatbed for crawler carrier installation complete with pullout access steps and 4" high solid steel metal border.
- \* Top mounted box on the curb side front of the flatbed
  - 24" x 18" x 18"
  - Side drop down door
- \* Pintle Hitch on the rear with two B50 "D" Rings.
- \* Install entry for access to Command Post and Platform.
- \* Hannay Spring Loaded Hydraulic Hose Reel with two (2) 30 foot hoses and quick disconnects.
- \* Heavy duty guard installed to protect the hose reel.
- \* One round LED Work Light install off back of cab.
- \* One square LED Work Light installed on the command post.
- \* One LED bar light installed on the boom rest to face the front.
- \* Install DP 30,000 pound planetary hydraulic winch mounted in front of carrier with 200 feet of 5/8 cable with clevis, winch control valve, and 4 way roller.
- \* Install Pulling eye plate in front of winch mounting bracket.
- \* Cab, Bed, and Accessories Painted White.
- \* Grab handles as necessary for 3-point contact.
- \* 150' of 1 1/8" nylon rope with 7JH downhaul weight and swivel hook for the turret mounted winch
- \* 24" Auger
- \* One 10 lb. fire extinguisher installed at the front of the flatbed
- \* Paint complete package white to match the cab
- \* Paint body floor and compartment tops with non-skid paint.

**CRAWLER:**

- \*Terramac RT9U Rubber Track Carrier
- \*Engine: Cummins QSB 6.7 T4F, 225HP @ 2200 RPM
- \*Transmission: 2 Speed Hydrostatic Transmission
- \*ROPS/FOPS certified enclosed cab with heat and air

**DIMENSIONS:**

- \*Overall Weight: 43,500 LBS
- \*Overall Dimensions: 31' 6" L x 8' 5" W x 11' 0"
- \*Overall Ground Pressure (Full Capacity): 6.4 PSI