



Product Quotation

Quotation Number: BDH-00161

Date: 2020-08-21 11:50:20

Description

E145 Bobcat Excavator

Auto-Idle
Auto Shift, 2 Speed Travel
Auto Shut-off
Auxiliary Hydraulics with Selectable Flow
Battery Disconnect
Cab, Enclosed with Auto HVAC - ROPS
Includes: Adjustable Arm Rests, Cup Holder, Heated Air
Suspension Seat, AM/FM Stereo with CD Player & MP3
Port, Retractable Seat Belt
Camera: Rear and Side
Control Lock-Out, disabling all machine functionality
Control Pattern Selector Valve (ISO/STD)
Display, 7" LCD
Password protection
Emergency Stop Switch
Engine/Hydraulic Monitor with Shutdown
Engine Restart Prevention System
Fingertip Auxiliary Hydraulic Control
Foot Pedal Attachment Control
Horn (joystick mounted)
Hydraulic joystick Controls

Part No	Qty	Price Ea.	Total
M3330	1	\$117,860.32	\$117,860.32

Mirrors, Left, and Right
Pin-On Attachment Mounting System
Power Boost
Power Modes: Power+, Power, Standard, Economy
Self-Diagnostics System
Smart Power Control (SPC)
Steel Tracks
Telematics
Travel Motion & Swing Alarm
Turbocharged, Tier 4, Non DPF
Two Way Piping with Pedal and Fingertip Control
Vandalism Protection
Includes: Locking Access Panels and Locking Fuel Cap
Work Lights: Boom (2), House (1), and Rear (1)
Work Modes: Dig, Lift, Breaker (single directional aux flow), & Shear (dual directional aux flow)
12 Volt Power Port
Warranty: 2 years, or 2000 hours whichever occurs first

24" Trenching Bucket

M3330-A01-C01	1	\$2,720.80	\$2,720.80
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Total of Items Quoted	\$120,581.12
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Dealer Assembly Charges	\$0.00
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Quote Total - US dollars	\$120,581.12
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Notes:

All prices subject to change without prior notice or obligation. This price quote supersedes all preceding price quotes.

Customer Acceptance:

Purchase Order: _____

Authorized Signature:

Print: _____ Sign: _____ Date: _____

Bobcat

E145

HYDRAULIC EXCAVATOR

Effective June 1, 2019

These bid specifications are to be used as guidelines when assisting purchasing agents and governmental specification writers in writing specs for excavators.

It is not the intent of these specifications to cover all details of design or construction. The unit shall be fully equipped to perform the work intended and shall be a new, current production model.

For individual assistance in preparing detailed specifications, contact the Product Management or Product Training Department in the West Fargo, ND office at 701-241-8700.

For the most up-to-date Bid Specs go to BobcatNET >>Excavators>>E145>>Bid Specs

COMPACT EXCAVATOR BID SPECIFICATIONS (14 Ton)

OPERATING WEIGHTS & GROUND PRESSURES – MUST MEET THE FOLLOWING SPECIFICATIONS

Operating Weight:

- 24" Steel tracks, fluids full & 36" bucket & operator 34,987 lbs. (15870 kg)
- Add for Blade Option + 2425 lbs. (1100 kg)

Arm Digging Force 13228 lbf. (5 kn)

Bucket Digging Force 21471 lbf. (95.5 kn)

Steel track (24"/600mm) w/o blade: ground pressure shall not exceed 5.7 psi (0.40 kgf/cm²)

Steel track (24"/600mm) with blade: ground pressure shall not exceed 6.1 psi (0.43 kgf/cm²)

Rear counterweight 7496 lb (3400 kg)

WORKING RANGE– MUST MEET THE FOLLOWING SPECIFICATIONS

Maximum Reach at Ground Level 335 in. (8530 mm)

Maximum Dig Depth shall be no less than 235 in. (5985 mm)

Maximum Depth of Vertical Wall which can be excavated 184 in. (4680 mm)

Minimum Arm Length 118 in. (3000 mm)

Minimum Boom Length 181 in. (4600 mm)

Minimum Bucket Pivot Angle 174 °

Maximum Radius of Working Equipment 341 in. (8665 mm)

Maximum Bucket Tooth Height 372 in. (9470 mm)

Maximum Dump Height 278 in. (7080 mm)

Minimum Swing Radius (front) 91 in. (2320mm)

Maximum Height of Bucket Pin Height 326 in. (8300 mm)

Maximum Blade Lift Height (optional) 20.0 in. (508 mm)

Maximum Blade Drop Depth (optional) 20.4 in. (519 mm)

Minimum Slew Speed 10.7 RPM

DIMENSIONS – MUST MEET THE FOLLOWING SPECIFICATIONS

Overall Length (transport position) 288 in. (7320 mm)

Overall Height (top of cab) 111 in. (2820 mm)

Overall Shipping Height (top of boom structure) 123 in. (3135 mm)

Swing Clearance, Rear 60 in. (1525 mm)

- Tail swing over hang shall be no more than 9.1 in. (231 mm)

Clearance, Upperstructure to Groundline 35.2 in. (895 mm)

Length of Track on Ground 119 in. (3025 mm)

Overall Length of Track Assembly 147 in. (3755 mm)

Ground Clearance – center of machine 16.1 in. (410 mm)

Overall Overall Width of Crawler Assembly 101 in. (2565 mm)

Minimum Radius in Travel/Transport Position 228 in. (5795 mm)

Blade Height (optional) 23.4 in. (595 mm)

Blade Width (optional) 102 in. (2590 mm)

HYDRAULIC SYSTEM – MUST MEET THE FOLLOWING SPECIFICATIONS

- System shall utilize a two load sensing, torque limiting variable displacement piston pumps with tandem gear pump.
- Total hydraulic pump capacity shall be capable of providing no less than 68.1 GPM (258 L/min)
- Hydraulic pump capacity for auxiliary flow shall be capable of providing no less than 29 GPM (109 L/min) for attachment operation.
- Auxiliary port relief pressure shall be set at 4694 PSI (330 bar).
- Variable flow, dual direction auxiliary hydraulics shall be standard equipment.
- Cylinders shall be a double-acting type.
- A hydraulic oil cooler shall be standard equipment.
- Slew motor shall be axial piston motor with planetary reduction.
- Swing torque shall be minimum of 34718 lbf.ft. (4800 kgf-m)

DRIVE SYSTEM – MUST MEET THE FOLLOWING SPECIFICATIONS

- Each track shall be independently driven by a hydrostatic axial piston motor.
- Maximum drawbar pull (Traction force) shall be no less than 29101 lbf.-ft. (4023 kgf-m).
- Maximum gradability shall be 35° (70%).
- Travel Speeds shall be no less than:
 - Low 1.7 mph (2.8 km/hr)
 - High 2.9 mph (4.7 km/hr)

UNDERCARRIAGE – MUST MEET THE FOLLOWING SPECIFICATIONS

- Steel track pin links shall be permanently lubricated and sealed.
- Track adjusters shall be grease-type with shock absorbing recoil springs.
- Steel shoe track shall be 46 links per side.
- Track width (steel) shall be no more than 24" (600 mm).
- Track width (optional segmented road liner) shall be no more than 20 " (500 mm).
- Each side will utilize 7 bottom track rollers and 1 top roller.
- Drive motors shall not protrude beyond width of the track.

ENGINE/ELECTRICAL – MUST MEET THE FOLLOWING SPECIFICATIONS

- Excavator shall have a 4 cylinder, liquid-cooled, turbocharged diesel engine producing no less than:
 - 115 hp (86 kW) at 2000 RPM rated engine speed. (SAE J1995 Gross)
 - 113 hp (85 kW) at 2000 RPM rated engine speed. (SAE J1349 Net)
- Engine shall produce no less than 369 ft.-lbs. (500 Nm) torque at 1400 RPM (SAE Gross).
- Engine displacement shall be no more than 269 in.³ (4.4 L).
- Engine must meet Tier 4 emission standards without the use of a diesel particulate filter (DPF)
- Automatic glow plugs (cold start assist system) shall be standard equipment.
- Air cleaner shall be a dry replaceable paper cartridges with safety element.
- Alternator shall be 24 volt, delivering no less than 85 amps.
- Batteries shall be 12 volt (qty 2), delivering no less than 950 CCA
- Starter shall be a 24 volt, gear reduction type delivering 6.0 hp (4.5 kW)
- Engine coolant shall include ethylene glycol anti-freeze with freeze protection to -34°F (-37°C)
- Excavator shall be equipped with an Engine Control Unit to electronically monitor and control the performance of the engine.
- The fuel injection system shall include a High Pressure Common Rail (HPCR).

CONTROLS – MUST MEET THE FOLLOWING SPECIFICATIONS

- Excavator direction, steering, and travel speed shall be controlled by two hand or foot levers.
 - Thumb buttons OR foot pedal control auxiliary hydraulics
 - Blade control shall be a separate lever with float function (optional)
- Excavator boom, arm, bucket and slew functions shall be controlled by two joysticks.
- Excavator Functions shall be selectable between ISO and Standard controls.
- High and Low travel speed shall be controlled by a three position rocker switch
 - Low; High; High with Auto-Shift
- Engine speed control shall be a rotary dial with auto-idle feature.
- Service brake (Travel) shall be a hydraulic lock on the motor.
- Parking brake (Travel) shall be a hydraulic lock on the motor.
- Service brake (Slew) shall be a hydraulic lock on the motor.
- Holding brake (Slew) shall be an automatically applied slew brake integrated in motor.
- Engine starting and shutdown functions shall be controlled electrically with a key switch.

CAPACITIES – MUST MEET THE FOLLOWING SPECIFICATIONS

- Fuel Tank shall be made of polypropylene and have a minimum capacity of 55.5 gal (210 L).
- Cooling System (radiator) shall have a minimum capacity of 6.6 gal (25 L).
- Engine oil capacity (with oil filter) shall be a maximum of 2.1 gal (8 L).
- Hydraulic System capacity shall be no more than 42.5 gal (161 L).
- Hydraulic Reserve shall have a maximum capacity of 34.3 gal (130 L).

INSTRUMENTATION

- The standard excavator instrumentation panel shall be positioned forward of the operator for optimum visibility.
- Standard Instrumentation shall consist of LCD display providing:
 - Fuel level
 - DEF level
 - Engine coolant temperature
 - Hydraulic oil temperature
 - Engine RPM
 - Battery voltage
- Warning / Indicator lights shall provide status of the following:
 - Seat belt
 - Error codes
 - SCR warning
 - Check engine
 - Engine oil pressure
 - Engine pre-heat (cold start system)
 - Radiator coolant level & temperature
 - Air filter
 - Gauges for engine coolant temperature and fuel level
- Password protection system that provides ability to lock machine shall be standard.

STANDARD FEATURES SHALL INCLUDE:

- Auto-Idle engine speed control
- Auto-Shift with 2-Speed travel
- Auxiliary Hydraulics with selectable flow
- Cab, Enclosed with Auto HVAC
- Camera, rear & side
- Control Lock-out, disabling all machine functions when in lowered position
- Control Pattern Selector Valve (ISO/STD)
- Deluxe heated high back cloth seat with air suspension and adjustable fore & aft joysticks
- Electrical disconnect switch
- Electrical disconnect switch
- Engine/Hydraulic Monitor with Shutdown
- Fingertip Auxiliary Hydraulic Control
- Horn (joystick mounted)
- Hydraulic Joystick Controls
- Password Protection System
- Power Boost
- Power Modes (4): Power+, Power, Standard, Economy
- Self Diagnostics System
- Smart Power Control (SPC)
- Steel track
- Travel motion alarm
- Vandalism Protection, including locking access hoods and locking fuel cap
- Work lights: boom (2), house (1), and rear (1)
- Work modes: Dig, Lift, Breaker (single directional aux flow), Shear (dual directional aux flow)
- 12 volt power port

AVAILABLE OPTIONS/ACCESSORIES:

The following items must be available as optional equipment:

- Beacon Light
- Dozer Blade
- Engine block heater
- Segmented rubber tracks (road liner)
- Attachment Quick-Change system (Hydraulic activated attachment mounting system)

ATTACHMENTS

Attachment Requirements:

- All attachments must be mounted on a quick-change mechanism.
- A hydraulic powered Quick-Change mechanism shall be available as optional equipment.
- The following attachments shall be available:
 - Buckets, Trenching
 - Bucket, Grading
 - Plate Compactor
 - Hydraulic Clamp, standard
 - Hydraulic Clamp, pro-link
 - Hydraulic Breaker

SERVICEABILITY

- Access to the following items shall be gained by opening the rear hood or side access hoods:
 - Air cleaner with indicator
 - Batteries
 - Cooling System (engine oil and hydraulic oil coolers) for cleaning
 - Engine oil and fuel filters
 - Engine oil level
 - Sight gauge for hydraulic oil level
 - Starter
- Rear hoods and fuel fill shall be lockable for vandal proofing.
- Excavator shall utilize metal engine hoods and side cover panels.
- Central grease point for boom pivot locations.
- Central grease point for slew bearing.

SAFETY

- Operator compartment shall meet Rollover Protective Structure (ROPS) in accordance with ISO 12117-2:2008.
- Operator protection shall be provided by deactivating ALL excavator functions when the operator console flag is in the upright position.
- An automatic spring applied multi-disc brake shall be provided to lock the upper structure to the undercarriage for transporting.
- Grab handles to assist the operator in entering and exiting the excavator will be provided as standard equipment.
- Front working lights for indoor use and low light operation will be standard.
- A weather resistant operator handbook written in English will be attached to inside of cab, providing operational instructions and warning by decals with pictorials and international symbols plus some messages in four basic languages: English, French, German and Spanish.

TRAINING RESOURCES

- A comprehensive Excavator Service Safety Training Kit shall be available.
- A comprehensive Excavator Operator Training Kit shall be available.

- *Where applicable, specification conform to SAE or ISO standards and are subject to change without notice.*
- *Specifications(s) are based on engineering calculations and are not actual measurements. Specification(s) are provided for comparison purposes only and are subject to change without notice. Specification(s) for your individual Bobcat equipment will vary based on normal variations in design, manufacturing, operating conditions, and other factors.*

WARRANTY

Bobcat Excavators

Bobcat Company warrants to its authorized dealers and authorized dealers of Bobcat Equipment Ltd., who in turn warrant to the owner, that each new Bobcat excavator with a delivery date on or after January 1, 2019 will be free from proven defects in material and workmanship with respect to (i) all components of the product except as otherwise specified herein for twenty-four (24) months, or a total of 2000 hours of use, whichever occurs first, (ii) tracks for twelve (12) months on a prorated basis based on the remaining depth of the track at the time any defect is discovered, (iii) Bobcat brand batteries, for an initial twelve (12) month warranty period and for an additional twelve (12) months thereafter, Bobcat Company shall reimburse a fixed portion of the cost of replacing the battery as designated by Bobcat in the event of a proven defect and (iv) auxiliary hydraulic quick couplers for six (6) months or 200 hours of use, whichever occurs first. The foregoing time periods shall all commence after delivery by the authorized Bobcat dealer to the original buyer.

During the warranty period, the authorized Bobcat dealer shall repair or replace, at Bobcat Company's option, without charge for parts and labor, any part of the Bobcat product except as otherwise specified herein which fails because of defects in material or workmanship. The owner shall provide the authorized Bobcat dealer with prompt written notice of the defect and allow reasonable time for repair or replacement. Bobcat Company may, at its option, require failed parts to be returned to the factory. Travel time of mechanics and transportation of the Bobcat product to the authorized Bobcat dealer for warranty work are the responsibility of the owner. The remedies provided in this warranty are exclusive.

This warranty does not cover replacement of scheduled service items such as oil, filters, tune-up parts, and other high-wear items. This warranty does not cover damages resulting from abuse, accidents, alterations, use of the Bobcat product with any accessory or attachment not approved by Bobcat Company, air flow obstructions, or failure to maintain or use the Bobcat product according to the instructions applicable to it.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND CONDITIONS, EXCEPT THE WARRANTY OF TITLE. BOBCAT COMPANY DISCLAIMS ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL BOBCAT COMPANY OR THE AUTHORIZED BOBCAT DEALER BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, LOSS OR INTERRUPTION OF BUSINESS, LOST PROFITS, OR LOSS OF MACHINE USE, WHETHER BASED ON CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, STATUTE OR OTHERWISE, EVEN IF BOBCAT COMPANY OR THE AUTHORIZED BOBCAT DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE TOTAL LIABILITY OF BOBCAT COMPANY AND THE AUTHORIZED BOBCAT DEALERS WITH RESPECT TO THE PRODUCT AND SERVICES FURNISHED HEREUNDER SHALL NOT EXCEED THE PURCHASE PRICE OF THE PRODUCT UPON WHICH SUCH LIABILITY IS BASED.



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