# Quotation

Page 1 of 12



Ring Power Corporation 500 World Commerce Parkway St. Augustine, FL 32092 Andrew Kurz Cell – (305) 323-6427

6/02/2014

City of Venice 221 S. Seaboard Avenue Venice, FL 34285

Attention: Chuck Speake Phone: (941) 486-2422 EXT. 30026

# Qty. Description AERIAL DEVICE

One (1) New Terex Hi-Ranger TL50 Articulating / Telescoping Aerial Device providing a working height of 54.6 ft (16.6 m) and a side reach of 36.0 ft (11.0 m) with a side mount platform or a working height of 54.6 ft (16.6 m) and a side reach of 36.0 ft (11.0 m) with an end mount platform. Unit will be mounted behind the cab.

### Design Criteria:

\* Design criteria is in accordance with current industry and engineering standards applicable and accepted for structural and hydraulic design.

### Platform Leveling:

- \* Leveling is provided by a master/slave cylinder system.
- \* A control a both the upper and lower control is provided.

### **Upper Controls:**

- \* "Control-Plus" single stick controller
- \* Non-metallic control handle
  - \* Dielectrically tested for limited secondary protection between the valve and handle.
  - \* May provide limited secondary protection for operator depending on condition and cleanliness.
  - \* Not rated for electrical protection, although it may provide limited secondary protection.
- \* Not intended to replace safe work practices or primary protection such as cover-up and personal protection equipment.
- \* Enable lever must be actuated before operation.
- \* Controls upper boom lift, boom extension and rotation.

# Lower Control:

- \* Individual control levers are located in an accessible location on the turntable.
- \* The lower controls activate boom lift, boom extension, platform leveling, and rotation.
- \* An upper/lower control selector provides override of platform controls, along with an emergency stop.

# Lower Boom:

\* Constructed of high strength, rectangular steel tube with a rectangular bi-axial epoxy resin filament wound, high strength fiberglass insert providing an insulation gap of 16 inches.

\* The lower boom articulation is from 0 to 87 degrees.

### Upper Boom:

- \* Aerial device upper boom is constructed of high strength steel.
- \* The upper boom has an articulation of -40 to 75 degrees (Platform to reach the ground).
- \* A boom rest with a cam style tie down strap is provided.

#### Second Section Boom:

- \* The second section boom is constructed of high strength filament wound fiberglass.
- \* Extension of the second section is accomplished by a hydraulic cylinder.
- \* The upper boom has a total insulation gap of 20 inches retracted and 64 inches extended for end mount platform.
- \* (Note: Side mount platform will be reduced by 12 inches.)
- \* Tapered non-metallic rollers mounted at the end of the second section 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.

# Lower Boom Cylinder:

\* Single, threaded end gland design, double acting hydraulic lift cylinder equipped with integral holding valves.

# Upper Boom Cylinder:

\* A double acting hydraulic lift cylinder equipped with integral holding valve is provided.

# Extension Cylinder:

- \* The boom cylinder is of threaded end gland design.
- \* The cylinder is equipped with integral holding valves to prevent creep and hold the boom is position in the event of hose failure.

#### **Engine Throttle Control:**

- \* A two speed engine throttle control is provided at the upper controls.
- \* The engine will advance to a pre-set speed when engaged and decrease to idle when disengaged.

### Boom Interlock:

\* To operate the boom the outriggers must be extended.

### Pedestal:

- \* Square constructed pedestal is of welded high strength steel construction and designed with access holes for maintenance of hydraulic plumbing.
- \* The pedestal top plate and turntable base plate are machined from a single piece of thick plate.

# Turntable:

- \* The turntable is constructed of side plates with an offset configuration to provide maximum strength.
- \* The steel bottom plate has provisions for attaching the outer race of the rotation bearing.

### Continuous Unrestricted Rotation:

- \* A hydraulic rotary manifold provides a rotating oil distribution system for continuous and unrestricted rotation.
- \* One 3/8 inch hydraulic port is available for options.
- \* Self-locking worm gear rotation drive is provided and equipped with bi-directional motor.
- \* A 7/8 inch external hex shaft allows for manual rotation.

\* A minimum 4-channel electric collector ring is provided.

### Rotation Bearing:

- \* The rotation bearing is a heavy-duty "shear ball" bearing with external gear teeth utilizing polished alloy steel balls.
- \* Both the inner and outer races are made from high-strength alloy steel and are heat treated to provide maximum life.
- \* High strength grade 8 bolts attach the inner and outer races to the pedestal and turntable.

# ANSI Rating:

\* Aerial device is designed as a Category C machine and is dielectrically tested and rated for operation up to 46,000 volts AC per ANSI/SIA A92.2-2009.

# Hydraulic System:

- \* Full pressure, open center hydraulic system.
- \* A 20 gallon hydraulic oil reservoir is built into the pedestal and is provided with a 60 mesh filler screen, baffles, 100 mesh suction screen with bypass, clean out access hole, dip stick and shut off valve.
- \* A spin on type 10 micron return line filter is provided.
- \* A relief is also provided.
- \* Hydraulic hoses are equipped with permanent type fittings.

### Miscellaneous:

- \* All metallic components of the complete aerial device are prime painted.
- \* The fiberglass upper boom, boom inserts, platforms, and covers are white.
- \* Two complete manuals providing operation and maintenance procedures, and a replacement parts listing.
- \* Warning decals provided with unit.
- Pedestal with 20 Gallon Internal Tank.
- 1 Platform 24" x 48" x 42":
  - \* One curbside mounted fiberglass platform with a rated capacity up to 600-lbs, with restrictions
  - \* Includes one outside access step with slip-resistant surface.
  - \* Two safety harnesses with lanyards.
- 1 Insulated Platform Liner For 24" x 48" x 42" Platform:
  - \* Tested at 50 KV AC.
- 1 Vinyl Platform Cover For 24" x 48" Platform:
  - \* Waterproof with internal elastic cord around edge.
- Dual Hydraulic Tool Outlets At Platform With Flow Control:
  - \* Installed at the platform to accommodate two open center hydraulic tools.
  - \* Provides 5 GPM at 2250 psi at engine idle.
- 1 Auxiliary Let Down for use with Open Center Hydraulics:
  - \* Allows for the descent of the boom (platform) in the most direct manner for a time limited by the duty cycle of the electric motor.
  - \*Includes 12 volt electric motor for use on a 12 volt chassis.

Note: This includes a switch for activation at pedestal for electric or air function.

- Upper Controls: (In lieu of standard 3-function control)
  - \* "Control-Plus" single stick controller (4-function)
  - \* Non-metallic control handle
    - \* Dielectrically tested for limited secondary protection between the valve and handle.
    - \* May provide limited secondary protection for operator depending on condition and cleanliness.
    - \* Not rated for electrical protection, although it may provide limited secondary protection.
  - \* Not intended to replace safe work practices or primary protection such as cover-up and personal protection equipment.
  - \* Enable lever must be actuated before operation.
  - \* Controls lower boom lift, upper boom lift, boom extension and rotation.
  - \*\* NOTE: Will not work on a closed center system.
- 1 Hydraulic Platform Rotator:
  - \* For end mount platform.
  - \* Allows 180-degrees hydraulic rotation and is controlled at the upper controls.
- 1 Insulated Engine Stop / Start:
  - \* Controlled from platform
- 1 Platform Rest Saddle with a padded rest.
  - \* Provides platform support during road travel
- 1 Terex Chassis Controller (DTS51) 12 volt:
  - \*Display Screen Provides Inputs and Outputs indication for trouble shooting.
  - \*Warning screens.
  - \*Switch Buttons have LED indicators to show when active.
  - \*Recommended for all Class 6 and above Chassis types.
  - \*One system for all Chassis Types
  - \*Controller programmable for communication with different Chassis manufacturers.
- 1 Top mount, Removable 1000 lb. Jib/Winch with Platform Rotation
  - \* Levels with platform.
  - \* Rotates with the platform.
  - \* Hydraulic articulation from 0 to 90 degrees.
  - \* 54"" load radius from the platform shaft.
  - \* Hydraulic extension 16".
  - \* Jibw/winch is removable and comes with ship loose socket to store the jib/winch when removed.
  - \* Maximum jib capacity of 1000 lb.
  - \* Includes up to 75' of 3/8" winch rope and hook.
- 1 Subframe for 120" CA chassis.
  - \* Subframe constructed for non-possum belly application.
  - \* Subframe is 170.00" long
  - \* Constructed with 6" x 6" x 1/4" wall square tubing with 5/16" thick steel plate.
- 1 Tie down kit for two set of outriggers for TL Models.
- 1 Heavy Duty A-frame Outriggers:
  - \* Hydraulic double acting outriggers including integral holding valves.
  - \* 145.5" Spread pin to pin and 157.4" to outside of pads at 8.8" penetration and 40" frame height.
  - \* 13" x 12" Swivel type stabilizer pads.

- 1 Under slung Modified A-frame Outriggers:
  - \* Hydraulic double acting outriggers including integral holding valves.
- 1 Controls For 2-Sets Of Outriggers And Auxiliary Tool Outlets (Open center systems):
  - \* Recessed at rear of truck each side for ease of view for outrigger placement.
  - \* Includes switches and alarm for outrigger in motion alarm.
- 1 Boom Stow Interlock In Addition to be used with Standard Boom Interlock:
  - \* To operate the outriggers the boom must be in the stowed position and to operate the boom the outriggers must be extended.
- 1 Pump for systems requiring 11 gallons per minute:
  - \*Fixed displacement vane pump providing 5 gallons per minute at 725 engine rpm and 8 gallons per minute at 1050 engine rpm with a 103% pto.
- Upgrade: Extra HD Outriggers
- Delete: Outrigger controls w/o tool outlets
- \* Delete: Tool Outlets at platform
- \* Delete: Boom Stow Interlock

# **UTILITY BODY**

168 inches long x 46 inches high x 94 inches wide Chassis cab to axle (CA) of 120 inches with dual rear wheel axle.

# **Body Dimensions:**

- 46 Inches Compartment height
- 18 Inches Compartment depth
- 58 Inches Load space width
- 28 Inches Top of body to the top of the floor
- 24 Inches Horizontal compartment height
- 4 Inches Wheel well box height

### **Body Materials:**

- 16 gauge galvanneal. Main body material
- 12 gauge hot rolled treadplate compartment tops with 45 degree drip edge.
- 18 gauge galvanneal Inner door panels
- 18 gauge galvanneal Outer door panels
  - 5/16" Stainless Steel continuous rod Door Hinge Rod.
  - Stainless Steel Door Hinge Sockets.
- 14 gauge galvanneal Wheel Panels
- 14 gauge galvanneal Front bulkhead
- 18 gauge galvanized Shelving & dividers.

### Subframe Installation:

- Install customer supplied subframe, with outriggers attached, to body (include tie down kit if necessary).

# Body Floor and Understructure:

- Cut out in bed area floor for customer supplied aerial/digger
- 12 gauge hot rolled treadplate Floor
- 6 Inch structural steel channel full frame.

#### Accessories:

- Automotive rotary type door latches.
- Chain stops on all doors.
- Rubber rolled crown type fenders.
- Automotive Bulb Type Weatherstripping.
- Master door lock system.

### Paint:

- Prime Paint Complete (Sherwin Williams E2A933) 2 to 3 mil. Dry

# Streetside Compartmentation

### 1st Vertical:

30" Wide x 46" High x 18" Deep

- Five (5) 3/8" round stock fixed material hooks 1-3-1.

# 2nd Vertical:

30" Wide x 46" High x 18" Deep

- Two (2) adjustable shelves each with Five (5) adjustable dividers

#### 3rd Vertical:

30" Wide x 46" High x 18" Deep

- Two (2) adjustable shelves each with Five (5) adjustable dividers

# Horizontal Compartment:

54" Wide x 24" High x 18" Deep

- Eight (8) adjustable dividers installed on compartment bottom

### Rear Vertical:

24" Wide x 46" High x 18" Deep

- Five (5) 3/8" round stock fixed material hooks 1-3-1.

### Hotstick Shelf:

168 Inch long shelf installed on the streetside with a rear dropdown access door.

- Automotive rotary type door latches.
- Automotive Bulb Type Weatherstripping.

### **Curbside Compartmentation**

### 1st Vertical:

30" Wide x 46" High x 18" Deep

- Five (5) 3/8" round stock fixed material hooks 1-3-1.

Curb Side Access 30" Wide

Gripstrut access steps to bed area with

12 gauge galvanneal risers and side kickplates.

Two (2) grabhandles at the side access of the body.

One (1) cable type access step under the side access steps.

### 3rd Vertical:

30" Wide x 46" High x 18" Deep

- Two (2) adjustable shelves each with Five (5) adjustable dividers

### Horizontal Compartment:

54" Wide x 24" High x 18" Deep

- One (1) adjustable shelf with Eight (8) adjustable dividers

#### Rear Vertical:

24" Wide x 46" High x 18" Deep

- Five (5) 3/8" round stock fixed material hooks 1-3-1.

#### Tailshelf:

- 12 Ga. treadplate tailshelf 30 inches long X 94 inches wide x 6 inches high with smooth sides. 6 Inch structural steel channel full frame.

# Tailshelf Rear Lighting:

- 94" Wide 7-Lamp light bar installed at rear of tailshelf
- Rubber mounted recessed rear lighting kit with harness Installed
- Two (2) stop/tail/turn lights Peterson Brand M-426-R Incandescent
- Two (2) clear back up lights Peterson Brand M-415 Incandescent
- Two (2) front clearance lights reflector style- Peterson Brand M-143-A Incandescent
- 8 foot wire coil in front compartment.
- Two (2) side clearance lights reflector style- Peterson Brand M-143-R Incandescent
- Two (2) rear clearance lights reflector style Peterson Brand M-143-R Incandescent
- Three (3) light center cluster reflector style- Peterson Brand M-143-R Incandescent
- 7-Lamp light wiring harness.

# Wheel Chock Storage:

- Two (2) built into body fender panel on streetside and curbside.

. . . . .

# **INSTALLATION AND ACCESSORIES**

- 1 Install Aerial Device Behind Cab And Install All Associated Components:
  - \* Final test and inspect completed unit including stability and dielectric testing per manufacturers requirements and ANSI/SIA A92.2-2009.
- 1 Hose and fittings to connect the hydraulic system from the oil reservoir to the pump and unit.
- 1 Platform rest, bottom base
- 1 DOT Inspection.
- 1 Set chassis parameters.
- 1 Power take off with indicator light for automatic transmission.
- 1 Back-up alarm to sound when the vehicle is shifted into reverse.
- 4 Laminated wood outrigger pad 24" x 24" x 2-1/4" with rope handle.
  - \* Includes outrigger pad storage.
- 4 Rubber wheel chocks with eye bolt.
- 2 Cable type gripstrut stirrup step.
- 1 Rigid stirrup step mounted on side access for ground to body access.
- 1 Access step mounted on floor of the body to access the top of body compartment.
- 1 Access steps to platform from top of body or flatbed floor.
- 4 Grab Handles
- One pair of mud flaps with logo 30" tall.

Note: Trim As-Required.

- 1 Bracket for storing grounding cable.
- 1 2/0 Black Electrical Cable used for grounding per ASTM F855-04:
  - \* 50' of multi-strand flexible copper cable, three grounding lugs, two ferrules and grounding clamp.
  - \* Three point grounding system for grounding vehicle during work operations.
  - \* Cable must be fully removed from bracket before use.

NOTE! Purchaser to verify this meets their company's requirements for fault current.

Boom rest for Aerial, H-frame style weldment used on A-frame, Radials or Out/Down outriggers, 36" wide.

Qty.	Description
1	Lighted license plate bracket kit.  * Light is incandescent.
2	Preco 4242A amber strobe light with 4" tall & 6" dia. lens, and Preco BG4240 branch guard
2	Strobe mounting bracket weldment.
1	Remote engine stop / start from rear of vehicle.
1	15 ton pintle hook:  * Safety chain eyes.  * Chassis frame reinforcements.
1	Front Mounted Winch With Cone Holder
1	Horizontal Ladder Rack * Located on Street side on Body
1	Rubber Blanket Box
1	Rope Rail
1	Bench Vise * Mounted to Tail Shelf
1	Bumper Sticks * Steel
1	Chainsaw Box
1	Wire Reel Holder
2	LED Strobe Lights * Mounted on Boom Rest
1	Flood Lights
1	LED Lights in Cabinets
1	Wireless Spot Light * Go Light
1	LED Lights Front and Rear
1	LED Traffic Advisor
1	1800 Watt Power Inverter
1	Grab Handles, Steps and Stair Painted Red

<b>Qty.</b> 1	Description Paint line body one color *Note - Paint under carriage black.
1	Paint TC aerial device one color. Paint body floor with non-skid paint.
1	Paint compartment top with non-skid paint.
1	ICC rear bumper.
1	7-prong trailer socket.
1	Safety Kit consists of the following: *5-lb ABC fire extinguisher with bracket. *James King triangle reflector kit.
	Changes to FSA Install Spec per Customer Spec
*	Delete: Bumper Sticks
*	Delete: Wire Reel Holders
*	Delete Front Mounted Winch With Cone Holder
*	Delete Horizontal Ladder Rack
*	Delete Rubber Blanket Box
*	Delete Rope Rail:
*	Delete Bench Vise
*	Delete Chainsaw Box
*	Delete Flood Lights
*	Delete LED Lights in Cabinets
*	Delete Wireless Spot Light * Go Light
*	Delete1800 Watt Power Inverter

Delete Grab Handles, Steps and Stair Painted Red

# Qty. Description CHASSIS

2015 TL50 on 2015 4x2 Freightliner to include all options as discussed in FSA sheet

Sales Price: \$174,800.00

### Notes:

- 1. Prices are FOB St. Augustine Fl.
- 2. Prices exclude any applicable taxes or license fees.
- 3. If Federal Excise Tax has not been included, you could still responsible unless a current exemption/resale certificate must be on file or provided with purchase order for tax exempt sale. Federal Excise Tax will be added if certificate is not supplied with order.
- 4. Terms: Net 30 days with pre-approved credit.
- 5. Chassis pricing is based upon current model year production availability. Any Federal mandated costs, such as 2010 emission requirements, will be passed on at cost.
- 6. Chassis payment is due upon chassis receipt at our facility.
- 7. Quotation good for 30 days. Contact us for a possible extension if required.
- 8. It is vital that we build your new unit(s) to the specifications and approved drawings as required to meet your expectations. Once the final drawings are approved and the unit(s) are in production, any changes made will result in delays and cost not only to Terex Utilities, Inc. but to you our customer. Please avoid or minimize any changes possible during our production process. Note: change orders will be billed at our "Premium Rates".
- 9. The following items must be considered by the purchaser if not already included: Back-up Alarm \$150.00; Strobe Light \$525.00; Wheel Chocks \$110.00; Outrigger Pads \$200.00 to \$650.00 (based on pad size & type); Truck Grounding Cable \$550.00; Barricade Kit \$895.00; Hydraulic Over Load Protection (derrick only, price will vary based on final option selection); Boom / Boom Stow Interlock \$700.00; Engine Stop / Start \$200.00 to \$795.00 (based on unit model); Auxiliary Let Down \$1500.00; and Platform Liner \$380.00 to \$625.00 (based on platform size).
- 10. Delivery from receipt of order shall generally be 180-240 days, provided, that (1) the chassis is received by Seller a minimum of 90 days prior to scheduled delivery, (2) drawings are sent timely and the approved drawings are returned to Seller by requested date and (3) vendor supplied chassis are order timely and suppliers delivery schedules will meet the customers delivery date or customer supplied accessories are received by Seller by the date necessary to comply with scheduled delivery. Terex Utilities, Inc. makes every effort to meet the delivery commitments we provide to our customers. Unfortunately, if a chassis manufacturer fails to deliver the bare chassis to our plant for the installation of our equipment, we cannot deliver a finished product to you, our customer. Recent inconsistencies by some chassis manufacturers have forced us to include this disclaimer in every bid. If a chassis manufacturer halts or delays production for any reason, Terex Utilities, Inc. cannot be held responsible.
- 11. Chassis requires clean frame rails, side and top. Relocation of chassis components, to facilitate equipment installation, will be in addition to above quoted price.
- 12. Trade-in conditions:
  - a. Trade-in becomes a part of this contract with acceptance of this quotation unless otherwise agreed.
  - b. Trade-in shall be maintained in a condition consistent with that at time of bid. Normal wear and tear is expected. Vehicle must meet all DOT requirements at time of delivery including but not limited to: tires, brakes, lighting, glass, etc.
  - c. All accessories shall remain with unit unless agreed upon at time of evaluation.

- d. Trade-in, title and unit operation, maintenance, and parts manual shall be transferred at time of new unit delivery.
- e. We reserve the right to adjust our trade-in allowance if these conditions are not met.
- f. You hereby warrant to Terex that: (a) You have the right, power, and authority to sell the trade-in; (b) the trade-in is free and clear of all liens, encumbrances, and any claims of third parties; (c) good title to the trade-in will pass to Terex; and (d) all information you have provided related to the trade-in is true and correct.
- 13. Terex South Dakota, Inc. is ISO 9001:2000 Certified.

	Accepted By:
Account Manager – Andrew Kurz	PO Number:
Account Manager – Andrew Ruiz	Date: