WHEEL LOADER 966H

I. GENERAL:
This standard is intended to provide specifications for the procurement of Caterpillar Model 966H Wheel Loaders that meet specific area operational requirements for JEA / SJRPP. This type of Wheel Loader shall be utilized for bulk material handling to support operational needs for the solid fuel units or any other earth moving type work in or around the plants.

II. DESCRIPTIONS FOR CATERPILLAR MODEL 966H WHEEL LOADER:
The following shall be provided:

II.1. ENGINE:
The Cat C11 ACERT engine shall meet or exceed all EPA Tier 3/EU Stage IIIa emission specifications.

II.1.1. Engine Model: ...................................... Cat® C11 ACERT™
II.1.3. Net Power - ISO 9249: .......................... 262 hp
II.1.4. Net Power - SAE J1349: .......................... 259 hp
II.1.5. Net Power - 80/1269/EEC: .................. 262 hp
II.1.6. Peak Torque (Net) @ 1,400 RPM: ....... 896 ft-lb
II.1.7. Bore: .............................................. 5.12 in
II.1.8. Stroke: ............................................ 5.51 in
II.1.9. Displacement: .................................... 677 in³

- Caterpillar engine with ACERT™ Technology - EPA Tier III, EU Stage III Compliant
- These ratings apply at 1,800 rpm when tested under the specified standard conditions.
- Rating for net power shall be based on power available when the engine is equipped with alternator, air cleaner, muffler and on-demand hydraulic fan drive at maximum fan speed.

II.2. WEIGHTS:

II.2.1. Operating Weight: .............................. 52,254 lb
- As supplied with a 5.5 yd³ general purpose bucket with bolt on cutting edge.

II.3. BUCKETS

II.3.1. Bucket Capacities: .......................... 4.5 – 5.5 yd³
II.3.2. Max Bucket Capacity: ......................... 5.5 yd³

II.4. OPERATING SPECIFICATIONS:

II.4.1. Breakout Force: ...................... 42,300 lb
II.4.2. Static Tipping Load, Full Turn .......... 34,120 lb
- For 4.5 yd³ general purpose bucket with BOCE.
II.5. TRANSMISSION CAPABILITIES FOR 966H WHEEL LOADER SHALL MEET THE FOLLOWING:
   II.5.1. Forward 1: ................................. 4.2 mph
   II.5.2. Forward 2: ................................. 7.8 mph
   II.5.3. Forward 3: ................................. 13.7 mph
   II.5.4. Forward 4: ................................. 23.2 mph
   II.5.5. Reverse 1: ................................. 4.6 mph
   II.5.6. Reverse 2: ................................. 8.6 mph
   II.5.7. Reverse 3: ................................. 15.1 mph
   II.5.8. Reverse 4: ................................. 23.2 mph
   • Maximum travel speeds 23.5 R 25 tires.

II.6. HYDRAULIC SYSTEM FOR 966H WHEEL LOADER SHALL MEET THE FOLLOWING:
   II.6.1. Bucket/Work Tool System – Pump - ... 80.6 gal/min
   II.6.2. Steering System Pump Type: .......... Piston
   II.6.3. Hydraulic Cycle Time – Raise:........ 5.9 Seconds
   II.6.4. Hydraulic Cycle Time – Dump:........ 1.6 Seconds
   II.6.5. Hydraulic Cycle Time - Lower,........ 2.4 Seconds
           Empty, Float Down
   II.6.6. Hydraulic Cycle Time – Total:......... 9.9 Seconds
   • Implement System (Standard), Piston Pump - Rated at 2,100 rpm and 1,000
          psi.

II.7. BRAKE SYSTEM FOR 966H WHEEL LOADER SHALL MEET THE FOLLOWING:
   • Brakes: Break system shall meet OSHA, SAE J1473 OCT90 and ISO 3450-
         1985 standards.

II.8. AXLES FOR 966H WHEEL LOADER SHALL MEET THE FOLLOWING:
   II.8.1. Front: Axle: ................................. Fixed
   II.8.2. Rear Axle: .................................... Oscillating ± 13°
   II.8.3. Maximum Single-Wheel Rise and Fall: 19.88.5 in

II.9. CAB FOR 966H WHEEL LOADER SHALL MEET THE FOLLOWING:
   II.9.1. Cab for 966H Wheel Loader shall be constructed with:
   • Integrated Rollover Protective Structure (ROPS) which meets SAE J1040
         APR88 and ISO 3471:1994 criteria.
   • Falling Objects Protective Structure (FOPS) shall meets SAE J231
         JAN81 and ISO 3449:1992 Level II criteria.
   • Operator sound pressure level measured according to the procedures
         specified in ISO 6394:1998 at 72 dB(A) when properly installed,
         maintained and tested with the doors and windows closed.
   • The sound pressure level shall be 111 dB(A) when measured according
         to the static test procedure and conditions specified in ISO 6395:1998
         for a standard machine configuration.
II.10. SERVICE REFILL CAPACITIES:
   II.10.1. Fuel Tank – Standard: .......................... 100.4 gal
   II.10.2. Engine Cooling System: ...................... 10.3 gal
   II.10.3. Engine Crankcase: .............................. 9.25 gal
   II.10.4. Transmission: ................................. 11.62 gal
   II.10.5. Front Differentials and Final Drives...... 16.9 gal
   II.10.6. Rear Differentials and Final Drives ...... 16.9 gal
   II.10.7. Hydraulic Oil Tank: ............................ 29 gal

III. STANDARD EQUIPMENT:
The following standard equipment shall be provided for the 966H Wheel Loader:

III.1. ELECTRICAL:
   III.1.1. Alarm, back-up
   III.1.2. Alternator, 80-amp brushless
   III.1.3. Batteries, Maintenance free (2) 1400 CCA
   III.1.4. Ignition key; start/stop switch
   III.1.5. Lighting system, halogen (6 total)
   III.1.6. Main disconnect switch
   III.1.7. Receptacle, starting, 24-volt
   III.1.8. Starter, electric, heavy-duty
   III.1.9. Starting and charging system (24-volt)

III.2. OPERATOR ENVIRONMENT
   III.2.1. Air conditioner, heater and defroster
   III.2.2. Bucket/work tool function lockout
   III.2.3. Cab, pressurized and sound-suppressed ROPS/FOPS
      III.2.3.1. Radio-ready (entertainment) includes antenna, speakers and converter
                  (12-volt, 10-amp)
   III.2.4. Cigar lighter and ashtray (12-volt)
   III.2.5. Coat hook (2) with straps
   III.2.6. Computerized monitoring system
      III.2.6.1. Instrumentation, gauges:
         III.2.6.1.1. Digital gear range indicator
         III.2.6.1.2. Engine coolant temperature
         III.2.6.1.3. Fuel level
         III.2.6.1.4. Hydraulic oil temperature
         III.2.6.1.5. Speedometer/tachometer
         III.2.6.1.6. Transmission oil temperature
      III.2.6.2. Instrumentation, warning indicators:
         III.2.6.2.1. Axle oil temperature
         III.2.6.2.2. Electrical, alternator output
         III.2.6.2.3. Engine air filter restriction
III.2.6.2.4. Engine inlet manifold temperature
III.2.6.2.5. Engine oil pressure
III.2.6.2.6. Fuel level
III.2.6.2.7. Fuel pressure, hi/low
III.2.6.2.8. Hydraulic filter bypass
III.2.6.2.9. Hydraulic oil level
III.2.6.2.10. Parking brake
III.2.6.2.11. Primary steering oil pressure
III.2.6.2.12. Service brake oil pressure
III.2.6.2.13. Transmission filter bypass

III.2.7. Controls, electrohydraulic, lift and tilt function
III.2.8. Horn, electric (steering wheel/console)
III.2.9. Light, dome (cab)
III.2.10. Lunchbox, beverage holders and personal tray
III.2.11. Mirror, rearview (internally mounted)
III.2.12. Seat, Cat Comfort (cloth) with air suspension
III.2.13. Seat belt, retractable, 51 mm (2") wide
III.2.14. Steering column, adjustable angle (SW-CCS) and length (CCS)
III.2.15. Wet-Arm wipers and washers, front and rear Intermittent front wipers
III.2.16. Window, sliding (left and right side)

III.3. POWER TRAIN
III.3.1. Brakes, full hydraulic enclosed wet-disc with Integrated
III.3.2. Braking System (IBS) and brake wear indicator
III.3.3. Engine, Cat C11 with ACERT™ Technology and ATAAC
III.3.4. Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand
III.3.5. Filters, fuel, primary/secondary
III.3.6. Filters, engine air, primary/secondary
III.3.7. Fuel priming pump (electric)
III.3.8. Muffler, sound suppressed
III.3.9. Radiator, unit core
III.3.10. Starting aid, ether (ready)
III.3.11. Switch, transmission neutralizer lockout
III.3.12. Torque converter, free wheel stator
III.3.13. Transmission, automatic, planetary power shift (4F/4R)
III.3.14. Variable Shift Control (VSC)

III.4. OTHER
III.4.1. Automatic bucket positioner
III.4.2. Counterweight
III.4.3. Couplings, Caterpillar O-ring face seal
III.4.4. Doors, service access (locking)
III.4.5. Ecology drains, engine, transmission and hydraulics
III.4.6. Fenders, steel (front and rear)
III.4.7. Guard, airborne debris
III.4.8. Hitch, drawbar with pin
III.4.9. Hood, non-metallic, power tilting
III.4.10. Hoses, Caterpillar XT™
III.4.11. Hydraulic oil cooler
III.4.12. Kickout, lift and tilt, automatic (in-cab adjustable)
III.4.13. Linkage, Z-bar, cast crosstube/tilt lever
III.4.14. Oil sampling valves
III.4.15. Product Link ready
III.4.16. Remote diagnostic pressure taps
III.4.17. Service center, electrical and hydraulic
III.4.18. Sight gauges:
   III.4.18.1. Engine coolant
   III.4.18.2. Hydraulic oil
   III.4.18.3. Transmission oil level
III.4.19. Steering, load sensing
III.4.20. Vandalism protection caplocks

III.5. TIRES, RIMS, WHEELS
III.5.1. Wheel Loader shall be supplied with 26.5 R25 XHA MX L3 Tires, rims and wheels as needed

III.6. ANTIFREEZE
III.6.1. Premixed 50% concentration of Extended Life Coolant with freeze protection to -34°C (-29°F)

IV. OPTIONAL EQUIPMENT:
IV.1. Autolube – Lincoln Lube System
IV.2. Bucket – GP 4.5 CYDS (5.5 CYD with BOCE)
IV.3. Bucket Ground Engaging Tools (GET) Bolt-on Cutting edge
IV.4. Cooling, high-ambient, 50° C (122° F)
IV.5. Drain, axle ecology
IV.6. Fenders, roading
IV.7. Glass, cab, rubber-mounted
IV.8. Guard, power train
IV.9. Hydraulic arrangement, three-valve
IV.10. Joystick control, two- or three-valve
IV.11. Lights, directional
IV.12. Lights, high intensity discharge (HID)
IV.13. Lights, roading
IV.14. Lights, work, cab-mounted
IV.15. Mirrors, external
IV.16. Precleaner, turbine
IV.17. Product Link
IV.18. Remote pressure taps, transmission
IV.19. Ride Control System, two-valve
IV.20. Seatbelt, 76 mm (3") wide
IV.21. Steering, Command Control System
IV.22. Switch, lift lever FNR (steering wheel machines)
IV.23. Sun visor, front
V. TIRES:

26.5R25 XHA MX L3

VI. DIMENSIONS:

All dimensions are approximate.

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1. Height to top of ROPS 11'10"
2. Height to top of exhaust pipe 11'9"
3. Height to top of hood 8'9"
4. Ground clearance with 26.5R25 L4 Firestone (see tire chart for other tires) 1'8"
5. B.Pin height 13'10"
6. Center line of rear axle to edge of counterweight 3'1"
7. Wheelbase 11'4"
8. B.Pin height @ carry 1'8"
9. Center line of rear axle to hitch 5'8"
10. Rack back @ maximum lift 60.0
11. Dump angle @ maximum lift 45
12. Rack back @ carry 47.4
13. Rack back @ ground 41.8
14. Height to center line of axle 2'8"
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