

**Used MODEL A30G ARTICULATED HAULER OR EQUIVALENT
Minimum Bid Specifications**

- Unit bid shall be currently advertised and produced model with all the latest standard features whether or not called for in these specifications. Standard equipment shall be defined in current manufacturer’s literature. (Provide current brochure / specifications of the unit bid)
- Indicate compliance with checking either a YES or NO answer.
- A 'YES' answer indicates 100% compliance with the entire statement. Manufacturer's bid is allowed to meet, or exceed, stated specifications, unless otherwise quantified.
- Explain all 'NO' answers in detail in the section at the end, clearly referencing the relevant non-conforming item(s) by section and item number.

	COMPLIANT?	
	YES	NO
A) GENERAL:		
Articulated Hauler bid shall consist of a diesel engine driven, six-wheel drive articulated hauler. Unit bid shall be a currently advertised and produced model with all the latest standard features whether or not called for in these specifications, except where this specification requires substitution in lieu of manufacturer's standard. (Attach current model brochure/specifications).	_____	_____
B) ENGINE:		
1. Unit shall have an electronically controlled, direct injected, turbocharged and intercooled diesel engine, with grouped oil filters for ease of service, which delivers net power not less than 355 hp (265 kW) per SAE J1349.	_____	_____
2. The cooling system shall include two hydraulically driven, variable-speed cooling fans.	_____	_____
3. The engine shall be certified low-emission type and meet all US (EPA) Tier4F emission regulations.	_____	_____
4. The engine has light EGR (Exhaust Gas Recirculation) and exhaust after treatment with EAT-Muffler (Exhaust After treatment) including SCR (Selective Catalytic Reduction) with an electronically controlled UDS (Urea Dosing System).	_____	_____
C) TRANSMISSION:		
1. Transmission shall be fully automatic, computer controlled, planetary gear design, with a minimum of 6 forward gears and 2 reverse gears. Torque converter with automatic lock-up is required. The transmission control must include an operator-controlled shift inhibitor switch to control up shifting.	_____	_____
D) DROPBOX:		
1. Dropbox shall be of, in-line design, single stage, with high ground clearance and 100% longitudinal "dog clutch" type differential lock.	_____	_____
E) AXLES AND DIFFERENTIALS:		
1. All axles shall have heavy duty, purpose built Volvo designed fully floating drive shafts with planetary gear hub reduction and 100% “dog clutch” type differential lock.	_____	_____
2. Machine must have flexible drive combinations and be able to shift between 6X4 and 6X6 drive mode.	_____	_____

3. The machine should be equipped with an **Automatic Traction Control system (ATC)** which are 100% lockable, no-slip, no-wear differential locks. The machine automatically engaging/disengaging all-wheel drive via the longitudinal differential lock and the 6x6 clutch, without operator intervention.

4. All longitudinal and transverse differential locks, can be activated and deactivated manually via a floor switch in the cab.

F) BRAKES:

1. Fully Hydraulic, wet disc brakes on all six wheels.

2. Braking shall comply with ISO 3450. Service brakes shall consist of a dual circuit system, one for front axle and one for rear bogie unit.

3. Emergency/parking brake shall be spring-applied, air-released disc brake on the propeller shaft independent of service brakes. Automatic application when machine is turned off.

4. An engine retarder system consisting of a compression brake combined with an exhaust brake that can be automatically engaged when the throttle pedal is released.

5. **A load and dump brake**, independent of the parking brake and operator selectable, with an automatic application of the service brakes and shifting the transmission to neutral. Selecting a gear deactivates the function, releasing the brakes.

G) HYDRAULIC SYSTEM:

1. A closed center, load sensing hydraulic system is required and shall consist of engine-driven, variable-displacement piston pumps, with a ground-dependent hydraulic pump for supplementary steering. Steering: two double-acting cylinders. Body Dump System: two single-stage, double-acting cylinders.

2. Shall be equipped with a detent body lowering function and an in cab adjustable tipping angle function, to limit machine height.

H) STEERING:

1. The Hauler shall have **hydro-mechanical, self-compensating** articulated steering with mechanical feedback and ± 45 degree steering angle. The steering system and back-up secondary steering system complies with ISO 5010.

I) ELECTRICAL SYSTEM:

1. A 24-volt electrical system shall be provided. An alternator with a minimum rating of 80 amps. Batteries shall be rated a minimum of 170 Ah per battery.

J) CAB:

1. A pressurized, heated, electronic climate control system including air conditioning, and filtered air cab. ROPS/FOPS tested and approved in accordance with SAE J1040/ISO 3471 and SAE J231/ISO 3449 standards.

2. Cab shall have a centrally positioned operator position above the front axle and a full-glass door feature for excellent visibility and a reverse camera with an in cab color monitor.

3. The cab shall be insulated to minimize noise with internal sound level maximum of 74 dB (a) per ISO 6396 standard.

- 4. The operator’s seat is to be air suspended, heated, with a wide range of adjustments to suit any individual taste with a retractable seat belt. Trainer’s seat with seat belt shall be fitted as standard. _____
- 5. Cab instrumentation shall include gauges for, fuel level, brake pressure, transmission oil temperature, speedometer and malfunctions indicator that alert the operator if something is abnormal. _____
- 6. An on-board, electronic machine monitoring system with a large color monitor which can display text information and symbols. It should continuously provide valuable information such as fuel consumption; haul cycle time and distance and grade inclination. _____

K) SUSPENSION

- 1. Rear suspensions should be 100% maintenance free and must be 3-point axle mounting, allowing individual wheel movement independent of the frame and utilize cross stabilizers. _____
- 2. Front suspension must be a 3-point axle mounting progressive gas-hydraulic system, allowing individual wheel movement. _____

L) TIRES

- 1. Tires must be tubeless radial articulated hauler type. Size: 23.5R25 or 750/65R25. _____

M) BODY

- 1. Body volume, heaped SAE 2:1, shall be a minimum of 22.9 cubic yards. _____
- 2. Payload capacity must be a minimum of 31.0 tons. _____
- 3. The body shall have minimum hardness of 400 HB, yield strength of 145,000 psi, and tensile strength of 181,000 psi. _____
- 4. Body plate thickness shall be a minimum: Front 0.31 in. (8mm), Sides 0.47 in. (12mm), and Bottom/Chute 0.55 in. (14mm). _____
- 5. Body dumping angle shall be a minimum of 70 degrees. _____
- 6. Loaded tipping and lowering time, combined, shall be no more than 22 seconds. _____

N) SERVICE/MAINTENANCE

- 1. No daily or weekly greasing should be required. _____
- 2. All grease points and remote mounted drains must be accessible from ground level or non-slip platforms. _____
- 3. Machine must be equipped with a 90 degree tilting hood and a swing down front grill with integrated steps, acts as a service platform. _____
- 4. The rotating hitch must be 100% maintenance free, fully sealed, with permanently greasing. _____

Bid shall be sealed and marked “Used Haul Truck”. Bids will be opened and read aloud at Region 2000 Services Authority office located at 361 Livestock Road , Rustburg VA 24588 @ 2pm September 12, 2016. Bid received after 2pm will not be considered.

Please Contact Larry “Buzz” Hall @434-455-6334 with any questions