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WHEEL LOADER SPECIFICATIONS

SPECIFICATIONS		YES	NO	DEVIATION
ENGINE MODEL				
1	Gross Power: 146 hp			
2	Rated Net Power @ 1,800 rpm: ISO 9249 (1977)/EEC 80/1269 142 hp			
3	Maximum Gross Torque: 534 lbf-ft			
4	Maximum Net Torque: ISO 9249 (1977)/EEC 80/1269 520 lbf-ft			
5	Displacement: 402 in³			
6	Bore: 4 in			
7	Stroke: 5 in			
BUCKETS				
8	General Lift: 2.5-3.3 yd³, Fusion bucket, bolt-on cutting edges, additional guarding, 176 lb Fusion bucket, bolt-on cutting edges, additional guarding, 176 lb operator			
WEIGHTS				
9	Operating weight – Standard Lift: 28,360 lb			
STEERING				
10	Steering articulation angle each direction: 40°			
11	Steering cylinder: double acting			
	Bore diameter – 2.8 in			
	Rod diameter – 1.6 in			
	Stroke – 17.2 in			
	Maximum flow – steering pump: 34 gal/min			
	Maximum working pressure – steering pump: 3,500psi			
12	Maximum steering torque:			
	0° (straight machine) 35,155 lbf-ft			
	40° (full turn) 27,747 lbf-ft			
13	Steering cycle times (full left to full right):			
	800 rpm: pump flow limited 2.8 seconds			
	1,800 rpm: 90 rpm steering wheel speed 2.4 seconds			
14	Number of steering wheel turns:			
	Full left to full right or full right to full left – 3.5 turns			
15	Steering systems shall use a dedicated load sensing variable displacement pump with dual Double acting cylinders.			
LOADER HYDRAULIC SYSTEM				
16	Maximum flow: 40 gal/min			
	3rd function maximum flow – 40 gal/min			
	4th function maximum flow – 20 gal/min			
17	Maximum working pressure: 3,771 psi			
18	Relief pressure – tilt cylinder: 4.061 psi			
	3rd function maximum working pressure – 3,771 psi			
	3rd function relief pressure – 4061 psi			
	4th function maximum working pressure – 3,771 psi			
	4th function relief pressure – 4061 psi			
19	Lift cylinder: double acting:			
	Bore diameter – 4.3 in			
	Rod diameter – 2.4 in			
	Stroke – 28.7 in			
20	Tilt cylinder: double acting:			
	Bore diameter – 5.1 in			
	Rod diameter – 2.8 in			
	Stroke – 21.9 in			

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LOADER HYDRAULIC SYSTEM CONTINUED			
21	Hydraulic cycle times (1,800 rpm):		
	Raise (ground level to maximum lift) – 5.5 seconds		
	Dump (at maximum lift height) – 1.5 seconds		
	Float down (maximum lift to ground level) – 2.6 seconds		
	Total cycle time – 9.6 seconds		
22	Hydraulic cycle times (1,000 rpm):		
	Raise (ground level to maximum lift) – 9.6 seconds		
	Dump (at maximum lift height) – 3.0 seconds		
	Float down (maximum lift to ground level) – 2.6 seconds		
SERVICE REFILL CAPACITIES			
23	Fuel tank – 51.5 gal		
24	Cooling system – 7.9 gal		
25	Engine crankcase – 5.3 gal		
26	Transmission (gear box) – 2.2 gal		
27	Axles:		
	Front – 5.5 gal		
	Rear – 5.5 gal		
28	Hydraulic system (including tank) – 42.3 gal		
29	Hydraulic tank – 23.8 gal		
TRANSMISSION			
30	Forward		
	Range 1* - 0.6-8.0 mph		
	Range 2 – 8 mph		
	Range 3 – 17 mph		
	Range 4 – 25 mph		
31	Reverse		
	Range 1* - 0.6-8.0 mph		
	Range 2 – 8 mph		
	Range 3 – 17 mph		
	Range 4 – 25 mph		
	*Provide Creeper control that will allow maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the secondary display when equipped.		
	Factory default shat be set at 7/km/h (4.4 mph).		
POWER TRAIN			
32	Front axle – Fixed		
33	Traction aid – Locking differential standard		
34	Rear axle - Oscillating		
	Oscillation with 17.5 tires – plus or minus 13 degrees		
	Oscillation with 20.5 tires – plus or minus 11 degrees		
35	Traction aid – Limited slip differential		
36	Brakes		
37	Service brakes – Inboard wet disc		
38	Park brake – Spring applied/hydraulically released		
TIRES			
39	Standard tire – 20.5 R25, radial (L-3) or 17.5 R25, radial (L-3)		
40	ROPS – SAE J1040 MAY94, ISO 3471-1994		
41	FOPS – SAE J/ISO 3449 APR, Level II, ISO 3449 1992 Level II		
	<ul style="list-style-type: none"> • Cab and Rollover Protective Structures (ROPS) are standard • Falling Objects Protective Structures (FOPS) 		

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OPERATING SPECIFICATIONS			
42	Tipping load: straight (ISO 14397-1) – 19,051 lb		
43	Tipping load: full turn (ISO 14397-1) – 16,352 lb		
44	Clearance: full lift and 45° dump – 9 foot 5 inches		
45	Reach: full lift and 45° dump – 3 foot 4 inches		
MANUALS			
	i) Operator manual - 1 copy for unit ordered (English)		
	ii) Workshop Manual - 1 copy for unit ordered		
	iii) Parts manual - 1 copy for unit ordered		
	B. Provide current brochure on vehicle and options		
	C. Provide "line sheet" for unit on delivery, detailing component details, belt part #'s, filter numbers, etc. to assist with future parts and service issues		
	D. A pre-build meeting shall be held via teleconference or in person approximately 2 weeks after award of tender		
	E. Project progress reports		
	i) the winning vendor at point of construction is to provide a production schedule		
	iii) the first report will be at approximately the 50% completion point		
	iv) the second report will be at approximately the 85% completion point		
	vi) the reports are to show where the project is on the production schedule and if on, behind, or ahead of schedule		
	vii) photos and other related information to be included in the email as required		
	F. Training - detail the level of training provided at delivery of the unit, both for the operators and mechanics in Bermuda		
	G. Online and telephone technical support direct from the manufacturer available to Quarry Depot for the lifetime of the vehicle.(15 years)		
	H. All operating manuals, workshop manuals, technical back-up and training to be provided in the English language.		

USED EQUIPMENT

OPTIONS	YES	NO	DEVIATION
PURCHASE OF ON-THE- LOT or LOW HOUR USED EQUIPMENT			
The Ministry of Public Works is interested in pursuing the option of buying "low hours", on - the - lot or demonstrator equipment.			
if in the best interest of the Government of Bermuda			
Minor variations from the specifications will be considered			
If you have any which you feel meets the specifications, please complete a separate tender form, including full specifications and any deviations.			
A. Maximum 500 hours on unit. Specify actual --->			
B. Full chassis warranty is required			
C. Please complete pricing sheet for each unit available			

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SPARE PARTS

SPARE PARTS REQUIREMENTS			
Maximum fork height (top of forks)			
Fuel filters			
Air filters			
Oil filters – Motor/Hydraulic etc.			
Brake pads/shoes (complete axle set front \$.....and rear \$.....)			
Wheel cylinders/caliper (front each axle set\$..... rear each axle set \$)			
Brake discs/drums (front each axle set\$..... rear each axle set \$)			
E. Spares available for at least 15 years with prices held to above plus increases in line with the consumer price index			
F. Spares available from East Coast North America with national distribution and warehousing			
G. Provide Bermuda's user's list for this type of unit. Telephone numbers and contact names may be required to confirm performance and suitability of unit in our operating conditions			

SHIPPING

COSTS			
iii) all travel and carriage costs			
iv) all insurance costs			
v) all bonding costs			
vi) all costs of delivery to the Town			
vii) all costs of installation and set-up, including any pre-delivery inspection charges and all other			
viii) including any fees or other charges required by law			
B. Change orders			
i) work on changes or additions cannot start until the change is approved through the appropriate levels within the City			
ii) all changes requested must be approved through the City Fleet Services department prior to commencing work			
iii) the vender can start work on the requested change once the PO has been adjusted to include all new items and costs and after instructed by City Fleet Services personnel			
C. Completed vehicle supplied in compliance with Bermuda Motor Traffic Act, Environmental and TCD regulations			
D. Delivered vehicle to be ready for motor vehicle registration in Bermuda, including all inspections as required.			
TRAINING			
Diagnostic Equipment			
Serviceability			
Maintenance			
Repair			