



**AUTOMIZER HELPING-HAND  
 BID SPECIFICATIONS  
 CAPACITY 24 CU.YD.**

**YES NO OFFERED**

**1- Body capacity**

**The body has a rounded shape enhancing resistance to deformation, durability and better legal payload.**

The minimum capacity of the body, excluding hopper area is:	20 cu.yd	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hopper capacity is:	6.5 cu.yd	<input type="checkbox"/>	<input type="checkbox"/>	_____
The capacity of the tailgate is:	4 cu.yd	<input type="checkbox"/>	<input type="checkbox"/>	_____

**2- Body dimensions**

**The body is rounded for better resistance**

		<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--	--------------------------	--------------------------	-------

**The body is tapered (walls and roof) to facilitate the unloading of the material and to increase compaction ratio.**

The total taper dimension of the body sides is:	7.325 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The inside body width at front is:	78 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The inside body width at rear is:	85.325 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The outside body width is:	96 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The inside body height at front is:	89 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The inside body height at rear is:	91.625 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The height tapering is:	2.625 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The outside body height above frame is:	102 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
The overall length including hopper is:	256 in	<input type="checkbox"/>	<input type="checkbox"/>	_____

**3- Body floor construction**

**The body floor is rounded.**

		<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--	--------------------------	--------------------------	-------

**The body floor thickness is:**

	0.157 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	----------	--------------------------	--------------------------	-------

**The body floor steel grade is:**

	Hardox 450	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	------------	--------------------------	--------------------------	-------

**The body floor yield strength is:**

	175,000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------------	--------------------------	--------------------------	-------

The body long sills dimensions are:

	HSS tubing 5 x 2 x 1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	---------------------------	--------------------------	--------------------------	-------

The body long sills yield strength is:

	50,000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	------------	--------------------------	--------------------------	-------

The hopper sump box volume is:

	45 gal	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--------	--------------------------	--------------------------	-------

The hopper sump box dimensions are:

	24 X 19 X 93 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-----------------	--------------------------	--------------------------	-------

Crossmember thickness is:

	0.250 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	----------	--------------------------	--------------------------	-------

Crossmember steel grade is:

	CSA G40.21 50W	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	----------------	--------------------------	--------------------------	-------

Crossmember dimensions are:

	21 5/8 x 2 15/16 x 8 5/1 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-----------------------------	--------------------------	--------------------------	-------

**4- Body side walls construction**

**The body walls are rounded and smooth, improving resistance and lightness.**

		<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--	--------------------------	--------------------------	-------

**They are in one piece, full length of the body to reduce welding seams.**

Body windows are installed on the front wall of the body, to indicate when body is full.

		<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--	--------------------------	--------------------------	-------

**A hinged door is installed to allow operator's access to the hopper on curbside.**

***Door on street side not accepted***

Upper wall corner is rounded for better resistance to compression and stress

		<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--	--------------------------	--------------------------	-------

Lower body walls thickness is:

	10 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------	--------------------------	--------------------------	-------

Lower body walls steel grade is:

	ASTM A1011 GR 80	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	------------------	--------------------------	--------------------------	-------

Lower body walls yield strength is:

	80 000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	------------	--------------------------	--------------------------	-------

Upper body walls thickness is:

	12 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------	--------------------------	--------------------------	-------

Upper body walls steel grade is:

	ASTM A1011 GR 80	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	------------------	--------------------------	--------------------------	-------

Upper body walls yield strength is:

	80 000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	------------	--------------------------	--------------------------	-------

The hopper lower sides thickness is:

	1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--------	--------------------------	--------------------------	-------

The hopper lower sides steel grade is:

	Hardox 450	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	------------	--------------------------	--------------------------	-------

The hopper sides yield strength is:

	175,000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------------	--------------------------	--------------------------	-------

Dimensions of body windows (2), are:

	8 x 8 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	----------	--------------------------	--------------------------	-------

The hopper upper left wall thickness is:

	10 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------	--------------------------	--------------------------	-------

The hopper upper right wall thickness is:

	10 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------	--------------------------	--------------------------	-------

The hopper walls upper part steel grade is:

	ASTM A1011 CS	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	---------------	--------------------------	--------------------------	-------

The hopper access door thickness is:

	10 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------	--------------------------	--------------------------	-------

The hopper access door steel grade is:

	ASTM A1011 CS	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	---------------	--------------------------	--------------------------	-------

The hopper access door dimensions:

	28 5/8 x 44 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	----------------	--------------------------	--------------------------	-------

Front bolster thickness is:

	12 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	-------	--------------------------	--------------------------	-------



**AUTOMIZER HELPING-HAND  
 BID SPECIFICATIONS  
 CAPACITY 24 CU.YD.**

		YES	NO	OFFERED
Front bolsters steel grade is:	ASTM A1011 CS	<input type="checkbox"/>	<input type="checkbox"/>	_____
Front bolsters dimensions are:	5 13/16 x 5 x 4 3/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Rear bolsters thickness is:	0.188 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Rear bolsters steel grade is:	ASTM A1011 CS	<input type="checkbox"/>	<input type="checkbox"/>	_____
Rear bolsters dimensions are:	7 x 9 x 8 13/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____

**5- Body roof construction**

Body roof is rounded and made of high yield steel for maximum resistance to stress		<input type="checkbox"/>	<input type="checkbox"/>	_____
The roof thickness is:	12 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
The roof steel is:	ASTM A1011 GR 80	<input type="checkbox"/>	<input type="checkbox"/>	_____
The roof yield strength is:	80 000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Rear bolsters steel grade is:	CSA G40.21 50W	<input type="checkbox"/>	<input type="checkbox"/>	_____
Rear bolsters thickness is:	3/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Rear bolsters dimensions are:	6 5/8 x 6 5/8 x 7 7/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____

**6- Hopper dimensions and construction**

<b>The hopper floor is made of abrasion resistant steel.</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The hopper floor steel grade is:</b>	Hardox 450	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The hopper floor thickness is:</b>	1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The hopper floor yield strength is:</b>	175,000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hopper depth curbside is:	40 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hopper depth streetside is:	77 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hopper length is:	73 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hopper width is:	72 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Follower panels thickness is:	3/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Follower panels steel grade is:	100QT	<input type="checkbox"/>	<input type="checkbox"/>	_____

**7- Rear tailgate**

The rear tailgate is operated by 2 hydraulic cylinders.		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The rear tailgate is equipped with automatic hydraulic locks and constant pressure system to allow leakproof joint</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Tailgate hydraulic line is equipped with flow restrictor to prevent sudden descent.</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>A channel mounted rubber seal is installed on the tailgate to prevent liquid leakage.</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The tailgate pivots around a fixed point preventing seal damage and friction against body</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
A cab mounted audible alarm is provided to indicate when the tailgate is unlocked.		<input type="checkbox"/>	<input type="checkbox"/>	_____
A manual tailgate control with safety protection is installed in the cab to prevent accidental activation.		<input type="checkbox"/>	<input type="checkbox"/>	_____
One tailgate safety prop is provided.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate length is:	33 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate side and rear thickness is:	12 ga	<input type="checkbox"/>	<input type="checkbox"/>	_____
The tailgate side and rear steel is:	ASTM A1011 GR 80	<input type="checkbox"/>	<input type="checkbox"/>	_____
The tailgate side and rear yield strength is:	80 000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate cylinders rods are:	Chrome-plated	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate cylinders bore diameter is:	2½ in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate cylinders rod diameter is:	1¾ in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate cylinders stroke is:	39 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate cycle time at idle is:	55 sec	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate side framing steel is:	AR200	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate side framing thickness is:	0.188	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate side framing is:	2 x 5 x 2 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate top framing steel is:	HSS tubing	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate top framing is:	4 X 4 X 3/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate bottom framing steel is:	HSS tubing	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate bottom framing is:	7 X 3 X 1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate hinge pins diameter is:	1 1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Tailgate rubber seal height is:	30 in	<input type="checkbox"/>	<input type="checkbox"/>	_____



**AUTOMIZER HELPING-HAND  
 BID SPECIFICATIONS  
 CAPACITY 24 CU.YD.**

**YES NO OFFERED**

**8- Packer**

<b>The packer face is 16" high providing 66 750 lbs of force on material</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Packer is operated by 2 single stage, double acting cylinders.</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
One complete set of packer controls located in cab is provided.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Emergency red button is provided to stop packer ram movement at any time.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Control buttons are industrial type,color coded and weather resistant.		<input type="checkbox"/>	<input type="checkbox"/>	_____
The packer is guided by 2 rails made of steel grade:	Hardox 500	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Wear plates thickness is:</b>	1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Rail dimensions are:</b>	3½ x2 3/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Packer wear shoes steel grade is:</b>	Hardox 450	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Packer wear shoes thickness is:</b>	3/8	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Packer cylinders rods are:</b>	Chrome-plated	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Cylinder bore diameter is:</b>	4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Cylinder rod diameter is:</b>	2½ in	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Cylinder stroke is:</b>	40 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Maximum operation pressure:</b>	3000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Average compaction of refuse is:	900 lbs/cu.yd	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing force:	66,750 lbf	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinder force:	75,400 lbf	<input type="checkbox"/>	<input type="checkbox"/>	_____
Inside width of packing ram is:	71 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Inside heigth of packing ram is:	16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing ram stroke is:	52 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing ram top steel grade is:	CSA G40.21 100QT	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing ram top thickness is:	1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing ram top yield strength is:	100000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing face plate steel grade is:	CSA G40.21 100QT	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing face plate thickness is:	1/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing face plate yield strength is:	100,000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packing ram swept volume is:	1.3 cu.yd	<input type="checkbox"/>	<input type="checkbox"/>	_____
Penetration of the ram into body is:	6 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packer cycle time, engine at idle, with arm in operation shall be:	18 sec	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packer length (including following panels)	55 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Red packer buttons diameter is:	2 3/4 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Others packer buttons diameter is:	1 9/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packer pins diameter is:	1 ¼ in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packer pins steel grade is:	HR 1045	<input type="checkbox"/>	<input type="checkbox"/>	_____

**9- Hydraulic system**

The hydraulic system is designed to allow easy maintenance		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Hydraulic system is composed of a double Denison vane pump, one section for the body functions and one for the arm. Pumps have a common suction port.</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The hydraulic pressure body line shall be equipped with a Denison relief valve R5P, a Denison vent valve VV01 with a 12 volts DC in line mounted solenoid to divert the flow back to tank when pump is not engaged, and a flow control block for system protection</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The hydraulic tank is pressurized for pump protection</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>The hydraulic tank is equipped with magnetic drain plug, oil level sight gauge and shut-off ball valve on suction line.</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Return line filter is tank mounted style</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
Return filter has a bypass valve and a differential pressure gauge.		<input type="checkbox"/>	<input type="checkbox"/>	_____
100 mesh suction strainer is installed in tank		<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic tubing is used where flexibility is not needed.		<input type="checkbox"/>	<input type="checkbox"/>	_____
All hydraulic tubes are zinc plated to prevent corrosion.		<input type="checkbox"/>	<input type="checkbox"/>	_____
All tubes are securely clamped to prevent vibration, abrasion and excessive noise		<input type="checkbox"/>	<input type="checkbox"/>	_____
All hoses are double braided minimum, high burst rated and abrasion resistant		<input type="checkbox"/>	<input type="checkbox"/>	_____
All hydraulic hoses meet SAE standards		<input type="checkbox"/>	<input type="checkbox"/>	_____
All hose bending radius respect manufacturer's requirements		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Hydraulic system operates at acceptable temperature without external cooler</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Quick disconnect fittings are provided so that a pressure gauge can be easily connected without using tools or hydraulic fittings removal.</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____



**AUTOMIZER HELPING-HAND  
 BID SPECIFICATIONS  
 CAPACITY 24 CU.YD.**

		YES	NO	OFFERED
<b>Hydraulic pump model is:</b>	Denison T6DC	<input type="checkbox"/>	<input type="checkbox"/>	_____
the excess flow back to tank over:	45 gpm	<input type="checkbox"/>	<input type="checkbox"/>	_____
Body functions pump maximum flow is:	20,0 gpm at 700 rpm	<input type="checkbox"/>	<input type="checkbox"/>	_____
Arm functions pump maximum flow is:	16.0 gpm at 700 rpm	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic system pressure relief valve for the body is :	2000 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic system pressure relief valve for the arm is :	2100 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic tank capacity for cab over is:	85 gal	<input type="checkbox"/>	<input type="checkbox"/>	_____
Maximum quantity of oil in hydraulic tank is:	74 gal	<input type="checkbox"/>	<input type="checkbox"/>	_____
The in tank return line filter capacity is :	150 gpm	<input type="checkbox"/>	<input type="checkbox"/>	_____
Nominal filtration rating :	5 mic	<input type="checkbox"/>	<input type="checkbox"/>	_____
Beta filtration ratio per ISO 16889 is:	Beta ratio10 ≥200	<input type="checkbox"/>	<input type="checkbox"/>	_____
Suction line strainer size is:	100 mesh	<input type="checkbox"/>	<input type="checkbox"/>	_____
Suction line strainer flow capacity:	100 gpm	<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic tank is baffled.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic tank is pressurized at:	5 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Return line filter cracking pressure is:	25 psi	<input type="checkbox"/>	<input type="checkbox"/>	_____
Pump drive shaft is:	HD Spicer 1310 Series	<input type="checkbox"/>	<input type="checkbox"/>	_____

**10- Automated arm "Helping Hand" Standard Reach**

<b>The automated arm is hydraulically operated and activated by an electro-proportional joystick located in the cab.</b>		_____
<b>The arm is mounted inside the hopper and is protected by a steel enclosure</b>		_____
<b>The gripper fingers use rubber straps to adapt to a wide variety of containers</b>		_____
<b>An integrated adjustable hydraulic cushioning valve is used</b>		_____
<b>shocks on the extension cylinder</b>		_____
<b>Joystick uses contactless Hall effect technology for better reliability.</b>		_____
<b>Joystick has a deadman switch to prevent accidental activation of the arm</b>		_____
<b>The center of the gripper is offset by a maximum of 24" from the center of the lift pivot point</b>		_____
<b>The arm is powder coated, high visibility safety yellow</b>		_____
Minimum bin size accepted by lifting mechanism is:	32 gal	_____
Maximum bin size accepted by lifting mechanism is:	95 gal	_____
Maximum lifting capacity at maximum reach is:	400 lbs	_____
Vertical dump height is:	91 in	_____
Maximum horizontal reach from side of vehicle is:	84 in	_____
Minimum horizontal reach from side of vehicle is:	0 in	_____
Lifting mechanism cycle time at minimum reach is:	8 sec	_____
Lifting mechanism cycle time at maximum reach is:	18 sec	_____
Unit weight, including valve is:	1425 lbs	_____
Flow to Helping Hand from the flow control is:	20 gpm @ 700 RPM	_____
Maximum operating pressure is:	2 000 PSI	_____
The length of warranty on the automated arm and its cylinders is:	1 year	_____

**10- Automated arm "Helping Hand" Long Reach (Optional)**

<b>The automated arm is hydraulically operated and activated by an electro-proportional joystick located in the cab.</b>		_____
<b>The arm is mounted inside the hopper and is protected by a steel enclosure</b>		_____
<b>The gripper fingers use rubber straps to adapt to a wide variety of containers</b>		_____
<b>An integrated adjustable hydraulic cushioning valve is used</b>		_____
<b>shocks on the extension cylinder</b>		_____
<b>Joystick uses contactless Hall effect technology for better reliability.</b>		_____
<b>Joystick has a deadman switch to prevent accidental activation of the arm</b>		_____
<b>The center of the gripper is offset by a maximum of 24" from the center of the lift pivot point</b>		_____
<b>The arm is powder coated, high visibility safety yellow</b>		_____
Minimum bin size accepted by lifting mechanism is:	32 gal	_____
Maximum bin size accepted by lifting mechanism is:	95 gal	_____
Maximum lifting capacity at maximum reach is:	400 lbs	_____
Vertical dump height is:	91 in	_____
Maximum horizontal reach from side of vehicle is:	120 in	_____
Minimum horizontal reach from side of vehicle is:	0 in	_____



**AUTOMIZER HELPING-HAND  
BID SPECIFICATIONS  
CAPACITY 24 CU.YD.**

**YES NO OFFERED**

Lifting mechanism cycle time at minimum reach is:	8 sec			
Lifting mechanism cycle time at maximum reach is:	22 sec			_____
Unit weight without grab and oil but including valve is:	1990 lbs			_____
Flow to Helping Hand from the flow control is:	20 gpm @ 700 RPM			_____
Maximum operating pressure is:	2 000 PSI			_____
The length of warranty on the automated arm and its cylinders is:	1 year			_____

**11- Body lifting mechanism**

The body hoist cylinder is front mounted with outer cover and top ported		<input type="checkbox"/>	<input type="checkbox"/>	_____
One safety prop is supplied to support the body in the raised position.		<input type="checkbox"/>	<input type="checkbox"/>	_____
A light and audible alarm in cab are provided to indicate when body is raised and remain activated until it is not completely down.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Body is raised by one single acting front mounted telescopic cylinder with:	4 sections	<input type="checkbox"/>	<input type="checkbox"/>	_____
Cylinder has a stroke of:	150 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Body cylinder bore diameter is:	6 1/2 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Body cylinder is:	Salt bath Nitrided	<input type="checkbox"/>	<input type="checkbox"/>	_____
Body dump angle is:	45 deg	<input type="checkbox"/>	<input type="checkbox"/>	_____
Body lifting cycle time is:	70 sec @ 850 RPM	<input type="checkbox"/>	<input type="checkbox"/>	_____

**12- Crusher panel**

Optional

An optional crusher panel is installed on the front wall of the body optimize the compaction of the material and to facilitate the transfer into the body.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Hydraulic protection is supplied to prevent dumping on top of the panel		<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel steel grade is:	A-569	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel thickness is:	3/16 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel dimensions for standard body are:	63 X 34 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel is operated by 1 cylinder.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel cylinder rod is:	Chrome-plated	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel cylinder bore diameter is:	2 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel cylinder rod diameter is:	1 1/2 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel cylinder stroke is:	14 1/2 in	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel cylinder pins steel is:	Cold-roll Stressproof	<input type="checkbox"/>	<input type="checkbox"/>	_____
Crusher panel cylinder pins diameter:	1 in	<input type="checkbox"/>	<input type="checkbox"/>	_____

**13- Electrical/Pneumatic systems**

All stop, directional, tail and clearance lights are LED type, recessed mount and water tight		<input type="checkbox"/>	<input type="checkbox"/>	_____
All lights are FMVSS #108 compliant		<input type="checkbox"/>	<input type="checkbox"/>	_____
Rear lights are integrated to tailgate structure.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Back-up alarm is provided.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Limit switches are heavy duty, industrial type, water tight with adjustable arm				
All circuits are protected with resettable circuit breakers and wiring is color coded and numbered.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Wiring conforms to SAE J1128.		<input type="checkbox"/>	<input type="checkbox"/>	_____
Wiring connections are sealed with shrink tube		<input type="checkbox"/>	<input type="checkbox"/>	_____
All wiring run in plastic loom.		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Electrical/Pneumatic valves are installed in a watertight box</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>All electric wires are run in side rub rails with bolted access panels for easy access, no wiring under body</b>		<input type="checkbox"/>	<input type="checkbox"/>	_____

**14- Controls characteristics**

Tailgate switch is:	Electric	<input type="checkbox"/>	<input type="checkbox"/>	_____
Body lift switch is:	Electric	<input type="checkbox"/>	<input type="checkbox"/>	_____
Pump switch is:	Electric	<input type="checkbox"/>	<input type="checkbox"/>	_____
Packer controls are:	Electric	<input type="checkbox"/>	<input type="checkbox"/>	_____
Arm joystick is:	Electro-proportional	<input type="checkbox"/>	<input type="checkbox"/>	_____
If the body hydraulic control valve is pneumatic, electrical/pneumatic control valves				



**AUTOMIZER HELPING-HAND  
 BID SPECIFICATIONS  
 CAPACITY 24 CU.YD.**

will transfer the signal from the cab control to the body hydraulic control valve. YES NO OFFERED  
  \_\_\_\_\_

**15- Console standard characteristics**

All body and arm functions are controlled via a Canopen network YES NO OFFERED  
  \_\_\_\_\_  
 An LCD display with integrated diagnostic functions is installed in the cab   \_\_\_\_\_  
 Real time operation assistance with continuous system status on screen   \_\_\_\_\_  
 All switches are illuminated   \_\_\_\_\_

**16- Accessories**

Mud flaps are supplied at front and rear of rear axle. YES NO OFFERED  
  \_\_\_\_\_

**17- Painting**

All parts are properly cleaned of all dirt, grease and weld slag. YES NO OFFERED  
  \_\_\_\_\_  
 Body, hopper and arm are shot blasted with steel beads   \_\_\_\_\_  
 One coat (0,002") of polyurethane primer Imron Elite is applied on body   \_\_\_\_\_  
 One finish coat (0,002") of polyurethane paint Imron Elite is applied on body   \_\_\_\_\_  
 Finish paint coat is baked. 125°F-150°F   \_\_\_\_\_  
 Arm is powder coated, safety yellow   \_\_\_\_\_

**18- Manuals**

Parts, service and operator's manual are supplied for the refuse packer. YES NO OFFERED  
  \_\_\_\_\_

**19- Lubrication**

All body hinges, cylinder rod ends, cylinder base, YES NO OFFERED  
 trunnion and pivot points are supplied with grease fittings.   \_\_\_\_\_

**20- Warranty**

The body manufacturer is certified ISO 9001. YES NO OFFERED  
  \_\_\_\_\_  
 All internal inspection documents such as intermediate  
 inspection booklets made at the body manufacturer  
 are available and filed per vehicle.   \_\_\_\_\_  
 Length of warranty on defective parts will not be less than : 1 year   \_\_\_\_\_  
 Length of warranty on hydraulic cylinders and hoses  
 will not be less than : 1 year   \_\_\_\_\_  
 Length of warranty on automated arm is not less than : 1 year   \_\_\_\_\_



---

**AUTOMIZER HELPING-HAND  
BID SPECIFICATIONS  
CAPACITY 24 CU.YD.**

**YES NO OFFERED**



---

**AUTOMIZER HELPING-HAND  
BID SPECIFICATIONS  
CAPACITY 24 CU.YD.**

**YES NO OFFERED**



---

**AUTOMIZER HELPING-HAND  
BID SPECIFICATIONS  
CAPACITY 24 CU.YD.**

**YES NO OFFERED**