

**TENDER NOTICE FOR PROCUREMENT**  
**TENDER No. A2Z WMPL/DHAN/2012-13/Revision 02**

With reference to our earlier advertisement in the newspaper Ranchi Express dated 20 Oct 2012 & 16 Feb 2013. The quantity of Equipment & Vehicles to be procured are revised hereunder and the last date of submission of offer stands extended to 10 May 2013. Tenders received after due date will not be accepted under any circumstances.

| <b>S. No</b> | <b>Item Description</b>   | <b>Unit</b> | <b>Qty</b> |
|--------------|---|-------------|------------|
| 1            | Covered bins for Households (10 Ltr) Blue & Green Color   | Nos.        | 302730     |
| 2            | Containerized Rickshaws (8 Bin/40Ltr each)  | Nos.        | 390        |
| 3            | 40 Ltr LLDP Waste collection Bins   | Nos.        | 3600       |
| 4            | Wheelbarrow for Street Sweeping   | Nos.        | 500        |
| 5            | Street Sweeping Machine   | Nos.        | 1          |
| 6            | Shovel with wooden handle   | Nos.        | 300        |
| 7            | Broom with long bamboo handle   | Nos.        | 600        |
| 8            | Safety Mask   | Nos.        | 600        |
| 9            | Gloves(Rubber)  | Nos.        | 200        |
| 10           | Boots Rubber Black  | Nos.        | 200        |
| 11           | Dust pan(Metal/ Plastic)  | Nos.        | 300        |
| 12           | Uniforms  | Nos.        | 465        |
| 13           | 1100 Litre capacity RC bins RC Steel Bins   | Nos.        | 1000       |
| 14           | 120 Litre capacity two Wheeled Covered bin for Hotels/Restaurants   | Nos.        | 100        |
| 15           | Litter bin with advertisement Pole Mounted Special Type Twin Bins 100 L   | Nos.        | 300        |
| 16           | Bins for Apartment 240 Litre capacity   | Nos.        | 200        |
| 17           | Refuse Collector cum Compacter 14 Cbm   | Nos.        | 10         |
| 18           | Cattle Lifting Vehicle  | Nos.        | 1          |
| 19           | Dead Animal Pick Up Van   | Nos.        | 1          |
| 20           | Large Haulage vehicle Dumper/ Tipper  | Nos.        | 8          |
| 21           | Backhoe Loader  | Nos.        | 2          |
| 22           | Tractor 35 HP with Power Steering and its Accessories   | Nos.        | 15         |
| 23           | Tractor Trolley 10' x 6' x3' with Hydraulic Tipping   | Nos.        | 15         |
| 24           | Tractor 55 HP with Accessories  | Nos.        | 4          |
| 25           | Front End Loader with Grab Type Bucket / Bottom Opening Bucket to be mounted for 55HP Tractors  | Nos.        | 4          |
| 26           | VTS (Vehicle Tracking System) SIM based GPS with receiver in all Waste Collection & Transportation vehicles   | Nos.        | 95         |
| 27           | Web Server Quadcore-8 Gb- 2x 500 GB (1 Tb) along with Windows Server 2008 R2 STD, MS SQL Server 2008/2012 R2 STD Licensed software for receiving GPS data, VPN server & Backup Server | Nos.        | 3          |
| 28           | Computer System   | Nos.        | 8          |
| 29           | Installation of configuration of software in systems  | Nos.        | 1          |
| 30           | Split AC 1.5 Tons   | Nos.        | 8          |
| 31           | Development of GIS Map  | Nos.        | 1          |
| 32           | Surveillance cameras for all the Site facilities  | Nos.        | 1          |
| 33           | Hand Held Device  | Nos.        | 60         |
| 34           | Bio Metric Device   | Nos.        | 20         |

For detailed Technical specification of Vehicle & other Equipment to be quoted for, same can be viewed on our Company's Website [www.a2zgroup.co.in](http://www.a2zgroup.co.in) under heading 'Tenders'.

Guidelines for procurement for Dhanbad MSW Project shall follow current Jharkhand State Purchase Policy. Technical & Commercial offers may be sent by due date to A2Z Infrastructure Limited, Purchase Dept. F-4, Plot no. B-38, Cosmos Building, Jharsa Chowk, Sector 32, Gurgaon, Haryana-122001 or by e-mail to [Deep.shikhar@a2zemail.com](mailto:Deep.shikhar@a2zemail.com), [Manohar@a2zemail.com](mailto:Manohar@a2zemail.com)

## **Detailed Specifications:**

### **1.0 Covered bins for Households (10 Ltr) Blue & Green Colour**

Capacity : 10 Ltrs with Lid & Handle  
Dimension : Top OD : 242(L) x 298(H) mm approx.  
: Bottom OD : 212mm approx.  
: Lid : 364(L) x 80 (H) mm approx.  
Total Height with Lid : 50mm approx.

Raw Material : HDPE  
Process : Blow Molding

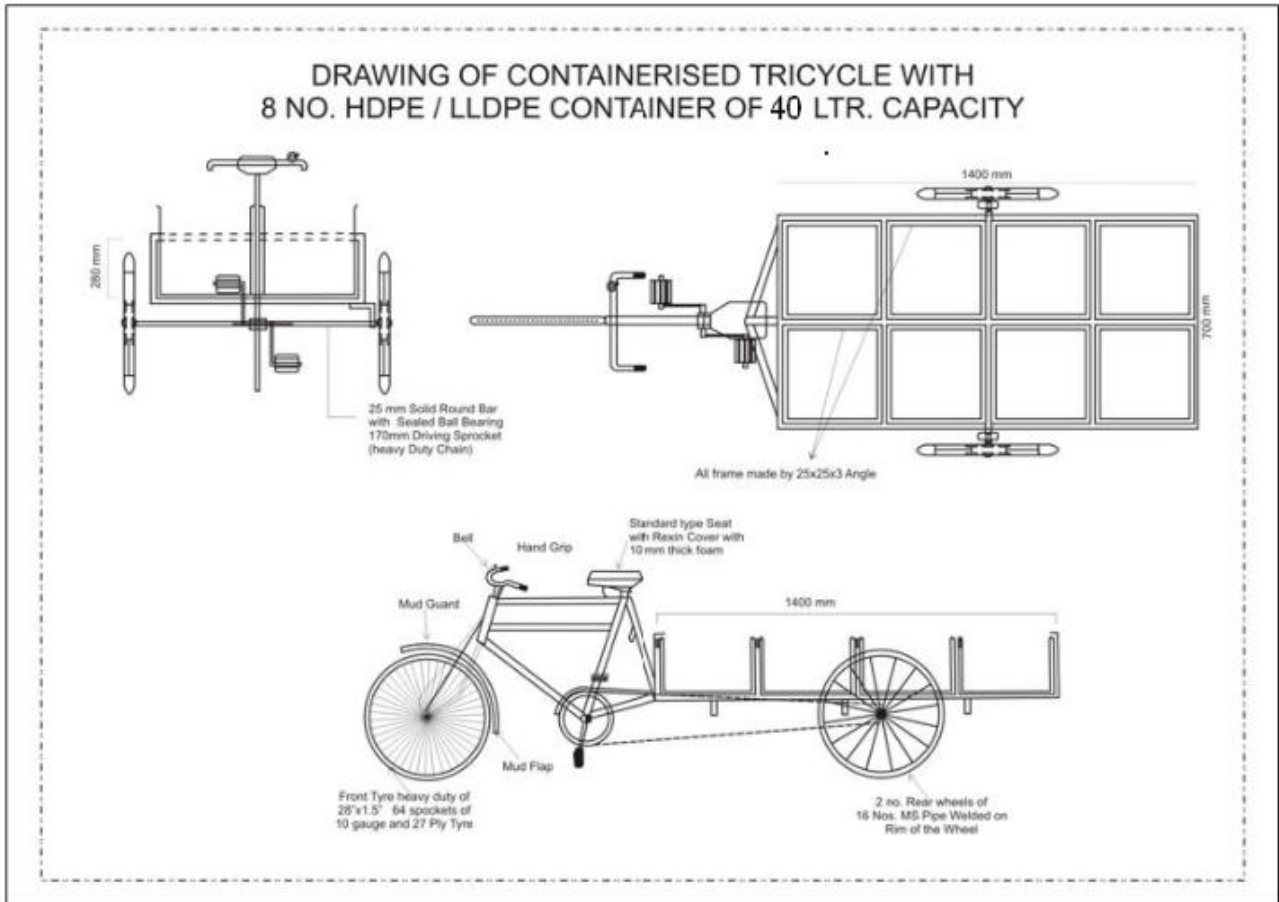
### **2.0 Containerized Rickshaws (8 Bin/40 Ltr each) and Bins**

#### **40 Ltrs Rickshaw Bin**

Capacity : 40 Ltrs with Handle  
Dimension : Top OD : 350(L) x 350(B) mm approx.  
Top ID : 320(L) x 320(B) mm approx.  
Bottom OD : 285(L) x 285 (B) mm approx.  
Height : 455 mm approx.  
Handle : 08mm Rod and strips are painted with anti corrosive paints.

Raw Material : LLDPE  
Process : ROTO Molding  
Features : Heavy Duty handle makes it easy to lift. Smooth finish inside and outside – so easy to wipe and clean.





### 3.0 Wheel barrow for Street Sweeping



## 4.0 Street Sweeping Machine



| <b>Technical Specification of Truck mounted Road Sweeper With Dual Sweep</b> |  |   |
|--|--|---|
| <b>S.NO</b>  | <b>Description</b>                         | <b>Specification</b>  |
| <b>1.0</b>   | Application                                | Cleaning of Municipal and Industrial Plant Roads, Parking Areas and other paved areas   |
| 1.1  | Type                                       | Truck mounted Vacuum Sweeper  |
| <b>2.0</b>   | <b>Auxiliary diesel Engine</b>             |   |
| 2.1  | Make                                       | TATA 1613/42  |
| 2.2  | Power                                      | 100 HP  |
| 2.3  | No. of Cylinder                            | 4   |
| 2.4  | Engine Cooling                             | Water Cooled  |
| 2.5  | Fuel Tank Capacity                         | 100 Ltrs  |
| 2.6  | Battery                                    | 24/12V, 200Ah   |
| <b>3.0</b>   | <b>Frame &amp; Body</b>                    |   |
| 3.1  | Material of construction                   | Heavy Duty Steel Frame  |
| <b>4.0</b>   | <b>Sweeping System</b>                     |   |
|  |  | The Sweeping System consists of one central brush, two side brushes, two suction heads. The central brush can swing towards right or left as per requirement, depending upon the direction of travel of the machine for cleaning of the Central or side verge of the road. Sweeping is carried out with the help of the central brush with one side brush (right or left) |
| 4.1  | Main Broom                                 | Dia -400, Length-1500mm – 1 No.   |
| 4.2  | Side Brush                                 | Diameter 800mm – 2Nos   |
| 4.3  | Cleaning width                             | 2400mm with central brush and one side brush  |
| 4.4  | Operation of brushes                       | Through individual variable speed Hydraulic Motors using power from Hydraulic pump. All operation are controlled from the driver's cabin. The individual brush speed can be varied by operating electric turn knob provided on the Dash Board.  |
| <b>5.0</b>   | <b>Driving System</b>                      |   |
| 5.1  | Drive of Vacuum Exhauster & Hydraulic Pump | Through Centrifugal clutch from Auxiliary Industrial Engine.  |
| 5.2  | Tipping Operation                          | Hydraulically actuated rear discharge door locking / unlocking, door lifting & lowering and tipping   |
| <b>6.0</b>   | <b>Stainless Steel Hopper</b>              |   |
| 6.1  | Gross Volume                               | 5000 Ltrson 16 ton GVW on Truck Chassis   |
| 6.2  | Dumping Height                             | 1100mm  |
| <b>7.0</b>   | <b>Suction system</b>                      |   |
| 7.1  | Fan Centrifugal                            | High Performance Centrifugal Blower   |
| 7.2  | Filer Type                                 | Mesh Type   |
| 7.3  | Sweeping                                   | Wet   |
| 7.4  | Dust Control System                        | The machine meets the PM-10 Pollution Control Environment Norms of Dust Emission  |
|  |  | Filtration Systems with built-in Cyclone/Pre-filter for large   |

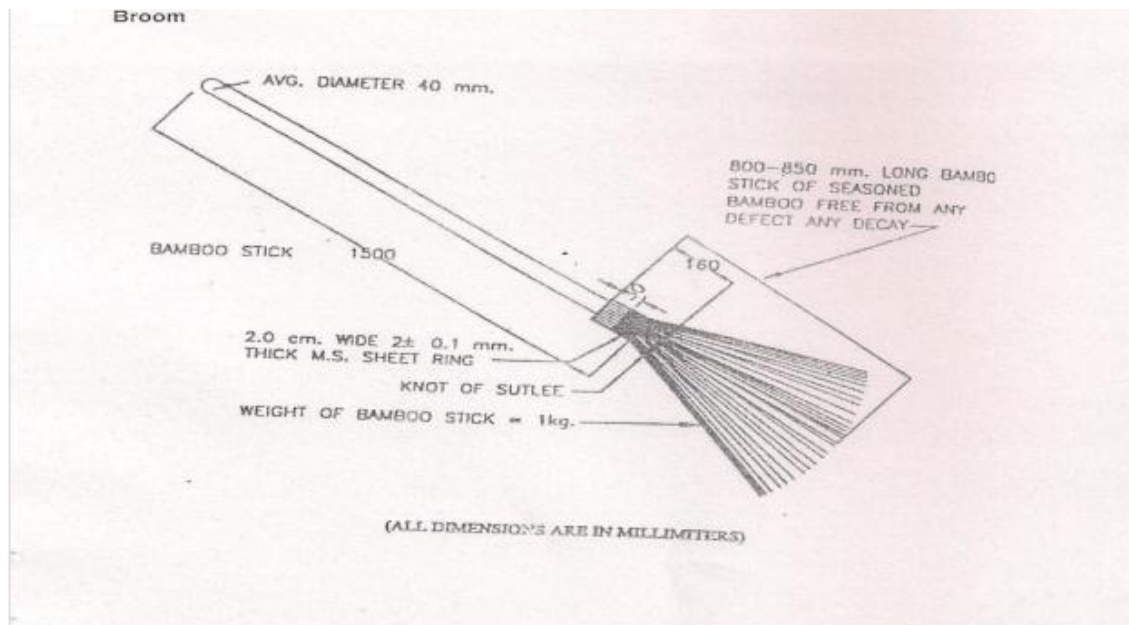
|             |                                   |  |
|-------------|-----------------------------------|--|
|             |                                   | dust particles.  |
| <b>8.0</b>  | <b>Indicators in Panel</b>        |  |
| 8.1         | Engine Oil Pressure               |  |
| 8.2         | Engine Cooling Liquid temperature |  |
| 8.3         | Fuel Gauge                        |  |
| 8.4         | Operating hour meter              |  |
| 8.5         | Parking brakes                    |  |
| <b>9.0</b>  | <b>Water System</b>               |  |
| 9.1         | Jetting Pump                      | Pressure – 100 bar   |
| 9.2         | Water Tank Capacity               | Stainless Steel Water Tank of 3000 ltrs  |
| 9.3         | Spray Location                    | On Side Brushes  |
| 9.4         | Jetting Hose with Lance           | The high pressure hose (length -10m, size- ½” dia) with hand lance / gun   |
| 10.0        | Painting                          | Automotive Paint   |
| <b>11.0</b> | <b>Overall Dimension</b>          |  |
| 12.1        | Length x Width                    | 7650 x 2450mm approx.  |
| 12.2        | Height                            | 3800mm approx  |
| <b>13.0</b> | <b>Salient Features</b>           |  |
|             |                                   | 1. Rear wandering suction hose of 150 mm dia. Of 5m length is provided with the machine. Eases the task of cleaning spillages like leaves, paper, stones etc. from areas outside the sweeping path |
|             |                                   | 2. Machine powered with an India diesel engine and incorporating latest international electro hydraulic system.  |
|             |                                   | 3. Machine with straight through suction.  |
|             |                                   | 4. Rugged machine, specially designed for high ambient temperature and heavy dust loads prevalent in India.  |

## 5.0 Shovel with wooden handle



**Standard:** IS: 274 (Part I & II)/1981

## 6.0 Broom with long bamboo handle



## 7.0 Safety Mask



## 8.0 Gloves (Rubber)



## 9.0 Boots Rubber Black



## 10.0 Dust Pan (Metal/ Plastic)



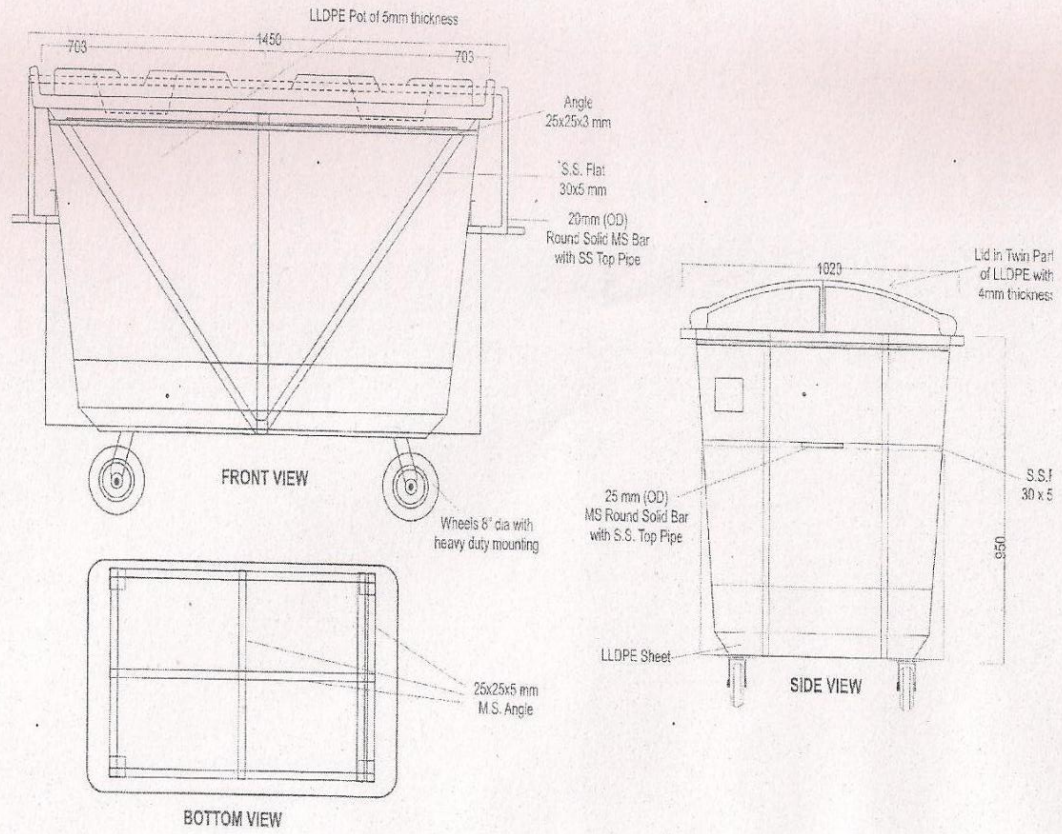
## 11.0 Uniforms:

Helper T-Shirt, Helper Trouser, Helper Cap, Supervisor Shirt, Supervisor Trouser, Sweater Full- Sleeves,

## 12.0 1100 Litre capacity RC bins RC Steel Bins 1.1 CuM



5.0 Refuse Collector Bin (Capacity 1100 litre)





### **13.0 120 Litre capacity two Wheeled Covered bin for Hotels/Restaurants**



Top OD : 485 x 510 mm approx.  
Bottom OD : 200 x 385 mm approx.  
Height (without lid) : 885 mm approx..  
Height ( with Lid) : 945mm approx..  
Capacity : 120 Litres approx..

### **14.0 Litter bin with advertisement Pole Mounted Special Type Twin Bins 100 L**

#### **Pole Mounted Twin Bin 50 Ltr each with M.S.Stand**

Top O.D. : 375 x 320 mm approx.  
Bottom O.D.: 305 x 250 mm approx.  
Height (Without Lid): 575 mm approx.  
Height (With Lid): 770 mm approx.  
Capacity: 50 Ltrs. approx.  
M.S. Pole: Sqare 40x40 mm approx.  
Pole Height: 1350 mm approx.  
With Powder Coating  
Accessories: Gumbaj on both Pole, Locking System, Huck for Tilting, Hinge for Lid



**15.0 Bin for apartment 240 Ltrs:**



Top OD : 740 x 587 mm approx.  
Bottom OD : 465 x 520 mm approx.  
Height (without lid) : 1010 mm approx..  
Height ( with Lid) : 1070 mm approx..  
Capacity : 240 Litres approx..

# 16.0 Technical Specification of Refuse Compactor

## **TECHNICAL SPECIFICATION OF 14 CUBIC METER CAPACITY REFUSE COMPACTOR VEHICLE** **Specification of Refuse Compactor Vehicle (RCV)**

The Refuse Compactor Vehicle shall be easy to handle and allow the bin handlers to unload Solid Waste from the Bins into the Machine Tailgate hopper with minimum physical effort and maximum safety. Hand lever arrangement for operation of Compaction Cycle shall be provided. The RCV shall have a bin lifter capable of unloading garbage from closed containers of 1100 liters capacity. The Tailgate loading height shall not be more than 1.2 Meters from the ground level.

The RCV would be 14 M3 Capacity. The Tailgate hopper capacity will be minimum 1.75 Cubic Meter. The Bin Lifter shall be also able to unload garbage simultaneously from two bins of size up to 240 Liters.

### **Refuse Collection Body**

The refuse compactor shall be of 14M3 Capacity and be in torsion-free steel construction. The bottom, the side walls and the top must form a box-type design. The side walls as well as the top shall be in reinforced frame steel construction.

Roof panel thickness – Minimum 2 mm  
Side Panel thickness – Minimum 3 mm  
Floor thickness – Minimum 4 mm

The tailgate bearing and automatic tailgate locking shall be integrated into the rear frame of the body.

The Ejection Plate shall run on synthetic guide blocks within the lateral longitudinal guides of the boat-type bottom group of the refuse collection body and must be operated by a telescopic hydraulic ram. A hydraulic control unit will regulate the withdrawal of the ejection panel during the loading process, so that the compaction is optimized.

It must serve during loading as a resistance for the refuse compaction process.

### **Tailgate**

The tailgate shall unlock automatically and raise, to permit ejection of refuse from RCV hopper when hydraulic valve is actuated. There shall be automatic locking arrangement between tailgate and RCV hopper body. This locking system shall be completely liquid proofed between tailgate and refuse collection body by using double rubber lip seal.

The Tailgate Hopper shall be able to take the refuse from 1100 ltrs. Garbage bins. The Tailgate hopper shall have a capacity of minimum 1.75 M3

Slide plate – The Slide Plate shall be actuated by 2 Hydraulic Cylinders and must run on suitable number of sliding blocks.

Packer Plate – The Packer Plate shall be actuated by 2 Hydraulic Cylinders.

### **Lifter System**

The Lifter System shall be capable of lifting and unloading garbage from 1100 ltrs. Capacity bins. The Bins Lifter shall be also capable to unload garbage simultaneously from two bins of size up to 240 ltrs. The lifter system shall be provided with four cylinders i.e. two cylinders for leveling and lifting of Bin, and two cylinders for tipping operation.



The RCV shall be equipped with following hydraulic system:  
Hydraulic actuation via hydraulic pump driven by the PTO of the vehicle.

The Tailgate lifting and closing as well as the compaction operation will be controlled with hydraulic Lever Systems.

11 Hydraulic Cylinders shall be installed covering following operation.

1 Three stage telescopic ram, double-acting for the ejection panel.

2 hydraulic rams, double acting for the side plate.

Double acting slide cylinders (for compacting) shall be located outside of the sidewalls. The cylinders are mounted in pushing position.

2 hydraulic rams, double acting for packer plate.

2 hydraulic rams, double acting for the tailgate (lifting / lowering and automatic locking)

The lifter shall be integrated in the tailgate and have

2 leveling and lifting cylinders

2 tipping cylinders

All Cylinders shall be of reputed make from ISO certified organization.

The hydraulic oil tank shall be of min 140 ltrs capacity. First fill of hydraulic oil and other consumables to be provided in the equipment.

Working light, Rotating Beacon light, Backing light, stop light, Direction indicator and number Plate light to be provided in the RCV.

### **Safety Features**

Hose burst valve shall be fitted to the system to prevent the tailgate descending in the event of the hydraulic failure. There shall be a body prop provided on the tailgate to hold the tailgate in the open position for safety of workshop personnel when entering the body for maintenance or repair.

### **Painting**

The entire unit shall be painted with two coats of superior quality anticorrosive primer with two coats of approved quality paint to ensure long lasting, resistance to rust, weathering and breakage.

## **17.0 Technical specification**

### **Cattle Lifting Vans- Hydraulic Platform**



1. Cattle Lifting Platform : Made from 2mm thick MS Sheet Cold formed
2. MS Channel Sections to withstand 1000kg of load.
3. Platform Railing Made from 40 x 40 x 2mm thick square pipe. Two side
4. should be hinged to the floor and rear side should be removable for easy entry of animal. The complete railing should be collapsible.
5. There shall be 8 Nos. MS rings made of 12mm MS Round inside the cargo box for tying the animals.
6. Floor shall have 10 nos of holes of 10mm dia for drainage.
7. Platform load capacity : 1000 Kg

8. Hydraulic Pump : Gear Pump , Pressure 3000 PSI (Max)
9. Hydraulic Cylinder : 2 Nos. Hardchrome Double Action, Single Stage.
10. Hydraulic Oil : Antiwear Grade 68 of repured make.
11. Loading Time : < 30 sec.
12. Unloading Time : < 30 sec
13. Hydraulic Oil Tank Capacity : 30 litre
14. Control Valve : Manual Directional Spool Valve.
15. Closing / Opening of Tail Gate : Semi- Automatic.
16. Power Source : From Vehicle PTO.

### **18.0 Technical specification Dead Animal Lifting Van- Hydraulic Platform**



Cattle Lifting Platform : Made from 2mm thick MS Sheet Cold formed MS Channel Sections to withstand 1000kg of load.

1. Platform Railing                      Made from 40 x 40 x 2mm thick square pipe. Two side should be hinged to the floor and rear side should be removable for easy entry of animal. The complete railing should be collapsible.
2. There shall be 8 Nos. MS rings made of 12mm MS Round inside the cargo box for tying the animals.
3. Floor shall have 10 nos of holes of 10mm dia for drainage.
4. Platform load capacity    : 1000 Kg
5. Hydraulic Pump : Gear Pump , Pressure 3000 PSI (Max)
6. Hydraulic Cylinder : 2 Nos. Hardchrome Double Action, Single Stage.
7. Hydraulic Oil : Antiwear Grade 68 of repured make.
8. Loading Time : < 30 sec.
9. Unloading Time : < 30 sec
10. Hydraulic Oil Tank Capacity : 30 litre
11. Control Valve : Manual Directional Spool Valve.

12. Closing / Opening of Tail Gate : Semi- Automatic.

13. Power Source : From Vehicle PTO.

## 19.0 Large Haulage vehicle Dumper/Tipper

3810 MM (150") WB tipper (BSIII) diesel engine, Power 160hp@2400rpm, GVW 25000kgs, 6 speed synchromesh gearbox, power steering, exhaust brake, spare wheel carrier & rim, mirror LH/RH (one each), PTO pump assy, noise shield, ASA, tool kit and CMVR kit with day cabin, front end tipping gear and box type body of 14 cu.m capacity built and mounted by authorised body builder.

## 20. Backhoe Loader



21. **Tractor 35 HP:** Tractor 35 HP with standard accessories.

### Specifications

#### ENGINE

32 HP , S324/NH,Bharat TREM III

#### CLUTCH

Diaphragm Type, Single

#### FRONT AXLE

Fix Fabricated U-Beam with Heavy Duty Cast Iron Axle support

#### TRANSMISSION

Gear Box Type : Constant Mesh, 8 Forward + 2 Reverse

Gear & Range Controls : AFD Side-Shift, Neutral Start Safety Switch.

Optional : Reverse Constant Mesh

#### **BRAKES**

Type : Sealed Oil Immersed Dual Disc for each wheel

Brake Lining : Non asbestos Graphite based Liners

#### **HYDRAULIC LIFT**

Details : Automatic Depth & Draft Control, Mixed Control, Lift- O-Matic, Response Control, Multiple Sensitivity Control, Isolator Valve.

#### **TYRES**

Front Tyres : 6.00x16

Rear Tyres : 12.4x28

Rated RPM : 2000

## **22. Tractor Trolley 10' x 6' x 3' with Hydraulic Tipping**

- Capacity- 8 Ton
- Tyre- 1000/20 make Ceat
- Sheet- 8mm / 6mm
- Angle & Channel- Standard
- Rim - Tata make
- Tipping Cylinder- USHA (Jaipur) Double Acting
- Primer- Berger
- Paint- Berger

## **23. Tractor 55 HP: Tractor 55 HP with standard accessories**

### **Specifications**

#### **ENGINE**

55 HP IVECO, Bharat TREM III

#### **CLUTCH**

Diaphragm Type - Single Clutch, Double Clutch (Optional)

#### **FRONT AXLE**

Adjustable Fabricated U-Beam with Heavy Duty Cast Iron Axle support

| <b>TRANSMISSION</b>   |   |
|-----------------------|---|
| Gear Box Type         | : Constant Mesh, 8 Forward + 2 Reverse  |
| Gear & Range Controls | : AFD Side-Shift, Neutral Start Safety Switch.  |
| Optional              | Ground Speed PTO  |
| <b>BRAKES</b>         |   |
| Type                  | : Sealed Oil Immersed Disc - 3 Discs for each wheel   |
| Brake Lining          | : Non asbestos Graphite based Liners  |
| <b>HYDRAULIC LIFT</b> |   |
| Details               | : Automatic Depth & Draft Control Mixed Control, Lift- O-Matic, Response Control, Isolator Valve, Sensitivity Control with 24 Points Sensitivity. |
| <b>TYRES</b>          |   |
| Front Tyres           | : 6.00x16/7.50x16   |
| Rear Tyres            | : 14.9x28/16.9x28   |
| Rated RPM             | : 2500  |

**24.0** Front end Loader with Bottom Opening Bucket / 4 in 1 bucket. Bucket capacity 0.6cum /900Kgs lift height: 3.66Mtrs /12ft , Dump Height: 12 Ft with Bottom Opening Bucket.

**25.0 Split AC 1.5 Tons:** Branded with Stabilizer

**2.0 Computer System:** Branded Computer System with Latest Technology i3, processor, 2GB RAM, 320 GB HD XP

**27.0 Web Server (03 Nos.), Desktop PC (01 No.), Printer (01 No.), LED 32" (01 No)**

Quadcore-8 Gb- 2x 500 GB (1 Tb) along with Windows Server 2008 R2 STD, MS SQL Server 2008/2012 R2 STD Licensed software for receiving GPS data, VPN server & Backup Server, Computer Desktop system Dual core with CPU 2 Gb, 320 Gb HDD, keyboard, mouse, Windows 7 OS Professional (with license) ,LED Panel 32" compatible with PC, Dot Matrix Printer Qty-01

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