# MOBILE TOILET VAN -SPECIFICATIONS

Annexure –A

## Type/ Category C

# TRACTOR DRAWN TWO WHEEL TRAILER MOUNTED MOBILE TOILET VAN - (10 TOILET SEATS)

### (with S.S.TOILET TUB, 10 Toilet seats)



(Photo is for reference and Idea only, Tenderer has to submit his own design and drawing which shall matches the tender specifications and requirements)

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No. of Toilet Block	5 Nos. (One each side/ as per design requirement.)	
Toilet Size	4' X 3'-6" X 6'-6" (appx)	
Toilet Tub	Non-corrosive and easy to clean S.S. tub with floor	
	(Indian type 920 mm x770 mm x 50 mm appx.) ( 8 Indian style & 2 European style)	
Structure	Shall be Made from 25x25x16 gauge M.S. sq. Pipe and M.S. angle.	
Panelling	PVC coated G.I. sheet for full height of toilet from floor to top (inside)	
Doors	Inside opening type & shall be made from 18 gauge PVC coated G.I. sheet on outside & inside panelling also of same sheet with heavy duty hinges, stopper & handle.	
SIDE PLATFORM / S	TAIR	
Туре	Platform / stairs on both the side of toilet with attractive designing railing & 3 mm Aluminium Chequered plate fitted on platform / stairs.	
Material	Shall be Made from heavy duty MS structure with side railing made from SS Pipe of at least 40 mm $\phi$ x 2 mm & minimum 20x20x2 mm SS / 20 $\phi$ x 2 mm as per our sample.	
Ladder	2 Nos. Ladder portable type with pipe handle. on entry side of toilet made from SS pipe, 3 mm Aluminium Chequered plate on platform / stairs shall be provided.	
Side	All side shall be covered. Entry in to toilet units shall be from one side only. There shall be 2 entry doors. One for each block. Structure made from 20x20x2 mm sq. pipe or from 20 $\phi$ x 2 mm round pipe & 18 gauge	

#### **Appx Quantity Requirements: 7**

	galvanize sheet (As per our drawing/requirements.)
SLUDGE TANK	
Capacity	1250 liters (appx.) of SS material.
Material	2.5 mm S.S. 304
Fitting	<ul> <li>Sludge drain valve 100mm diameter heavy duty butterfly valve of S.S.at rear of the unit. A flange system with leak proof sealing is required for fixing the valve, &amp; flange should be fitted with tank by nut bolt arrangement.</li> <li>Sludge tank flushing line by which tank can be cleaned by jet of water.</li> <li>Flushing elbow provided at rear by which sludge can be sucked directly by suction machine.</li> <li>Air vent pipe &amp; exhaust fan is provided to the sludge tank to exhaust foul gases.</li> <li>Sludge tank shall have slope at rear and of about 3" for easy drain.</li> </ul>
WATER TANK	
Capacity	1250 liters. (appx.) of SS material
Material	2.5 mm S.S. 304
Fitting	<ul> <li>Water filling line at front of the toilet van with valve &amp; coupling arrangement.</li> <li>Water tank cleaning cover at bottom of the tank.</li> <li>Plumbing line with push-pull type tap from water tank to all toilet compartments as well as at both wash basins.</li> <li>Flush tank &amp; water spray facility for toilet pan &amp; urinals.</li> </ul>
TRAILER SPECIF	
Chassis	Two Wheeled Chassis made from 75 x 40 (for support channel), 125 x 65 M.S. Channel (for main frame) with heavy duty turn table made from 100 x 50 M.S. Channel.
Payload	4 Tones.
Road Speed	32 Km/Hr. (minimum)
Tyre	Number: Minimum 2 wheel type. (However Location shall be as per tenderer's submitted design) Size: 7.50x16,16 ply. or lower than it, of standard make like MRF / CEAT / JK / GOODYEAR / BIRLA / APOLLO / DUNLOP/BKT/ BRIDGESTONE etc. Tyre shall be capable enough to handle the designed load of entire unit.
Axle	Number: 01, Size sq. High speed axle shall be fitted to for low height tyres. Suitable Automobile axle must be provided.

Hub	Number: 02, Material: Cast Steel. Suitable to high speed axle.
Tow Bar	Detachable, connected with turn table.
Tow Eye Size	Spring cushion eye, 50 mm (Appx.)
Тор	Made from 16 gauge galvanize sheet
Wheel (Disc Type)	As per hub & tyre design.
Bearing	As per hub Design, & shall be of standard make.
Brake	Parking and service type internal expanding cam operated shoe brake & tail light with wiring up to front end. Brake system must be as per the latest RTO norms.
Suspension	As per tenderer design.
Lighting arrangement	Each toilet block shall be having one CFL / LED Light for each toile block & atleast 2 nos of CFL in common area. It shall be wall mounted power saver CFL / LED as per requirement. Out side near stairs (or each stair) CFL / LED also shall be provide. Separate electric junction box for switch, MCB & wire spool for electricity connection, with necessary safety provisions. Standard IS approved switches, wires and accessories shall be provided
Power distribution box	<ul> <li>Individual power distribution box fitted inside the toilet with wire reel.</li> <li>&amp; 50 Mtr. wire with necessary safety shall be preclusion / mechanism.</li> <li>Standard IS approved switches, wires and accessories shall be provided.</li> </ul>
Overall Dimension	Actual dimension shall be as per tenderer's design.
ACCESSORIES	<ul> <li>Discharge valve – 100 mm heavy duty S.S. butterfly valve at rear bottom of sludge tank.</li> <li>Proper pipe &amp;/or valve connections must be provided to charge the</li> <li>water tanker with fresh water and to clean the sludge tank either by gravity &amp;/or by suction cum jetting unit.</li> <li>Mirror – 02 nos.</li> <li>washbasins – 02 nos.</li> <li>Napkin hanger – 02 nos.</li> <li>Soap keeper – 02 nos.</li> <li>Toilet lamp (a/c supply)</li> <li>Foldable ladder – 02 nos.</li> </ul>
	<ul> <li>Push pull type taps to all toilet compartments and at washbasins.</li> <li>Automatic sensor &amp; water flush / spray system shall be provided for</li> <li>urinals.</li> <li>Mud guard on wheels.</li> </ul>

Special Features	<ul><li>Sturdy trailer to withstand rough use and give long lasting service.</li></ul>
Required	<ul> <li>Non-corrosive and easy to clean S.S. toilet tub with SS floor and SS urinals in one block.</li> </ul>
	Non-corrosive and light weight PVC coated G.I. sheets are shall be used in door as mentioned.
	<ul> <li>Water supply from water tank to all toilets compartments by gravity / motor system with push-pull type tap and to urinal units. Flush tank &amp; sensor based water spray shall be provided as specified.</li> </ul>
	<ul> <li>Sludge tank Shall be directly emptied by just opening a valve. At the rear bottom of the sludge tank 100 mm Dia. Opening with flange and dead end plate shall be provided.</li> </ul>
	<ul> <li>Flushing elbow by which sludge can be sucked directly by suction machine shall be possible.</li> </ul>
	In case of low water pressure due to gravity feeding of water in to urinal blocks; by pass / separate push cock mechanism shall also be provided for urinal cleaning. Proper water / drain channel with all required connections / outlets etc. Shall be provided of good quality.
PAINT	✤ Two coats of anti-corrosive P.U. base primer.
	✤ Two coats of P.U. shade as per choice.

#### General for all category:

- o All raw materials are as per Indian standard.
- All MS material shall be of Tata / SAIL/ Jindal / Vishakhapatnam steel/ Essar / Ispat etc., if any size / material not available of above brand then it shall be of any IS/ISO approved make only. Contractor has to submit necessary test report and/or invoice copies.

Sample unit should be first send to us for approval and after the approval of the same, the remaining ordered quantity should be manufactured by the tenderer, as per the approved sample. Minor correction / suggestion as suggested by the Corporation Engineer and/or his authorized representative should be incorporated.

#### FINISHING & PAINTING:

All exposed parts (internal & external) of the Toilet shall be cleaned, and painted with suitable anti-corrosive protective paint. The final painting shall be of synthetic enamel paint of approved make and shade and having gloss finished.

All rolling & sliding members shall be provided with adequate greasing points which are accessible for periodic maintenance

Bearing, pins, slides & rollers shall be assembled in such a manner that any component can be easily removed for repair/replacement when worn out.

The bottom of the tanks shall be sloped towards the drain hole.

The water tank shall have liquid level indicator suitably protected.

The electrical circuits shall be protected by circuit breaker of appropriate capacity.

#### TOOL KIT:

A standard and recommended tool kit shall be supplied along with the Unit for regular maintenance of the unit and all fittings and attachments.

#### **INSTRUCTION MANUAL:**

Copies of each operation instructions manual, service manual and spare parts list shall be supplied with Mobile Toilet.

#### **TESTING:**

The successful tenderer shall make arrangement for testing of the Toilet unit both at the works of manufacturer (if required) and at the Municipal site (as may be required). The tenderer shall issue a test certificate for the performance of the Toilet unit.