

MOBILE TOILET VAN - SPECIFICATIONS

Type/ Category A

TRACTOR DRAWN TWO WHEEL TRAILER MOUNTED MOBILE TOILET VAN - (2 TOILET SEATS AND 3 URINALS)

(with S.S.TOILET TUB, SS urinals and tanks - 2 Toilet seats & 3 Urinals)



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

Appx Quantity Requirements: 7

No. of Toilet Block	2 Nos. (One On each side/ as per design requirement.)
No. Of Urinals	3 Nos.
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.) (1 Indian style & 1 European style)
Structure	Shall be Made from 25x25x16 gauge M.S. sq. Pipe and M.S. angle.
Paneling	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 / STAIR	
Type	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 ϕ x 2 mm & minimum 20x20x2 mm SS / 20 ϕ 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 ϕ x 2 mm round pipe & 18 gauge galvanize sheet (As per our drawing/requirements.)
SLUDGE TANK	
Capacity	500 liters (appx.) of SS material.
Material	2.5 mm S.S. 304
Fitting	<ul style="list-style-type: none"> * 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, & flange should be fitted with tank by nut bolt arrangement. * Sludge tank flushing line by which tank can be cleaned by jet of water. * Flushing elbow provided at rear by which sludge can be sucked directly by suction machine. * Air vent pipe & exhaust fan is provided to the sludge tank to exhaust foul gases. * Sludge tank shall have slope at rear and of about 3" for easy drain.
WATER TANK	
Capacity	500 liters. (appx.) of SS material
Material	2.5 mm S.S. 304
Fitting	<ul style="list-style-type: none"> * Water filling line at front of the toilet van with valve & coupling arrangement. * Water tank cleaning cover at bottom of the tank. * Plumbing line with push-pull type tap from water tank to all toilet compartments as well as at both wash basins. * Flush tank & water spray facility for toilet pan & urinals.
TRAILER SPECIFICATION	
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	3 Tones.
Road Speed	32 Km/Hr. (minimum)
Tyre	<p>Number: Minimum 2 wheel type. (However Location shall be as per renderer's submitted design)</p> <p>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.</p>

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.)
Top	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 toilet block & atleast 2 nos of CFL in urinal / common area. It shall be wall mounted power saver CFL / LED as per requirement. Out side near stairs (on 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	Individual power distribution box fitted inside the toilet with wire reel & 50 Mtr. wire with necessary safety shall be preclusion / mechanism. Standard IS approved switches, wires and accessories shall be provided.
Overall Dimension (As per R.T.O. Approval)	Actual dimension shall be as per tenderer's design. Design approval & passing from RTO dept. is tenderer's responsibility.
ACCESSORIES	<ul style="list-style-type: none"> * Discharge valve – 100 mm heavy duty S.S. butterfly valve at rear bottom of sludge tank. Proper pipe &/or valve connections must be provided to charge the * water tanker with fresh water and to clean the sludge tank either by gravity &/or by suction cum jetting unit. Mirror – 02 nos. * washbasins – 02 nos. * Napkin hanger – 02 nos. * Soap keeper – 02 nos. * Toilet lamp (a/c supply) * Foldable ladder – 02 nos. * Push pull type taps to all toilet compartments and at washbasins. * Automatic sensor & water flush / spray system shall be provided for *

	<p>urinals.</p> <ul style="list-style-type: none"> * Mud guard on wheels.
Special Features Required	<ul style="list-style-type: none"> * Sturdy trailer to withstand rough use and give long lasting service. * Non-corrosive and easy to clean S.S. toilet tub with SS floor and SS urinals in one block. * Non-corrosive and light weight PVC coated G.I. sheets are shall be used in door as mentioned. * Water supply from water tank to all toilets compartments by gravity / motor system with push-pull type tap and to urinal units. Flush tank & sensor based water spray shall be provided as specified. * 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. * Flushing elbow by which sludge can be sucked directly by suction machine shall be possible. * 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:

- 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 invoicecopies.

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 Toiletunit.

Type/ Category B

**TRACTOR DRAWN TWO WHEEL TRAILER MOUNTED MOBILE TOILET VAN -
(3 TOILET SEATS AND 4 URINALS)**

(with S.S.TOILET TUB, SS urinals and tanks - 3 Toilet seats & 4 Urinals)



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

Appx Quantity Requirements: 7

No. of Toilet Block	3 Nos. (One one side/ as per design requirement.)
No. Of Urinals	4 Nos.(On one 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.) (1 Indian style & 1 European style)
Structure	Shall be Made from 25x25x16 gauge M.S. sq. Pipe and M.S. angle.
Paneling	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 / STAIR	
Type	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 ϕ x 2 mm & minimum 20x20x2 mm SS / 20 ϕ 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 ϕ x 2 mm round pipe & 18 gauge galvanize sheet (As per our drawing/requirements.)
SLUDGE TANK	
Capacity	750 liters (appx.) of SS material.
Material	2.5 mm S.S. 304
Fitting	<ul style="list-style-type: none"> * 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, & flange should be fitted with tank by nut bolt arrangement. * Sludge tank flushing line by which tank can be cleaned by jet of water. * Flushing elbow provided at rear by which sludge can be sucked directly by suction machine. * Air vent pipe & exhaust fan is provided to the sludge tank to exhaust foul gases. * Sludge tank shall have slope at rear and of about 3" for easy drain.
WATER TANK	
Capacity	750 liters. (appx.) of SS material
Material	2.5 mm S.S. 304
Fitting	<ul style="list-style-type: none"> * Water filling line at front of the toilet van with valve & coupling arrangement. * Water tank cleaning cover at bottom of the tank. * Plumbing line with push-pull type tap from water tank to all toilet compartments as well as at both wash basins. * Flush tank & water spray facility for toilet pan & urinals.
TRAILER SPECIFICATION	
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	3 Tones.
Road Speed	32 Km/Hr. (minimum)
Tyre	<p>Number: Minimum 2 wheel type. (However Location shall be as per tenderer's submitted design)</p> <p>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.</p>

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.)
Top	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 toilet block & atleast 2 nos of CFL in urinal / common area. It shall be wall mounted power saver CFL / LED as per requirement. Out side near stairs (on 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	Individual power distribution box fitted inside the toilet with wire reel & 50 Mtr. wire with necessary safety shall be preclusion / mechanism. Standard IS approved switches, wires and accessories shall be provided.
Overall Dimension (As per R.T.O. Approval)	Actual dimension shall be as per tenderer's design. Design approval & passing from RTO dept. is tenderer's responsibility.
ACCESSORIES	<ul style="list-style-type: none"> * Discharge valve – 100 mm heavy duty S.S. butterfly valve at rear bottom of sludge tank. Proper pipe &/or valve connections must be provided to charge the * water tanker with fresh water and to clean the sludge tank either by gravity &/or by suction cum jetting unit. Mirror – 02 nos. * washbasins – 02 nos. * Napkin hanger – 02 nos. * Soap keeper – 02 nos. * Toilet lamp (a/c supply) * Foldable ladder – 02 nos. * Push pull type taps to all toilet compartments and at washbasins. * Automatic sensor & water flush / spray system shall be provided for *

	<p>urinals.</p> <ul style="list-style-type: none"> * Mud guard on wheels.
Special Features Required	<ul style="list-style-type: none"> * Sturdy trailer to withstand rough use and give long lasting service. * Non-corrosive and easy to clean S.S. toilet tub with SS floor and SS urinals in one block. * Non-corrosive and light weight PVC coated G.I. sheets are shall be used in door as mentioned. * Water supply from water tank to all toilets compartments by gravity / motor system with push-pull type tap and to urinal units. Flush tank & sensor based water spray shall be provided as specified. * 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. * Flushing elbow by which sludge can be sucked directly by suction machine shall be possible. * 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	<ul style="list-style-type: none"> * Two coats of anti-corrosive P.U. base primer. * Two coats of P.U. shade as per choice.

General for all category:

- 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 invoicecopies.

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 Joint Director (Mechanical) 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.

least Two year.

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 Toiletunit.

Type/ Category C

**TRACTOR DRAWN TWO WHEEL TRAILER MOUNTED MOBILE TOILET VAN -
(6 TOILET SEATS)**

(with S.S.TOILET TUB, 6 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)

Appx Quantity Requirements: 7

No. of Toilet Block	3 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.) (1 Indian style & 1 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 / STAIR	
Type	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 ϕ x 2 mm & minimum 20x20x2 mm SS / 20 ϕ 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 ϕ x 2 mm round pipe & 18 gauge

	galvanize sheet (As per our drawing/requirements.)
SLUDGE TANK	
Capacity	750 liters (appx.) of SS material.
Material	2.5 mm S.S. 304
Fitting	<ul style="list-style-type: none"> * 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, & flange should be fitted with tank by nut bolt arrangement. * Sludge tank flushing line by which tank can be cleaned by jet of water. * Flushing elbow provided at rear by which sludge can be sucked directly by suction machine. * Air vent pipe & exhaust fan is provided to the sludge tank to exhaust foul gases. * Sludge tank shall have slope at rear and of about 3" for easy drain.
WATER TANK	
Capacity	750 liters. (appx.) of SS material
Material	2.5 mm S.S. 304
Fitting	<ul style="list-style-type: none"> * Water filling line at front of the toilet van with valve & coupling arrangement. * Water tank cleaning cover at bottom of the tank. * Plumbing line with push-pull type tap from water tank to all toilet compartments as well as at both wash basins. * Flush tank & water spray facility for toilet pan & urinals.
TRAILER SPECIFICATION	
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	3 Tones.
Road Speed	32 Km/Hr. (minimum)
Tyre	<p>Number: Minimum 2 wheel type. (However Location shall be as per tenderer's submitted design)</p> <p>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.</p>
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.)
Top	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 toilet 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 (on 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	Individual power distribution box fitted inside the toilet with wire reel & 50 Mtr. wire with necessary safety shall be preclusion / mechanism. Standard IS approved switches, wires and accessories shall be provided.
Overall Dimension (As per R.T.O. Approval)	Actual dimension shall be as per tenderer's design. Design approval & passing from RTO dept. is tenderer's responsibility.
ACCESSORIES	<ul style="list-style-type: none"> * Discharge valve – 100 mm heavy duty S.S. butterfly valve at rear bottom of sludge tank. Proper pipe &/or valve connections must be provided to charge the * water tanker with fresh water and to clean the sludge tank either by gravity &/or by suction cum jetting unit. Mirror – 02 nos. * washbasins – 02 nos. * Napkin hanger – 02 nos. * Soap keeper – 02 nos. * Toilet lamp (a/c supply) * Foldable ladder – 02 nos. * Push pull type taps to all toilet compartments and at washbasins. * Automatic sensor & water flush / spray system shall be provided for * urinals. Mud guard on wheels. *

Special Features Required	<ul style="list-style-type: none"> * Sturdy trailer to withstand rough use and give long lasting service. * Non-corrosive and easy to clean S.S. toilet tub with SS floor and SS urinals in one block. * Non-corrosive and light weight PVC coated G.I. sheets are shall be used in door as mentioned. * Water supply from water tank to all toilets compartments by gravity / motor system with push-pull type tap and to urinal units. Flush tank & sensor based water spray shall be provided as specified. * 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. * Flushing elbow by which sludge can be sucked directly by suction machine shall be possible. * 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	<ul style="list-style-type: none"> * 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.
- o 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 invoicecopies.

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 Joint Director (Mechanical) 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.

Type/ Category D

TECHNICAL SPECIFICATION OF CONTAINER TYPE TOILET



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

TECHNICAL SPECIFICATION OF CONTAINER TYPE TOILET

3 + 3 = 6 SEATER

NO. OF TOILET BLOCK	:	06 Nos.
Toilet Size	:	3'-0" X 2'-5" X 6'-3"
Toilet Tub	:	Non-Corrosive And Easy To Clean S.S. Tub. & ' P ' Trap fiber glass compulsory.
Structure	:	Made From 75X 40X 2 mm M.S. Sq. Pipe , 25 X 25X2 mm M.S. Sq. Pipe & 40X 40X 2 mm M.S. Sq. Pipe.
Paneling	:	Outside : Made From 18 Gauge M.S. Sheet

	:	Inside : Made From 20 Gauge. Aluminum Sheet
Doors	:	Made From 20 Gauge Corrugated Aluminum Sheet & 25X 25X 2 mm M.S. Sq. Pipe With Heavy Duty Hangers, Stopper & Handle.
SIDE PLATFORM		
Type	:	Fixed Platform On Both The Side Of Toilet & 2mm Aluminum Checkered Plate.
Material	:	Made From 40X 40X 2 mm M.S. Sq. Pipe & 25 X 25X 2 mm M.S. Sq. Pipe.
SLUDGE TANK		
Capacity	:	800 Liters With 1mm Fibre Coating in Side Sludge Tank
Material	:	3 mm Galvanize Sheet
WATER TANK		
Capacity	:	750 Liters.
Material	:	PVC made from 100 % virgin material (Sintex / National/ Standard make)

Fitting	:	<ul style="list-style-type: none"> * Sludge Drain Valve 100mm Dia M.S.Pipe at Rear Of The Unit. * Air Vent Pipe Is Provided To The Sludge Tank To Exhaust Foul Gases. * Sludge Tank Shall Have Slope At Rear And Of About 3" For Easy Drain.
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BASE FRAME		
Base Frame	:	Frame Made From 75X40X 2.5 mm M.S. Sq. Pipe, 40 X 40X 2mm M.S. Sq. Pipe.
Top	:	18 Gauge Galvanize Sheet Fitted On Top.
Overall Dimension (Traveling)	:	2300(W) x 3050(L) x 3050(H) (Approximate)
Lighting arrangement	:	* Each toilet block shall be having one CFL / LED Light for each toilet 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 (on 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

<p><u>Power distribution box</u></p>	<ul style="list-style-type: none"> * Individual power distribution box fitted inside the toilet with wire reel & 50 Mtr. wire with necessary safety shall be preclusion / mechanism. Standard IS approved switches, wires and accessories shall be provided.
<p><u>ACCESSORIES</u></p>	<ul style="list-style-type: none"> * Discharge valve – 100 mm heavy duty S.S. butterfly valve at rear bottom of sludge tank. This valve shall be fitted as per AMC instruction for better working. * Proper pipe &/or valve connections must be provided to charge the water tanker with fresh water and to clean the sludge tank either by gravity &/or by suction cum jetting unit. * Mirror – 02 nos. * S.S. washbasins – 02 nos. * Napkin hanger – 02 nos. * Soap keeper – 02 nos. * Toilet lamp (a/c supply) * Foldable ladder – 02 nos. * Push pull type taps to all toilet compartments and at washbasins. * Automatic sensor & water flush / spray system shall be provided for urinals. * Mud guard on wheels.
<p><u>Special Features Required</u></p>	<ul style="list-style-type: none"> * Sturdy trailer to withstand rough use and give long lasting service. * Non-corrosive and easy to clean S.S. toilet tub with SS floor and SS urinals in one block. * Non-corrosive and light weight PVC coated G.I. sheets are shall be used in door as mentioned. * Water supply from water tank to all toilets compartments by gravity / motor system with push-pull type tap and to urinal units. Flush tank & sensor based water spray shall be provided as specified. * 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. * Flushing elbow by which sludge can be sucked directly by suction machine shall be possible. * 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.
<u>PAIN</u>	* Two coats of anti-corrosive P.U. base primer. * Two coats of P.U. shade as per choice.

All raw materials shall be as per Indian standard.

- o 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.

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.

OTHER INSTRUCTIONS:

The tenderer shall offer the Model which is current standard model of production, also which is substantially the same as one proved in successful use for a period of at least Two year.

All rolling & sliding members shall be provided with adequate greasing

points which are access

- 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 Container 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.

Type/ Category E

TECHNICAL SPECIFICATION OF VEHICLE MOUNTED MOBILE TOILET

Technical; Specifications- Design, Fabrication, Supply & Testing - Commissioning of Mobile Urinal cum Toilet van as per tender Specifications & requirements on new Mini LCV BS IV chassis.



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

The equipment shall be designed, fabricated, mounted and integrated to the chassis having Minimum EURO IV (BS- IV) norms & matching all requirements of various govt. agencies / RTO rules/ norms & the following technical specification as the minimum requirement

Functional Requirements: Cab-chassis is required to build up the Mobile toilet unit having 2 toilet blocks with required accessories as mentioned in the specifications etc .

Mini Truck Chassis

All steel Fully forward control driver's cab. Cabin should have minimum two nos. foam padded adjustable seats with seat belts. Cab should have all standard accessories provided by truck chassis manufacturer and shall confirm to requirements of Motor Vehicles Act.

The truck chassis shall be suitable to handle the specified load, provide satisfactory service envisaged and shall comply with all provisions of Motor Vehicles Act

The vehicle- equipment shall confirm to the following minimum requirements/ specifications:

Specifications:

The chassis (goods chassis) having EURO-IV/ BS-IV Engine should be provided with front & rear shock absorbers with four forward & one reverse constant / synchromesh / sliding mesh gear box, complete original front show with company built driver cabin, headlights, starters, alternator with batteries and fuel tank, wipers etc. The vehicle should be suitable also to move in narrow lanes.

ENGINE TYPE	4-STROKE, NATURALLY ASPIRATED, WATER COOLED DIESEL ENGINE. (Confirming to latest EURO-IV/ BS-IV emission norms)
MIN OUTPUT	25 HP AT RATED RPM or AS PER ARAI/CMVR CERTIFICATE
MIN TORQUE	125 NM AT RATED RPM or AS PER ARAI/CMVR CERTIFICATE
CLUTCH	SINGLE PLATE DRY FRICTION DIAPHRAGM TYPE/ Or as per approval of ARAI/CMVR.
GEAR BOX TYPE	SYNCHROMESH (4 FORWARD GEARS), SLIDING MESH (REVERSE GEAR), Or as per approval of ARAI/CMVR.
BRAKE: FRONT	HYDRAULIC DUAL CIRCUIT DISC BRAKE, Or as per approval of ARAI/CMVR.
REAR	DRUM BRAKES , Or as per approval of ARAI/CMVR.
PARKING BRAKE	MECHANICAL ON REAR WHEELS
SHOCK ABSORBER	STANDARD- AS PER ARAI/CMVR/ GOVT.apooval

SUSPENSION

TYRES

145R12LT 8PR RADIAL (Min)

(2 FRONT, 2 REAR AND 1 SPARE)

WHEEL BASE

MIN. 2000 MM

DIMENSION (MM)

MIN. LENGTH (MM) 3650

MIN. WIDTH (MM) 1600

Mobile toilet unit shall be designed and fabricated on above vehicle which must meet all requirements and specifications. further tenderer has to design the same in accordance with the prevailing RTO and other motor vehicle acts.

**TECHNICAL SPECIFICATION OF VEHICLE MOUNTED MOBILE TOILET VAN
(S.S.) [2 Seater]**

No. of Toilet	:	1 No.
Toilet Size	:	3'-8" X 3'-8" X 6'-0" Ceramic European Tub Fitted on Non-corrosive and Easy To Clean S.S. Tray (16 Gauge 304 S.S.)
No. of Urinal	:	1 No.
Urinal Size	:	3'-8" X 2'-6" X 6'-0"
Urinal Tub	:	Non-Corrosive And Easy To Clean S.S. Tub. Made from 16 Gauge 304 S.S.
Structure	:	Made From 25x25x16 Gauge M.S. Sq. Pipe and M.S. Angle.
Outside Body	:	Made From 16 Gauge Galvanize Sheet
Panelling (Inside)	:	PVC Coated G.I. Sheet & 20 mm Thick Thermocal Sheet Between Outside & Inside Panelling
Doors	:	Inside Opening Made From 18 Gauge Aluminium Sheet on Outside & PVC Coated G.I. Sheet on Inside With Heavy Duty Hangers, Stopper & Handle.
<u>SIDE PLATFORM</u>	:	
Type	:	Fixed & Folding Platform On Left Side of Toilet + Urinal With Side Railing.
Material	:	Made From ISMC 75x40 M.S. Channel and 3 mm Aluminium Chequered Plate on Bottom & 25x3 M.S. Flat With Side Railing made from M.S. Sq. Pipe of 40 mm & 20 mm.
Ladder	:	Ladder Portable Type Ladder on Left Side of Urinal Made From M.S. Pipe.
<u>SLUDGE TANK</u>	:	

Capacity	:	100 Liters, Both Side of Chassis (1 Side Tank For Urinal & Another Side Tank For Toilet)
Material	:	2.5 mm Galvanize Sheet
Fitting	:	* Sludge Drain Valve 50mm Dia S.S. Ball Valve * Air Vent Pipe Is Provided To The Sludge Tank To Exhaust Foul Gases. * Sludge Tank Shall Have Slope At Rear And of About 2" For Easy Drain.
WATER TANK	:	
Capacity	:	500 Liters.
Material	:	2.5 mm Galvanize Sheet (Between Driver's Cabin & Urinal)
BASE-FRAME SPECIFICATION	:	
Base – Frame	:	Made From 75x40 M.S. Channel, 20x20x2 M.S. Square Pipe Structure Made From 25x25x2 M.S. Sq. Pipe
Overall Dimension	:	2440(L) x 1540(W) x 2700(H) From Ground Level All Dimensions are in mm And Approximate. However, actual dimension shall be determined as per the selected chassis dimensions.
Top	:	3 mm Fibre Sheet
ACCESSORIES	:	<u>INDIVIDUAL IN TOILET & URINAL COMPARTMENT</u> <ul style="list-style-type: none"> • Mirror – 01 Nos. • Wash basins – 01 Nos. • Napkin Hanger – 01 Nos. • Soap Keeper – 01 Nos. • Toilet Lamp (D.C Supply) • Foldable Ladder – 01 Nos. • S.S Taps to Toilet & Urinal Compartments and At Wash basins. • Mud Guard on Wheels.
PAINT	:	<ul style="list-style-type: none"> • Two Coats of Anti-Corrosive Zinc Base Primer. • Two Coats of Auto Paint (Shade as Per Choice) • Epoxy Paint inside the Tank.

Entire unit shall be self sufficient to use the same at the site. All required inter related connections etc. shall be provided.

Painting:- The body shall be coated with one coat of zinc rich primer & then with two coats of synthetic enamel paint to ensure long lasting structure suitable for use under hostile conditions. Color shade shall be as specified by the RMC. The logo/ message of, capacity of equipment and any other information asked by the RMC

shall be painted on the body. The paint shall be of good quality and of ICI / Asian / Johnson & Nicholson / Burger / Nerolac make.

The supplier shall paint/ provide number and messages on the body as per RMC requirement.

All welding work must be MIG welding only. All necessary finishing shall be carried out prior painting. Welding wire shall be of ESAB/ADOR/L&T only.

o All angle and channels and other raw materials are as per Indian standard.

o All MS material shall be of Tata/ SAIL/ Indalco / Jindal / Vishakhapatnam steel/ Essar /Ispat/ (for angle/ channel if not available of above brand then it shall be of IS/ISO approved make) only.

Inspection of the fully built unit will be done by Environment engineer and/or his representative and during inspection if any minor modification/suggestion recommended for better working of the system, same shall be implemented by contractor.

All required safety & warning control system & mechanism shall be provided in built.

_ Party has to submit the latest test certificate/report for quoted model of ARAI / CMVR / Govt. Agency confirming emission norms (if any- applicable in Ahmedabad city) along with its technical bid.

OTHER INSTRUCTIONS:

The Bidder shall offer the engine Model which is current standard model of production, also which is substantially the same as one proved in successful use.

TOOL KIT:

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

INSTRUCTION MANUAL:

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

WORK TESTING:

The successful Bidder shall make arrangement for testing/ demonstration of the mobile urinal cum toilet both at the works of manufacturer (if required) and at the Municipal site (as may be required). The bidder shall issue a test certificate for the performance of the unit.