



Ministry of Housing and Urban Affairs
Government of India



SEWER, FAECAL SEPTAGE & DRAIN CLEANING EQUIPMENT MANUFACTURED IN INDIA

Ministry of Housing and Urban Affairs
Nirman Bhavan, New Delhi

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Introduction

From the perspective of human development, it will be correct to state that improved sanitation is one of the principal indicators of civilization and urbanization. Planned management of human excreta has been a hallmark of all great urban societies from as early as the Indus Valley towns and the Roman cities. History is replete with accounts of epidemics and heavy human losses caused by outbreak of Cholera and other water borne diseases directly resulting from poor sanitation where discharged sewage, was somehow allowed to mix with supply of drinking water.

Most Indian towns and cities have developed organically around places of commercial or religious interest. There have been very few 'planned' developments. Household sanitation in these towns have thus ranged from a mixture of open defecation, rudimentary insanitary toilets and right upto the most modern water borne sewerage and treatment.

Swachh Bharat Mission launched in 2014, together with other central and state government schemes, has ensured that excreta being discharged from each urban households now flows into a designated sanitary outlet, viz., into sewers or septic tank systems thereby eliminating the possibility of sewage mixing up with drinking water.

The septic tanks and sewers are designed to make excreta flow. However, sewerage systems are prone to blockage due to growth of roots in conducive moist soil, brickbats and other unwanted materials. This is often due to design faults in sewers which allow sewage to leak at some spots. Septic tanks may be overloaded if their capacity exceeds the design capacity or if they are not properly maintained. When this happens, sewers and septic tanks may overflow on public spaces. This situation may lead to contamination of pipelines and open wells and thus pose a health hazard.

As with any other system, regular maintenance is the most appropriate mechanism to ensure that the system minimizes the need for any human intervention. While it is potentially dangerous, only if used in a confined space with protective equipment (PPE) and proper ventilation. In a space with likely presence of hazardous gases, it is not recommended.

While initially, it was common, the use of manual labor by sanitation workers to rectify the faults in the system. Modern devices has generally kept pace with the technological capabilities and cost is readily available. However, manual entry except in extreme emergency situations is not recommended.

internationally avused equipment, gear and devices for eliminating the need for human entry into sewers and septic tanks are also readily available in India.

The Government e- Marketplace (GeM), a venture of Ministry of Commerce and Industry, has enlisted a large number of such products. In addition, this Ministry had organized a global technology challenge in later half of 2018, which brought to notice certain interesting equipment which are in various stages of development. Further to this, a number of different products are available and variety of manufacturers are selling their products in open market in India. MoHUA has published this consolidated directory to help municipal procurers make an informed decision

It will be endeavored to update this directory on regular basis with more categories and manufacturers to provide more options to the buyers. The directory will will be maintained online on the website of Swachh Bharat Mission

Disclaimer- The directory, though supported by the Ministry for production and dissemination as an information tool, is not to be understood as specific endorsement of vendors/ manufacturers whose products are showcased in the following pages.

Layout of Vendor Direct

This vendor directory has been su as under-

- a) Septic Tank Cleaning Equipme
- b) Sewer Cleaning Equipment
- c) Special Innovations

Each of the categories has been describe a range of products of c for narrow lanes to those for wide manufacturers names and capab given.

This is followed by a list of contac convenience of the buyers and a which is presently available on the

A separate section on safety devi equipment has been provided to equipment used by various gover chemicals, oil, defence etc. These under their particular category h

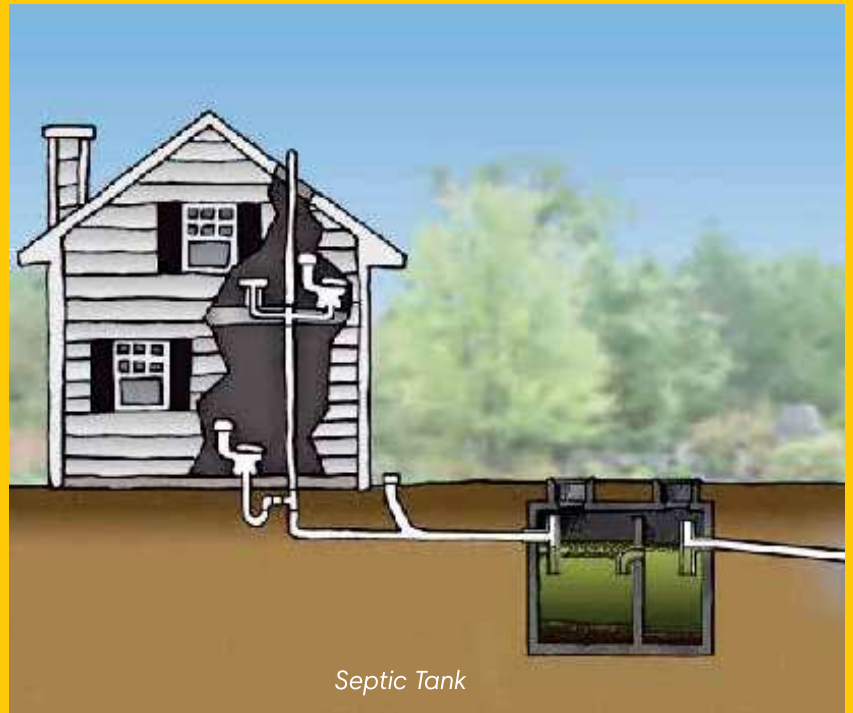
It is expected that the municipal find this directory useful to ensure undertake any unnecessary entry sewers or septic tanks and any ur where a suitable mechanical alte



I. Septic Tank Cleaning Ec

In Septic Tank system, the wastewater generated from residential and commercial establishments is collected in a septic tank from the household or establishment through underground piping.

Based on the above methods of collection and transportation of wastewater or sullage, various methods of cleaning which is required for ensuring maintenance of the infrastructure involved.



I.1 DESLUDGING OF SEPTIC

Septic tanks are required to be periodically desludged using vacuum loaders to ensure complete evacuation of the sillage as well as solids that tend to sediment.

Price Range : Rs. 25 Thousand to 45 Lakhs



Suction Machine mounted on LCV, MCV, HCV, Trailer

DESLUDGING OF SEPTIC TANKS



Product Name : KAMVAC

Description :

- KAMVAC is a truck chassis equipped with a vacuum suction pit/cesspool emptier and has capacities of sludge collection and displacement ratings of 1000 to 1500 litres.
- Siphoning the liquid and sludge from the equipment's sludge collection tank from surcharged manholes, water drain lines, septic tanks, etc. and transporting the same to a central collection tank for emptying under gravity.
- Vacuum Loader is available in various capacities ranging from 1000 to 1500 litres.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DESLUDGING OF SEPTIC TANKS



Product Name : GULLYM

Description :

- MANIAR Suction machine with cum blow back system is used for desludging of Cesspool, Cesspit and can suck particles upto 25 feet and depth of 25 feet by small nagar panchayat with no investment of the trust.

Manufacturer :
MANIAR & CO.

DESLUDGING OF SEPTIC TANKS



Product Name : DESILT M

Description :

- D'silting machine (Grabber) of 2006. It is underground machine with silt carrying capacity of 500 kgs, grabbing capacity of 1000 kgs. It is no limitations in depth. It can be directly emptied into the handling of waste.

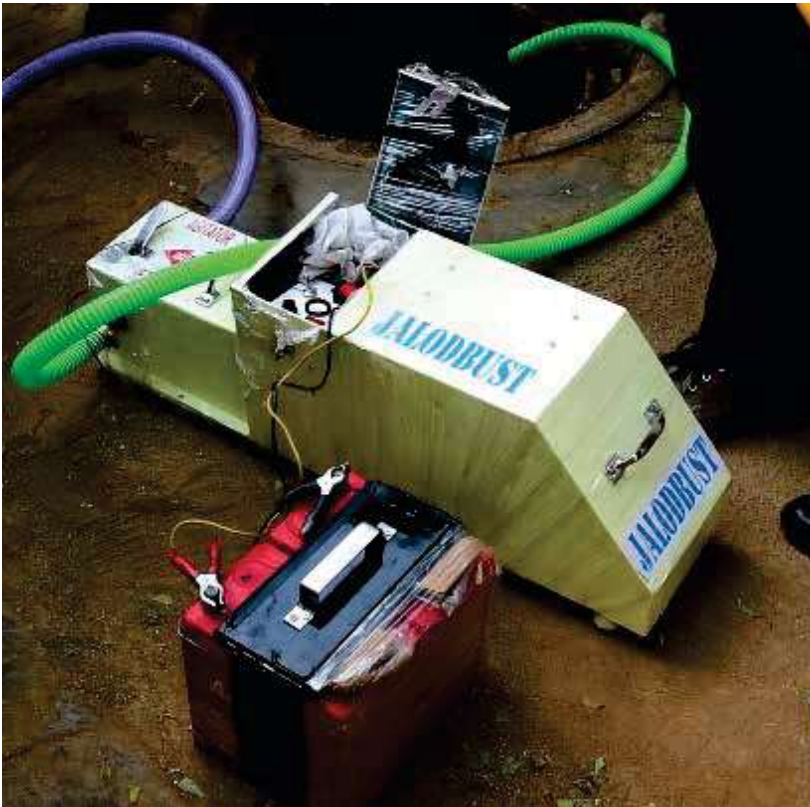
Specifications :

- The machine is self propelled for transportation.
- Easily can ply in narrow streets. Capacity of 500 kgs, nC. Operations, Cost Effective.

Manufacturer :

MANIAR & CO.

DESLUDGING OF SEPTIC TANKS



Product Name : JALODBUST

Description :

- The equipment is a portable sludge handling machine
- Product specifications are:
 - 500-800 liters per hour
 - 2,500 litres handling per day
 - 50 mtrs horizontal distance
 - 30 Kgs weight of machine
 - 24 volt 40 AH Battery
 - 200-500 watt motor
 - Works on piston pump principle
 - Agitator based on shock action as follows :
 - Displacement is done by shock
 - Gland for water seal
 - Lever for creating shock
 - Can be used to produce sludge
 - Liquifies sludge by removing

Manufacturer :

JALODBUST

DESLUDGING OF SEPTIC TANKS



**Product Name : SEWER L
(SEWER SUCTION) MACH**

Description :

- The equipment is a Truck-mounted desludging machine for suctioning the Sludge from gully pits, septic tanks and discharging the collected sludge into the Tipping of the Tank, alternate arrangement.

Manufacturer :

TPS INFRASTRUCTURE

DESLUDGING OF SEPTIC TANKS



Product Name : TRAILER

Description :

- These are Vacuum Mac and mounted on 2 Whe basically used for Clea

Specification :

- 5/10 HP Diesel Engine o 6500-9000 LPM and Vo Capacity 3000 Ltrs

Manufacturer :

JETBROOM WASTE SOLUT

II. Wastewater transport Underground Sewerage

Underground Sewerage Networks are designed and constructed to carry waste water and some amount of solids from its point of generation to its point of collection.

Due to irregular flow of wastewater, the prescribed self-cleansing velocity of the wastewater is often not achieved. The solids separate from the liquids and tend to accumulate within the pipeline thereby reducing its hydraulic load carrying capacity. This sedimentation is called siltation.

Extensive siltation not only affects the flow of sullage but also is the main reason for the choking of the sewerage lines. If a planned preventive maintenance schedule (PPMS) is put in place siltation can be minimized thereby reducing the frequency of chokes. Dechoking is a breakdown maintenance activity representing a deteriorating sewerage network.

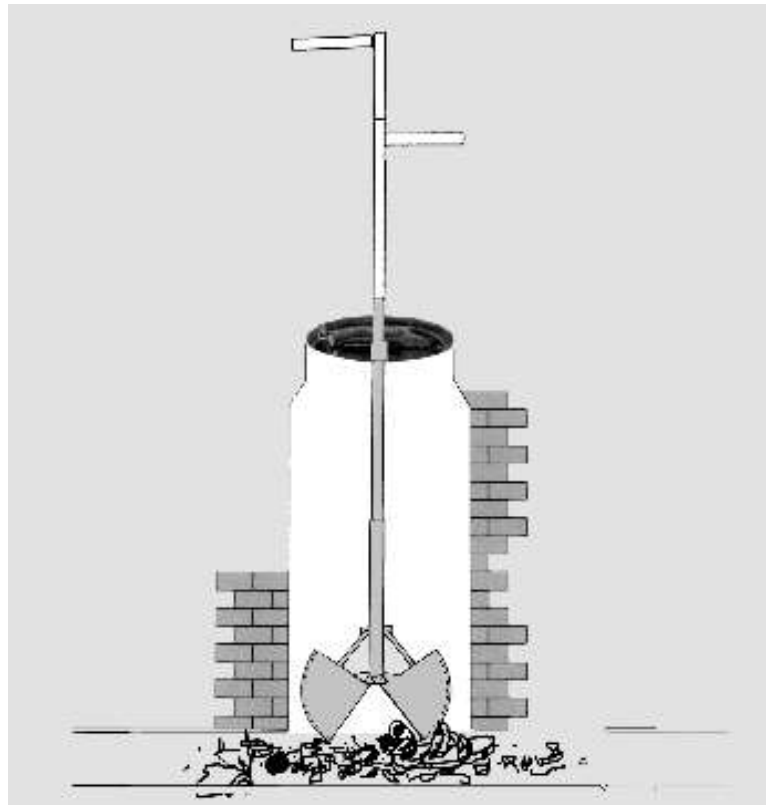
To overcome the inherent issues faced in sewerage networks the below 3 processes of cleaning and maintenance are recommended.



II.1 Desilting of Manholes

Silt that flows through the network, often accumulates in the manhole and is removed. The removal of silt from manholes can be carried out mechanically or through pneumatic methods.

Price Range : Rs. 20 Thousand to 35 Lakhs



Mechanical Silt removal equipment

DESILTING OF MANHOLES



Product Name : KAMGRAB

Description :

- The KAM GRAB is ideal for removing "SOLID MATERIAL" at a depth up to 10 meters.
- Machine is able to scoop up to 6 litres of solids into its bucket.
- Can be used to manually desilt manholes & open nallahs.
- Kamgrab is available in two sizes of 3 ltr. & 6 ltr.

Manufacturer :

KAM-AVIDA ENVIRO ENG

DESILTING OF MANHOLES



Product Name : KAMGRAV

Description :

- With a 25 ltr bucket capacity, the machine can be operated by an electro-hydraulically controlled engine driven hydraulic pump and valves.
- The Grab bucket can lift vertically (up to 1.5m level & the boom rotation (360° and R). The Hopper can hold up to 1.5m one trip.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DESILTING OF MANHOLES



Product Name : KAMVAC

Description :

- KAMVAC is a truck chassis equipped with a large cylindrical tank for gully pit/cesspool emptying. It has various capacities of sludge collection and displacement ratings of 1000 to 12000 ltr.
- Siphoning the liquid and sludge from equipment's sludge collection tanks, from surcharged manholes, from water drain lines, septic tanks, etc. and transporting the same to a central sludge emptying under gravity to a central sludge tank.
- Kamvac is available in various capacities from 1000 to 12000 ltr.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DESILTING OF MANHOLES



Product Name : JALODBUST

Description :

- The equipment is a portable sludge handling machine
- Product specifications as follows:
 - 500-800 liters per hour
 - 2,500 litres handling per hour
 - 50 mtrs horizontal distance
 - 30 Kgs weight of machine
 - 24 volt 40 AH Battery
 - 200-500 watt motor
 - Works on piston pump principle
 - Agitator based on shock wave
- The Process is as follows :
 - Displacement is done by shock wave
 - Gland for water seal
 - Lever for creating shock wave
 - Can be used to produce shock wave
 - Liquifies sludge by removing water

Manufacturer :
JALODBUST

DESILTING OF MANHOLES



Product Name : DESILT MAN

Description :

- A combination of Desilting machine, which is unique of its kind developed by MANIAR & CO.
- It is underground manhole desilting machine with carrying capacity of 0.5 cum.
- The grabbing capacity of the machine is not limited by depth.
- The silt collected in the hopper can be emptied into other container without re-arranging the machine in checked underground lines.

Specifications :

- The machine is self propelled.
- Easily can ply in narrow lanes.
- Silt collection capacity of 5 cum.
- Compact Vehicle, User Friendly.

Manufacturer :

MANIAR & CO.

DESILTING OF MANHOLES



Product Name : TROMBI

Description :

- It is a combination of H
Suction and Rodding m

Specifications :

- Compact
- Can ply in narrow lanes
- All operations can be c
- Cost effective, User frie

Manufacturer :

MANIAR & CO.

II.2 Desilting of Sewer Lines

Silt that is accumulated within the sewerage network is to be removed to ensure minimizing chokes. The method adopted for desilting will also depend on the

For non-man-entry lines, the ideal means is by bucketing or high-pressure jetting. For man-entry lines, pneumatic conveyance with all prescribed safety precautions is used, with or without jetting.

Price Range : Rs. 39 to 80 Lakhs



Sewer Suction cum Jetting Machine

DESILTING OF SEWER LINES



Product Name : KAMBI

Description :

- KAMBI is a truck chassis combination machine with capacities of clean water. These equipments are used for sewer lines of diameter.
- Siphoning the liquid and equipment's sludge collection from surcharged manholes, water drain lines, septic tanks, transporting the same to emptying under gravity to sludge tank.
- De-choking and de-silting lines and chambers by using suitably dimensioned jets. The dislodged effluent is transported to the desired disposal site for pressure/tipping of sludge.
- Kambi is available in various capacities.

Manufacturer :

KAM-AVIDA ENVIRO ENG

DESILTING OF SEWER LINES



Product Name : KAMBI RECYCLER

Description :

Combination of high vacuum suction and high pressure water jetting combination recycling system. It is a high GVW rating (up to 40 Tonnes) truck chassis. Made in India.

- The equipment power jetting system extracts debris in the drain lines and sludge compartment from the drain. The debris is extracted, recycled through a filtration system to maintain filtration system. The water is pumped for further power jetting.
- The KAMBI RECYCLER does not discharge water but continues cleaning the drain lines, thus asserting the elimination of debris. It reduces cycle time and offers maintenance free operation.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DESILTING OF SEWER LINES



Product Name : KAMBI HIFLOW-5 DUMP TANK

Description :

A wide range of suitably equipped trucks with a mounted high vacuum suction head, high pressure combination machines, and high capacity dump tanks, working in sewer lines of various diameters of up to 2000 mm. The truck is used for:

- Simultaneously/independently suctioning and siphoning the silt and debris from deep sewer mains.
- Transportation of the excavated material to a disposal site for emptying.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DESILTING OF SEWER LINES



**Product Name : TRUCK MOUNTED
MACHINE**

Description :

- These are Combination of Vacuum Pump & PTO taking Power from the Engine of a Truck. These machines are used for Desilting of Sewer Lines (De-choking) & Sludge from Septic Tanks.

Specifications :

- Vacuum Pump having 1000 mm WC Pressure : 8000 mm WC
Compressed Air Pressure : 150 Bar Compressed Air
(Fresh Water : 4500 Ltrs)

Manufacturer :

JETBROOM WASTE SOLUTIONS

DESILTING OF SEWER LINES



Product Name : GULLYM

Description :

- MANIAR Suction machine cum blow back system. Cesspool, Cesspit and can suck particles upto feet and depth of 25 feet by small nagar panchayat no investment of the trust.

Manufacturer :
MANIAR & CO.

DESILTING OF SEWER LINES



Product Name : COMBIN

Description :

- Machine is a combinat Jetting and Suction with
- The tank capacity can be partitioned into fresh water as per requirement.
- The machine can effectively drain drainage lines and can reach a distance of 200 feet and is trailer mounted and co

Manufacturer :
MANIAR & CO.

DESILTING OF SEWER LINES



Product Name : TROMBI

Description :

- It is a combination of H
Suction and Rodding m

Specifications :

- Compact
- Can ply in narrow lanes
- All operations can be c
- Cost effective, User frie

Manufacturer :

MANIAR & CO.

DESILTING OF SEWER LINES



Product Name : HIGH PRESSURE WATER JETTING MACHINES

Description :

- The equipment is a Truck mounted High Pressure Water Jetting Machine used for removing blockages from sewer lines. It uses High Pressure Water Jetting to remove sludge from the manholes. It also removes sludge by Hydraulic Tip and Blow-off through Blow-back Arrangement.

Manufacturer :

TPS INFRASTRUCTURE LTD

DESILTING OF SEWER LINES



**Product Name : HIGH PRESSURE
CLEANING VEHICLES WITH**

Description :

- The equipment is used for cleaning sewer pipelines through high-pressure water jets. Heavily clogged sewer lines can be cleaned with the high-pressure water produced by the jetting operation. The debris in the manholes shall be removed by the suction system. The debris is then recycled filtered water is suctioned from the manhole.
- The main advantage of this equipment is that it does not require fresh water for cleaning. The Jetting operation can be performed without interruption for long duration. The capacity of the fresh water is high. The suction-cum-jetting De-

Manufacturer :

TPS INFRASTRUCTURE LTD

DESILTING OF SEWER LINES



Product Name : SUPER S

Description :

- The Machine is a Heavy machine is self-contained suitable for suctioning in conjunction with Truck
- The machine is capable of sludge like mud, slurry, lines, storm water drain and capable of jetting diameters ranging from
- It consists of a water tank of 4000 liters. The equipment is mounted on a 10 Ton GVW Chassis.
- Sewage collect tank (separate vehicles of total 1000 liters mounted on a suit

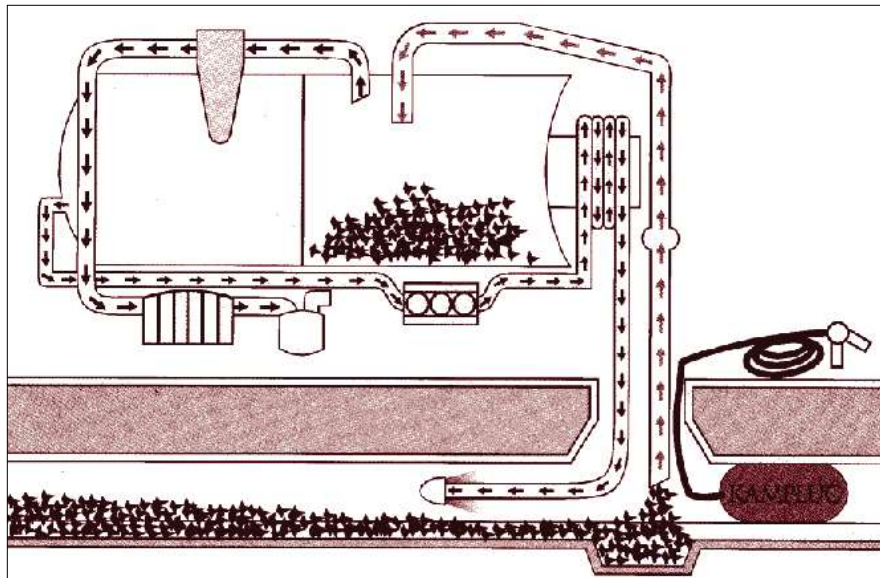
Manufacturer :

TPS INFRASTRUCTURE LTD

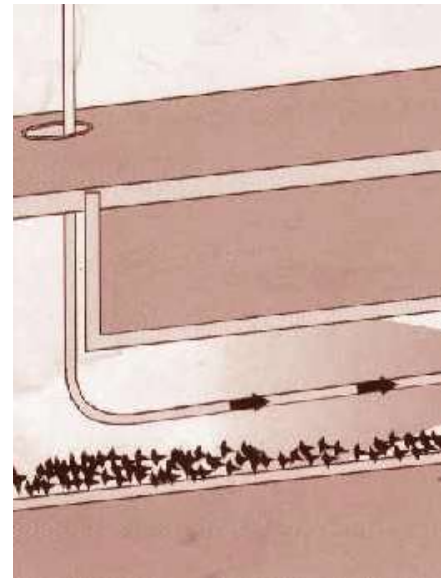
II.3 Dechoking of Sewer Line

Obstructions within the sewer line that do not allow the wastewater to flow are called chokes. These chokes are to be broken in order to resume the normal flow of wastewater. The dechoking of a blockage is either by manual rodding, power rodding or high-pressure water jetting.

Price Range : Rs. 6 to 61 Lakhs



High Pressure Water Jetting in Progress



High Pressure Water Jetting in Progress

Manual Rodding, Power Rodding & High Power Jetting Machine

DECHOKING OF SEWER LINES



Product Name : KAMROD

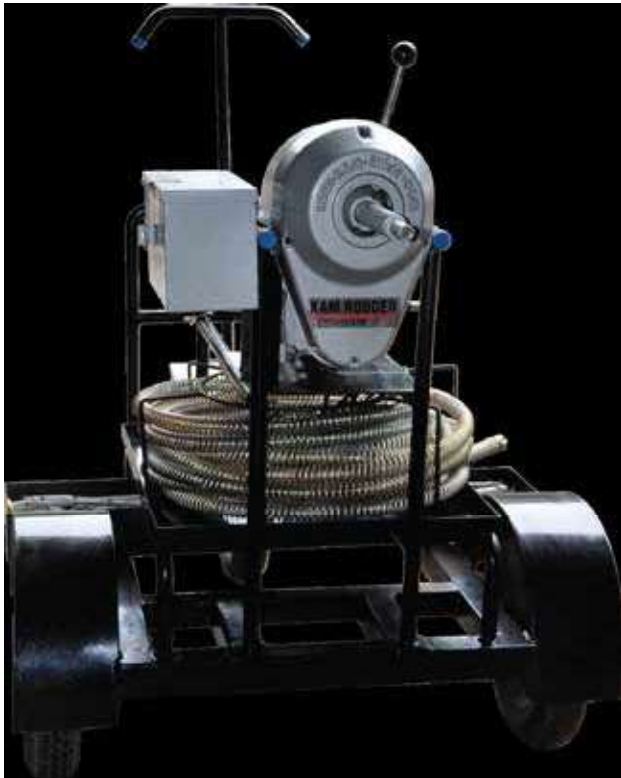
Description :

- The KAMROD is suitable for use as a sewer line cleaner for 4" to 12" Lines.
- KAMROD is made of zinc plated steel and complies with the requirements of the relevant standards.
- The tools and accessories are chosen based on application. The accessories include Sand Driller, Double Coil Tool, Push Pull Tool.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DECHOKING OF SEWER LINES



Product Name : KAMBORE

Description :

Motorised Cabling - Cum

- Powered by a 0.5 HP, 220V induction motor, the trolley machine drives the flexible rods through a compact box and a timing belt arrangement.
- The equipment is effective for stubborn pipe and drain cleaning ranging from 4 inches to 12 inches in diameter mode of cleaning the sewer lines.
- The flexible cables or sections of steel sewer cleaning rods are suitable for both external and internal applications.
- The concept of low speed rotation is more effective.
- The standard accessories like Auger and Double Cork can be optionally attached.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DECHOKING OF SEWER LINES



Product Name : KAMROD

Description :

- The entire unit of the KAMROD 8-1000 is designed and manufactured by Kam-Avida Enviro Engineering for sewer rodding equipment.
- The Kam-Rodder 8-1000 is a compact sewer rodding machine with a 8mm x 1000mm section of pipe attached to clean and remove roots, trees and other stubborn blockages from residential and/or sanitary sewer lines up to an approximate 300metre. The machine is easy to maintain and uses a simple control panel.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DECHOKING OF SEWER LINES



Product Name : KAMJET

Description :

- KAMJET is a truck chassis mounted de-choking machine available in multiple volumes. It consists of a large cylindrical tank. These equipments are used for de-choking of sewer lines of diameter 150mm to 1200mm. It is used for de-choking of sewer lines and chambers by high pressure jetting. The suitably dimensioned jetting nozzle dislodges the effluent and discharges it at the desired disposal site for the sludge. The sludge is disposed off by high pressure/tipping of sludge.
- Kamjet is available in various capacities ranging from 1000 to 12000 ltr.

Manufacturer :

KAM-AVIDA ENVIRO ENG

DECHOKING OF SEWER LINES



Product Name : KAMJET GR

Description :

- Hydraulically driven, electrically powered machine for cleaning and maintenance of sewer lines. It is designed for:
 1. De-choking of sewer lines.
 2. Flushing and de-silting of sewer lines.
 3. Water Jetting.
 3. Removal of silt and debris.
 4. Grabbing.

All the above, without any need for trenching, excavation, water and man-entry.

- A suitable truck chassis (10-12 Tons Gross Vehicle Weight) with minimum required horsepower and torque for the hydraulic machine.
- The KAMJET GR is under CEI certification 10376/2018.
- The KAMJET GR is the 2nd runner up in the Ministry of Development, India (MOI) Innovation Challenge 2018.
- Kamjet GR is available in various configurations.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DECHOKING OF SEWER LINES



Product Name : KAMBI

Description :

- KAMBI is a truck chassis machine combination machine available for use of clean water and sludge disposal. It is capable of efficiently working on lines from 200 - 1000 mm.
- Siphoning the liquid and sludge from sludge collection tank under vacuum into manhole chambers, sewer sump tanks and gully pits and transporting to desired disposal site for emptying under pressure/tipping of sludge.
- De-choking and de-silting of sewer lines and chambers by high pressure jetting hoses and transporting effluent and transporting to disposal tank for emptying under gravity.
- Kambi is available in varying capacities from 12000 ltr.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DECHOKING OF SEWER LINES



**Product Name : TRUCK MOUNTED
MACHINE**

Description :

- These are Combination Machines which are driven by a PTO taking Power from Vehicle or a Truck. These machines are used for De-choking of Sewer Lines (De-choking of sludge from Septic Tanks)

Specifications :

- Vacuum Pump having FA
Pressure : 8000 mm WC J
Pressure : 150 Bar Comb
(Fresh Water : 4500 Ltrs. c

Manufacturer :

JETBROOM WASTE SOLUTIONS

DECHOKING OF SEWER LINES



Product Name : COMBIN

Description :

- Machine is a combinat Jetting and Suction with
- The tank capacity can be partitioned into fresh water as per requirement.
- The machine can effectively drain drainage lines and can reach a distance of 200 feet and is trailer mounted and co

Manufacturer :
MANIAR & CO.

DECHOKING OF SEWER LINES



Product Name : JETTING M

Description :

- A high pressure jetting machine with a capacity of 4000 liters suitable for effective cleaning of underground drainage and sewer lines.
- The machine can effectively clean and dechoke drainage lines.
- The machine can be towed by a tractor, saving additional investment of

Manufacturer :
MANIAR & CO.

DECHOKING OF SEWER LINES



Product Name : MULJET

Description :

- A high pressure jetting capacity suitable for underground drainage
- The machine can effectively clean sewer lines at 100 bar pressure and flow rate

Manufacturer :

MANIAR & CO.

DECHOKING OF SEWER LINES



Product Name : TROMBINI

Description :

- A unique product developed to meet the necessity and demand of the market.
- It is a combination of High Pressure Suction and D'silting Grouting.

Specifications :

- Compact
- Can ply in narrow lanes
- All operations can be done
- Cost effective, User friendly

Manufacturer :

MANIAR & CO.

DECHOKING OF SEWER LINES



Product Name : HIGH PRESSURE WATER JETTING MACHINE

Description :

- The equipment is a Truck-mounted High Pressure Water Jetting Machine used for removing blockages from sewer lines. It uses High Pressure Water Jetting to remove sludge from the manholes. The sludge is removed by Hydraulic Tip and is collected through Blow-back Arrangement.

Manufacturer :

TPS INFRASTRUCTURE LTD

DECHOKING OF SEWER LINES



**Product Name : MULTIPURPOSE
CLEANING MACHINE**

Description :

- The machine is a multipurpose equipment suitable for cleaning sewer lines of 450 mm dia. with the help of high pressure water. The machine is provided with a high pressure water tank, a bucket for cleaning sewer lines, and a rod for cleaning obstructions in the sewer lines. The machine is mounted on a truck chassis.

Manufacturer :

TPS INFRASTRUCTURE LTD

III. Drain Cleaning Equipment

In the urban areas, both natural (nallahs) and man made drains are in parallel existence and dispose the storm water runoff safely. But these drains are prone to continuous silting. Therefore, periodic cleaning or desilting is necessary for these drains for maintaining the flow. The drain cleaning equipment that are available in the Country are discussed in the sub



III.1 Desilting of Open Nallahs

Periodic desilting of Open Nallahs or Culverts which may be covered by slabs powered by tractors or jeeps or by using a high-powered vacuum technology.

Price Range : Rs. 15 to 30 Lakhs



Mechanical Grabs mounted on Tractor, Jeep, Chassis

DESILTING OF OPEN NALLAHS



Product Name : KAMSCOOP

Description :

- The KAMSCOOP is a tractor-drawn drain de-silting equipment used for desilting both main roads and narrow drains in medium sized cities and towns.
- Machine is able to de-silt drains and canals of a maximum width of 1.5 meters, using a hydraulic excavator arrangement.
- The scooped out silt and debris is deposited in an open skip, a waiting dumper trailer or the dumper trailer itself.

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

DESILTING OF OPEN NALLAHS



Product Name : KAMSCOOP

Description :

- The KAMSCOOP can be mounted on a 4-wheel drive vehicle / jeep. The vehicle is driven parallelly to the open nallah, and the excavator arm is used to dig the silt from the bottom and other floating bodies. The excavated silt can be discharged into a container, keeping the front side free.
- The Kamscoop with a boom length of 3.65 m and an arm radius of 3.65 m.

Manufacturer :

KAM-AVIDA ENVIRO ENG

DESILTING OF OPEN NALLAHS



Product Name : KAMSCOOP TBCT

Description :

- KAMSCOOP TBCT is ideal for desilting and towns having a drainage system and large sized open drains.
- Capable of removing silt from dry or flowing open drains. Available in 3 variants for different operations and open drains up to a depth of 6 meters. Removable and a folding type loading mechanism. Truck's cabin and tipper are operated and extended.

Manufacturer :

KAM-AVIDA ENVIRO ENG

DESILTING OF OPEN NALLAHS



Product Name : NALHAM

Description :

- MANIAR Roadside Open
- This machine is very use
- clean Road side open N
- The back-hoe can be e
- sitting directly on Nalah
- vision of the blockage fo
- It can collect silt, mud, c
- and can accumulate th
- Apart from Trailer moun
- available on Bolero, Xen

Manufacturer :
MANIAR & CO.

III.2 Desilting of Large Open

Large nallas play a major role in the transportation of the excess storm water by minimizing the inundation duration of the surrounding areas.

These large nallahs are prone to extensive siltation therefore reducing its hydraulic capacity by maintenance by mechanically grabbing is required to be carried out in these areas.

After making the aforesaid inclusions and corrections you are requested to forward the same to JS(SBM-II) with a request to print with a copy to JS(SBM), Adviser (CPHEEO), S

Price Range : Rs. 2.5 Crores



Mobile All Terrain Excavator

DESILTING OF LARGE OPEN DRAINS



Product Name : KAM-MATE

Description :

- M/s Menzi Muck, Switzerland is a leading manufacturer of Mobile Hydraulic Excavators together with Kam-Avida. Kam-Mate is available in models of varying capacities and attachments. We are delivering an engineering marvel that is far more compact than a conventional excavator, but with the reach to even reach.

- Kam-Mate may be used for:
 - De-silting of inaccessible drains
 - Dredging of Canals & Streams
 - River Bank Reinforcement
 - Stream and Canal Restoration

Sold by:

KAM-AVIDA ENVIRO ENGINEERING

Manufacturer :

Menzi Muck, Switzerland

IV SPECIAL INNOVATION

Presenting a range of new age cutting edge



SPECIAL INNOVATIONS



Product Name : ANNAM-M

Description :

- The on-site mobile treatment unit performs liquid separation, sludge thickening, etc. While the liquid is separated, the sludge is thickened through the treatment process.
- The sludge thickening process reduces the water content in the sludge. The thickened sludge later goes for secondary treatment.

Specifications :

- The Mobile Treatment Unit uses advanced technology.
- It is a treatment system installed on a truck, capable to treat the contents of the truck.
- 3000 to 6000 lits/hr.

Manufacturer :

WASH INSTITUTE

SPECIAL INNOVATIONS



Product Name : BANDICOOT

Description :

- The Robotic scavenger developed for safe scavenging.
- Combination of pneumatic tires for safe cleaning of manholes.
- Infrared cameras helping in monitoring wastes can be monitored in real-time helps to control the robot in real-time.
- The operator doesn't need to be near the robot, operation can be remotely controlled.

Specifications :

- Image processing & High resolution camera
- Water Resistant & Dust Proof
- Lighter & Stronger than steel
- Simple to Use with auto cleaning
- Detection and alert for harmful gases
- Artificial Intelligence for the robot
- Bandicoot 2.0 could maneuver in narrow spaces

Manufacturer :

GENROBOTIC INNOVATIONS PVT. LTD.

SPECIAL INNOVATIONS



Product Name : SEWER CROC

Description :

- To Clean Under Ground Sewer

Specifications :

- Operating Pressure: Max. 100 bar to 175 bar
- Flow Rate: 145 LPM to 250 LPM
- Nozzle: Imported Ceramic
- Dimensions:
 - Ref. Dia 200-400
 - Flexibility 30 mm
 - Length 500- 650 mm
- Weight: 12 kg -18 Kg
- Material:
 - Turbine, Body frame: Stainless Steel
 - Cutting Blades: Low Carbon Steel
 - Wheels: PTFE/Nylonc
- Turbine RPM: 500 to 1500

Manufacturer :

SANITOR (Ajantha Techno Solu)

SPECIAL INNOVATIONS



Product Name : DYNASTORM

Description :

- To Clean Underground (UGD) pipe diameter.

Specifications :

- Operating Pressure: Max. 20 to 175 bar
- Flow Rate: 75 LPM to 100LPM
- Nozzle: Imported Ceramic N
- Dimensions:
 - Ref. Dia 450 -1200mm
 - Length 650 mm
- Weight: 35KG
- Material:
 - Turbine, Body frame: Stainless
 - Cutting Blades: Low Carbon
 - Wheels: PTFE/Nylonc
- Turbine RPM: 500 to 1500 rp

Manufacturer :

SANITOR (Ajantha Techno Solu

SPECIAL INNOVATIONS



Product Name : GAS DETECTOR

Description :

- To safely measure the poisonous gas by opening the manhole lid.

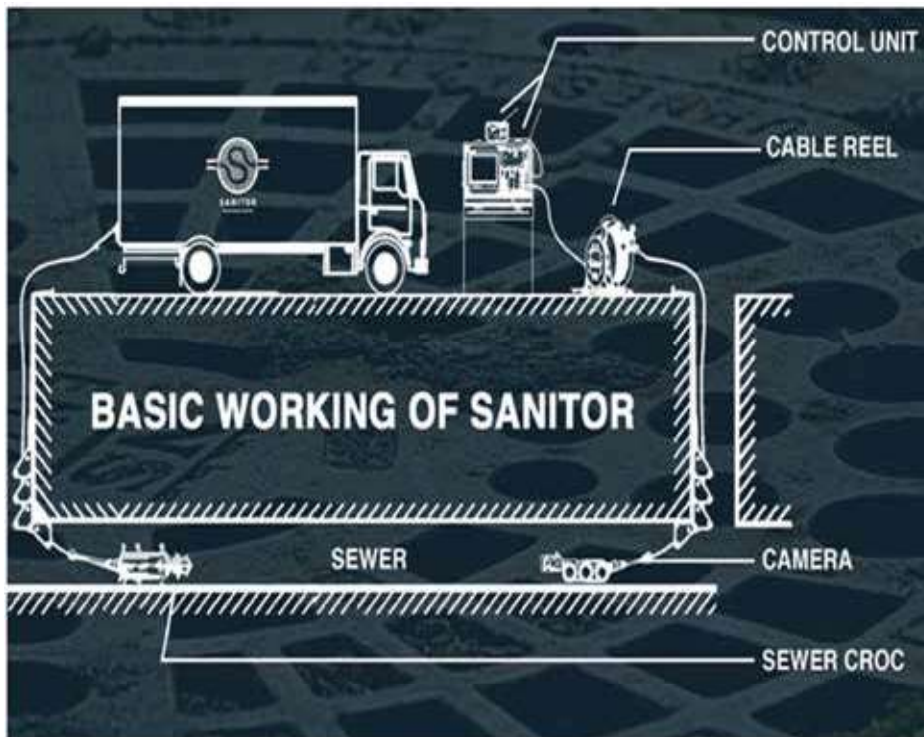
Specifications :

- Consists of gas detector on the manhole lid and an alarm system with sensors and display system.
- Carbon Monoxide, Methane gas detected.
- Beep alert will ring if it exceeds the limit.

Manufacturer :

SANITOR (Ajantha Techno Solutions)

SPECIAL INNOVATIONS



Product Name : ROBOTIC SEWER INSPECTION ON THE VEHICLE

Description :

- Robotic CCTV camera with v... lighting, Water proof to 40 m... Ip68 with camera reel and m...

Manufacturer :

SANITOR (Ajantha Techno Solu...

SPECIAL INNOVATIONS



Product Name : KAM CCTV

Description :

- Spartan Tool 2.0 Traveller is a portable CCTV camera that takes finding and seeing to the next level.
- The CCTV features a removable lens & easily swap reels in the field.

Specifications :

- Sapphire glass lens with 1/4" depth of field. Camera centering gage.
- Tab® communicates via Wi-Fi.
- Lithium-ion battery technology.
- Weight 15.5 Kg complete.
- Size 22.5"W x 26"H x 12"D
- Camera Resolution 640 x 480
- Wheels: PTFE/Nylon
- Turbine RPM: 500 to 1500

Manufacturer :

KAM-AVIDA ENVIRO ENGINEERING

Contacts

Name : **KAM-AVIDA ENVIRO ENGINEERS PT. LTD.**
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E-mail : mktgservices4@kam-avida.com
Website : www.kam-avida.com

Name : **MANIAR & CO.**
Address : Behind Ajit Mills, Rakhial, Ahmedabad - 380023, Gujarat,
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Mobile : 9909991010, 9925009005
Tel. : 079 22911636
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Name : **TPS INFRASTRUCTURE LTD.**
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Contact : Priyashil Choubey
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Tel. : 011-29212101, 29214007
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Name : **JALODBUST**
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rakeshkasba@gmail.com

Name : **JETBROOM WASTE SOLUTIONS PVT. LTD.**
Address : C-120, Dayalbagh, Faridabad - 121003 (Haryana)
Contact : Saloman Masih
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Name : **WATER, SANITATION AND HYGIENE (WASH) INSTITUTE**
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Tel. : 04542- 240881
Email : akalimuthu@washinstitute.org
Website : www.washinstitute.org

Name : **PVT. LTD.**
Address :
Techno
Thiruvar
Contact :
Mobile :
E-mail :
Website :

Name : **Solution**
Address :
Road, A
Bangalo
Contact :
Mobile :
Email :
Website :



GeM
Government
e Marketplace

Listing of Sewer & Faecal Septage Cleaning Equipment
India under “Swachh Bharat Mission” Category H

<https://gem.gov.in/swachh-bharat-mis>

Summary of Equipment on C

| Sr. No | Name of Product | No of M |
|--------|---|---------|
| 1 | Tractor Trailer Mounted Suction Machine | |
| 2 | Tractor Trailer Mounted Suction Cum Jetting Machine | |
| 3 | Truck Mounted Suction Machine (Small) | |
| 4 | Truck Mounted Suction Machine (Medium) | |
| 5 | Truck Mounted Suction Machine (Heavy) | |

1



2



3



4



Summary of Equipment on GeM

| Sr. No | Name of Product | No of M |
|--------|--|---------|
| 6 | Truck Chassis Mounted Suction Cum Jetting Machine (Small) | |
| 7 | Truck Chassis Mounted Suction Cum Jetting Machine (Medium) | |
| 8 | Truck Chassis Mounted Suction Cum Jetting Machine-(Heavy) | |
| 9 | Super Sucker Machine | |
| 10 | Super Sucker With Auxiliary Engine | |

6



7



8



9



Summary of Equipment on GeM

| Sr. No | Name of Product | No of M |
|--------|--|---------|
| 11 | Truck Chassis Mounted Jetting Machine | |
| 12 | Combined- Suction, Jetting, Rodding and Grabbing | |
| 13 | Precast Manhole Covers | |
| 14 | Sewage Pumps | |

11



12



13



PERSONAL PROTECTIVE EQUIPMENT AS PER THE PROHIBITION OF MANUAL SCAVENGING REHABILITATION ACT 2013

ALL THE BELOW PRODUCTS ARE AVAILABLE ON THE

1. Safety Devices for Entering in to the manhole to avoid the Hazard



Air Compressor Blower



Airline Breathing Apparatus



*Airline Respirator With Manually
Operated Air Blower*



Air Purifier Gas Mask



Breathing Mask



*Emergency Medical
Oxygen Resuscitator Kit*



Gas Monitor - 4 Gases



Chlorine Mask

2. Safety Devices for Protection from Skin Diseases, Cuts And Wounds



Barrier Cream



Face Mask



Hand Gloves



Safety Goggles



Safety Gumboots



Safety Helmet



Head Lamp



Normal Face Mask



Safety Body Clothing



Rain Coat



Fishing Wader Suit with Boots



First Aid Box

3. Equipment for Safety from Slips, Trips, Road Accidents and accidents inside drains



Nylon Rope Ladder - 5 m



Reflecting Jackets



Nylon Safety Belt



Safety Harness



Caution Tape



Caution Cone



Caution Board



Lead Acetate test paper



Safety Tripod set



Search Light



Safety Torch



Portable Oxygen



Ministry of Housing and Urban Affairs
Government of India