

# **GAPVAX MC SERIES**







# The GapVax MCseries Combination Vacuum and Jetting machine is a simple-to-operate machine for contractors and municipalities!

### A body built to last:

- Unitized, cylindrical, water/debris tank with full longsill sub-frame
- •3/16" non-corroding stainless steel water compartment
- •3/16" high strength carbon steel debris compartment
- Three heavy-duty body reinforcement rings
- Full-opening rear door
- Liquid tight seal of the rear door is always assured by a non-corroding stainless steel ring
- Reversible tailgate gasket
- Four independent field-adjustable rear door locks
- Adjustable rear door hinges
- Dual lift cylinders to open the rear door
- Material-backed air inlet cannon
- Top-loaded debris compartment for maximum debris capacity
- Material loaded at rear of debris compartment for fast unloading
- Debris compartment inlet diffuser significantly reduces material carry-over

#### The smoothest drive system:

- OMSI mid-ship transfer case directs the power of the engine to the blower and hydraulic system
- Rated at 550 continuous horsepower
- Transfer case mount is vibration isolated with four isolators
- Oil level sight glass
- A hot-shift clutch is available for remote activation

## **Powerful vacuum performance:**

- Rotary lobe positive displacement blower
- Minimum air slippage under vacuum
- Direct shaft drive
- Blower mount is vibration isolated by four isolators
- Ultra quiet specifically engineered absorption silencer
- Blower air connections isolated by rubber couplings
- Silencer supports independent of blower
- Oil sight glasses
- Rated at 3,500 CFM and 15" Hg of vacuum
- Upgradable to 5,000 CFM and 15" Hg of vacuum
- Operator-friendly vacuum relief valves

## Filtration:

- Top- loading body
- Debris compartment inlet diffuser directs material from the airstream
- •12" stainless steel float ball to shut off liquids from overloading
- 10" low friction pipework
- Specifically engineered centrifugal separator to force the dust and mist from the airstream into a large capacity compartment
- Air passes a final micro-screen strainer before entering the blower



#### Now that's a boom:

- Works as one with the chassis thanks to the GapVax structural steel torque box
- Dual lift cylinders
- 180 degrees of rotation
- Full 8" flow capacity
- •3/16" tube design for minimum friction and very long component life
- Field-adjustable seals
- Power rotate and 4' extension are standard
- Upgradable to 9' extension, 25' reach from center of the truck

## Put it together:

- The heavy duty sub-frame is bolted to the chassis
- •4" cross I-beams for maximum rigidity
- Full body pivot pin through rear of sub-frame for excellent dumping stability
- Double acting 3-stage dump cylinder substantially extends the life of the chassis suspension

## Jetting system:

- URACA KD708 water pump
- •Rated at 65 GPM at 2,000 PSI
- Triplex plunger style
- Uses "chevron" seals, no rope packing
- File-reversible check valves mounted in stainless steel cages
- The cross head chamber has top and bottom covers
- Direct shaft drive from 8 or 10 bolt transmission PTO
- Can operate independent of the vacuum system

#### The front hose reel:

- Hydraulically powered direct-drive gearbox
- Variable speed control
- Heavy-duty stainless steel water swivel
- Positive action spooler lock
- •4' of reach from center of bearing allows for working over obstacles
- 180 degrees of rotation to curbside
- Mounted on a heavy-duty 12" Fruitland bearing with external grease fittings
- Air operated brake
- Operator friendly control station
- Easy, and full, engine access for maintenance
- Integrated docking station allows full hose reel operation without moving the boom



# GAPVAX MC COMBINATION MACHINE

# TRI-PLEX WATER SYSTEM WITH MULTI-FLOW

Water is stored in the stainless steel Water Tank 1. The water is piped via a 3" gravity-feed line, through a 20 mesh Filter 2 to the Water Pump 3. High pressure water from the Water Pump is directed to the Front Hose Reel 0, the Body Flushout System 3, or the Handgun 1. Precise control of water pressure and flow is accomplished with the Multi-flow Valve 1 via the Multi-flow Control Valve 1 located on the Operator Panel in the weather-tight Front Control Box.







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# POSITIVE DISPLACEMENT VACUUM SYSTEM OPERATION

In operation, vacuum conveys liquid material, sludge, rocks, gravel, sand, etc. through the Vacuum tubes and Boom 👔 into the Debris Body 👩 . The material is top-loaded into the Debris Body where the majority of the debris drops out of the airstream 🕙 due to gravity and air-flow velocity reduction. A Debris Body Inlet Diffuser is also incorporated to direct material from the airstream. A 12" automatic stainless steel Floatball () is built in to shut off liquids from overfilling the system.

The airstream moves into a specially engineered Cyclone Separator (5) to centrifugally force dust and mist from the airstream. The material drops out of the Cyclone and into the Collector Box (1) located directly below the Cyclone.

The airstream exits through the top of the Cyclone and passes through a final micro-screen strainer 1 which collects any material remaining in the airstream before it enters the Vacuum Pump 1

The airstream passes through the Vacuum Pump and exits through the special noise-atenuation Silencer []. Air returned to the atmosphere is clean and free of particulates.





# GapVax<sub>®</sub> MC at work





