

Technical Specifications: GapVax HV-56 HydroVax

Body steel:	Tank body and dished heads: ¼" ASTM A572 Grade 50 (EXTEN) Baghouse steel: ¼" A656 Grade 80 Cyclone chute: 5/16" ASTM A572 Grade 50 (EXTEN) Ductwork: ¼" ASTM A572 Grade 50 (EXTEN) Cyclone top cylinder: ¼" ASTM A53 Grade B, type E Cyclone cone: 3/16" ASTM A366 Other steel: 3/8" & above: A36; ¼" EXTEN; & under ¼": A366.
Vacuum blower:	Hibon Model S.I.A.V. 8702 positive displacement tri-lobe blower with ductile iron closed-end impellers, high temperature piston ring seals, helical timing gears and air injection cooling.
Free air flow:	5,300 CFM (9,000 cubic meters per hour)
Max. air flow @ 27" Hg:	2,940 CFM (5,000 cubic meters per hour)
Max. vacuum:	28" Hg (.93 bar vacuum)
Max. blower speed:	2,000 Rpm
Max. blower torque:	800 ft. lbs. at maximum blower output (1,085 newton meters)
Blower mounts:	Four 3 ½" thick rubber vibration isolation mounts.
Blower silencer supports:	Silencers supported by independent frame (i.e. not supported by blower casing).
Transfer case:	Air-shift engagement.
Transfer case mounts:	Four 2" thick rubber vibration isolation mounts.
Blower drive line:	Series 1710 Spicer drive shaft.
Collector body:	Round collector body 15' long X 70" diameter. 15 cubic yards, 3,000 gallons (US), 70 barrels capacity. (11.5 cubic meters)
Liquid shut-off:	12" stainless steel float ball shutoff
Body pivot pin:	One full width 1-15/16" X 40" cold rolled steel pivot pin. Entire pin rotates inside bearing tube with body to reduce wear.
Baffle plate:	Semi-circular plate with air flow cutouts mounted inside body at midpoint. The baffle plate reduces carryover.

Body inlet:	“Debris backed” collector body inlet mounted on top of tank. Accommodates top loading. Has porthose flanges to allow for routine rotation of porthose for longer life.
Distance air travels in body:	9’ 6” from body inlet to outlet.
Porthose:	8” super duty porthose with metal spiral core.
Filtration:	Single mode filtration. No wet/dry changeover.
Filtration cyclones:	Six cyclones (3 cu. ft. volumetric capacity each). Air flows through cyclones in parallel. CFM-per-cyclone ratio: 883 CFM.
Cyclone ductwork doors:	Ductwork has all steel construction. Duct has five adjustable access doors for complete duct accessibility for cleanout and inspection.
Filter baghouse:	40 – 60” X 4 5/8” snap-ring polyester filter bags. Air flows from cyclones to bottom of baghouse via an internal chamber to prevent side-blinding of bags.
Filter baghouse doors:	Two baghouse doors with adjustable hinges. Requires no power assist to lift.
Cyclone/baghouse chutes:	Two large oval-shaped dumpchutes with 208 sq. in. surface area. Dumpchute doors open with tailgate and are self-adjusting by means of two coil springs to ensure even seal to chute lip. 1 ½ “ square door gasket is mounted into channel groove in door (does not rely on glue to stay in place).
Filter cages:	Galvanized steel cages
Bag cleaning:	5-zone pulsator system operated by timer panel in NEMA 4 enclosure which sequences solenoids and goyen valves at 30 second intervals. System may be operated safely while truck is in transit due to air regulator in pulsator air supply line.
Blower inlet plenum:	Plenum has micro-screen stainless steel final filter. Filters down to .020” or 600 micron.
Air flow path:	Porthose - body - cyclone ductwork - cyclones - crossover duct - bottom of baghouse via internal chamber - through filter bags - upper baghouse (clean air) - blower inlet plenum - blower - exhaust silencer - atmosphere
Vacuum relief valve:	6” manual butterfly valve on bottom of plenum.
Hydraulics pump:	Pump output is 20.5 GPM @ 1500 engine RPM.

Hydraulic system:	Open center system with three port spool valve. Locks, tailgate, and body have independent circuit.
Body dump:	Double-acting single telescopic cylinder. 45 degree dump angle. Safe break away force of 60,000 lbs. Cyclone and baghouse compartments dump automatically with main payload.
Tailgate:	Full opening dished head tailgate. Safety prop included.
Tailgate cylinders:	Two double-acting hydraulic cylinders
Tailgate locks:	Four over-center cam type locks. Locks are individually adjustable and fail-safe. Once locked, they cannot open due to accidental loss of hydraulic pressure. Locks are suitable for pressure applications with no modification.
Tailgate hinge:	Fully adjustable with three 1 3/4" positioning bolts. Pivot surface is bronze bushing.
Tailgate sealing surface:	Sealing surface where steel meets rubber is a continuous bar of series 304 stainless steel welded to tailgate (even if body is carbon steel). This prevents pitting and leaks.
Dump Chute sealing surface:	Stainless steel bar (same as tailgate).
Control panel:	Includes: work light, blower RPM gauge and hour meter, vacuum gauge, blower temperature gauge, vibrator control, throttle controls, pulsator switch, power switch, optional vacuum relief button.
Rear tow plate:	3/4" steel plate welded to frame.
Vibrator:	Electric with thermal circuit breaker protection.
Ladder:	Rear folding ladder
Work lights:	Two sealed beam work lights on tailgate.
Surface Prep:	Body, chassis frame sandblasted to SP10 near white finish.
Paint:	One coat of epoxy fill primer. Two coats of automotive urethane finish. Body is sanded between primer and finish coats to enhance final appearance.
Fenders:	Full length aluminum, raise with body.
Overall height:	Approximately 13 feet 2 inches on trucks with a boom.

Additional Specifications for GapVax HV-56 High Pressure Water Pump System

Water pump:	Giant LP200 high pressure reciprocating triplex pump with ceramic plungers. Maximum pump rating is 20 GPM @ 2,900 PSI Output range: 10 GPM @ 1,000 engine RPM to 20 GPM @ 2,000 engine RPM
Water Pump Drive:	Direct shaft drive via transmission PTO. Continuous PTO torque rating of 175 Ft-lb.
Pressure regulator:	Giant (Heavy Industrial) Model #: 22973C-H rated to 26.4 GPM @ 4060 PSI.
Hose reel:	Manual hose reel, 1/2" X 50' hose rated at up to 4,000 PSI
Gun:	Single trigger heavy duty gun rate for up to 4,000 PSI
Water tank:	Fresh tank is formed by sub-compartmenting the debris tank with internal dished head. Tank has a water level sight tube.
Tank fill:	Anti-siphon fill
Tank coating:	Steel surface is blasted to SP-10 near white finish prior to application. Belzona® 5811 (Immersion Grade) polymer coating.
Strainer:	20 mesh inline Y-strainer stops rust scale and debris from entering fluid end of water pump. Strainer is easy to clean out.

Note: GapVax, Inc. follows a policy of continual product improvement and refinements. As a result, changes to standard equipment and features, specifications and optional equipment may occur at anytime without notice.

Option:

Vibration dampening: Vulkan VKL2912 rubber coupler mounted on blower drive shaft. Coupler rated at 925 continuous ft. lbs. torque and intermittent torque excursions of 2,200 ft lbs.

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