LMV 5K – 20K rental liquid-phase adsorption systems

Applications

Xylem's liquid phase adsorption system vessels hold Granular Activated Carbon (GAC) or other adsorptive media designed to remove contaminants from water. These systems are cost-effective in such applications as:

- Groundwater remediation
- Wastewater filtration
- Tank rinse water treatment
- Pilot testing
- Underground storage tank clean-up
- Leachate treatment
- Dechlorination
- Spill cleanup
- Hydrostatic test water treatment

InstallATion, startup and operation

The LMV 10K, and LMV 20K vessel systems are shipped as individual vessels with modular interconnecting hosing suitable for system operation in parallel and series as well as optional backwash operation configuration. The systems require minimal field assembly and site connections.

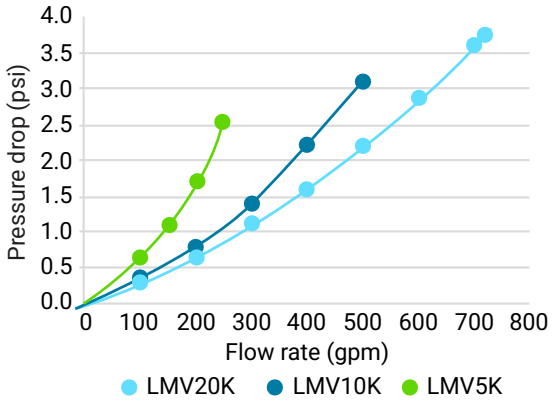
Xylem can provide a total service package that includes using OSHA-trained personnel performing onsite carbon changeouts.



Features and benefits

- Carbon steel vessel
- Corrosion-resistant acrylic polyurethane coated exterior
- Uniform, continuous internal epoxy or polyurea coating
- Modular design for easy handling and transportation
- HDPE header with polypropylene nozzles
- Schedule 40 carbon steel pipe supplied with butterfly valves
- Carbon slurry piping made from Schedule 40 carbon steel
- Top and side manway allows for easy internal inspection

LMV 5K - pressure drop (8 x 30 mesh)



Specifications / typical properties	LMV 5K MP	LMV 5K	LMV 10K	LMV 20K
Dimensions (dia. x sidewall height)	6' x 6'	6' x 6'	8' x 5' 9"	10' x 8'
Overall height	11'	11'	11'	17' 7"
Process piping	4"	4"	6"	6" or 8"
Flanged inlet/outlet (150# ANSI)	4"	4"	6"	6" or 8"
Flanged slurry port	N/A	3"	4"	4"
Manway (dia., side shell location)	20"	20"	20"	20"
Manway (top)	14" x 18"	14" x 18"	14" x 18"	14" x 18"
Utility water/air (hose cxn)	Chicago (select units)	Chicago (select units)	Chicago (select units)	Chicago (select units)
Interior coating	Epoxy or polyurea	Epoxy or polyurea	Epoxy or polyurea	Epoxy or polyurea
Exterior coating	Polyurethane	Polyurethane	Polyurethane	Polyurethane
Empty system weight (lb.)	3,149	3,150	4,500	10,900
Maximum carbon capacity (lb.)*	5,000	5,000	10,000	20,000
Maximum capacity (ft^3)	175	175	350	700
Minimum carbon fill (lb.)*	2,500	2,500	5,000	10,000
Minimum fill (ft^3)	90	90	180	360
Operating weight (lb.)	17,450	17,450	37,000	75,600
Design pressure (psig) @ 140° F	60	90	100	100
Max. Flow (gpm)**	280	280	500	780
Backwash rate (gpm) (8 x 30 mesh @ 55° F)	280	280	500	780
Materials of construction	Carbon steel	Carbon steel	Carbon steel	Carbon steel

Contact your local Xylem Sales representative to confirm vessel selection, verify appropriate flow rates and obtain detailed specifications, dimensional information or drawings.

* Weight of carbon based on density of 28 lb./ft^3. Loaded weight can vary depending on actual density of GAC.

** Maximum flow based on maximum hydraulic loading.

Safety note

Wet GAC readily adsorbs atmospheric oxygen. Dangerously low oxygen levels may exist in closed vessels or poorly ventilated storage areas. Workers should follow all applicable state and federal safety guidelines for entering oxygen-depleted areas

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