



## LP SERIES LIQUID PHASE ADSORPTION SYSTEMS (ASME CODE)

### Applications

The LP Series Adsorption Systems are designed to remove dissolved organic contaminants from water. These systems are cost effectively used in applications including:

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

### Installation, Startup and Operation

The LP 810 and LP1020 systems are shipped as separate components—two adsorbers and a piping skid module. The piping module allows the adsorbers to operate in series or parallel configurations. The systems require minimal field assembly and site connections.

Evoqua can provide a total service package that includes utilizing OSHA trained personnel providing on-site carbon changeouts, packaging and transportation of spent carbon

for recycling at our RCRA permitted reactivation facilities, where the contaminants are thermally destroyed.

We can provide instructions on sampling the spent carbon and completion of our spent carbon profile form. Spent carbon acceptance testing can be performed at our certified laboratory.

When requested, a certificate of reactivation will be issued.

### BENEFITS & DESIGN FEATURES

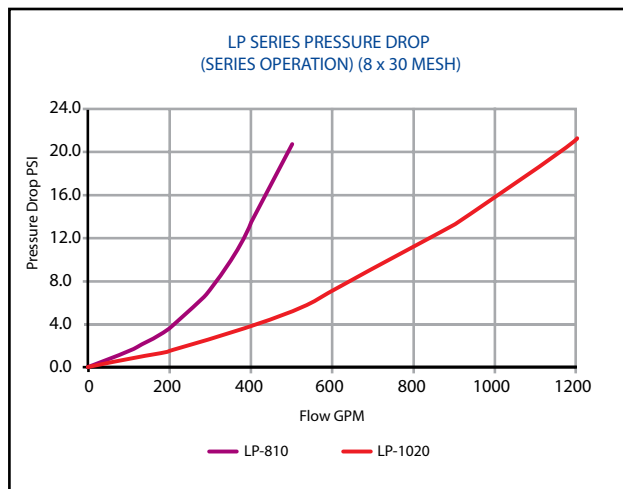
- ASME code section VIII (stamped), carbon steel vessel.
- SSPC-SP5 surface preparation, NSF 6-approved Plasteel vinyl ester lining; rust preventative epoxy/urethane exterior.
- Uniform, continuous internal lining flange to flange.
- Modular design for easy handling and installation.
- Schedule 40 carbon steel pipe, supplied with cast iron gear/wheel operated butterfly valves with EPDM seats.
- Carbon fill slurry piping made from schedule 40 carbon steel.
- Carbon discharge slurry piping made from schedule 10 304 stainless steel.
- Top and side manway allows for easy internal inspection.

## TYPICAL PROPERTIES

	LP 810SYS	LP 1020SYS
Dimensions (each adsorber)	96" x 138"	120" x 194"
Overall Height	13' 11"	19' 5"
System Length	18' 8"	23' 4"
System Width	9' 2"	12' 10"
Process Piping	4"	6"
Flanged Inlet/Outlet (150# ANSI)	4"	6"
Carbon Fill/Discharge	4"	4"
Flanged Backwash/Vent	6"	8"
Manway (dia., side shell location)	20"	20"
Manway (top)	14" x 18"	14" x 18"
Utility Water/Air (hose connection) <sup>1</sup>	1 1/2"	1 1/2"
Interior Coating	Vinyl Ester	Vinyl Ester
Exterior Coating	Urethane	Urethane
Empty Vessel Weight (lbs.)	18,000	30,000
Carbon Weight/Vessel (lbs.)	10,000	20,000
Operating Weight (lbs.)	104,000	206,000
Design Pressure (PSIG) @ 150°F	75	75
Max. Flow (GPM) Series/Parallel	500/1,000	750/1,500
Backwash Rate (GPM) (8 x 30 mesh @ 55°F)	450	710

<sup>1</sup> Kamlock type

For detailed specifications or dimensional information or drawings, contact your local Evoqua sales representative.



**Safety Note:** Wet activated carbon 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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