

# MobileFlow\*

## Description and Use

GE offers the world's largest fleet of mobile water treatment systems, providing demineralization, filtration, softening, and deoxygenation treatment, quickly and efficiently – available for either emergency, supplemental, or extended term service.

All aspects of treatment, from system analysis and design through installation, maintenance, upgrades and emergency response are available. Included are immediate system backup, complete analytical laboratory, application and engineering consultants, qualified Field Service Representatives (FSR's), regional service centers, and a 24-hour dispatch and control center.

Each MobileFlow\* system contains six rubber-lined ASME code steel tanks of uniform size, with a patented piping system to allow operation in series or parallel. The system can be operated by FSR's, your plant personnel or remotely monitored. Automatic shutdown features protect from power failure, excess pressure and off-specification water. Regional service centers perform regeneration quality control checks on every unit. Demineralization treatment is available in as little as two hours plus transit time. Other special applications may require additional time.

## Typical Applications

### Demineralization

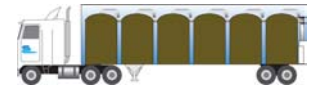
Premium 10% cross-linked cation resins and porous Type I strong base anion resins are standard in custom loading of the MobileFlow system.

Regeneration of ion exchange resins at service centers provides the highest conversions for economical production of ultra pure water. A proprie-

- Filter Media
- Mixed Bed Resin
- DEOX Media
- Strong Base Anion Resin
- Cation Resin

tary rinse is used on the selected resins to prevent any residual QC test water from remaining in the trailer when it is delivered to the user. Off-site resin regeneration gives the customer the use of a true zero discharge system.

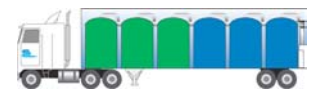
Formalized resin purchase specifications include specific test procedures and quality limits to ensure that the products are free of manufacturing impurities, and can meet the most stringent specifications.



### Filtration

GE stands alone in filtration capability, having pioneered in-line coagulation for the mobile water treatment industry. The MobileFlow system takes advantage of a proprietary dual media filter that is treated with a biocide, acid, and hot water after each use to protect against cross-contamination from various surface water sources.

We guarantee the effluent quality for influents up to 50 NTU and the system can also treat water up to 100 NTU. Treatment flow rates are dependent upon the influent turbidity values. Typically, flow rates up to 600 GPM per trailer are possible with influent values of less than 10 NTU.



### Deoxygenation

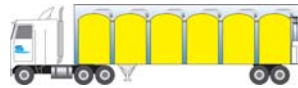
Our patented DEOX\* process provides a water quality of less than 1 ppb dissolved oxygen, with 0.5 ppb typically measured. Clients in the pulp and paper, petrochemical, refinery, and utility industries have benefited by our capability to



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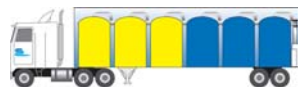
deoxygenate water from virtually any source, including municipal, well, raw surface water, condensate, and demineralized water. This service is readily available on an emergency basis, and is also typically utilized during by-pass of the client's deaerator for inspections and repairs.

### Softening



The MobileFlow system provides softening at high flow rates, routinely producing water at 600 GPM, and can be reconfigured to produce 1,000 GPM per trailer. Mobile and quickly available, this application can be provided with either exchange service off-site (regeneration) or on-site regeneration. A MobileFlow unit has a softening capacity in excess of 15 million grains.

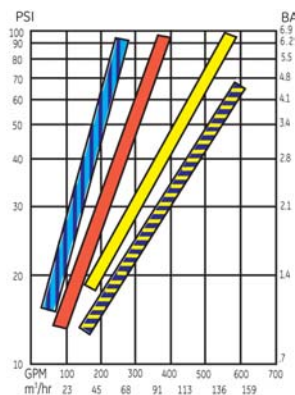
### Condensate Polishing



Utilizing a cation/mixed bed configuration, condensate can be polished to remove crud loading and trace ionic contaminants during unit start-ups or for longer-term requirements. The 10% cross-linked cation resin is strong enough to withstand aggressive temperatures and crud loads of the condensate while keeping the mixed bed resins clean for final ionic contaminant removal without interference.

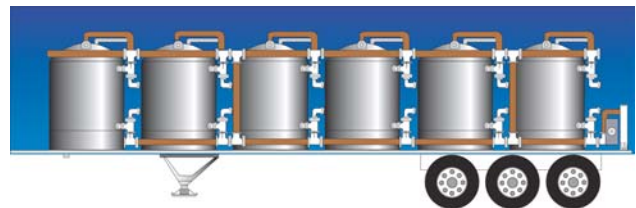
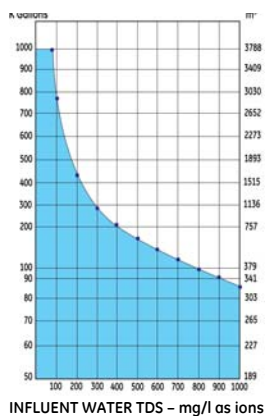
### General Properties

MobileFlow Pressure Drop at 60°F (16°C)



- Filter/DI Combo
- 3 Cation/3 Anion
- Standard DI
- DEOX/DI Combo
- 3 Filter/3 DEOX
- 2 Cation/3 Anion / 1 Mixed Bed
- 3 Cation/3 Mixed Bed
- All Cation
- All Filter
- All Mixed Bed

Demineralizer Capacity



The MobileFlow system incorporates an exclusive piping system linking six rubber-lined ASME code pressure vessels. The international version (shown here) has three axles and the U.S. version has two.

Dimensions and weights	
Overall length with tractor	60'-0"
Trailer length	43'-0"
Trailer height	13'-6"
Trailer width	8'-0"
Gross trailer operating weight	90,000 lbs.
Electrical	
Electrical power requirements	110V, 20 amps
Specifications	
Inlet/outlet connections	2.5" NST, male fire hose, 3 inlet, 3 outlet Also available: 4" 150 psi flange or 4" NST male fire hose, 1 inlet, 1 outlet
Pressure vessels	6 per trailer, ASME code, 100 psi (7 bar) W.P., rubber lined
Resin capacity	Over 5 million grains (Demineralization)
Outlet resin trap	8" with suitable mesh element
Suitable media	Ion exchange resins, synthetic adsorbents, activated carbon, granular filter media, etc.
Instrumentation	
	<ul style="list-style-type: none"> <li>• Two conductivity meters, one with strip chart recorder and alarm or telog recorder, with alarm</li> <li>• High/Low temperature alarms</li> <li>• Complete pressure instrumentation</li> <li>• Rate of flow indicator</li> <li>• Totalizing flow meter</li> </ul>
Controls	
	<ul style="list-style-type: none"> <li>• Adjustable pressure reducing valve on inlet</li> <li>• Isolation valves on all pressure vessels</li> <li>• Automatic shutdown system</li> <li>• External audible alarms</li> </ul>
Heating	
	Propane fueled, thermostat controlled system for freeze protection to -20°F

### Further Information

For more about the Emergency and other services please call number below:

**US toll free 800 446 8004 or 757-855 9000**

