

UNI-TECH GREENSAND FILTERS

STANDARD FEATURES:

- Single Unit Flows up to 385 gpm
- Epoxy Lined Steel Tanks with 100 psig Design Pressure
- Top Mounted Manway
- Schedule 80 PVC Hub and Lateral Distributors
- Factory Assembled Diaphragm Valve Nest
- Steel External Piping
- Electro-mechanical Backwash Controller

ADVANTAGES:

- Materials and Coatings Selected to Withstand Corrosive Environments
- Reliable, Low Restriction Valves
- Distributors Allow Operation Over Wide Flow Rate Range
- Standard Designs Reduce Cost and Delivery Time
- Simple Operation Reduces Operator Training Requirements

OPTIONS:

- ASME Code Vessel
- Stainless Steel, Copper, PVC, or Galvanized External Piping
- Stainless Steel, Polypropylene, Steel, or CPVC Internal Piping
- Differential Pressure Switch
- Air Scour
- Sub-Surface Wash
- Sightglasses
- Pre-piped and Wired Systems Mounted on Skid
- Manual Unit Isolation Valves
- Interconnecting Piping Between Multiple Units
- Allen Bradley PLC

**For Options Not Listed Here
Please Contact Nalco Res-Kem**

Nalco Res-Kem Uni-Tech Greensand Filters are available in a wide range of self-contained packages configured in single, double, and multiple unit arrangements to remove dissolved iron, manganese and hydrogen sulfide. Iron and manganese are removed from water to avoid staining problems and meet drinking water regulations. Nalco Res-Kem Uni-Tech Greensand Filters utilize magnesium oxide coated manganese greensand media. Nalco Res-Kem Uni-Tech Greensand filters are generally limited to application where the combined iron and manganese concentration is below 15 ppm.

Nalco Res-Kem Uni-Tech Greensand Filters are used for municipal, institutional, and industrial water filtration applications. Single units are rated for flows up to 385 gpm. For larger flow rates, contact Nalco Res-Kem to determine whether larger or multiple units would be appropriate.

Economical and efficient, Nalco Res-Kem Uni-Tech Greensand Filters can be equipped for manual, semi-automatic, or full-automatic operation. Regardless of the configuration, only limited technical expertise is required for operation. Nalco Res-Kem Uni-Tech Greensand Filters will integrate into a complete water treatment system without expensive custom field engineering and programming. They can be used to remove. The greensand media has a finite capacity for removal and must be regenerated using potassium permanganate (KMnO₄). This regeneration process may be either batch or continuous.



**Triple 30" Greensand Filter System with
Optional PVC Piping, PVC Valves, and Flowmeters**

FEATURES AND SPECIFICATIONS

Model Prefix	Vessel Diameter inches	Flow Rate Minimum gpm	Flow Rate Continuous gpm	Flow Rate Maximum gpm	Inlet/Outlet Pipe Sizes inches	Approximate Dimensions Single Unit L x D x H inches	Approximate Dimensions Duplex Unit L x D x H inches
GSF20	20	7	11	22	1 1/2	30x32x81	56x32x81
GSF24	24	9	15	31	1 1/2	34x36x81	62x36x81
GSF30	30	15	25	49	2	40x42x85	78x42x85
GSF36	36	21	36	70	2	46x48x85	90x48x85
GSF42	42	29	48	96	2 1/2	52x54x87	102x54x87
GSF48	48	38	63	125	2 1/2	56x50x91	114x50x91
GSF54	54	48	80	159	3	64x66x91	126x66x91
GSF60	60	59	98	196	3	70x72x93	138x72x93
GSF66	66	71	119	238	4	76x78x95	152x78x95
GSF72	72	85	141	283	4	82x84x95	164x84x95
GSF78	78	100	166	332	6	88x90x95	176x90x95
GSF84	84	115	193	385	6	94x96x95	188x96x95

Flow Rate Specification Bases: (For your specific water source, contact Nalco Res-Kem for estimates)

Minimum flow rating: 3gpm/ft²

Continuous flow rating: 5gpm/ft²

Maximum Flow Rate: of 10gpm/ft²

Features	Standard	Optional
System Design and Operation		
Steel Pressure Tank with Epoxy Lining	◆	
Steel Pressure Tank with High Temperature Epoxy, or Baked Phenolic Lining		◆
Stainless Steel, Fiberglass, or Galvanized Steel Pressure Tank		◆
ASME Code Vessel Construction		◆
PVC Hub and Lateral Distribution and Internal Piping	◆	
CPVC, Polypropylene, Steel, or Stainless Steel Internal Piping		◆
Cast Iron Diaphragm Valves	◆	
Steel External Piping	◆	
Copper, PVC, Galvanized Steel, or Stainless Steel External Piping		◆
Manual System Isolation Valves		◆
Subsurface Wash		◆
Skid Assembly for Multiple Units		◆
Interconnecting Piping for Multiple Units		◆
Instrumentation and Controls		
Time Clock with Stager Controller	◆	
Manual, Semi-Automatic, or Full-Automatic Controls		◆
Differential Pressure Gauge or Switch		◆
Inlet and Outlet Pressure Gauges		◆
NEMA 4XFG Electrical Enclosure	◆	
Allen Bradley Programmable Logic Controller		◆
Backwash Initiation Methods		
Timer	◆	
Manual	◆	
Differential Pressure Switch		◆