



ROTATEK

SU ARITMA SİSTEMLERİ

ROTATEK Arıtma ve Çevre Teknolojileri San. Tic. Ltd. Şti.

realizes, on every scale, the services of design, manufacturing, commitment and post-sale support for commercial and industrial water treatment systems.

ROTATEK, with its studies, aims at rarefying the quality and efficiency of manufacturing in industry by enabling the quality of drinking water, which is one of the most vital needs go human being and the process water that is necessary for industry.

ROTATEK takes maximum care for key points for each kinds of activity.

- to accommodate the customer with right detection of the need and optimum engineering solution
- to enable the system that will be installed to be easy to operate and control
- to continue a close relationship with the customer through the post-sale technique service support
- to enable the customer with the most suitable technology, equipment and service support, without falling for commercial concern
- to train the customer representative best
- to enable documentation support for the combined design
- delivery on time

ROTATEK finds sectoral specific engineering solution in regards with the preparing the process water that industrial plants such as food, soft drink, textile, cosmetics, chemicals, electronics, energy, chemistry, automotive etc need .

ROTATEK realizes specific treatment systems, design, manufacturing and assembling commitments for Domestic/ Commercial and Industrial (chemicals, food, soft drink, textile, electronics etc.) sectors.

As **ROTATEK**, we have been making efforts in order to do better and to define high standards both for ourselves and for the products we manufacture for our customers. We have been working to reach for the best product and service quality. Not letting it go like that, we have been searching for the methods that will carry us to the best.

ROTATEK QUALITY POLICY

- **ROTATEK**'s quality target is to complete its commitments as soon as possible in this competitive market conditions and with optimum cost; to meet the expectations of employer in full force; and to carry the services that are furnished to the customer to the highest quality.
- To present the customer with the exact and correct system with the most suitable price, avoiding all commercial concern in its activities.
- Always to be fair and honest to its state, business partners, customers and personnel.
- **ROTATEK** is aware of the fact that continuity of quality is possible only when the changing and developing customer expectation is exactly and correctly determined and met. Therefore **ROTATEK** always gives importance to the activities of engineering and business development.
- At all stages of engineering services, it is one of the indispensable principles for **ROTATEK** to wholly comply with quality, hygiene, environment and safety rules.
- The main principle that is paid attention for all activities from purchasing to post-sale is to do the right and to increase the competitive power of the company with constant development. For this purpose, **ROTATEK** diligently chooses its material provider and makes effort to carry the strategic relationship it established with them towards better. **ROTATEK** detects critical points during design and commitment and takes precautions in order to prevent defects and inconvenience, and enables continuity in quality with effective and corrective activities for possible problems. It follows technological advances and reflects contemporary applications to service quality.
- **ROTATEK** trains its employees, whom it sees as the most precious resource in terms of constant development in accordance with the advancing technology so that service meeting the expectations of employees on top level is presented in the most effective way.
- To put team spirit into the core. To share profit/loss, success/failure with all personnel and to enable high motivation.





Application Areas

Containerized water treatment systems are mobile systems densely preferred generally on remote areas and outdoor applications. Containerized systems are manufactured completely installed ready to start compact systems with 20 ft or 40 ft ISO containers. Different type of water treatment processes may be used depending on raw water source and required product water quality.



20 ft ISO containerized water treatment system – Inside View



Standard Specifications

- ◆ 20 ft ve 40 ft ISO container
- ◆ Equipment fixing fully comply with sea worthy and land shipping
- ◆ Labelling comply with international transportation
- ◆ Corrosion resistant epoxy painted
- ◆ Internal installation of all equipments
- ◆ Indoor lighting
- ◆ Service door
- ◆ CSC certificated



40 ft ISO containerized water treatment system – Outside View



Optional Specifications

- ◆ Sandwich panel heat insulation
- ◆ A/C conditioner
- ◆ Louvered service door
- ◆ Investigation report

Performance and Function Tests

All performance and function tests are done before shipping the system to the customer.

Investigation Report (Optional)

In case of need, containerized water treatment systems are investigated and certificated by a third party investigation company (i.e. SGS, BV) Investigation includes below check & control stages.

- ◆ Manufacturing specifications conformity audit
- ◆ Visual quality controls of water treatment units
- ◆ Supervision during performance test
- ◆ Critical design controls
- ◆ Quantity controls
- ◆ Marking controls
- ◆ Visual quality controls
- ◆ Product photographing



40 ft ISO containerized water treatment system – Inside View





Standard Technical Specifications

- ◆ FRP mineral tank body
- ◆ Top mount automatic control valve
- ◆ Timer controlled automatic backwash
- ◆ Backwash flowrate inhibitor
- ◆ 220 V/50 Hz energy inlet
- ◆ Bottom collector difuser



Optional Specifications

- ◆ Backwash with differential pressure switch
- ◆ Inlet and outlet sample valves
- ◆ Inlet and outlet pressure gauges
- ◆ Dublex (twin tank) system
- ◆ Vacuum breaker



Working Conditions

- ◆ Working pressure: 2 – 6 bar
- ◆ Energy feed: 220 V/50 Hz
- ◆ Working temperature: 5 – 45 °C



MF-50/P30



MF-300/P24



Fleck 5600



Fleck 2900



Fleck 7700



GE Performa



GE Magnum



FRP mineral tanks



MF-100 SERIE MEDIA FILTERS TECHNICAL DETAILS

Model	Flowrate m3/h				Mineral quantity (lt)	Tank Dimensions		Connection
	Min.	Avg.	Max.	Backwash		DxH (cm)	D"xH"	
Multimedia Sand Filters: Anthracite, Quartz Sand and Gravel (Turbidity removal)								
MF 20/P8-56	0,3	0,6	0,9	0,9	20	20x89	8x17	1"
MF 30/P10-56	0,5	1,0	1,5	1,5	30	25x89	10x35	1"
MF 50/P10-56	0,5	1,0	1,5	1,5	50	25x137	10x54	1"
MF 75/P13-77	0,9	1,7	2,6	2,6	75	33x137	13x54	1"
MF 100/P14-77	1,0	1,9	2,9	2,9	100	35x165	14x65	1"
MF 125/P16-77	1,3	2,5	3,8	3,8	125	40x165	16x65	1"
MF 150/P18-77	1,6	3,2	4,8	4,8	150	45x165	18x65	1"
MF 200/P21-77	2,2	4,4	6,6	6,6	200	53x153	21x62	1"
MF 300/P24-28	2,9	5,8	8,8	8,8	300	61x175	24x72	1"1/2
MF 450/P30-29	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
MF 600/P36-31	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
MF 800/P42-31	8,8	17,6	26,5	26,5	800	106x198	42x72	2"
AG Filters: Filter AG Filter Media (Turbidity removal)								
AG 20/P8-56	0,3	0,6	0,9	0,9	20	20x89	8x17	1"
AG 30/P10-56	0,5	1,0	1,5	1,5	30	25x89	10x35	1"
AG 50/P10-56	0,5	1,0	1,5	1,5	50	25x137	10x54	1"
AG 75/P13-77	0,9	1,7	2,6	2,6	75	33x137	13x54	1"
AG 100/P14-77	1,0	1,9	2,9	2,9	100	35x165	14x65	1"
AG 125/P16-77	1,3	2,5	3,8	3,8	125	40x165	16x65	1"
AG 150/P18-77	1,6	3,2	4,8	4,8	150	45x165	18x65	1"
AG 200/P21-77	2,2	4,4	6,6	6,6	200	53x153	21x62	1"
AG 300/P24-28	2,9	5,8	8,8	8,8	300	61x175	24x72	1"1/2
AG 450/P30-29	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
AG 600/P36-31	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
AG 800/P42-31	8,8	17,6	26,5	26,5	800	106x198	42x72	2"
Activated Carbon Filters: Granular Activated Carbon Media (Taste, colour, smell, organics, free chlorine removal)								
CF 20/P8-56	0,3	0,6	0,9	0,9	20	20x89	8x17	1"
CF 30/P10-56	0,5	1,0	1,5	1,5	30	25x89	10x35	1"
CF 50/P10-56	0,5	1,0	1,5	1,5	50	25x137	10x54	1"
CF 75/P13-77	0,9	1,7	2,6	2,6	75	33x137	13x54	1"
CF 100/P14-77	1,0	1,9	2,9	2,9	100	35x165	14x65	1"
CF 125/P16-77	1,3	2,5	3,8	3,8	125	40x165	16x65	1"
CF 150/P18-77	1,6	3,2	4,8	4,8	150	45x165	18x65	1"
CF 200/P21-77	2,2	4,4	6,6	6,6	200	53x153	21x62	1"
CF 300/P24-28	2,9	5,8	8,8	8,8	300	61x175	24x72	1"1/2
CF 450/P30-29	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
CF 600/P36-31	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
CF 800/P42-31	8,8	17,6	26,5	26,5	800	106x198	42x72	2"



MF-100 SERIE MEDIA FILTERS TECHNICAL DETAILS

Model	Flowrate m3/h				Mineral quantity (lt)	Tank Dimension		Connection
	Min.	Avg.	Max.	Backwash		DxH (cm)	D"xH"	
Birm Filters: Iron and manganese removal								
IF 20/P8-56	0,3	0,6	0,9	0,9	20	20x89	8x17	1"
IF 30/P10-56	0,5	1,0	1,5	1,5	30	25x89	10x35	1"
IF 50/P10-56	0,5	1,0	1,5	1,5	50	25x137	10x54	1"
IF 75/P13-77	0,9	1,7	2,6	2,6	75	33x137	13x54	1"
IF 100/P14-77	1,0	1,9	2,9	2,9	100	35x165	14x65	1"
IF 125/P16-77	1,3	2,5	3,8	3,8	125	40x165	16x65	1"
IF 150/P18-77	1,6	3,2	4,8	4,8	150	45x165	18x65	1"
IF 200/P21-77	2,2	4,4	6,6	6,6	200	53x153	21x62	1"
IF 300/P24-28	2,9	5,8	8,8	8,8	300	61x175	24x72	1"1/2
IF 450/P30-29	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
IF 600/P36-31	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
IF 800/P42-31	8,8	17,6	26,5	26,5	800	106x198	42x72	2"
Dolomite Filters: pH neutralization and remineralization								
RM 20/P8-56	0,3	0,6	0,9	0,9	20	20x89	8x17	1"
RM 30/P10-56	0,5	1,0	1,5	1,5	30	25x89	10x35	1"
RM 50/P10-56	0,5	1,0	1,5	1,5	50	25x137	10x54	1"
RM 75/P13-77	0,9	1,7	2,6	2,6	75	33x137	13x54	1"
RM 100/P14-77	1,0	1,9	2,9	2,9	100	35x165	14x65	1"
RM 125/P16-77	1,3	2,5	3,8	3,8	125	40x165	16x65	1"
RM 150/P18-77	1,6	3,2	4,8	4,8	150	45x165	18x65	1"
RM 200/P21-77	2,2	4,4	6,6	6,6	200	53x153	21x62	1"
RM 300/P24-28	2,9	5,8	8,8	8,8	300	61x175	24x72	1"1/2
RM 450/P30-29	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
RM 600/P36-31	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
RM 800/P42-31	8,8	17,6	26,5	26,5	800	106x198	42x72	2"





Standard Technical Specifications

- ◆ FRP tank
- ◆ PLC control panel
- ◆ Surface piped installation
- ◆ Pneumatic actuated valves
- ◆ UPVC surface piping
- ◆ Epoxy coated chassis
- ◆ System inlet and outlet valves
- ◆ Timer controlled backwashing
- ◆ Backwash flowrate restrictor
- ◆ PVC lateral difuser



Optional Specifications

- ◆ AISI304 / AISI316 Stainless steel tank
- ◆ Electric actuated valves
- ◆ Touch screen panel
- ◆ Backwash with differential pressure switch
- ◆ Dublex (twin tank) system
- ◆ Vacuum breaker
- ◆ Inlet and outlet pressure gauges



1000/P48-PA



Working Conditions

- ◆ Working pressure: 2 – 6 bar
- ◆ Energy feed: 220 V/50 Hz
- ◆ Working temperature: 5 – 45 °C



Pneumatic actuated valve



Electric actuated valve



63\" FRP tank



MF-200 SERIE MEDIA FILTERS TECHNICAL SPECIFICATIONS

Model	Flowrate m3/h				Mineral quantity (lt)	Tank Dimension		Connection
	Min.	Avg.	Max.	Backwash		DxH (cm)	D"xH"	
Multimedia Sand Filters: Anthracite, Quartz Sand and Gravel (Turbidity removal)								
MF 450/P30-PA	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
MF 600/P36-PA	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
MF 800/P42-PA	8,8	17,6	26,5	26,5	800	107x183	42x72	2"1/2
MF 1000/P48-PA	11,5	23,0	35,0	35,0	1000	120x183	48x72	3"
MF 2000/P63-PA	20,0	40,0	60,0	60,0	2000	160x245	63x86	4"
AG Filters: Filter AG Filter Media (Turbidity removal)								
AG 450/P30-PA	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
AG 600/P36-PA	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
AG 800/P42-PA	8,8	17,6	26,5	26,5	800	107x183	42x72	2"1/2
AG 1000/P48-PA	11,5	23,0	35,0	35,0	1000	120x183	48x72	3"
AG 2000/P63-PA	20,0	40,0	60,0	60,0	2000	160x245	63x86	4"
Activated Carbon Filters: Granular Activated Carbon Media (Taste, colour, smell, organics, free chlorine removal)								
AC 450/P30-PA	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
AC 600/P36-PA	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
AC 800/P42-PA	8,8	17,6	26,5	26,5	800	107x183	42x72	2"1/2
AC 1000/P48-PA	11,5	23,0	35,0	35,0	1000	120x183	48x72	3"
AC 2000/P63-PA	20,0	40,0	60,0	60,0	2000	160x245	63x86	4"
Birm Filters: Iron and manganese removal								
IF 450/P30-PA	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
IF 600/P36-PA	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
IF 800/P42-PA	8,8	17,6	26,5	26,5	800	107x183	42x72	2"1/2
IF 1000/P48-PA	11,5	23,0	35,0	35,0	1000	120x183	48x72	3"
IF 2000/P63-PA	20,0	40,0	60,0	60,0	2000	160x245	63x86	4"
Dolomite Filters: pH neutralization and remineralization								
RM 450/P30-PA	4,5	9,1	13,6	13,6	450	76x183	30x72	2"
RM 600/P36-PA	6,5	13,0	19,5	19,5	600	91x183	36x72	2"
RM 800/P42-PA	8,8	17,6	26,5	26,5	800	107x183	42x72	2"1/2
RM 1000/P48-PA	11,5	23,0	35,0	35,0	1000	120x183	48x72	3"
RM 2000/P63-PA	20,0	40,0	60,0	60,0	2000	160x245	63x86	4"





Standard Technical Specifications

- ◆ Epoxy coated ST37 carbon steel
- ◆ PLC control panel
- ◆ Surface piped installation
- ◆ Pneumatic actuated valves
- ◆ UPVC surface piping
- ◆ Inlet and outlet sample valves
- ◆ Inlet and outlet pressure gauges
- ◆ Timer controlled automatic backwashing
- ◆ Backwash flow restrictor
- ◆ PVC lateral difuser (1200/S125 ve 2000/S160 models)
- ◆ Bottom collector structure with platform and PP nozzles (3000/S200 ve 6000/S280 models)



1200/S125-EA serie media filter



Optional Specifications

- ◆ AISI304 / AISI316 Stainless steel tank
- ◆ Stainless nozzles
- ◆ Electric actuated valves
- ◆ Touch screen panel
- ◆ Air compressor for pneumatic valves
- ◆ Backwash with differential pressure switch
- ◆ Dublex (twin tank) system
- ◆ Vacuum breaker



Working Conditions

- ◆ Working pressure: 2 – 6 bar
- ◆ Energy feed: 220 V/50 Hz
- ◆ Working temperature: 5 – 45 °C



Pneumatic actuated valve



Electric actuated valve



2000/S160-PA serie media filter



MF-300 SERIE MEDIA FILTERS TECHNICAL SPECIFICATIONS

Model	Flowrate m ³ /h				Mineral quantity (lt)	Tank Dimension	Connection
	Min.	Avg.	Max.	Backwash		DxH (cm)	
Multimedia Sand Filters: Anthracite, Quartz Sand and Gravel (Turbidity removal)							
MF 1200/S125-PA	12,5	25,0	37,0	37,0	1200	125x280	DN65
MF 2000/S160-PA	20,0	40,0	60,0	60,0	2000	160X320	DN80
MF 3000/S200-PA	31,5	63,0	94,0	94,0	3000	200X325	DN100
MF 4500/S240-PA	45,5	91,0	136,0	136,0	4500	240X340	DN125
MF 6000/S280-PA	61,5	123,0	185,0	185,0	6000	280X375	DN150
AG Filters: Filter AG Filter Media (Turbidity removal)							
AG 1200/S125-PA	12,5	25,0	37,0	37,0	1200	125x280	DN65
AG 2000/S160-PA	20,0	40,0	60,0	60,0	2000	160X320	DN80
AG 3000/S200-PA	31,5	63,0	94,0	94,0	3000	200X325	DN100
AG 4500/S240-PA	45,5	91,0	136,0	136,0	4500	240X340	DN125
AG 6000/S280-PA	61,5	123,0	185,0	185,0	6000	280X375	DN150
Activated Carbon Filters: Granular Activated Carbon Media (Taste, colour, smell, organics, free chlorine removal)							
AC 1200/S125-PA	12,5	25,0	37,0	37,0	1200	125x280	DN65
AC 2000/S160-PA	20,0	40,0	60,0	60,0	2000	160X320	DN80
AC 3000/S200-PA	31,5	63,0	94,0	94,0	3000	200X325	DN100
AC 4500/S240-PA	45,5	91,0	136,0	136,0	4500	240X340	DN125
AC 6000/S280-PA	61,5	123,0	185,0	185,0	6000	280X375	DN150
Birm Filters: Iron and manganese removal							
IF 1200/S125-PA	12,5	25,0	37,0	37,0	1200	125x280	DN65
IF 2000/S160-PA	20,0	40,0	60,0	60,0	2000	160X320	DN80
IF 3000/S200-PA	31,5	63,0	94,0	94,0	3000	200X325	DN100
IF 4500/S240-PA	45,5	91,0	136,0	136,0	4500	240X340	DN125
IF 6000/S280-PA	61,5	123,0	185,0	185,0	6000	280X375	DN150
Dolomite Filters: pH neutralization and remineralization							
RM 1200/S125-PA	12,5	25,0	37,0	37,0	1200	125x280	DN65
RM 2000/S160-PA	20,0	40,0	60,0	60,0	2000	160X320	DN80
RM 3000/S200-PA	31,5	63,0	94,0	94,0	3000	200X325	DN100
RM 4500/S240-PA	45,5	91,0	136,0	136,0	4500	240X340	DN125
RM 6000/S280-PA	61,5	123,0	185,0	185,0	6000	280X375	DN150





Function

Multi cartridge filtration units are used to remove particulates, sediments in water and contains polypropylene filter cartridges 10", 20", 30", 40" in size with 1 μ - 5 μ - 10 μ - 25 μ filtration precision. Filter cartridges are absolute filters and renewed when clogged.

Filter vessels can be manufactured with stainless steel or PVC material. The advantage of multicartridge filtration units is very good and absolute filtration performance in high flowrates. The capacity of the filtration units can be increased by using more cartridges in the filter vessels.



STAINLESS STEEL GROUP FILTERS TECHNICAL SPECIFICATIONS					
MODEL	Flowrate 5 μ * (m ³ /hour)	Connection	Cartridge quantity & dimension	Unit Dimension (mm)	Weight (kg)
SS GF320	9	2" DN50	3 x 20"	375*426*954	19
SS GF330	13	2" DN50	3 x 30"	375*426*1200	22
SS GF340	18	2" DN50	3 x 40"	375*426*1250	24
SS GF520	15	2" DN50	5 x 20"	425*470*973	23
SS GF530	22	2" DN50	5 x 30"	425*470*1223	27
SS GF540	30	2" DN50	5 x 40"	425*470*1473	32
SS GF830	36	2" 1/2 DN65	8 x 30"	435*440*1235	37
SS GF840	48	2" 1/2 DN65	8 x 40"	435*440*1485	44
SS GF1230	54	3" DN80	12 x 30"	490*485*1238	49
SS GF1240	72	3" DN80	12 x 40"	490*485*1538	58
SS GF1640	96	4" DN100	16 x 40"	595*600*1550	82
SS GF2430	108	5" DN125	24 x 30"	790*790*1274	105
SS GF2440	144	5" DN125	24 x 40"	790*790*1574	115

Operation conditions
**Flowrates indicates the maximum capacities for cartridges with 5 μ filtration precision.*
 Vessel material : AISI304 Stainless steel
 Max. operating pressure : 7 Bar



Stainless Steel Group
Filter Vessel



PVC GROUP FILTERS TECHNICAL SPECIFICATIONS					
MODEL	Flowrate 5 μ * (m ³ /hour)	Connection	Cartridge quantity & dimension	Unit Dimension (mm)	Weight (kg)
PV GF520	10	1" 1/2 DN40	5 x 20"	300*300*720	13
PV GF530	15	1" 1/2 DN40	3 x 30"	300*300*1000	14
PV GF540	20	1" 1/2 DN40	3 x 40"	300*300*1200	16
PV GF920	18	2" DN50	9 x 20"	400*400*720	21
PV GF930	25	2" DN50	9 x 30"	400*400*1000	26
PV GF940	36	2" DN50	9 x 40"	400*400*1200	31

Operation conditions
**Flowrates indicates the maximum capacities for cartridges with 5 μ filtration precision.*
 Vessel material : PVC
 Max. operating pressure : Bar



PVC Group Filter
Vessel





Standard Technical Specifications

- ◆ Epoxy coated carbon steel chassis
- ◆ TFC 2,5" / 4" spiral wounded membranes
- ◆ 5 µ sediment filter
- ◆ Rotary type high pressure pump (R 251 – 402)
- ◆ Centrifugal type Dikey high pressure pump (R 403 – 4015)
- ◆ 220 V/1 faz/50 Hz (R 251 – 402)
- ◆ 380 V/3 faz/50 Hz (R 403 – 4015)
- ◆ FRP membrane vessels
- ◆ TDS / Conductivity analyser
- ◆ Low pressure piping U-PVC Zonder / PP
- ◆ High pressure piping U-PVC Zonder / PP
- ◆ Low & high pressure switches
- ◆ Membrane inlet pressure regulator valve
- ◆ Concentrate wastewater flow regulation valve
- ◆ Permeate and concentrate flowmeters
- ◆ Recirculation flowmeters (R 251 – 403)
- ◆ Inlet solenoid valve
- ◆ Automatic flush system
- ◆ Pressure gauges
- ◆ Microprocessor control panel



R 404 Reverse Osmosis Unit



Optional Specifications

- ◆ AISI 304 Stainless steel chassis
- ◆ Stainless steel membrane vessels
- ◆ AISI 304/316 stainless steel high pressure piping
- ◆ PLC control panel
- ◆ Touch screen panel
- ◆ Electric actuated inlet valve
- ◆ Wooden casing with pallette
- ◆ Complete plant with chassis (with pretreatment units)



4040 RO membrane

4" Membrane vessel



Pressure switch



Pressure gauge



Flowmeter



Rotary type high pressure pump



Centrifugal vertical type high pressure pump





REVERSE OSMOSIS SYSTEMS TECHNICAL SPECIFICATIONS

Model	Flowrate m3/day	Membrane Quantity	Membrane Model	Motor Power kW *	Recovery % *	Weight kg
ROTAPUR 400 SERIE						
R 251	2	1	2,5"x40"	0,37	40	45
R 401	5	1	4"x 40"	0,64	50	55
R 402	10	2	4"x 40"	0,64	60	65
R 403	15	3	4"x 40"	1,1	60	85
R 404	20	4	4"x 40"	1,5	60	100
R 405	25	5	4"x 40"	2,2	60	115
R 406	30	6	4"x 40"	2,2	60	130
R 408	40	8	4"x 40"	2,2	65	160
R 409	45	9	4"x 40"	2,2	65	190
R 4010	50	10	4"x 40"	2,2	70	205
R 4012	60	12	4"x 40"	3,0	70	240
R 4015	75	15	4"x 40"	3,0	70	300

* Parameter may vary according to raw water salinity and raw water analysis.



Operating Conditions

Feed inlet pressure	2 – 5 bar
Operating pressure	10 - 15
Feed water SDI	<3
Feed water turbidity	1 NTU
Max. feed water TDS ¹	2000 mg/l
Max. iron, manganese, aluminium	<0,05 mg/l
Max. silica ²	25 mg/l
Feed water pH range	3 - 11
Bacteriologic content	None
Organics (TOI, BOI, KOI)	None
Hydrocarbons, oil & grease	None
Hidrojen sülfür	None
Ba, Sr, F	Trace
Max. feed water temperature	42 °C
Recovery ³	%40 - 70

1. TDS = 5000 mg/l configuration (Optional)
2. %60 recovery
3. May vary according to raw water analysis and system capacity





Standard Technical Specifications

- ◆ Epoxy coated carbon steel chassis
- ◆ 8" spiral wounded membranes
- ◆ 5 µ sediment filter
- ◆ Centrifugal type Dikey high pressure pump
- ◆ 380 V/3 faz/50 Hz power requirement
- ◆ FRP membrane vessels
- ◆ Conductivity analyser
- ◆ Low pressure piping U-PVC Zonder / PP
- ◆ High pressure piping AISI 304 stainless steel
- ◆ Low pressure switch
- ◆ High pressure switch
- ◆ Membrane inlet pressure regulator valve
- ◆ Concentrate wastewater flow regulation valve
- ◆ Permeate and concentrate flowmeters
- ◆ Electric actuated inlet valve
- ◆ Automatic flush system
- ◆ PLC based control panel



R 8015 Reverse Osmosis Unit



Optional Specifications

- ◆ AISI 304 Stainless steel chassis
- ◆ Stainless steel membrane vessels
- ◆ AISI 304/316 stainless steel high pressure
- ◆ Permeate flush system
- ◆ Automatic flush and CIP unit
- ◆ Touch screen panel
- ◆ Feed inlet conductivity analyser
- ◆ Raw water blending system
- ◆ Containerized RO system
- ◆ Complete plant with chassis (with pretreatment units)



8" Membrane Vessels



Pressure Switch



Pressure Gauge



Kinetic Flowmeter



Digital Flowmeter



Vertical type centrifugal high pressure pump



REVERSE OSMOSIS SYSTEMS TECHNICAL SPECIFICATIONS						
Model	Flowrate m ³ /day	8040 Membrane Quantity	Vessel quantity	Motor Power kW ¹	Recovery % ¹	Weight kg
ROTAPUR 800 SERIE						
R 804	100	4	2 x 2 elements	4	60	900
R 806	150	6	2 x 3 elements	5,5	60	1000
R 808	200	8	2 x 4 elements	7,5	65	1100
R 809	225	9	3 x 3 elements	7,5	65	1150
R 8010	250	10	2 x 5 elements	7,5	70	1200
R 8012	300	12	2 x 6 elements	11	75	1300
R 8015	375	15	3 x 5 elements	15	75	1450
R 8018	450	18	3 x 6 elements	15	75	1600
R 8024	600	24	4 x 6 elements	18,5	75	2000
R 8030	750	30	5 x 6 elements	22	75	2150
R 8036	900	36	6 x 6 elements	30	75	2250
R 8042	1050	42	6 x 7 elements	30	75	2350
R 8048	1200	48	6 x 8 elements	37	75	2600
R 8054	1350	54	6 x 9 elements	37	75	2800
R 8060	1500	60	6 x 10 elements	45	75	3200
R 8066	1650	66	6 x 11 elements	45	75	3400
R 8072	1800	72	6 x 12 elements	45	75	3600
R 8078	1950	78	6 x 13 elements	45	75	3750
R 8084	2100	84	6 x 14 elements	55	75	3900
R 8090	2250	90	6 x 15 elements	55	75	4050
R 8096	2400	96	6 x 16 elements	75	75	4200
R 80114	2700	108	6 x 18 elements	2 X 37	75	4500
R 80126	3000	120	6 x 20 elements	2 X 37	75	4800



Operating Conditions	
Feed inlet pressure	2 – 5 bar
Operating pressure	10 - 15
Feed water SDI	<3
Feed water turbidity	1 NTU
Max. feed water TDS ¹	2000 mg/l
Max. iron, manganese, aluminium	<0,05 mg/l
Max. silica	25 mg/l
Feed water pH range	3 - 11
Bacteriologic content	None
Organics (TOİ, BOİ, KOİ)	None
Hydrocarbons, oil & grease	None
Hidrojen sülfür	None
Ba, Sr, F	Trace
Max. feed water temperature	42 °C
Recovery ²	%60 - 75

1. TDS = 5000 mg/l configuration (Optional)
2. May vary according to raw water analysis and system capacity





Standard Technical Specifications

- ◆ Epoxy painted carbon steel chassis
- ◆ TFC 2,5" / 4" spiral wounded membranes
- ◆ 5 µ pre-filter
- ◆ Duplex stainless steel high pressure pump
- ◆ 380 V/3 faz/50 Hz energy feed
- ◆ FRP membrane vessels
- ◆ Product conductivity analyser
- ◆ U-PVC Zonder / PP low pressure piping
- ◆ Stainless steel high pressure piping
- ◆ Low & high pressure sensors
- ◆ Product water TDS analyser
- ◆ Membrane inlet pressure regulator valve
- ◆ Concentrate regulation valve
- ◆ Permeate and concentrate flowmeters
- ◆ Feed inlet valve
- ◆ Automatic flush system
- ◆ Pressure gauges
- ◆ Microprocessor control panel



SWR 406 Sea Water Desalination System



Optional Specifications

- ◆ Stainless steel chassis
- ◆ PLC control panel
- ◆ Touch screen panel
- ◆ Wooden casing with pallette
- ◆ Automatic flush and CIP unit
- ◆ Complete plant with chassis (with pretreatment units)
- ◆ Containerized system configuration



Operating Conditions

Operating Conditions	
Feed inlet pressure	2 – 5 bar
Operating pressure	40 – 65 Bar
Feed water TDS ¹	10.000 - 40.000 mg/l
Max. iron, manganese, aluminium	<0,05 mg/l
Bacteriologic content	None
Organics (TOC, BOD, COD)	None
Hydrocarbons, oil & grease	None
Max. feed water temperature	42 °C
Recovery ²	%37

1. TDS = 50.000 mg/l configuration (Optional)

2. May vary according to raw water analysis and system capacity

SEA WATER DESALINATION SYSTEMS TECHNICAL SPECIFICATIONS

Model	Flowrate m3/day	Membrane Quantity	Membrane Model	Motor Power kW *	Recovery % *	Weight kg
SWR 251	1	1	2,5"x40"	1,5	37	100
SWR 401	3	1	4"x 40"	2,2	37	180
SWR 402	6	2	4"x 40"	5,5	37	205
SWR 403	9	3	4"x 40"	5,5	37	250
SWR 404	12	4	4"x 40"	5,5	37	295
SWR 405	15	5	4"x 40"	7,5	37	340
SWR 406	18	6	4"x 40"	7,5	37	385
SWR 407	21	7	4"x 40"	7,5	37	430
SWR 408	24	8	4"x 40"	11	37	475
SWR 409	27	9	4"x 40"	11	37	520

* Parameter may vary according to raw water salinity and raw water analysis.





Standard Technical Specifications

- ◆ Epoxy painted carbon steel chassis
- ◆ TFC 8" spiral wounded membranes
- ◆ 5 µ prefiltration
- ◆ Duplex stainless steel high pressure pump
- ◆ 380 V/3 faz/50 Hz energy feed
- ◆ 1000 PSI FRP membrane vessels
- ◆ Product conductivity analyser
- ◆ U-PVC Zonder / PP low pressure piping
- ◆ Duplex stainless steel high pressure piping
- ◆ Low & high pressure sensors
- ◆ Membrane inlet pressure regulator valve
- ◆ Concentrate regulation valve
- ◆ Permeate and concentrate flowmeters
- ◆ Automatic inlet control valve
- ◆ Automatic permeate flush system
- ◆ Pressure gauges
- ◆ PLC control panel



SWR 8066 Sea Water Desalination Unit



Optional Specifications

- ◆ Energy recovery turbine
- ◆ Stainless steel chassis
- ◆ Touch screen panel
- ◆ Wooden casing with pallette
- ◆ Automatic flush and CIP unit
- ◆ Complete plant with chassis
- ◆ Containerized system configuration



Operating Conditions

Operating Conditions	
Feed inlet pressure	2 – 5 bar
Operating pressure	40 – 65 Bar
Feed water TDS ¹	10.000 - 40.000 mg/l
Max. iron, manganese, aluminium	<0,05 mg/lt
Bacteriologic content	None
Organics (TOC, BOD, COD)	None
Hydrocarbons, oil & grease	None
Max. feed water temperature	42 °C
Recovery ²	%37

1. TDS = 50.000 mg/l configuration (Optional)
2. May vary according to raw water analysis and system capacity

SEA WATER DESALINATION SYSTEMS TECHNICAL SPECIFICATIONS

Model	Flowrate m3/day	Membrane Quantity	Membrane Dimension	Motor Power kW *	Recovery % *
SWR 802	30	2	8"x 40"	11	37
SWR 803	45	3	8"x 40"	18,5	37
SWR 804	60	4	8"x 40"	22	37
SWR 806	90	6	8"x 40"	30	37
SWR 808	120	8	8"x 40"	48	37
SWR 8012	180	12	8"x 40"	60	37
SWR 8016	240	16	8"x 40"	48	37
SWR 8020	300	20	8"x 40"	60	37
SWR 8024	360	24	8"x 40"	75	37
SWR 8030	450	30	8"x 40"	90	37
SWR 8042	630	42	8"x 40"	97	37
SWR 8054	800	54	8"x 40"	130	37
SWR 8066	1000	66	8"x 40"	140	37
SWR 8078	1150	78	8"x 40"	180	37
SWR 8090	1350	90	8"x 40"	215	37
SWR 80102	1500	102	8"x 40"	215	37

* Parameter may vary according to raw water salinity and raw water analysis.





Function

Multi cartridge filtration units are used to remove particulates, sediments in water and contains polypropylene filter cartridges 10", 20", 30", 40" in size with 1 μ - 5 μ - 10 μ - 25 μ filtration precision. Filter cartridges are absolute filters and renewed when clogged.

Filter vessels can be manufactured with stainless steel or PVC material. The advantage of multicartridge filtration units is very good and absolute filtration performance in high flowrates. The capacity of the filtration units can be increased by using more cartridges in the filter vessels.



STAINLESS STEEL GROUP FILTERS TECHNICAL SPECIFICATIONS					
MODEL	Flowrate 5 μ * (m ³ /hour)	Connection	Cartridge quantity & dimension	Unit Dimension (mm)	Weight (kg)
SS GF320	9	2" DN50	3 x 20"	375*426*954	19
SS GF330	13	2" DN50	3 x 30"	375*426*1200	22
SS GF340	18	2" DN50	3 x 40"	375*426*1250	24
SS GF520	15	2" DN50	5 x 20"	425*470*973	23
SS GF530	22	2" DN50	5 x 30"	425*470*1223	27
SS GF540	30	2" DN50	5 x 40"	425*470*1473	32
SS GF830	36	2" 1/2 DN65	8 x 30"	435*440*1235	37
SS GF840	48	2" 1/2 DN65	8 x 40"	435*440*1485	44
SS GF1230	54	3" DN80	12 x 30"	490*485*1238	49
SS GF1240	72	3" DN80	12 x 40"	490*485*1538	58
SS GF1640	96	4" DN100	16 x 40"	595*600*1550	82
SS GF2430	108	5" DN125	24 x 30"	790*790*1274	105
SS GF2440	144	5" DN125	24 x 40"	790*790*1574	115

Operation conditions

*Flowrates indicates the maximum capacities for cartridges with 5 μ filtration precision.

Vessel material : AISI304 Stainless steel

Max. operating pressure : 7 Bar



Stainless Steel Group
Filter Vessel



PVC GROUP FILTERS TECHNICAL SPECIFICATIONS					
MODEL	Flowrate 5 μ * (m ³ /hour)	Connection	Cartridge quantity & dimension	Unit Dimension (mm)	Weight (kg)
PV GF520	10	1" 1/2 DN40	5 x 20"	300*300*720	13
PV GF530	15	1" 1/2 DN40	3 x 30"	300*300*1000	14
PV GF540	20	1" 1/2 DN40	3 x 40"	300*300*1200	16
PV GF920	18	2" DN50	9 x 20"	400*400*720	21
PV GF930	25	2" DN50	9 x 30"	400*400*1000	26
PV GF940	36	2" DN50	9 x 40"	400*400*1200	31

Operation conditions

*Flowrates indicates the maximum capacities for cartridges with 5 μ filtration precision.

Vessel material : PVC

Max. operating pressure : Bar



PVC Group Filter
Vessel





Technical Specifications

- ◆ FRP tank
- ◆ PE Cabinet brine tank
- ◆ Top mount automatic control valve
- ◆ Timer controlled regeneration
- ◆ Collector difuser system
- ◆ Cationic softener resin



Optional Specifications

- ◆ Flow controlled regeneration



Operating Conditions

- ◆ Operating pressure: 2 – 6 bar
- ◆ Energy feed: 220 V/50 Hz
- ◆ Operating temperature: 2 – 38 °C



Cabinet type softeners



Applications

Cabinet type water softeners are generally used to prevent lime deposits in the machines such as dishwashers, laundries, water heaters, humidifiers, boilers in household and domestic applications.



Operation

Cabinet type water softeners are controlled with multiway automation valves. The exhausted resin is regenerated with brine solution. Regeneration control can be achieved with timer or flow controller. The brine solution needed during regeneration is drawn from the reserve in the brine tank.



Fleck 5600



GE Logix



Clack WS1

SC 100 CABINET TYPE WATER SOFTENERS TECHNICAL SPECIFICATIONS

Model	Flowrate m3/h			Capacity (m ³ xFr)	Mineral Qty (lt)	Salt use (kg)	Tank Dimension		Connection
	Ort.	Max.	Backwash				DxH (cm)	D"xH"	
SC 8/P8	0,7	1,5	0,5	48	8	1,3	20x41	8x17	1"
SC 20/P8	0,7	1,5	0,5	150	20	3,2	25x89	8x35	1"
SC 30/P10	1,0	2,0	0,7	180	30	4,8	25x89	10x35	1"





Standard Specifications

- ◆ FRP mineral tank body
- ◆ PE brine tank
- ◆ Top mount automation control valve
- ◆ Flow controlled regeneration
- ◆ Collector diffuser
- ◆ Cationic water softener resin



How it Works?

Both resin tanks are controlled with multiway top mount automation control valves. Dublex systems have two resin tanks which one tank is in service and the other tank is in regeneration or waiting service. Dublex water softeners can soften the water 24 hours a day without any interruption.



Operating Conditions

- ◆ Working pressure: 2 – 6 bar
- ◆ Energy feed: 220 V/50 Hz
- ◆ Working temperature: 2 – 38 °C



ST-600/P36 Dublex Water Softeners

ST 200 SERIE DUBLEX WATER SOFTENERS TECHNICAL SPECIFICATIONS

Model	Flowrate m ³ /h			Capacity (m ³ ×Fr)	Mineral Qty (lt)	Salt Consump. (kg)	Tank Dimensions		Connection
	Ort.	Max.	Backwash				D×H (cm)	D"×H"	
ST 20/P8-1"	0,7	1,5	0,5	120	2 x 20	3	20x89	8x35	1"
ST 30/P10-1"	1,0	2,0	0,7	180	2 x 30	5	25x89	10x35	1"
ST 50/P10-1"	1,0	2,0	0,7	300	2 x 50	8	25x137	10x54	1"
ST 75/P13-1"	1,7	3,4	1,3	450	2 x 75	12	33x165	13x54	1"
ST 100/P14-1"	1,9	3,8	1,4	600	2 x 100	16	35x165	14x65	1"
ST 125/P16-1"	2,5	4,0	1,9	750	2 x 125	20	40x165	16x65	1"
ST 125/P16-1"1/4	2,5	5,0	1,9	750	2 x 125	20	40x165	16x65	1"1/4
ST 125/P16-1"1/2	2,5	5,0	1,9	750	2 x 125	20	40x165	16x65	1"1/2
ST 150/P18-1"1/4	3,5	6,9	2,6	900	2 x 150	24	47x165	18x65	1"1/4
ST 150/P18-1"1/2	3,5	6,9	2,6	900	2 x 150	24	47x165	18x65	1"1/2
ST 200/P21-1/4	4,7	7,7	3,6	1200	2 x 200	32	53x151	21x60	1"1/4
ST 200/P21-1"1/2	4,7	8,0	3,6	1200	2 x 200	32	53x151	21x60	1"1/2
ST 200/P21-2"	4,7	9,5	3,6	1200	2 x 200	32	53x151	21x60	2"
ST 300/P24-1"1/2	5,8	10	4,4	1800	2 x 300	48	61x175	24x72	1"1/2
ST 300/P24-2"	5,8	11,7	4,4	1800	2 x 300	48	61x175	24x72	2"
ST 450/P30-2"	9,3	18	7,0	2700	2 x 450	72	77x181	30x72	2"
ST 600/P36-2"	13,6	19,5	10,2	3600	2 x 600	96	93x185	36x72	2"
ST 600/P36-3"	13,6	27,2	10,2	3600	2 x 600	96	93x185	36x72	3"
ST 800/P42-2"	18	23	13,5	4800	2 x 800	128	107x201	42x72	2"
ST 800/P42-3"	18	35	13,5	4800	2 x 800	128	107x201	42x72	3"
ST 1200/P48-2"	23	23	17,5	7200	2 x 1200	192	122x205	48x72	2"
ST 1200/P48-3"	23	45	17,5	7200	2 x 1200	192	122x205	48x72	3"





Technical Specifications

- ◆ AISI 304 stainless steel body
- ◆ 9000 hours lamp life
- ◆ Firstlight lamp
- ◆ Timer (*UVS serie*)
- ◆ Lamp failure indicator (*UVS serie*)
- ◆ Audio alarm (*UVS serie*)
- ◆ Alarm relay outlet (*UVS serie*)



Optional Specifications

- ◆ AISI 316 stainless steel body
- ◆ 16 bar pressure resistant body
- ◆ UV dosage sensor
- ◆ Reactor heat sensor
- ◆ Flow sensor
- ◆ Manual or automatic quartz glass cleaning mechanism
- ◆ UV sensor with ÖNORM or DVGW standards



Operating Conditions

- ◆ Max. operating pressure: 8 bar
- ◆ Energy feed: 220 V/1 faz/50 Hz
- ◆ Operating temperature: 2 – 40 °C



Ultraviolet Disinfection Systems

ULTRAVIOLET DISINFECTION SYSTEMS TECHNICAL SPECIFICATIONS

Model	Max. Flowrate (m3/hour)	Energy (Watt)	Lamp Qty (nos)	Dimension (cm)	Connection
UV 30	0,1	6	1	5 x 27 x 7	¼" threaded
UV 50	0,3	14	1	7 x 35 x 7	½" threaded
UV 105	1,5	21	1	10 x 50 x 19	1" threaded
UV 305	3	45	1	10 x 95 x 19	1" threaded
UV 505	5	58	1	10 x 95 x 19	1" threaded
UVS 110	10	130	2	13 x 95 x 16	1"1/2 threaded
UVS 115	15	195	3	16 x 95 x 25	1"1/2 threaded
UVS 120	20	260	4	20 x 95 x 40	2" threaded
UVS 125	25	325	5	22 x 95 x 40	2" threaded
UVS 130	30	390	6	25 x 95 x 50	2"1/2 threaded
UVS 140	40	520	8	33 x 95 x 55	3" threaded
UVS 150	50	650	10	35 x 95 x 55	3" threaded
UVS 160	60	900	12	40 x 95 x 60	DN100 Flanged
UVS 180	80	1050	16	43 x 95 x 65	DN100 Flanged
UVS 200	100	1200	20	43 x 95 x 65	DN100 Flanged

