

# DOMESTIC TREATMENT



professional treatment solutions  
**turning your water into benefit**



With our quality, we are everywhere there is water



→ **Asia**

Afghanistan  
Azerbaijan  
Bangladesh  
Georgia  
India  
Japan  
Kazakhstan  
Kyrgyzstan  
Myanmar  
Nakhichevan  
Nepal  
Uzbekistan  
Pakistan  
Russia  
Sakhalin Island  
Tajikistan  
Turkmenistan

→ **Europe**

Albania  
Bulgaria  
Cyprus  
Greece  
Ireland  
Latvia  
Malta  
Moldova  
Romania  
Slovakia  
Ukraine

→ **Africa**

Algeria  
Cameroon  
Djibouti  
Egypt  
Ethiopia  
Ghana  
Guinea  
Libya  
Maldives  
Morocco  
Niger  
Nigeria  
Sierra Leone  
Sudan  
Tunisia  
Zambia

→ **Middle East**

United Arab Emirates  
Iraq  
Iran  
Israel  
Jordan  
Oman  
Palestine  
Qatar  
Syria  
Saudi Arabia  
Yemen

Our company, which has been serving in the treatment sector since 1989, has entered into a joint investment with Aquamatch Inc. in 1996 and started designing and producing in Turkey. Since 2003, it has been an engineering and treatment company with 100% Turkish capital

Our company has become one of the world's leading companies of water and wastewater treatment sector by signing big references and projects in 4 continental and more than 50 countries.

## Professional treatment solutions Turning your water into benefit



- 9000 m<sup>2</sup> indoor production facilities in Aydın
- Installation of mega desalination and wastewater recovery facilities
- Over 20 years of deep knowledge and manufacturing experience in membrane technologies
- Sales and technical services with 16 dealers in 10 different cities
- Installation and operation of turnkey water & wastewater treatment systems at home and abroad
- Engineering, design, manufacturing, sales and after sales services staff of about 300 people together with our dealers







## Emaar Square/Istanbul

**Capacity:**  
1000 m<sup>3</sup>/day

**Filtration and Softening Systems**

## Medipol University/ Kavacık, İstanbul

**Capacity:**  
1920 m<sup>3</sup>/day

**Filtration, Softening, Disinfection Systems**



## Acibadem University/Ataşehir, İstanbul

**Capacity:**  
300 m<sup>3</sup>/day

**Filtration, Softening, Disinfection, Reverse Osmosis Systems**

## Park Afyon AVM/Afyon

**Capacity:**  
400 m<sup>3</sup>/day

**Side Piping Filtration and Softening Systems**



## → Separator Filters

Sand separators remove the sand and silt coming from the wells, used before storage tanks and well head. Separator filters keep the particles above 70 microns.

Model SS 304 / Carbon Steel	Capacity	Connection	Dia x Height
	m <sup>3</sup> /h		mm
SF 20 SS / KÇ	16 - 24	2" Threaded	240 x 860
SF 40 SS / KÇ	65 - 90	4" Threaded	320 x 1270
SF 60 SS / KÇ	90 - 150	6" Threaded	407 x 1678



## → Mechanical Filters

Mechanical filters are used in domestic water supply and wells with low particle load. These filters have Filtration degree above 50 microns and automatic backwash capability.

Model	Capacity @ Δp:0,5 bar	Connection	Dia x Height
	m <sup>3</sup> /h		cm
F76 S 1" AA	7,5	DN 25	21 x 45
F 76 S 1 ½" AA	15,6	DN 40	25 x 53
F76 S 2" AA	16,5	DN 50	27 x 53
F78 TS 65 FA 2,5"	48	DN 65	29 x 58
F78 TS 80 FA 3"	78	DN 80	31 x 67
F78 TS 100 FA 4"	100	DN 100	35 x 77



\*Models and capacities may vary by brand.

## → Cartridge Filters

Cartridge Filters are manual systems that used to filter the water with the desired micron sensitivity. They are usually used on plumbing and are required to have a diameter of at least the line diameter for minimum pressure loss. Replacement times of cartridge filters vary depending on the quality of the water being fed. On average, a clean 10 "cartridge filter is considered to give 0.9 m<sup>3</sup>/h water.

### General Features

- 10" / 20" / 30" / 40" Plastic Filter Body
- 5 / 10 / 20 / 50 / 100 Micron Cartridge Filters



## → Stainless Steel Bag and Cartridge Filters

Bag and cartridge filters are used where high filtration precision is required, such as 5 and 10 microns. The changing time of the filters depends on the amount of impurities in water.

### Stainless Steel Bag Filters

Model	Capacity	Connection	Surface Area	Dia x Height
	m <sup>3</sup> /h		cm <sup>2</sup>	cm
TF 304/316 - 716	25	2" Threaded	2250	22 x 90
TF 304/316 - 732	50	2" Threaded	4500	22 x 117



### SS 304 Stainless Steel Cartridge Filters

Model	Capacity	Connection	Cartridge Quantity	Dia x Height
	m <sup>3</sup> /h			cm
HSS 4	3,6	2" Threaded	4 x 10"	17 x 96
HSS 16	14,4	2" Threaded	4 x 40"	20 x 134

### SS 316 Stainless Steel Cartridge Filters

Model	Capacity	Connection	Cartridge Quantity	Dia x Height
	m <sup>3</sup> /h			cm
HSS 4	3,6	2" Threaded	4 x 10"	17 x 96
HSS 16	14,4	2" Threaded	4 x 40"	20 x 134
HSS 48	43,2	3" Flanged	12 x 40"	36 x 161
HSS 88	79,2	4" Flanged	22 x 40"	46 x 177
HSS 180	162	6" Flanged	45 x 40"	60 x 190
HSS 300	270	8" Flanged	75 x 40"	75 x 223
HSS 222 - 12	10,8	2" Threaded	4 x 30"	20 x 134
HSS 222 - 36	32,4	3" Flanged	12 x 30"	36 x 161



### Neopren Coated Cartridge Filters

Model	Capacity	Connection	Cartridge Quantity	Dia x Height
	m <sup>3</sup> /h			cm
HSW 180	162	6" Flanged	45 x 40"	60 x 213
HSW 300	270	8" Flanged	75 x 40"	75 x 220

### PVC Body Cartridge Filters

Model	Capacity	Connection	Cartridge Quantity	Dia x Height
	m <sup>3</sup> /h			cm
PVC 05 - 20 - 2	9	2" Threaded	5 x 20"	18 x 83
PVC 05 - 40 - 2	18	2" Threaded	5 x 40"	20 x 134
PVC 09 - 20 - 3	16	3" Threaded	9 x 20"	32 x 83
PVC 09 - 40 - 3	32	3" Threaded	9 x 40"	34 x 134



## → FLECK Valve Filtration Systems

Filtration systems are used to remove physical impurities such as sediment, turbidity, suspended solids, colour, odour and smell.

Filters remove particulates/sediments with various sizes and density by holding them with different media layers inside the tank. Filters are backwashed automatically in order to remove these particulates/sediments from filter bed.

### General Features

- FRP tanks
- 4 – 6 Bar Operating Pressure
- Elektronik / Mechanical Control Valve
- Adjustable Timer Control
- Elektric Supply 220 V / 50 Hz / 1 pH



### Fleck Valve - Multi Media Filter & Activated Carbon Filter Technical Features

Model	Capacity m <sup>3</sup> /h			Tank Dimensions cm	Connection	Activated Carbon Filters	Sand Filtraler			Area m <sup>2</sup>
	Filtraton Velocity					Activated Carbon & Gravel	Gravel	Sand	Anthracite	
	20 m/h	25 m/h	30 m/h	kg		kg	kg	kg		
<b>56 F 718 MM/AC</b>	0,6	0,75	0,9	21 x 113	¾"	9	7	6	6	0,03
<b>56 F 1015 MM/AC</b>	1	1,25	1,5	26 x 139	¾"	25	19	15	15	0,05
<b>58 F 1220 MM/AC</b>	1,4	1,75	2,1	31 x 134	1 ¼"	30	27	25	25	0,07
<b>58 F 1435 MM/AC</b>	2	2,5	3	36 x 165	1 ¼"	50	50	49	25	0,1
<b>58 F 1645 MM/AC</b>	2,6	3,3	3,9	41 x 164	1 ¼"	60	50	49	50	0,13
<b>58 F 1855 MM/AC</b>	3,8	4,8	5,7	46 x 173	1 ¼"	75 + 25	100	50	75	0,19
<b>58 F 2175 MM/AC</b>	5	6,3	7,5	54 x 163	1 ¼"	110 + 25	100	75	75	0,25
<b>58 F 24100 MM/AC</b>	6,2	7,8	9,3	61 x 187	1 ¼"	150 + 50	150	125	100	0,31
<b>31 F 30150 MM/AC</b>	10	12	14,4	77 x 225	2"	175 + 150	150	175	162	0,48
<b>31 F 36205 MM/AC</b>	14	18	21	92 x 231	2"	200 + 225	225	200	198	0,7
<b>31/39 F 42280 MM/AC</b>	19	24	28	107 x 242	2"-3"	225 + 300	300	225	198	0,93
<b>31/39 F 48300 MM/AC</b>	23,8	29,7	35,7	123 x 240	2"-3"	250 + 450	450	250	234	1,19

\* The filtration speeds of the table may vary depending on the water quality and filter usage.

\* Speed for reverse rinsing capacity is 35 m/h.

\* Tank height is total height including feet, sizes vary according to the manufacturer.

\* Filter inlet pressure should be min 3.5 bar. The capacities in the table are for max. 1.8 bar pressure loss.

## → AUTOTROL Valve Filtration Systems

Filtration systems are used to remove physical impurities such as sediment, turbidity, suspended solids, colour, odour and smell.

Filters remove particulates/sediments with various sizes and density by holding them with different media layers inside the tank. Filters are backwashed automatically in order to remove these particulates/sediments from filter bed.



### General Features

- FRP tanks
- 4 – 6 Bar Operating Pressure
- Elektronik / Mechanical Control Valve
- Adjustable Timer Control
- Elektric Supply 220 V / 50 Hz / 1 pH

Autotrol Valve - Multi Media Filter & Activated Carbon Filter Technical Features

Model	Capacity m <sup>3</sup> /h			Tank Dimensions	Connection	Activated Carbon Filters	Sand Filtraler			Area m <sup>2</sup>
	Filtraton Velocity					Activated Carbon & Gravel	Gravel	Sand	Anthracite	
	20 m/h	25 m/h	30 m/h	cm	kg	kg	kg	kg		
<b>AU 263 1645 MM/AC</b>	2,6	3,3	3,9	41 x 164	1 ¼"	60	-	99	50	0,13
<b>AU 263 1855 MM/AC</b>	3,8	4,8	5,7	46 x 173	1 ¼"	75 + 25	100	50	75	0,19
<b>AU 273 2175 MM/AC</b>	5	6,3	7,5*	54 x 163	1 ¼"	110 + 25	100	75	75	0,25
<b>AU 293 24100 MM/AC</b>	6,2	7,8	9,3	61 x 187	2"	150 + 50	150	125	100	0,31
<b>AU 293 30150 MM/AC</b>	10	12	14,4	77 x 225	2"	175 + 150	150	175	162	0,48
<b>AU 293 36205 MM/AC</b>	14	18	21*	92 x 231	2"	200 + 225	225	200	198	0,7

\* The filtration speeds of the table may vary depending on the water quality and filter usage.

\* Speed for reverse rinsing capacity is 35 m/h.

\* Tank height is total height including feet, sizes vary according to the manufacturer.

\* Filter inlet pressure should be min 3.5 bar. The capacities in the table are for max. 1.8 bar pressure loss.



## → FLECK Valve Softener Systems

Softening systems remove hardness by exchanging Calcium and Magnesium ions with sodium based resin. When the resin is exhausted, it is regenerated with brine, which is stored in the brine tank automatically.

### Fleck Valve - Single Softener Systems Technical Features

Model	Capacity m <sup>3</sup> /h			Resine lt	Gravel kg	Tank Dimensions cm	Connection	Salt Consumption kg/reg	Brine Tank cm
	Filtraton Velocity								
	35 m/h	40 m/h	45 m/h						
Mini Cabinet	0,5	0,6	0,7	15	-	21 x 113	¾"-1"	4	Mini Cabinet
56 F 715 S	0,5	0,6	0,7	15	-	21 x 113	¾"	4	54 x 110
58 F 1050 S	1,8	2	2,3	50	-	26 x 139	1 ¼"	12	54 x 110
58 F 1490 S	3	3,5	4	87	11	36 x 165	1 ¼"	21	54 x 110
58 F 16150 S	4,4	5	5,6	125	15	41 x 164	1 ¼"	30	100 x 95
58 F 18150 S	5,3	6	6,8	150	25	46 x 173	1 ¼"	36	100 x 95
58 F 21210 S	7	8	9	200	25	54 x 163	1 ¼"	48	100 x 95
29 F 24300 S	9,6			275	50	61 x 187	1 ¼"	66	100 x 95
29 F 24300 S	9,6	11	12,4	275	50	61 x 187	2"	66	100 x 95
29 F 30450 S	13,6*			375	150	77 x 225	2"	90	120 x 127
29 F 30450 S	13	15	17	375	150	77 x 225	2"	90	120 x 127
29 F 36600 S	16	18	21	450	225	92 x 231	2"	108	120 x 127
31 F 42900 S	27*			900	300	107 x 242	2"	216	120 x 127
39 F 42900 S	32	36	41	900	300	107 x 242	3"	216	120 x 127
31 F 481200 S	27*			1200	450	107 x 242	2"	288	120 x 127
39 F 481200 S	42	48	54	1200	450	107 x 242	3"	288	120 x 127

### Fleck Valve - Dublex Softener Systems Technical Features

Model	Capacity m <sup>3</sup> /h			Resine lt	Gravel kg	Tank Dimensions cm	Connection	Salt Consumption kg/reg	Brine Tank cm
	Filtraton Velocity								
	35 m/h	40 m/h	45 m/h						
91 F 715 T	0,5	0,6	0,7	25	-	21 x 113	1"	3	54 x 110
91 F 1045 T	1,8	2	2,3	100	-	26 x 139	1"	12	54 x 110
91 F 1260 T	2,2	2,5	2,8	125	22	31 x 134	1"	15	54 x 110
91/95 F 1490 T	3	3,5	4	175	22	36 x 165	1"-1 ½"	21	54 x 110
91/95 F 16150 T	4,4	5	5,6	250	30	41 x 164	1"-1 ½"	30	100 x 95
95/29 F 21210 T	7	8	9	400	50	54 x 163	1 ½"-2"	48	100 x 95
95 F 24300 T	9,6	11,1*		550	100	61 x 187	1 ½"	66	100 x 95
29 F 24300 T	9,6	11	12,4	550	100	61 x 187	2"	66	100 x 95
29 F 30450 T	13	15	17	750	300	77 x 225	2"	90	120 x 127
29/31 F 36600 T	16	18	21	900	450	92 x 231	2"	108	120 x 127
31 F 42900 T	27*			1800	600	107 x 242	2"	216	120 x 127
39 F 42900 T	32	36	41	1800	600	107 x 242	3"	216	120 x 127
31 F 481200 T	27*			2400	900	122 x 243	2"	288	120 x 127
39 F 481200 T	42	48	54	2400	900	122 x 243	3"	288	120 x 127

\* The filtration speeds in the table may vary depending on inlet water hardness and water capacity.

\* For 1lt of resin, 240 g salt consumption is accepted. For 1 lt resin 6800 lt F soft water was accepted.

\* Tank height is total height including feet, sizes vary according to the manufacturer.

\* The system input pressure should be min 3.5 bar. The capacities in the table are for max. 1.8 bar pressure loss.

### General Features

- FRP tanks
- 4 – 6 Bar Operating Pressure
- Elektronik / Mechanical Control Valve
- Adjustable Timer Control
- Elektric Supply 220 V / 50 Hz / 1 pH



## → AUTOTROL Valve Softener Systems

Softening systems remove hardness by exchanging Calcium and Magnesium ions with sodium based resin.

When the resin is exhausted, it is regenerated with brine, which is stored in the brine tank automatically.

### General Features

- FRP tanks
- 4 – 6 Bar Operating Pressure
- Elektronik / Mechanical Control Valve
- Adjustable Timer Control
- Elektric Supply 220 V / 50 Hz / 1 pH



### Autotrol Valve - Single Softener Systems Technical Features

Model	Capacity m <sup>3</sup> /h			Resine	Gravel	Tank Dimensions cm	Connection	Salt Consumption	Brine Tank
	Filtraton Velocity								
	35 m/h	40 m/h	45 m/h					lt	kg
AU 278 16150 S	4,4	5	5,6	125	15	41 x 164	1 ¼"	30	100 x 95
AU 278 18150 S	5,3	6	6,8	150	25	46 x 173	1 ¼"	36	100 x 95
AU 278 21210 S	7	7,5*		200	25	54 x 163	1 ¼"	48	100 x 95
AU 298 24300 S	9,6	11	12,4	275	50	61 x 187	2"	66	100 x 95
AU 298 30450 S	13	15	17	375	150	77 x 225	2"	90	120 x 127
AU 298 36600 S	16	18	21*	450	225	92 x 231	2"	108	120 x 127



### Autotrol Valve - Dublex Softener Systems Technical Features

Model	Capacity m <sup>3</sup> /h			Resine	Gravel	Tank Dimensions cm	Connection	Salt Consumption	Brine Tank
	Filtraton Velocity								
	35 m/h	40 m/h	45 m/h					lt	kg
AU 255 715 T	0,5	0,6	0,7	25	-	21 x 113	1"	3	54 x 110
AU 255 1045 T	1,8	2	2,3	100	-	26 x 139	1"	12	54 x 110
AU 255 1260 T	2,2	2,5	2,8	125	22	31 x 134	1"	15	54 x 110
AU 255 1490 T	3	3,5	4	175	22	36 x 165	1"	21	54 x 110
AU 278 16150 T	4,4	5	5,6	250	30	41 x 164	1 ¼"	30	100 x 95
AU 278 18150 T	5,3	6	6,8	300	50	46 x 173	1 ¼"	36	100 x 95
AU 298 21210 T	7	7,5*		400	50	54 x 163	2"	48	100 x 95
AU 298 24300 T	9,6	11	12,4	550	100	61 x 187	2"	66	100 x 95
AU 298 30450 T	13	15	17	750	300	77 x 225	2"	90	120 x 127
AU 298 36600 T	16	18	21*	900	450	92 x 231	2"	108	120 x 127

\* The filtration speeds in the table may vary depending on inlet water hardness and water capacity.

\* For 1lt of resin, 240 g salt consumption is accepted. For 1 lt resin 6800 lt F soft water was accepted.

\* Tank height is total height including feet, sizes vary according to the manufacturer.

\* The system input pressure should be min 3.5 bar. The capacities in the table are for max. 1.8 bar pressure loss.

## → Reverse Osmosis Systems

Reverse Osmosis (RO) systems are used to separate the dissolved ions from water with membrane separation in order to get low conductivity in fresh water.

Reverse Osmosis systems are crossflow membrane separation units without backwash. Membranes are cleaned in place with chemicals in a certain time period.

TFH Series RO Systems Technical Features : Horizontal Design, 4" x 40" Membrane Usage

Model	Capacity	Vessel Quantity	Membrane Quantity	Power	Connection Inlet/Outlet	W x L x H
	m <sup>3</sup> /day			kW	Giriş/Çıkış	cm
<b>TFH 1</b>	5	1	1	0,55	DN20/DN15	55 x 114 x 60
<b>TFH 2</b>	10	2	2	0,55	DN25/DN15	55 x 114 x 75
<b>TFH 4</b>	21,5	2	4	1,1	DN25/DN25	55 x 215 x 75
<b>TFH 6</b>	32	3	6	1,1	DN25/DN25	55 x 215 x 90

- Girişte 5 mikronluk kartuş filtre
- Recovery %60
- Kontrol panosu

TFZ Serisi RO Sistemleri: 4" x 40" Membran Kullanımı

Model	Capacity	Vessel Quantity	Membrane Quantity	Power	Connection Inlet/Outlet	W x L x H
	m <sup>3</sup> /day			kW	Giriş/Çıkış	mm
<b>TFZ 008</b>	1,8	2	8	2,2	DN50/DN32	730 x 4600 x 1380
<b>TFZ 012</b>	2,7	3	12	2,2	DN50/DN32	730 x 4600 x 1380
<b>TFZ 016</b>	3,6	4	16	3	DN50/DN32	730 x 4600 x 1380

- 5 micron cartridge filter
- Recovery up to % 70
- SS 316 High pressure piping
- PLC control panel

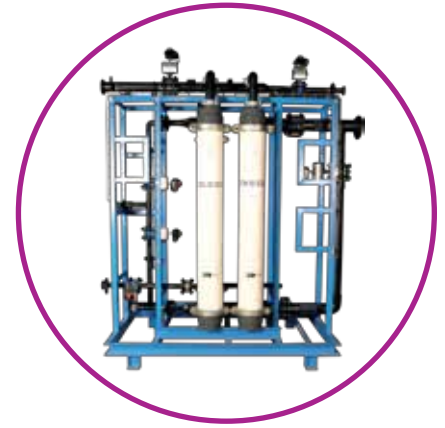


## → Ultrafiltration Systems – MINI Series

Ultrafiltration (UF) systems are used for filtration of especially sea water, river water, well water and spring water that have dense and variable physical impureness load by membrane technology.

Bacteria, viruses and turbidity in the water can be removed at high rates by hollow fiber membranes with a pore size of 0.02 microns.

Mini Ultrafiltration systems are used in drinking water treatment systems and gray water treatment systems.



### Mini UF Systems Technical Features

Model	Capacity	UF Membrane Quantity	UF Membrane Area	Net Flux	W x L x H
	m <sup>3</sup> /gün				
UFM UF 02 - 4	10	2	9	46,3	850 x 1052 x 1926
UFM UF 04 - 4	20	4	18	46,3	959 x 1487 x 1926
UFM UF 08 - 4	40	8	36	46,3	1413 x 172 x 1967



## → Under Sink RO Systems

Under sink Reverse osmosis Systems are compact drinking water treatment units, to procure drinking water at homes from city water or well water. Cartridge filters need to be replaced with new ones when they become dirty. Approximately exchange time is 6 months-1 year for cartridge filters and 2–3 years for membranes. The exchange time vary depending on the feed water quality.



### General Features

- 10" Sediment Cartridge Filter
- 10" Granular Carbon Cartridge Filter
- 10" Block Carbon Filter
- Reverse Osmosis Membrane
- Post InLine Filter
- 12 lt Storage Tank
- Special Tap
- Model option with and without pump



Feed water features for Under-Sink RO Systems ;  
Pressure; 3–5 bar, Total Hardness < 20 Fr, TDS < 1000 mg/l



## → Ultraviolet Systems

Ultraviolet Systems (UV) are used for disinfection. Ultraviolet disinfection method is a quick and effective method to remove the microorganisms without using heat or any chemical. UV Lamps produce certain wavelength rays in order to distract the DNA of bacteria, virus, fungus, mold spores and other microorganisms.



Water which will be disinfected via UV light, must be filtered, purified from hardness and heavy metals such as irons and manganese.

Ultraviolet lamps need to be replaced after approximately 9000 hours usage.

### General Features

- SS 316 Stainless Steel Body, PN10
- 5-40 °C Working Temperature
- Low Pressure Lamps
- Sight Glass
- Quartz & UV Lamps



### Aqua Series UV Systems Technical Features

Model	Capacity @ UV Dosage	UV Dosage	Lamp Quantity	Lamp Power	Connection	Weight
	m <sup>3</sup> /h	microwatts/cm <sup>2</sup>		watt	Inch	kg
UVY AQUA 12	3	30.000	1	36	1,25"	10
UVY AQUA 24	5,4	30.000	2	72	1,5"	13
UVY AQUA 40	10	36.000	4	144	2"	15
UVY AQUA 65	15	48.500	6	216	2"	21
UVY AQUA 100	20	48.500	8	288	2,5" Flanged	23

### Amalgam Series UV Systems Technical Features

Model	Capacity @ UV Dosage	UV Dosage	Lamp Quantity	Lamp Power	Connection	Weight
	m <sup>3</sup> /h	microwatts/cm <sup>2</sup>		watt	Inch	kg
UVA AQUA 1	34	40.000	1	270	2,5" Flanged	56
UVA AQUA 2	67	40.000	2	540	4" Flanged	60
UVA AQUA 3	101	40.000	3	810	6" Flanged	66
UVA AQUA 4	161	40.000	4	1080	6" Flanged	75