INDUSTRIAL

professional treatment solutions
turning your water into benefit



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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 Lione
Sudan
Tunusia
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^2 indoor production facilites in Aydın
- Installation of mega desalination and wastewater recovery facilites
- 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 & waterwater treatment systems at home and abroad
- Engineering, design, manufacturing, sales and after sales services staff of about 300 people together with our dealers





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2016 Türkiye İş Bankası Chess League 2nd.



Tüpraş İzmir Refinery/İzmir
Waste water Recovery System

Capacity:
780 m³/h Cooling Water
480 m³/h Cooling Water
156 m³/h Fire Water

System Content:
- Coagulation & Flocculation & Sedimentation System
- Activated Carbon Filtration System
- Ultrafiltration System
- 1.Pass Reverse Osmosis System
- 2. Pass Reverse Osmosis System
- Electrodeionization System
- Multi Media Filtratio System

Kos/Konya

Capacity:
1100 m³/h Filtration System
850 m³/h Ultrafiltration System
534 m³/h Reverse Osmosis System
166 m³/h Nanofiltration System





Greeneco/Denizli

Capacity:
430 m³/h Coagulation – Flocculation – Sedimentation System
416 m³/h Filtration System

Çolakoğlu Metallurgy/İzmit

Capacity:
700 m³/h Ultrafiltration System
400 m³/h SWRO Seawater Reverse Osmosis System
600 m³/h BWRO Reverse Osmosis System



Face Piping Multi Media & Activated Carbon Filters

Filtration systems are used to remove physical impurities such as sediment, turbidity, suspended solids, colour, odour and smell. Filters remove particulates/ediments with various sizes and density by holding them with different media layers inside the tank. Filters are backwashed automatically in order to remove these paticulates/sediments from filter bed.



General Features

- FRP / Epoxy Coated Carbon Steel Tanks
- 4 – 6 Bar Operating Pressure
- Pneumatic Actuated Butterfly Valves
- HDPE / PE / Galvanise Face Piping
- PLC Control Panel
- Electricity 220 V / 50 Hz / 1 pH

Epoxy Coated Multi Media & Activated Carbon Filters Technical Features

Model	Capacity m^3/h			Tank Dimensions	Body/ Dome Thickness	Activated Carbon Filters	Multi Media Filters			Area
	Filtration Velocity					Activated Carbon & Gravel	Gravel	Sand	Anthracite	
	20 m/h	25 m/h	30 m/h	cm	mm	kg	kg	kg	kg	m^2
YMMF/YACF 95 AS	14	18	21	95 x 320	6/8	325 + 150	150	500	252	0,7
YMMF/YACF 125 AS	25	31	37	125 x 320	8/10	575 + 300	300	850	414	1,23
YMMF/YACF 160 AS	40	50	60	160 x 340	8/10	900 + 450	450	1350	648	2
YMMF/YACF 190 AS	57	71	86	190 x 340	8/10	1300 + 675	675	2350	720	2,83
YMMF/YACF 240 AS	91	113	136	240 x 360	10/12	2025 + 1050	1050	3750	1134	4,52
YMMF/YACF 285 AS	128	160	192	285 x 380	10/12	2900 + 1500	1500	5300	1602	6,38

FRP Multi Media & Activated Carbon Filters Technical Features

Model	Capacity m^3/h			Tank Dimensions	Activated Carbon Filters	Multi Media Filters			Area
	Filtration Velocity				Activated Carbon & Gravel	Gravel	Sand	Anthracite	
	20 m/h	25 m/h	30 m/h	cm	kg	kg	kg	kg	m^2
MMF/ACF 30 AF	10	12	15	78 x 214	175 + 150	150	175	162	0,48
MMF/ACF 36 AF	14	18	21	94 x 215	200 + 225	225	200	198	0,7
MMF/ACF 42 AF	19	24	28	109 x 240	225 + 300	300	225	196	0,93
MMF/ACF 48 AF	24	30	36	123 x 240	250 + 450	450	250	234	1,19
MMF/ACF 63 AF	42	53	63	163 x 249	375 + 825	825	350	342	2,1

* The filtration speeds of the table may vary depending on the water quality and filter usage.
* Speed for reverse rinsing capacity is 30 m/h.
* Tank height is total height including feet, sizes vary according to the manufacturer.

Epoxy Coated Horizontal Multi Media Filters Technical Features

Model	Capacity m^3/h	Tank Dimensions	Gövde Bombe	Multi Media Filters			Area
	Filtration Velocity			Gravel	Sand	Anthracite	
	15 m/h	cm	mm	kg	kg	kg	m^2
HORIZONTAL YMMF 2,85x6 M	250	285 x 600	10/12	7350	14050	4014	15,89
HORIZONTAL YMMF 2,85x9 M	350	285 x 600	10/12	10950	21050	6030	23,17
HORIZONTAL YMMF 2,85x12 M	450	285 x 1200	10/12	14550	28100	8048	33,78

* Speed for reverse rinsing capacity is 30 m/h.
* Tank height is total height including feet, sizes vary according to the manufacturer.

Ultrafiltration Systems Vertical 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.

UF systems are operated according to the vertical flow principle. The impurities that are held membranes are removed by automatic backwash. Membranes are also periodically chemically enhanced backwash with chemical. Average system recovery is % 85–90.

General Features

- Hollow Fiber UF Membranes
- Automatic Backwash & Chemical Washing Unit
- PE Piping
- PLC Control Panel & Operator Pane

Surface Water & Sea Water Pre Treatment UF Systems Vertical Series Technical Series

Model	Turbidity	Capacity	Membrane Area	Flux
	NTU	m^3/h	m^2	$lt/m^2.h$
CHZ UFD 03	10 - 30	13,9 - 10,0	192	51,9
CHZ UFD 06	10 - 30	27,8 - 19,9	384	51,9
CHZ UFD 08	10 - 30	37,1 - 26,6	512	51,9
CHZ UFD 12	10 - 30	55,6 - 39,9	768	51,9
CHZ UFD 14	10 - 30	64,9 - 46,5	896	51,9
CHZ UFD 18	10 - 30	83,4 - 59,8	1152	51,9
CHZ UFD 22	10 - 30	101,9 - 73,1	1408	51,9
CHZ UFD 24	10 - 30	111,2 - 79,7	1536	51,9
CHZ UFD 30	10 - 30	139,0 - 99,6	1920	51,9
CHZ UFD 36	10 - 30	166,8 - 119,6	2304	51,9
CHZ UFD 48	10 - 30	222,4 - 159,4	3072	51,9

Face Piping Softener Systems

Softening systems remove hadness by exchangeing Calcium and Magnesium ions with sodium based resin.

When the resin's is exhaused, it is regenerated wth brine which is stored in the brine tank automatically.



General Features

- FRP / Epoxy Coated Carbon Steel Tanks
- 4 – 6 Bar Operating Tanks
- Pneumatic Actuated Butterfly Valves
- HDPE / PE / Galvanise Face Piping
- PLC Control Panel
- Electricity 220 V / 50 Hz / 1 pH

Epoxy Coated Carbon Steel Softener Systems Technical Features

Model	Capacity m^3/h			Resine	Gravel	Tank Dimensions	Body/Dome Thickness	Salt Consumption	Brine Tank
	Filtration Velocity								
	35 m/h	40 m/h	45 m/h	lt	kg	cm	mm	kg/reg	cm
YSTF 95 AS	25	28	32	700	275	95 x 330	6/8	112	120 x 127
YSTF 125 AS	63	72	81	1800	425	125 x 390	8/10	288	150 x 175
YSTF 160 AS	98	112	126	2800	650	160 x 410	8/10	448	150 x 175
YSTF 190 AS	140	160	180	4000	900	190 x 440	8/10	640	180 x 200
YSTF 240 AS	221	252	284	6300	1450	240 x 450	10/12	1008	230 x 250

FRP Softener Systems Technical Features

Model	Capacity m^3/h			Resine	Gravel	Tank Dimensions	Salt Consumption	Brine Tank
	Filtration Velocity							
	35 m/h	40 m/h	45 m/h	lt	kg	cm	kg/reg	cm
STF 30 AF	13	15	17	375	150	78 x 214	60	100 x 95
STF 36 AF	16	18	21	450	225	94 x 215	72	100 x 95
STF 42 AF	32	36	41	900	300	109 x 240	144	120 x 127
STF 48 AF	42	48	54	1200	450	123 x 240	192	150 x 175
STF 63 AF	62	70	79	1750	825	160 x 287	280	180 x 200

* The filtration speeds in the table may vary depending on inlet water hardness and water capacity.
* For 1 lt of resin, 160 g salt consumption is accepted. For 1 lt resin 6000 lt F soft water was accepted.
* Tank height is total height including feet, sizes vary according to the manufacturer.

Reverse Osmosis Systems

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

Reverse Osmosis systems are crossflow membrane seperation units without backwash. Membranes are claned in place with chemicals time to time.



General Features

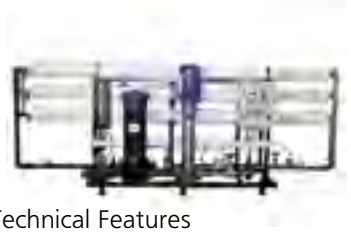
- TFC Spiral Wound Membranes
- FRP Membrane Housing
- SS 316 Stainless Steel High Pressure Pump
- Low Pressure Piping, PVC or SS 316 Optional
- High Pressure Piping, SS 316
- Cartridge Filter PVC / Stainless Steel Body

* The operating pressures and efficiencies of the systems vary for different TDS values.



TFE Series RO Systems Technical Features

Model	Capacity	Recovery	Vessel Quantity	Membrane Quantity	Power	Connection
	m^3/h	%			kW	Inlet/Outlet
TFE - 002	2,1 - 2,3	70 - 75	2	2	7,5	DN40/DN25
TFE - 004	4,3 - 4,7	75 - 77	2	4	7,5	DN40/DN40
TFE - 006	6,5 - 7,0	58 - 60	2	6	11	DN50/DN40
TFE - 008	8,5 - 9,5	65 - 70	2	8	11	DN50/DN40
TFE - 012	13 - 14	70 - 68	3	12	15	DN65/DN50
TFE - 018	19 - 21	75 - 80	3	18	18,5	DN80/DN65
TFE - 024	25 - 27	75 - 80	4	24	18,5	DN80/DN65
TFE - 030	32 - 35	75 - 80	5	30	30	DN80/DN80
TFE - 036	38 - 42	75 - 80	6	36	37	DN100/DN80



TFX Series RO Systems Technical Features

Model	Capacity	Recovery	Vessel Quantity	Membrane Quantity	Power	Connection
	m^3/h	%			kW	Inlet/Outlet
TFX - 04	2,5	45 - 54	1	4	7,5	DN40/DN25
TFX - 08	5	45 - 54	2	8	15	DN50/DN40
TFX - 12	7,5	45 - 54	3	12	18,5	DN65/DN40
TFX - 16	10	45 - 54	4	16	30	DN80/DN50
TFX - 20	12,5	45 - 54	5	20	30	DN80/DN65
TFX - 24	15	45 - 54	6	24	37	DN80/DN65
TFX - 36	25	60 - 64	6	36	45	DN100/DN80



TFK Series RO Systems Technical Features

Model	Capacity	Recovery	Vessel Quantity	Membrane Quantity	Power	Connection
	m^3/h	%			kW	Inlet/Outlet
TFK - 150	6	57	2	6	11	DN50/DN40
TFK - 200	8	65	2	8	11	DN50/DN40
TFK - 300	12,5	65	3	12	15	DN50/DN50
TFK - 450	19	75	3	18	18,5	DN80/DN65
TFK - 550	23	75	4	24	18,5	DN80/DN65
TFK - 750	31	75	5	30	37	DN80/DN80
TFK - 900	37,5	75	6	36	37	DN80/DN80



TFM Series RO Systems Technical Features

Model	Capacity	Recovery	Vessel Quantity	Membrane Quantity	Power	Connection
	m^3/h	%			kW	Inlet/Outlet
TFM - 42	37 - 50	75	7	42	37	DN100/DN80
TFM - 60	52 - 65	75	10	60	45	DN150/DN100
TFM - 72	65 - 85	75	12	72	75	DN150/DN150
TFM - 90	77 - 100	75	15	90	75	DN150/DN150
TFM - 108	98 - 125	75	18	108	75	DN150/DN150

Degassifier Sytems

Degassifier systems are used to remove CO_2 from water by forced aeration using fan and packing material.
Filling materials inside degassifier tower increase surface of the water in order to achieve better aeration and efficient CO_2 removal.



General Features

- FRP / Epoxy Coated Carbon Steel / SS 316 Stainless Steel Tank and Tower
- Radial Type Fan
- PP Filling Materials
- Standart Products Up To 200 m3/h Capacity

Model	Capacity	Tower Dimensions	Tank Dimensions
	m^3/h	m	m
AD 20	20	0,64 x 3	1,9 x 1
AD 45	45	0,96 x 3	1,9 x 1
AD 70	70	1,27 x 3	1,9 x 1
AD 145	145	1,6 x 3	1,6 x 1,5
AD 200	200	1,6 x 4,5	1,6 x 1,5

Membrane Cleaning Units

Reverse Osmosis systems operate continiously. Membranes are cleaned in place to remove contaminants and concentrated salts from membrane surface.



General Features

- SS 316 Stainless Steel Cleaning Pump
- SS 304 Stainless Steel Bag Filter
- PE Cleaning Tank
- SS 304 Stainless Steel Chassis

Model	Cleaning Pump		Bag Filter	Cleaning Tank
	Capacity	Pressure		
	m^3/h	bar		lt
CUTFZ	2,3	3,5	FLT 207 - A	250
CUTFK - 2	18	4	TF 716	1500
CUTFK - 3	36	4	TF 732	3000
CUTFK - 4	54	4	TF 732	5000
CUTFK - 5	54	4	TF 732	8000

Dolomite Systems

The low pH and conductivity values of RO product water are increased by using dolomite filter.



Model	Capacity	Tank Dimensions	Connection	Dolomite	Area
	m^3/saat	cm	m	kg	m^2
RC 30 M	10	77 x 225	DN 40	675	0,48
RC 36 M	14	92 x 231	DN 50	975	0,7
RC 42 M	19	107 x 242	DN 65	1350	0,93
RC 48 M	24	122 x 243	DN 65	1800	1,19

* The filtration speed of the table is 20 m/h.
* Speed for backwash capacity is 30 m/h.
* Tank height is total height including feet, sizes vary according to the manufacturer.

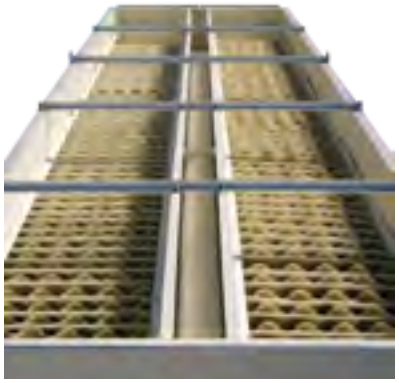
Coagulation Flocculation Sedimentation Systems

Coagulation Flocculation Sedimentation systems are used mainly for the physical treatment of surface waters with high physical impurities.



General Features

- Epoxy Coated Carbon Steel Tanks
- Mechanical Parts For Concrete Tanks
- Coagulation Unit
- Flocculation Unit
- Lamella Sedimentation Unit
- Coagulant & PE Dosing Unit
- PLC Control Panel



CFS Systems Technical Features

Model	Capacity	Tank Dimensions Width x Length x Height (m)		
	m^3/h	Coagulation	Flocculation	Sedimentation
CFS 25 ST / BT	25	1,2 x 1,2 x 1,2	2,3 x 2,2 x 2	2,3 x 2,2 x 2,5
CFS 50 ST / BT	50	1,2 x 1,2 x 1,2	2,3 x 2,2 x 4	2,3 x 2,2 x 4
CFS 75 ST / BT	75	1,2 x 1,2 x 1,2	2,3 x 2,2 x 6	2,3 x 2,2 x 6
CFS 100 ST / BT	100	1,2 x 1,2 x 1,2	2,3 x 2,2 x 8	2,3 x 2,2 x 8

Chemical Dosing Systems

Dosing systems include dosing pumps, measurement-control equipments and accessories used for conditioning in the water and wastewater treatment industry.



General Features

- 0,4–54 lt/h, 0,1–20 bar capacity standard dosage pump models
- 100 lt Vertical PE solution tank
- Constant/Proportional/Analog/Flow/pH,/ORP(redox) controlled dosing alternatives
- Special mixers for various chemicals
- Measurement and control equipments

* Please consult us for specific capacities and specifications.

Cooling Tower Control Systems

Sedimentation, corrosion, deposit, microbial pollution and sludge are removed from cooling water by water conditioning in cooling tower applications,



General Features

- 1000x500x10 mm Panel
- pH / Conductivity and pH / ORP / Conductivity Measurement Options on Panel
- 2/3 Pumps Options for Chemical Dosing on the System
- Modbus Compability
- pH/ORP/İletkenlik Probes
- 9” 80 Micron Pre Filter on Panel
- 5” 80 Micron Filter for pH Probe
- pH Measurement Range: 1-14
- Conductivity Measurement Range: 100-20.000 µS/cm
- 4-20 mA Signal Output for pH Measurement
- IP 65 Protection Class Equipments



* Please consult us for specific capacities and specifications.

Bernoulli / Sweden

Bernoulli filters are self-cleaning filters with a cleaning operation based on the Bernoulli principle, which ensures continuous filtration of water in pressurized systems. The most important part of Bernoulli Filter is the disc mounted on a pneumatic cylinder that is . The Bernoulli filter filtration range is 100–2000 microns.



Usage Ares

- Pre filtration of sea, well and river waters
- UF sytem input
- Cooling tower lines

STF Filtros / Spain

STF filters are used for filtration in drinking water facilities, seawater treatment plants, agricultural irrigation and physical barrier against to zebra mussels, cogeneration facilities, cooling towers. STF filter filtration range is 10–1000 microns.



Accessories

Various treatment equipments are used to help main treatment systems Iin power plants.



Measurement stations

- In UF, RO, MBDI ve EDI systems
- Measurement of turbidity and Silica



Cartridge & Bag Filters

- Sensitive filtration required



Chemical Dosing Systems

- Pre Filtration, UF, RO systems.



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