FOOD & BEVERAGE

professional treatment solutions
turning your water into benefit

act Su Teknolojileri

aquamatch®

www.aquamatch.com.tr

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

Coca Cola / Elazığ / Turkey

Capacity:
2 x 95 m^3/h
Ultrafiltration, Activated Carbon Filtration,
Nanofiltration Systems

Tuborg Brewery / İzmir / Turkey

Capacity:
500 m^3/h Multi Media Filter and
Steam Sterilized Activated Carbon Filter
130 m^3/h Softener ve RO Systems

Bottling Plant / Kocaeli

Capacity:
120 m^3/h Ultrafiltration System
2 x 60 m^3/h Ozonation System
134 m^3/h Bag Filter

Stainless Steel 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

- SS304 / SS316 Stainless Steel Filter Tanks
- 4 – 6 Bar Operating Pressure
- Valves for Food & Beverage Norms
- Stainless Steel Food & Beverage Piping
- Internal Parts for Steam Sterilizing
- PLC Control Panel
- Electricity 220 V / 50 Hz / 1 pH

Stainless Steel Multi Media & Activated Carbon Filters Technical Features

Model	Capacity m^3/h	Tank Dimensions	Body/ Dome Thick-ness	Activated Carbon Filters	Multi Media Filters			Area
	Filtration Velocity			Activated Carbon & Gravel	Gravel	Sand	Anthracite	
	20 m/h	cm	mm	kg	kg	kg	kg	m^2
BMMF / BACF 160 SS304/316	**40**	160x340	8/8	900 + 450	450	1350	648	2
BMMF / BACF 190 SS304/316	**57**	190x340	8/8	1300 + 675	675	2350	720	2,83
BMMF / BACF 220 SS304/316	**76**	220x360	10/10	1725 + 1050	875	3150	975	3,8

* Speed for reverse rinsing capacity is 30 m/h.
* 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
- SS 316 Stainless Steel High Pressure Pump
- High Pressure Piping SS 316 Stainless Steel
- Low Pressure Piping SS 316 Stainless Steel
- Cartridge Filter SS 316 Stainless Steel Body
- Stainlss Steel Control Panel & Operator Panel

TFK Series RO Systems Technical Features

Model	Capacity m^3/h	Recovery %	Vessel Quantity	Membrane Quantity	Power Kw	Connection 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 m^3/h	Recovery %	Vessel Quantity	Membrane Quantity	Power Kw	Connection 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

Ozonation Systems

Ozone is obtained by passing oxygen or air through high voltage or electrical current. Ozone is not a stabil gas, that's why it can not be stored or transported for a long time. It must be produced the in a place where it is used. For that purpose ozonation generators are used. Dry air and oxygen are oxygen-rich gases used in ozone production. Air should be filtered and completely dried before to be fed to the ozone generator (dew point <-60 ° C).

Technical Features

- Ejector
- Circulation Pump
- LiqTec Water Leakage Sensor
- S71200 – 6" OP PLC Control Panel
- SS 304 Stainless Steel Skid

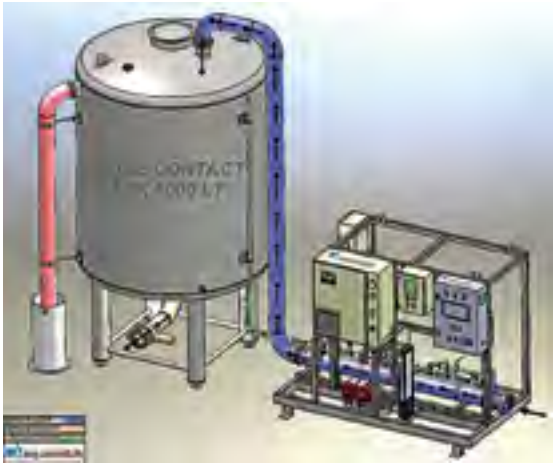
Optional Features

- Ozone Contact Tanks SS 316
- Compressor (ops. for CFS 1 and CFS 3 models)
- Dew Point Analyzer & Sensor (ops. for TOGC8X and TOGC13X models)
- Ozone Analyzer & Sensor & Panel
- Ozone Destruct Unit

Ozonation Systems Types

Ozonation Systems		TOGC8X–2015	TOGC13X–2015	CFS1–2015	CFS3–2015
Ozone Production Capacity gr/h	**Air % 3**	-	-	37	112
	Oxygen % 6	8	13	53	160
Cooling Water Capacity m /h		-	-	0,09	0,27
Compressor Capacity l/m		-	-	62	124
Air Dryer Capacity l/m		-	-	84	84
Power kW		0,6	0,65	0,7	2
Skid Dimensions mm (Width x Length x Height)		990x2200x1725	990x2200x1725	1140x2200x1725	1340x2200x1725

*The compressor and dryer are supplied with ozone generator for TOG-C8X and TOG-C13X series.
There is also no need to provide extra equipments.



Mineral Dosing Systems

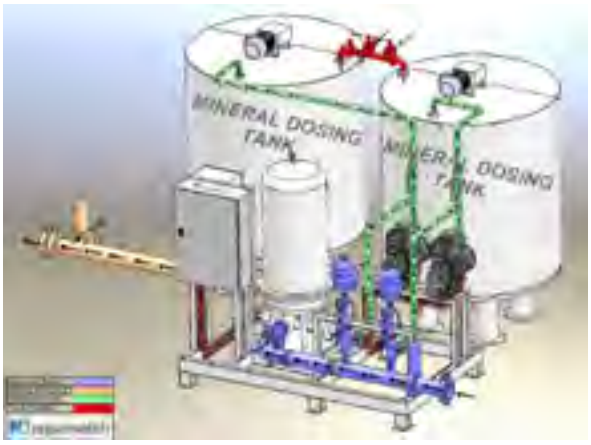
Mineral dosing systems used for automatically doses minerals to water. It may be necessary to increase the amount of the minerals and pH values for the usage of drinking water in which the water's conductivity is reduced by reverse osmosis systems. The absolute cartridge filter on the system eliminates residues that may arise from the dosage.

General Features

- Adjustable TDS Level 10–200 mg/l
- Absolute Cartridge Filter 0,2 µ
- Mixer SS 316 – Dosing Tank
- Inline Mixer SS 316 - Line
- Valves at Food Norms
- Dosing Tank Level Switch
- S71200 – 6" OP PLC Control Panel
- SS 304 Stainless Steel Skid
- Flow Analyzer & Sensor
- Conductivity Analyzer & Sensor
- pH Analyzer & Sensor
- Piping

Mineral Dosing Systems Technical Features

Mineral Dosing Systems	CHZ MNRDZJ 30	CHZ MNRDZJ 60
Capacity m /h	30	60
Dosing Tank l	1500 (1 duty –1 stand by)	1500 (1 duty –1 stand by)
Dosing Pump	300 l/h @ 5bars (1 duty –1 stand by)	600 l/h @ 5bars (1 duty –1 stand by)



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 distruct 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 sych as irons and manganese.
Ultraviolet lamps needs to be replaced after approximately 9000 hours usage.

Usage Area of Special Series;
Bottling filling lines
CIP lines
Ozone removal
Sugar syrup
Air disinfection

General Features

Special Process series UV Systems;

- SS 316 Stainless Steel Body, PN10
- UV Monitor ve Sensor
- Low Pressure, Amalgam, Medium Pressure Lamps
- Hygienic Standards
- Production Capacity up to 1025 m /h
- Optional Validated Device

Aqua Series UV Systems Technical Features

Model	Capacity @ UV Dosage m^3/h	UV Dosage microwattsn/cm^2	Lamp Quantity	Lamp Power kW	Connection	Weight 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" Flanşlı	23

Amalgam Series UV Systems Technical Features

Model	Capacity @ UV Dosage m^3/h	UV Dosage microwattsn/cm^2	Lamp Quantity	Lamp Power kW	Connection	Weight kg
UVA AQUA1	34	40.000	1	270	2,5" Flanşlı	56
UVA AQUA2	67	40.000	2	540	4" Flanşlı	60
UVA AQUA3	101	40.000	3	810	6" Flanşlı	66
UVA AQUA4	161	40.000	4	1080	6" Flanşlı	75

Bag and Cartridge filters

In Food & Beverage Industry, various additional treatment equipments such as bag & cartridge filters are used in depending on the water quality and process requirements.

Usage Area

- Before and after ultraviolet systems
- After activated carbon filters
- Before filling lines
- Polishing & fine Filtration

Stainless Steel Bag Filters

Model	Capacity m^3/h	Connection	Surface Area cm^2	Dia x Height 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 SS 304	Capacity m^3/h	Connection	Surface Area cm^2	Dia x Height cm
HSS 4	3,6	2" Threaded	3 x 20"	17 x 85
HSS 16	14,4	2" Threaded	3 x 40"	20 x 136

SS 316 Stainless Steel Cartridge Filters

Model SS 316	Capacity m^3/h	Connection	Surface Area cm^2	Dia x Height cm
HSS 4	3,6	2"	3 x 20"	17 x 96
HSS 16	14,4	2"	5 x 40"	20 x 134
HSS 48	43,2	3"	12 x 40"	36 x 166
HSS 88	79,2	4"	22 x 40"	46 x 177
HSS 180	162	6"	50 x 40"	60 x 190
HSS 300	270	8"	75 x 40"	75 x 223
HSS 222-12	10,8	2"	4 x 30"	20 x 134
HSS 222-36	32,4	3"	12 x 30"	36 x 161