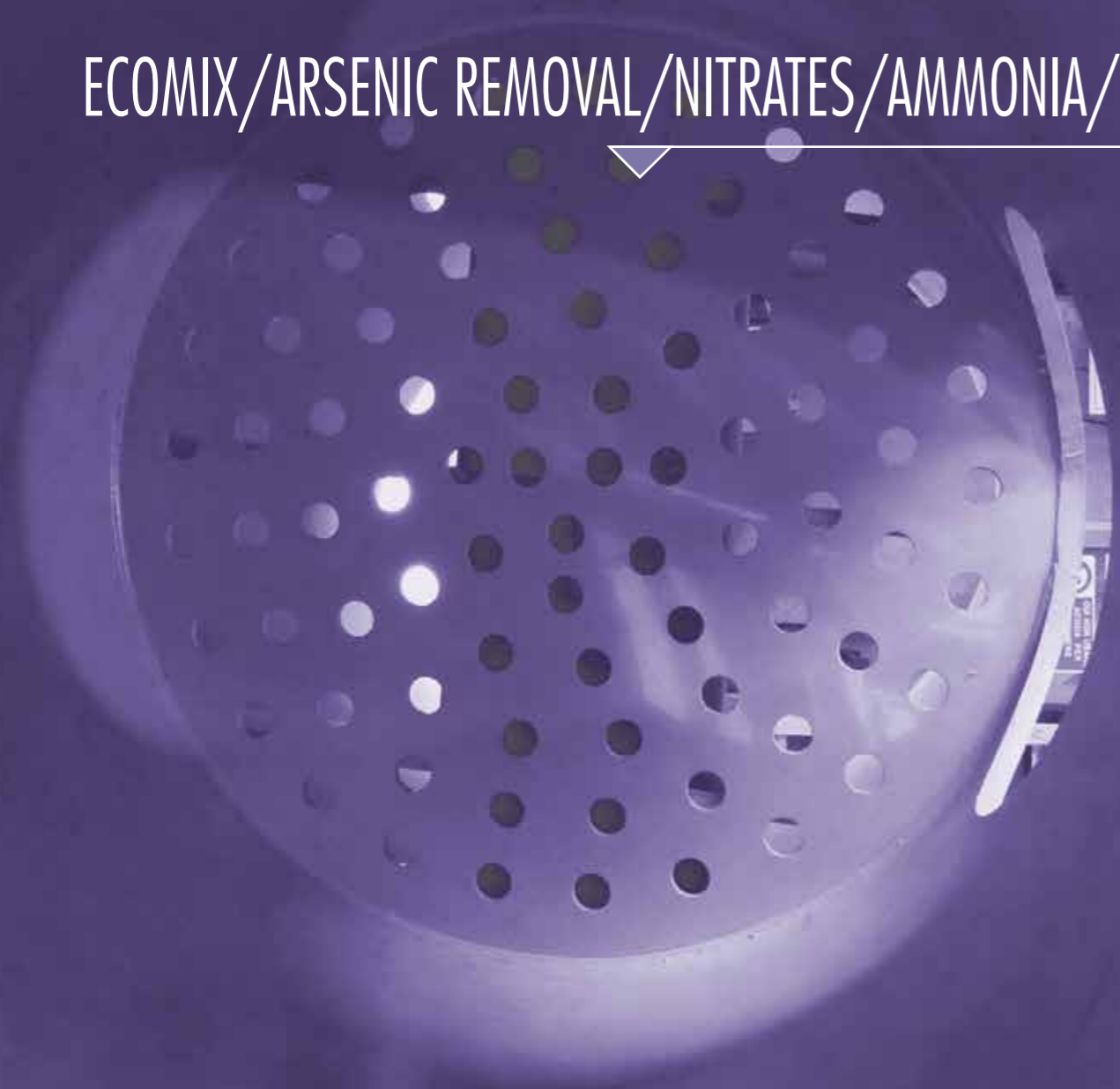


# ECOMIX/ARSENIC REMOVAL/NITRATES/AMMONIA/GAS



## Iron and hardness removal

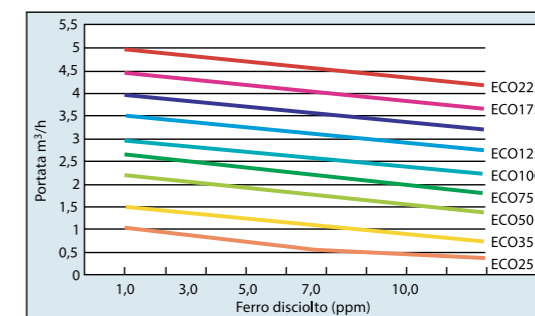
### ECOMIX

The ECOMIX systems were designed to eliminate iron, manganese, hardness, and even moderate amounts of dissolved aluminium, ammonia and organic substances from well water using just one single water treatment unit. The ECOMIX systems have a special blend (Ecomix) this consists of 5 different types of ion exchange resins and other special absorbent substances.

ECOMIX guarantees, that if used on well water with a Fe content < 6 ppm and Mn < 1 ppm, to bring the iron and manganese levels below the legal limits for drinking water (Fe < 0, 2 ppm, Mn < 0, 05 ppm).

If water has a higher content of iron and manganese we recommend that you first oxidize the water then filter the water before passing it through ECOMIX.

The ECOMIX system can treat water with Fe up to 1.5 ppm, Mn 3 ppm, 50°f of hardness (4000 mg/l of TDS) and can tolerate chlorine to the extent of 0.3 ppm (residual chlorine). The ECOMIX systems function as a common water softener and must be regenerated with sodium chloride. In calculating the capacity, consider only the hardness (the iron and manganese data should not be taken into account). The ECOMIX systems use components tested and certified for use with drinking water.



#### DIMENSIONS

Model	Resin column		Brine salt		Weight (Kg)
	Ø	h	Ø	h	
ECOMIX25	257	1140	480	680	33
ECOMIX35	257	1330	480	680	42
ECOMIX50	257	1600	480	680	54
ECOMIX75	334	1590	480	680	76
ECOMIX100	369	1860	570	1060	105
ECOMIX125	406	1860	570	1060	135
ECOMIX175	469	1890	700	1130	180
ECOMIX225	533	1790	700	1130	225

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

#### TECHNICAL DATA

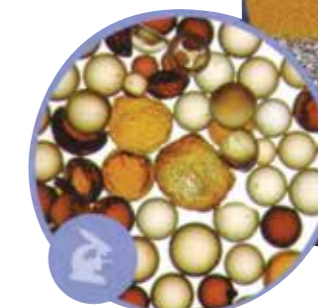
Model	ECOMIX (l)	Valves	I/O connections	Flow rate (m³/h)	Δp (bar)	Peak flow* (m³/h)	Capacity** (m³ x 1°F)	Salt per regen. (kg)	Brine tank (l)
ECOMIX25	25	5600SXT	1"	0,7	<0,5	1,1	112	3,5	100
ECOMIX35	35	5600SXT	1"	1,1	<0,5	1,6	158	4,9	100
ECOMIX50	50	5600SXT	1"	1,5	<0,5	2,0	225	7,0	100
ECOMIX75	75	5600SXT	1"	2,0	<0,5	2,5	337	10,5	100
ECOMIX100	100	7700 SXT	1"1/4	2,5	<0,6	3,1	450	14,0	200
ECOMIX125	125	7700 SXT	1"1/4	3,2	<0,6	3,8	562	17,5	200
ECOMIX175	175	7700 SXT	1"1/4	4,8	<1,1	5,5	788	24,5	300
ECOMIX225	225	7700 SXT	1"1/4	5,5	<1,2	6,3	1012	31,5	300

Working pressure 1,5 - 5 bar. Power supply 230V - 50 Hz

\* There can be moderate leakage of hardness and pressure drop >2 bar.

\*\* The capacity refers to regeneration with 140g of NaCl for litre of resin.

Data refers to water with 35°f hardness, 0,5ppm iron, temperature 20°C, T.D.S. 600 ppm. Other parameters enter within drinkable water. Starting from the model ECOMIX 100 the equipment is supplied with filter media and valve apart, unless otherwise indicated in writing while ordering.



#### Code

#### Euro

ECOMIX25T	
ECOMIX25V	
ECOMIX35T	
ECOMIX35V	
ECOMIX50T	
ECOMIX50V	
ECOMIX75T	
ECOMIX75V	
ECOMIX100T	
ECOMIX100V	
ECOMIX125T	
ECOMIX125V	
ECOMIX175T	
ECOMIX175V	
ECOMIX225T	
ECOMIX225V	

## UNDER SINK ARSENIC REMOVAL SYSTEMS

Arsenic is a toxic element found in nature and in some groundwater. The effects of arsenic on human health are well documented, high levels of arsenic can cause hyper pigmentation, skin and liver cancer, and circulatory disorders.

For this reason the European Community has established, with the EC Directive 98/83, that the maximum permissible concentration of arsenic in drinking water may not exceed 10 µg/l (micrograms per litre).

In Italy, the directive was implemented by Legislative Decree No 31 of February 2, 2001.

**Idroservice** has developed a range of systems with easy and inexpensive installation and maintenance which guarantee the removal of arsenic to that permissible within the law. These systems are suitable for under sink applications.

They work as a simple filter and do not require chemicals or regeneration.

The technology used was chosen for its simplicity and economic installation. It takes advantage of the ability of special ferric hydroxides, produced by Bayer AG, to retain arsenic (in the form of AS III and As V) thus purifying the treated water.

## UNDER SINK ARSENIC REMOVAL SYSTEMS

The product (Bayer Bayoxide E33) does not release substances into the water and does not need regeneration or chemical additives. It is certified for food grade and it is also utilized in the majority of aqueducts that need this type of purification.

Bayoxide E33 has a NSF certificate for human consumption.

WITH BAYOXIDE E33 BAYER



The duration of Bayoxide E33 (i.e. litres of water cleaned of arsenic before its exhaustion) depends on the amount of arsenic present in water and other chemical parameters.

For the purpose of monitoring the residual life: an electronic meter shows you the litres of water that can be treated and it emits an acoustic signal when Bayoxide is exhausted. This time (autonomy) has to be set depending on the water quality.

A kit of installation with a chromium-plated steel tap, a 1/2" water connection and a 3 m flexible tube is also included.

**NSF** NSF International  
**BAYOXIDE E33**  
**OFFICIAL LISTING**

NSF International Certifies that the products appearing on this Listing conform to requirements of NSF/ANSI Standard 61-Drinking Water System Components-Health Effects.



Table A - Bayoxide durability (in litres of treated water)\*\*

Model	Bayoxide durability (in litres of treated water)				
	(As III + As V) = 14 ppb	(As III + As V) = 18 ppb	(As III + As V) = 22 ppb	(As III + As V) = 30 ppb	(As III + As V) = 45 ppb
DEPURA-AS COUNTER	17.840	13.600	11.040	8.080	-
AS5 COUNTER	89.200	68.000	55.200	40.400	27.600
AS10 COUNTER	223.000	170.000	138.000	101.000	69.000

\*\* Valuable data for water complying with table B. For water with different characteristics, contact the technical office.

Attention, this equipment needs regular maintenance in order to ensure the quality of drinkable water as indicated from the producer.

**Table B**

Iron: < 200 µg/l  
Manganese: < 10 µg/l  
Phosphates (PO<sub>4</sub>): < 200 µg/l  
Vanadium: < 20 µg/l  
Selenium + Molybdenum: < 30 µg/l

Suspended solids: < 10 mg/l  
pH: 7  
SiO<sub>2</sub>: < 10 mg/l  
Bacteriologically pure.

**TECHNICAL DATA**

Model	Filter media (l)	I/O connections	Flow rate (l/min)	Capacity (g di As III + As V)
DEPURA-AS-COUNTER	0,8	1/4"	1,2	2,0
AS5-COUNTER	4,5	1/4"	2,1	11,0
AS10-COUNTER	10	1/4"	3,0	25,0

Code	Euro
DEPURA-AS-COUNTER	
AS5-COUNTER	
AS10-COUNTER	

**DIMENSIONS**

Model	Width (mm)	h (mm)	Depth (mm)
DEPURA-AS-COUNTER	360	360	140
AS5-COUNTER	260	400	175
AS10-COUNTER	260	500	225

## MANUAL ARSENIC REMOVAL SYSTEMS



AS 30 M

Arsenic is a toxic element found in nature and in some groundwater.

The effects of arsenic on human health are well documented, high levels of arsenic can cause hyper pigmentation, skin and liver cancer, and circulatory disorders.

For this reason the European Community has established, with the EC Directive 98/83, that the maximum permissible concentration of arsenic in drinking water may not exceed 10 µg/l (micrograms per litre). In Italy the directive was implemented by Legislative Decree No 31 of February 2, 2001.

Idroservice has developed a range of systems with easy and inexpensive installation and maintenance which guarantee the removal of arsenic to that permissible within the law. These systems are suitable for small and medium-sized applications.

They work as a simple filter and do not require chemicals or regeneration.

The technology used was chosen for its simplicity and economic installation. It takes advantage of the ability of special ferric hydroxides, produced by Bayer AG, to retain arsenic (in the form of AS III and AS V) thus purify the treated water.

The product (Bayer Bayoxide E33) does not release substances into the water and does not need regeneration or chemical additives. It is certified for food grade and it is also utilized in the majority of aqueducts that need this type of purification.

The only requirement is periodic backwashing (usually once or twice a month) to restore the filter bed.

The ASM arsenic removal systems are realized with:

- Tank made of fibreglass food grade certificate in line with D.M. 174/04;
- Filter media Bayoxide E33 produced by Lanxess-Bayer AG;

- 6 PVC ball valves (except model AS10M\*).

\*The model AS10M does not include valves for the backwashing and it is recommended for pilot plants, taps or under sink applications.

The duration of Bayoxide E33 (i.e. litres of water cleaned of arsenic before its exhaustion) depends on the amount of arsenic present in water and other chemical parameters for which analysis is required:

- Silica (SiO<sub>2</sub>),
- pH,
- Phosphates (PO<sub>4</sub>),
- Iron (Fe),
- Manganese (Mn),
- Vanadium (V),
- Molybdenum (Mo),
- Selenium (Se).



BAYOXIDE



Bayoxide is NSF certified for drinking water applications.



AS10M

Table A – Bayoxide durability (in m<sup>3</sup> of treated water)\*\*

Model	Bayoxide durability (in litres of water treated)				
	(As III + As V) = 14 ppb	(As III + As V) = 18 ppb	(As III + As V) = 22 ppb	(As III + As V) = 30 ppb	(As III + As V) = 45 ppb
AS10M	2.237	1.703	1.382	1.016	696
AS30M	6.711	5.109	4.146	3.048	2.088
AS60M	13.422	10.218	8.292	6.096	4.176
AS90M	20.133	15.327	12.438	9.144	6.264
AS120M	26.844	20.436	16.584	12.192	8.352
AS180M	40.266	30.654	24.876	18.288	12.528
AS240M	53.688	40.872	33.168	24.384	16.704
AS330M	73.821	56.199	45.606	33.528	22.968
AS480M	107.376	81.744	66.336	48.768	33.408
AS720M	161.064	122.616	99.504	73.152	50.112

\*\* Valuable data for water complying with table A. For water with different characteristics contact the technical office.

### TECHNICAL DATA

Model	Bayoxide (l)	Flow rate (m <sup>3</sup> /h)	Capacity (g di As)**	I/O connections	Backwash (m <sup>3</sup> /h)	ΔP MAX (bar)
AS10M*	10	0,1	25	1"	1,0	0,5
AS30M	30	0,3	75	1"	1,0	0,5
AS60M	60	0,6	150	1"	1,0	0,5
AS90M	90	0,9	225	1"	1,2	0,5
AS120M	120	1,2	300	1"	1,4	0,5
AS180M	180	1,8	450	1"1/2	2,0	0,5
AS240M	240	2,5	600	1"1/2	3,0	0,5
AS330M	330	3,6	825	1"1/2	4,2	0,5
AS480M	480	5,70	1200	1"1/2	6,8	0,5
AS720M	720	8,00	1800	1"1/2	9,5	0,5

\* Model AS10M is without valve battery. \*\* Valuable data for water complying with table 1

ΔP max 0,5 bar. Work pressure 1,5 – 5 bar.

Starting from model AS90M the equipment is supplied with filter material apart, unless otherwise indicated in writing while ordering.

Attention: Backwashing should be put into effect every 2-4 weeks, however before a ΔP of 0,5 bar.

Frequent backwashing can damage the Bayoxide reducing the duration.



Table 1

Iron: < 200 µg/l  
Manganese: < 10 µg/l  
Phosphates (PO<sub>4</sub>): < 200 µg/l  
Vanadium: < 20 µg/l  
Selenium + Molybdenum: < 30 µg/l  
Suspended solids: < 10 mg/l  
pH: 7  
SiO<sub>2</sub>: < 10 mg/l  
Bacteriologically pure.

CONTACT THE TECHNICAL OFFICE IF WATER HAS DIFFERENT PARAMETERS.

### DIMENSIONS

Model	Column		Weight (Kg)
	Ø (mm)	h (mm)	
AS10M	257	550	9
AS30M	257	1230	25
AS60M	334	1670	45
AS90M	369	2020	60
AS120M	406	2020	75
AS180M	469	2050	110
AS240M	533	1950	155
AS330M	610	2450	205
AS480M	770	2560	340
AS720M	920	2510	498

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

Code	Euro
AS10M*	
AS30M	
AS60M	
AS90M	
AS120M	
AS180M	
AS240M	
AS330M	
AS480M	
AS720M	

## AUTOMATIC ARSENIC REMOVAL SYSTEMS

Arsenic is a toxic element found in nature and in some groundwater. The effects of arsenic on human health are well documented, high levels of arsenic can cause hyper pigmentation, skin and liver cancer, and circulatory disorders.

For this reason the European Community has established, with the EC Directive 98/83, that the maximum permissible concentration of arsenic in drinking water may not exceed 10 µg/l (micrograms per litre).

In Italy the directive was implemented by Legislative Decree No 31 of February 2, 2001.

Idroservice has developed a range of systems with easy and inexpensive installation and maintenance which guarantee the removal of arsenic to that permissible within the law. These systems are suitable for small and medium-sized applications.

They work as a simple filter and do not require chemicals or regeneration.

The technology used was chosen for its simplicity and economic installation. It takes advantage of the ability of special ferric hydroxides, produced by Bayer AG, to retain arsenic (in the form of As III and As V) thus purifying the treated water.

The product (Bayer Bayoxide E33) does not release substances into the water and does not need regeneration or chemical additives. It is certified for food grade and it is also utilized in the majority of aqueducts that need this type of purification. The only requirement is periodic backwashing (usually once or twice a month) to restore the filter bed.

The AS code models are made with:

- Fibreglass tank food grade certified;

- Medium filter Bayoxide E33 manufactured by Bayer AG;
- Electronic Valve Fleck 5600 or 7700 SXT with automatic time clock backwash.

The models built with ASP code are made with:

- Epoxy painted steel tank with a special anti-corrosion interior food grade certified;
- Medium filter Bayoxide E33 produced by Bayer AG;
- Battery valve set composed by 5 diaphragm valves in cast iron/steel;
- AQUASTAR, electronic controller with LCD display and Siemens logical unit to automatically control filter backwash;

Models AS660-FL7700\*, ASP 1200\* and ASP 1680\* have 2 cylinders to install in succession. This will optimize the duration of Bayoxide, allowing the replacement of a single cylinder (the upstream one, which removes the majority of arsenic) when the arsenic released from the plant is greater than 10 ppb.



The duration of Bayoxide E33 (i.e. litres of water cleaned of arsenic before its exhaustion) depends on the amount of arsenic present in water and other chemical parameters for which analysis is required:

- Silica (SiO<sub>2</sub>),
- pH,
- Phosphates (PO<sub>4</sub>),
- Iron (Fe),
- Manganese (Mn),
- Vanadium (V),
- Molybdenum (Mo),
- Selenium (Se).



BAYOXIDE



Bayoxide is NSF certified for drinking water applications.



NSF International Certifies that the products appearing on this Listing conform to requirements of NSF/ANSI Standard 61-Drinking Water System Components-Health Effects.



AS60-FL5600SXT

### TECHNICAL DATA

Model	Bayoxide (l)	n° units	Flow rate (m <sup>3</sup> /h)	Capacity (g di As)**	Valve	I/O connections	Backwash (m <sup>3</sup> /h)	ΔP MAX (bar)
AS30-FL5600SXT	30	1	0,3	75	FL5600 SXT	1"	1,0	0,5
AS60-FL5600SXT	60	1	0,6	150	FL5600 SXT	1"	1,0	0,5
AS90-FL7700	90	1	0,9	225	FL7700 SXT	1 1/4"	1,2	0,5
AS120-FL7700	120	1	1,2	300	FL7700 SXT	1 1/4"	1,4	0,5
AS180-FL770	180	1	1,8	450	FL7700 SXT	1 1/4"	2,0	0,5
AS240-FL7700	240	1	2,5	600	FL7700 SXT	1 1/4"	3,0	0,5
AS330-FL7700	330	1	3,6	825	FL7700 SXT	1 1/4"	4,2	0,5
AS660-FL7700	660	2	3,6	1650	2 x FL7700 SXT	1 1/4"	4,2	0,5
ASP600	600	1	6,8	1500	DIAPHRAGM	2"	7,5	0,5
ASP840	840	1	10,1	2100	DIAPHRAGM	2"	10,5	0,5
ASP1200	1200	2	6,8	3000	DIAPHRAGM	2"	7,5	0,5
ASP1680	1680	2	10,1	4200	DIAPHRAGM	2"	10,5	0,5

\* see box

ΔP max (bar): 0.5 bar. Working pressure 1.5 to 5 bar. Electrical feed 230 V-50Hz.

Starting from model AS90 the equipment is supplied with filter material and the valve apart, unless otherwise indicated in writing while ordering.

Attention: Backwashing should be put into effect every 2-4 weeks, however before a ΔP of 0,5 bar.

Frequent backwashing can damage the Bayoxide reducing the duration.

### AS120-FL7700



The data refers to incoming water the following parameters:  
 Iron: < 200 µg/l  
 Manganese: < 10 µg/l  
 Phosphates (PO<sub>4</sub>): < 200 µg/l  
 Vanadium: < 25 µg/l  
 Selenium + Molybdenum: < 30 µg/l  
 Suspended solids: < 10 mg/l  
 pH: 6,5 - 7,5  
 SiO<sub>2</sub>: < 20 mg/l  
 Bacteriologically pure.

CONTACT THE TECHNICAL OFFICE IF WATER HAS DIVERSE PARAMETERS.

### DIMENSIONS

Model	Column Ø (mm)	Column h (mm)	Weight (Kg)
AS30-FL5600SXT	257	1140	25
AS60-FL5600SXT	334	1590	45
AS90-FL7700	369	1860	60
AS120-FL7700	406	1860	75
AS180-FL770	469	1890	110
AS240-FL7700	533	1790	130
AS330-FL7700	610	2320	180
AS660-FL7700*	610	2320	180
ASP600	800	2200	650
ASP840	950	2235	950
ASP1200*	800	2200	650
ASP1680*	950	2235	950

\* for 2 units

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.

Code	Euro
AS30-FL5600SXT	
AS60-FL5600SXT	
AS90-FL7700	
AS120-FL7700	
AS180-FL7700	
AS240-FL7700	
AS330-FL7700	
AS660-FL7700*	
ASP600	
ASP840	
ASP1200*	
ASP1680*	

## DENITRIFICATION SYSTEM

Ion exchange denitrification systems for residential and industrial applications.

They are made of:

- fibreglass tank food grade certified;
- anion exchange resins for the selective removal of nitrates regenerated with sodium chloride;
- automatic valves Pentair, Autotrol, Fleck or Siata (see side of page);
- time clock or volumetric (metered-demand, or meter delayed demand) regeneration control;
- polyethylene brine tank with brine well and air check.

The T-series are timer controlled denitrification systems that will regenerate resins at the pre-set number of days regardless of the volume of water used; the V series are volume-controlled denitrification systems that will regenerate when a pre-set volume of water has been used (see valve characteristics). Denitrification systems supply untreated water during regeneration.

Through the microswitch kits (optional) you can acquire a volt-free contact when the system is in regeneration (e.g. to block the supply of water in use, to start pumps, close valves, and to turn off downstream installations etc.).

Optional accessories (see page 122/123/124)

- auxiliary microswitch kit for regeneration signal;
- by pass;
- flexible in-out connection kit.

### Valve Selection Guide

- Series LGX 255 and LGX 268 with Autotrol LOGIX valve electronic timer, T series (time clock), V series (metered-demand). Modern valve with large LCD display, easy to understand electronics, with the possibility to fix the days and times of regeneration and to change the timing and level of resin regeneration. The volumetric version performs the regeneration on the water usage with statistical calculations based on the consumption of water during the days of the week.

- Series FL5600SXT, FL7700SXT, FL2850SXT, FL2910SXT with Fleck valve electronic timer T series (time clock), V series (metered-demand). New valve with LCD display, simplified electronics, with the possibility to fix the days and times of regeneration, to schedule a forced regeneration and change the timing of the cycles of regeneration of the resins.

- Series SI 132 with Siata valve and electronic programmer SFE, T series (time clock), V series (metered-demand). New and sophisticated Siata timer. There is the possibility to set regeneration at regular hourly intervals, the alarm for a lack of salt, to schedule forced regenerations and change the timing of the cycles of regeneration of the resins. In the advanced menu it is possible to access the historical statistics relative of the working of the filter.



### TECHNICAL DATA

Model	Resins (l)	Valve	I/O connections	Flow rate (m³/h)	Peak flow* (m³/h)	Capacity** (g/NO <sub>3</sub> )	Salt per regen. (kg)	Brine tank (l)
DN16	16	LGX255-FL5600SXT-SI132	1"	0,5	<0,7	0,6	2,2	100
DN25	25	LGX255-FL5600SXT-SI132	1"	0,8	<0,7	1,0	3,5	100
DN35	35	LGX255-FL5600SXT-SI132	1"	1,1	<0,7	1,4	4,9	100
DN50	50	LGX255-FL5600SXT-SI132	1"	1,5	<0,8	2,0	7,0	100
DN75	75	LGX268-FL5600SXT-SI132	1"	2,3	<1	2,9	10,5	100
DN100	100	LGX268-FL7700SXT-SI132	1" - 1 1/4 - 1"	3,0	<1,0	3,9	14,0	200
DN125	125	LGX268-FL7700SXT-SI132	1" - 1 1/4 - 1"	3,8	<1,0	4,5	17,5	200
DN175	175	FL7700SXT-SI132	1 1/4 - 1"	5,3	<1,2	6,3	24,5	300
DN225	225	FL7700 SXT-SI230	1 1/4	6,8	<1,5	8,1	31,5	300
DN300	300	FL2850 SXT-SI230	1 1/2 - 1 1/4	9,0	<1,6	10,8	42,0	500
DN350	350	FL2910 SXT-SI250	2" - 1 1/2	10,5	<0,8	12,6	49,0	500
DN500	500	FL2910 SXT-SI250	2" - 1 1/2	15,0	<0,8	18,0	70,0	500

Note

Working pressure 1.5 to 5 bar. Electrical feed 230 V-50Hz. Operating temperature: 2-40 °C.

\* There can be moderate leakage of nitrates and pressure drop > 2 bar.

\*\*The capacity refers to regeneration with 140g of NaCl per litre of resin

To calculate the amount of water treated (in m<sup>3</sup>) before regeneration of the resins divide the value indicated in the Capacity column for the amount (in mg/l) indicated in the analysis of the nitrates.

For example with 75mg/l of nitrate and DN300, the resin will regenerate after 100 m<sup>3</sup> of treated water.

Data refers to drinking water with hardness 35°, temperature 20°C, salinity 600ppm

Starting from the model DN100 the equipment is supplied with filter media and valve apart, unless otherwise indicated in writing while ordering

Chlorine damages the selective resins for the nitrates, we recommend feed water that has a chlorine content lower than 0,3 ppm. Contaminated water damages resins.

### DIMENSIONS

Model	Resin column		Brine tank		Weight (Kg)
	Ø (mm)	h (mm)	Ø (mm)	h (mm)	
DN16	210	1110	480	680	25
DN25	257	1140	480	680	33
DN35	257	1330	480	680	42
DN50	257	1600	480	680	54
DN75	334	1590	480	680	76
DN100	369	1860	570	1060	105
DN125	406	1860	570	1060	135
DN175	469	1890	700	1130	180
DN225	533	1790	700	1130	225
DN300	610	2320	900	1160	295
DN350	610	2440	900	1160	335
DN500	770	2550	900	1160	510

Dimensions and weight may vary without advance notice. In the case of binding dimension contact the technical office.

	Code	Euro	Code	Euro
AUTOTROL DENITRIFICATORS	DN16FLGX255		DN75TLGX268	
	DN16V-LGX255		DN75V-LGX268	
	DN25FLGX255		DN100FLGX268	
	DN25V-LGX255		DN100V-LGX268	
	DN35FLGX255		DN125FLGX268	
	DN35V-LGX255		DN125V-LGX268	
	DN50FLGX255			
	DN50V-LGX255			

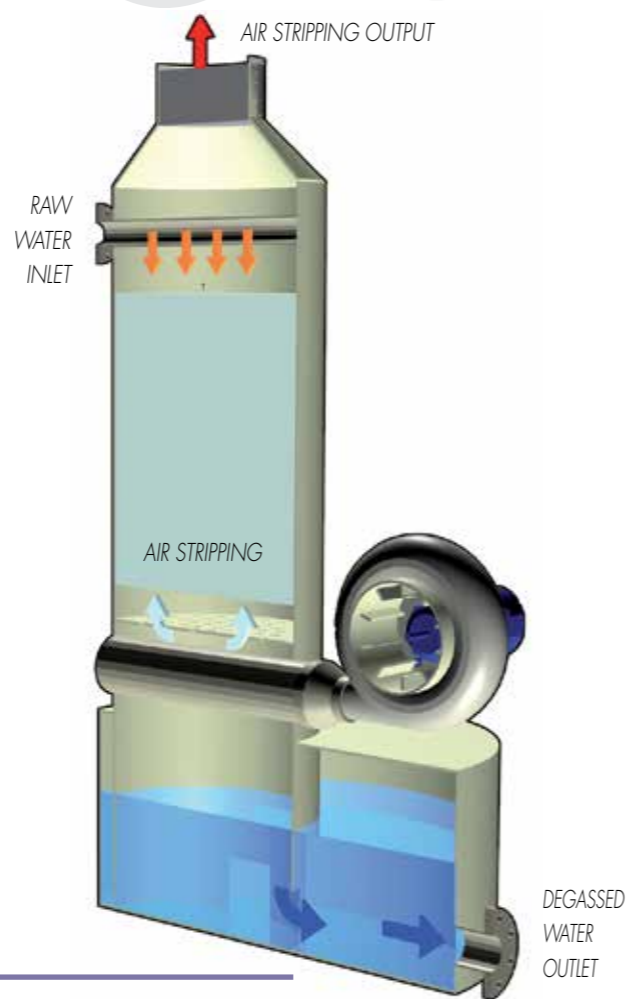
	Code	Euro	Code	Euro
FLECK DENITRIFICATORS	DN16FL5600SXT		DN125FL7700	
	DN16V-FL5600SXT		DN125V-FL7700	
	DN25FL5600SXT		DN175FL7700	
	DN25V-FL5600SXT		DN175V-FL7700	
	DN35FL5600SXT		DN225FL7700	
	DN35V-FL5600SXT		DN225V-FL7700	
	DN50FL5600SXT		DN300FL2850	
	DN50V-FL5600SXT		DN300V-FL2850	
	DN75FL5600SXT		DN350FL2910	
	DN75V-FL5600SXT		DN350V-FL2910	
	DN100FL7700		DN500FL2910	
	DN100V-FL7700		DN500V-FL2910	

	Code	Euro	Code	Euro
SIATA DENITRIFICATORS	DN16FSI132		DN125FSI132	
	DN16V-SI132		DN125V-SI132	
	DN25FSI132		DN175FSI132	
	DN25V-SI132		DN175V-SI132	
	DN35FSI132		DN225FSI230	
	DN35V-SI132		DN225V-SI230	
	DN50FSI132		DN300FSI230	
	DN50V-SI132		DN300V-SI230	
	DN75FSI132		DN350FSI250	
	DN75V-SI132		DN350V-SI250	
	DN100FSI132		DN500FSI250	
	DN100V-SI132		DN500V-SI250	

## Degassing towers

The cold atmospheric degassers (degassing towers) using stripping gas are suitable to remove some pollutants such as ammonia, carbon dioxide, hydrogen sulfide from water. They are also suitable to precipitate iron and manganese bivalent. The operating principle is simple: the water to be treated is pumped into the top of the tower and sprayed down, where it is atomized thanks to the air counterflow induced by the fan. The pall rings inside the tower, because of their particular geometric shape, increase the surface contact air/liquid and determine the transition from liquid to gaseous pollutant to be stripped. The degassed water will fall into the appropriate tank under the tower, or will be conveyed into a basin below, once the substances have been eliminated and the gasses removed through the chimney top.

The air full of the stripped substance coming out of the tower will be analysed to assess whether it can be introduced into the atmosphere or purified (by scrubbing) to reduce the pollutant concentration to within the limits of the law. The system design is closely related to the flow of the fluid to be treated and the concentration in/out of the substance involved. The towers are made of non-toxic polypropylene a corrosion-resistant material perfectly resistant to the aggression of the treated water. The equipment supplied includes the pall rings and the air fan (three phase). Electric board and booster pump are not included in delivery.



### TECHNICAL DATA

Model	Flow rate (m <sup>3</sup> /h)		In Connection	Out Connection	Air Fan kW	Air flow (Nm <sup>3</sup> /h)
	min	max				
TD 400	4	8	DN80	DN150	0,55	700
TD 500	6	14	DN80	DN150	1,1	1000
TD 600	9	20	DN80	DN150	1,1	1500
TD 800	15	30	DN80	DN200	1,1	2800
TD 1000	24	50	DN80	DN200	3,0	4100
TD 1270	40	80	DN125	DN250	4,0	7000
TD 1400	50	90	DN125	DN250	5,5	8500
TD 1600	75	120	DN125	DN350	7,5	11500
TD 1900	110	185	DN125	DN350	11	15000



Model	Flow rate (m <sup>3</sup> /h)		In Connection	Out Connection	Air Fan kW	Air flow (Nm <sup>3</sup> /h)	Degassed water tank (l)
	min	max					
TD-STD 400	4	8	DN80	DN80	0,55	700	500
TD-STD 500	6	14	DN80	DN80	1,1	1000	500
TD-STD 600	9	20	DN80	DN80	1,1	1500	800
TD-STD 800	15	30	DN80	DN80	1,1	2800	1300
TD-STD 1000	24	50	DN80	DN100	3,0	4100	1300
TD-STD 1270	40	80	DN125	DN125	4,0	7000	2000

Feed water inlet pressure 1.5 to 4 bar. Electrical feed 380V-50Hz. Operating temperature: 2-40 °C.  
The towers are supplied with pall rings apart, unless otherwise stated in writing while ordering.

The electric board fan is not included in the delivery.

N.B.: The stripping degree depends on chemical/physical characteristics of the water.



TD 800

### DIMENSIONS

Model	Diameter (mm)	Height (mm)	Max. width w/air fan (mm)
TD 400	400	2900	850
TD 500	500	2900	1050
TD 600	600	2900	1200
TD 800	800	2900	1400
TD 1000	1000	3300	1850
TD 1270	1270	3300	2370
TD 1400	1400	3900	2700
TD 1600	1600	4200	2780
TD 1900	1900	4200	3100

Model w/degassed water tank      Ø degassed water tank (mm)

TD-STD 400	400	2900	1050
TD-STD 500	500	2900	1050
TD-STD 600	600	2900	1300
TD-STD 800	800	2900	1600
TD-STD 1000	1000	3700	1900
TD-STD 1270	1270	3700	2000

Dimensions and weight may vary without advance notice. In the case of binding dimensions contact the technical office.



TD-STD 600

TOWERS		TOWERS W/DEGASSED WATER TANK	
Code	Euro	Code	Euro
TD 400		TD-STD 400	
TD 500		TD-STD 500	
TD 600		TD-STD 600	
TD 800		TD-STD 800	
TD 1000		TD-STD 1000	
TD 1270		TD-STD 1270	
TD 1400			
TD 1600			
TD 1900			