

# IONSOFT™ Maxi

Cost-efficient softeners

The IONSOFT™ Maxi is a cost efficient softener range based on ion Exchange resins technology that can be used for industrial applications. It is designed with upflow counter-current regeneration to optimize OPEX.

- 5 vessel sizes.
- Up to 4 units in parallel
- Up to 2 units in Duty/Stand-by

Flow rates  
from 1 to 56  
m<sup>3</sup>/h



## ✓ FEATURES & BENEFITS

- User-friendly controller with LCD display integrated in the Control valve
- Regeneration can be triggered manually or automatically
- Automatic regeneration is based on Volume and time
- Optimized usage of regeneration salt: upflow counter-current regeneration and proportional regeneration when resins are only partially exhausted
- Possibility to have duty/stand-by configuration with 2 vessels
- Up to 4 units running in parallel: continuous production

## 💧 APPLICATIONS

- Glass washing
- Cleaning and rinse water
- Laundry
- Reverse Osmosis feed water pre-treatment (eg. before Sirion)
- Cooling towers

### HYDREX™ CHEMICALS

Hydrex™ 7110 water treatment chemicals from Veolia Water Technologies and salt pellets should be used for optimized operation.

### ASSOCIATED SERVICES

Local after-sales service and support teams offer preventative and corrective maintenance programs to ensure the long-term, efficient operation of installed plant.





**System Operating Parameters**

Model	Unit	90	120	140	230	350	2-90A	2-120A
Min Feed Flowrate	m³/h	1	1	1.2	2.1	2.8	1	1
Nominal Feed Flowrate	m³/h	5.4	7.2	8.4	13	14	5.4	7.2
Nominal Capacity	kg CaCO <sub>3</sub>	4.6	6	7.1	11.7	17.5	9.3	12
Output per Regeneration <sup>(1)</sup>	m³	46	60	71	117	170.5	46	60
Salt Usage per Regeneration <sup>(1)</sup>	kg	11.2	14.4	17.2	28.1	42	11.2	14.4

Model	Unit	2-140A	2-230A	2-350A	2-90P	2-120P	2-140P	2-230P
Min Feed Flowrate	m³/h	1.2	2.1	2.8	2	2	2.4	4.2
Nominal Feed Flowrate	m³/h	8.4	13	14	10.8	14.4	16.8	26
Nominal Capacity	kg CaCO <sub>3</sub>	14.3	23.4	35	9.3	12	14.3	23.4
Output per Regeneration <sup>(1)</sup>	m³	71	117	170.5	46	60	71	117
Salt Usage per Regeneration <sup>(1)</sup>	kg	17.2	28.1	42	11.2	14.4	17.2	28.1

Model	Unit	2-350P	3-90P	3-120P	3-140P	3-230P	3-350P
Min Feed Flowrate	m³/h	5.6	3	3	3.6	6.2	8.4
Nominal Feed Flowrate	m³/h	28	16.2	21.6	25.2	39	42
Nominal Capacity	kg CaCO <sub>3</sub>	35	13.9	18	21.4	35.1	52.5
Output per Regeneration <sup>(1)</sup>	m³	170.5	46	60	71	117	170.5
Salt Usage per Regeneration <sup>(1)</sup>	kg	42	11.2	14.4	17.2	28.1	42

Model	Unit	4-90P	4-120P	4-140P	4-230P	4-350P
Min Feed Flowrate	m³/h	4	4	4.8	8.4	11.2
Nominal Feed Flowrate	m³/h	21.6	28.8	33.6	52	56
Nominal Capacity	kg CaCO <sub>3</sub>	18.4	24	28.4	46.8	70
Output per Regeneration <sup>(1)</sup>	m³	46	60	71	117	170.5
Salt Usage per Regeneration <sup>(1)</sup>	kg	11.2	14.4	17.2	28.1	42

<sup>(1)</sup> Per vessel, considering the standard hardness of 100 mg/l as CaCO<sub>3</sub>

**System Dimensions**

Model	Unit	90	120	140	230	350	2-90A	2-120A
Total Installed Length	m	1.40	1.70	1.70	1.80	1.90	1.93	2.25
Total Installed Width	m	0.70	1.05	1.05	1.05	1.10	0.75	1.05
Total Installed Height	m	1.63	1.93	1.93	2.00	2.25	1.75	2.05

Model	Unit	2-140A	2-230A	2-350A	2-90P	2-120P	2-140P	2-230P
Total Installed Length	m	2.28	2.45	2.55	2.05	2.60	2.60	2.75
Total Installed Width	m	1.05	1.05	1.15	1.20	1.63	1.60	1.75
Total Installed Height	m	2.05	2.03	2.28	1.63	1.90	1.93	2.00

Model	Unit	2-350P	3-90P	3-120P	3-140P	3-230P	3-350P
Total Installed Length	m	3.10	2.58	3.90	3.90	3.95	4.10
Total Installed Width	m	1.75	1.35	1.83	1.83	1.98	2.10
Total Installed Height	m	2.25	1.63	1.90	1.93	2.00	2.25

Model	Unit	4-90P	4-120P	4-140P	4-230P	4-350P
Total Installed Length	m	3.25	4.80	4.80	4.80	4.90
Total Installed Width	m	1.35	1.83	1.83	1.98	2.10
Total Installed Height	m	1.63	1.90	1.93	2.00	2.25





**Pipes Connections**

Model	Unit	90	120	140	230	350	2-90A	2-120A
Feed	DN	Rp 2" BSPT	Rp 2" BSPT	Rp 2" BSPT	Rp 2" BSPT	Rp 2" BSPT	Rp 2" BSPT	Rp 2" BSPT
Outlet	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT
Drain	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT

Model	Unit	2-140A	2-230A	2-350A	2-90P	2-120P	2-140P	2-230P
Feed	DN	Rp 2" BSPT	Rp 2" BSPT	Rp 2" BSPT	Rp 2" BSPT	65	65	80
Outlet	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT
Drain	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT

Model	Unit	2-350P	3-90P	3-120P	3-140P	3-230P	3-350P
Feed	DN	80	65	80	80	100	100
Outlet	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT
Drain	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT

Model	Unit	4-90P	4-120P	4-140P	4-230P	4-350P
Feed	DN	80	100	100	125	125
Outlet	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT
Drain	DN	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT	R2" BSPT

**Feed water Requirements**

Parameter	Unit	Value
Minimum water temperature	°C	5
Maximum water temperature	°C	25
Minimum supply pressure	barg	2.5
Maximum supply pressure	barg	6
Max inlet Total Chlorine	mg/l	0.10
Max inlet Iron Fe <sup>3+</sup>	mg/l	0.05
Max inlet Manganese Mn <sup>2+</sup>	mg/l	0.05

Feed water must have a quality equivalent to potable water, colorless, free from organic contamination, chlorine, Iron, manganese and suspended solids. Raw water shall not contain hardness stabilizing agents and must not be over-saturated with gas.

**Materials of Construction**

Pressure Vessels	Fiberglass
Pipework	Polypropylene

**Environmental Conditions**

Parameter	Unit	Value
Minimum ambient temperature	°C	5
Maximum ambient temperature	°C	35

Indoor installation in a non-corrosive atmosphere.

**Power Requirements**

Voltage	AC 100-240V / DC 15V
Frequency	50/60 Hz
Phases	1

**Typical Treated Water Quality**

Parameter	Unit	Value
Treated Water Hardness	mg/l as CaCO <sub>3</sub>	< 1