

DEMIN

Ion Exchanger Demineralisation

The DEMIN series is our go-to standard for the full desalination of water. The plants serve all procedures in which low-salt water is required, e.g. water treatment for boilers. With their compact architecture, small footprints and low flow rates, our DEMIN plants are the perfect solution for water treatment in confined spaces. By request, we gladly offer DEMIN plants with higher capacities.

Properties:

- direct current regeneration
- total salinity (TDS) up to 500 mg/l
- quick assembly and short commissioning times
- small footprint
- easy operation and maintenance
- reliable operation with product conductivity monitoring
- automatic regeneration
- valve design enables optimum operation plus good backwash and regeneration flow rates

Components:

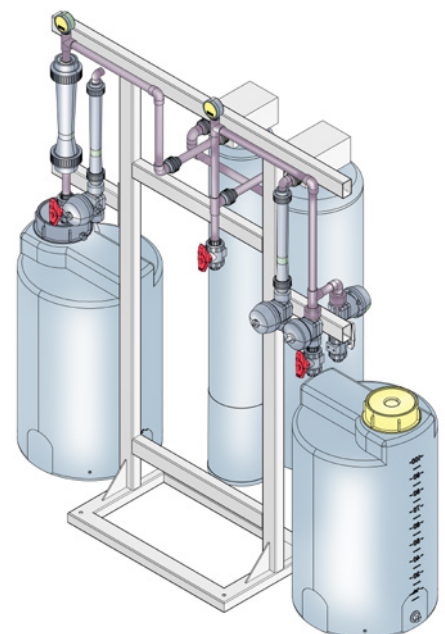
- GFRP pressure tank
- cationic and anionic resins
- central control valves
- microprocessor control
- dosing and collecting vessels
- regeneration fittings
- conductivity monitoring
- all fittings and measuring instruments necessary for the installation of the plant and monitoring the hydraulic parameters

Operating Conditions:

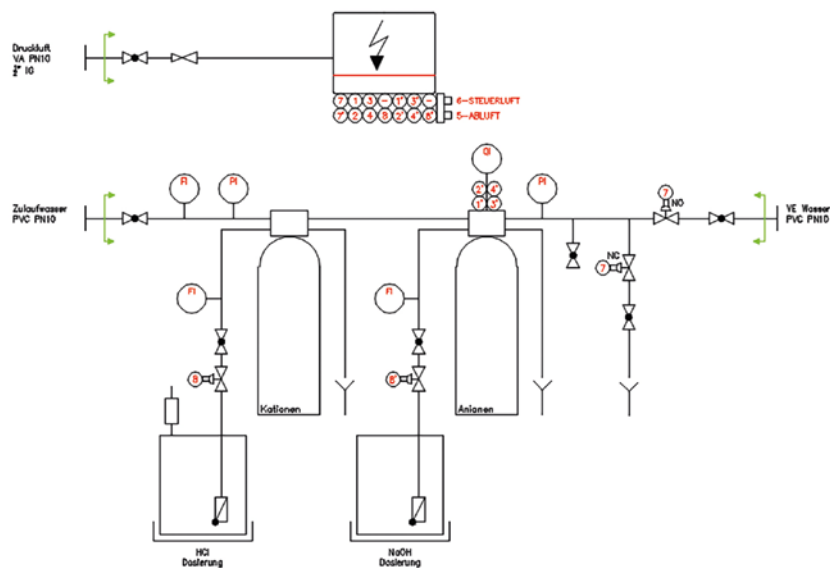
Hereinafter, the requirements for the inlet water:

Inlet pressure	2-6 bar
Temperature range	5-40° C
Feed line TDS	max. 500 mg/l
Inlet water	free of oils, oxidants, colloids, or particles

It is recommended to use a filtration device to remove colloids and particles.



Process diagram



sample scheme

DEMIN Ion Exchange Demineralisation Systems

Type		DEMIN 25	DEMIN 50	DEMIN 75	Demin 100	Demin 125	Demin 150	Demin 200
Capacity*	m ³ /h max.	1.0	1.5	2.5	3.0	4.0	5.0	6.0
Operating mode		Direct Current Regeneration						
Differential pressure*	bar	0.8						
Electrical connection		230V, 50Hz						
Cationic resin	Amberlite HPR 1 100 Na (l)	25	50	75	100	125	150	200
Anionic resin	Amberlite HPR 4 800 (l)	50	100	150	200	250	300	400
Resin capacity	Cation / Anion (val)	22/20	45/40	66/60	90/80	110/100	135/120	180/160
Cation tank	Type	8 x 44	10 x 54	14 x 65			18 x 65	
Anion tank	Type	10 x 54	14 x 65	18 x 65			24 x 72	
Chemicals tank	Volume (l)	100	200	300	400	500	800	800
Hydrochloric acid 35%*	Liter / regeneration	10	20	30	40	50	60	80
Sodium hydroxide 50%*	Liter / regeneration	10	20	30	40	50	60	80
Connection	Input / output	DN20		DN25		DN32		DN40
Dimensions	Length (mm)	1 500	2 000	2 300	2 600	2 600	3 500	3 500
	Width (mm)	800	900	1 000	1 000	1 000	1 200	1 200
	Height (mm)	1 700	1 800	1 900	1 900	1 900	2 200	2 200

*all specifications are approximate