

Mix Bed NS Deionizer



Markets

- **Cosmetics Manufacturing**
- **Pharmaceutical Manufacturers**
- **Hospital**
- **Hemodialysis**
- **Laboratories**
- **Medical and Research**
- **Plating Printing**
- **Metal Working/ Finishing**
- **Humidification**
- **Glass Industries**
- **Fluid Chemical Blending**
- **Car Wash Final Rinse**
- **Windows Cleaning**
- **Painting and Plating Process**
- **Photographic Processes**
- **Beverage Processing Plants**
- **Microelectronics**
- **Photo Labs**
- **Reverse Osmosis Polishing**
- **Laser/Water Cutting**
- **High Pressure Cleaning**
- **Mirror Manufacturing**
- **Battery Filling**

Water being a universal solvent has the ability to dissolve a wide range of inorganic and some organic minerals or salts such as potassium, calcium, sodium, bicarbonates, chlorides, magnesium, sulfates etc. Higher TDS water seriously effect various industrial processes, effect smooth heating and cooling, increase scaling and corrosion tendencies. For these reasons different technologies including resin based deionization are used to reduce the water TDS down to some reasonable value to reduce its impacts and make it acceptable for various uses.

Deionization (or demineralization) is the process of removing dissolved minerals from the water supply. Water deionizer uses ion exchange resins to remove ionized impurities from the water. In a mixed-bed deionizer, the cation-exchange and anion-exchange resins are contained in a single pressure vessel. These two separate resins are utilized in mixed form for an efficient deionization process.

The cation resin exchanges the positive ions for hydrogen ions (H^+), while the anion resin exchanges the negative ions for hydroxide ions (OH^-). $H + OH = H_2O$. Water (H_2O) is theoretically produced as an end result in the deionization process. Depending on the feed water quality and pre-treatment system selection, mixed bed deionizers may produce water quality up to 18 Mega ohm. NSMB water deionizers are generally used as water polishers in high purity applications.

Our **NSMB mixed bed units** produce high quality water for any application. Depending upon the size of unit, on exhaustion, **NSMB water deionizer resin** is either planned to discard to waste or regenerate off site. **Customized Systems** allow for greater flexibility in order to achieve the necessary water quality.

AQUA-NSMB deionization systems offer a new dimension in water treatment equipment and have been engineered with both the installer and consumer in mind. Systems are available in many different models and may be customized to fit your application. **AQUA-NSMB water deionizers** can be used in a variety of residential, commercial, industrial, and specialty applications.

Benefits

In many cases and applications, Non-regenerable/Service exchange deionization makes the most sense, due to the following advantages:

- Simple and efficient
- Eliminate on-site chemical storage and handling
- No permanent plumbing/installation
- Portable tank size and configuration can be easily and economically changed as volumes and quality needs change
- No hazardous waste or regeneration effluent
- Simple design for ease of operation, setting & service.

Aqua-NSMB Demineralizer Series

Salient Features

- Strong acid cation and type 1 strong base anion resins as the standard, with other resins available as an option.
- Resin vessel can be polyethylene-lined fiberglass or rubber-lined steel depending on size and customer requirements.
- Easy connect fitting
- Simple design for ease of operation setting & service.
- Fiberglass reinforced construction for longer corrosion resistant life.
- All corrosion free internals.
- 3-6 bar operating pressure

Accessories Available

- Wide range of inlet/outlet connection adaptors
- Resistivity light or monitor w/ audio alarm
- Remote indicator
- Recirculation pumps
- High quality water storage tanks
- Reverse osmosis system as pre-treatment
- Ultraviolet lights
- Filter cartridges and housings
- Silica sand filters
- Service carbon and activated carbon cartridges

Water 2000 offers a complete line of water deionizer systems, in either manual or automatic regeneration mode using a multiport valve design or valve nest design with fiberglass or epoxy-lined steel pressure vessels and come standard with state-of-the-art PLC control.

AQUA-NSMB Deionizer Series :

Model	Nominal Capacity (grains)	Service Flow Rate (lpm)	Inlet/Outlet pipe size (in)	Mineral Tank Size	Resin Quantity (Lit)	Approx. Shipping Wt Kg
AQUA-NS10MB	2,600	3	0.5"	9" x 17"	10	22
AQUA-NS15MB	4,000	5	0.5"	7" x 35"	15	27
AQUA-NS34MB	6,600	16	0.75"	8" x 44"	34	45
AQUA-NS50MB	13,200	25	0.75"	10" x 54"	50	63
AQUA-NS75MB	19,800	40	1.0"	13" x 54"	75	92
AQUA-NS100MB	26,400	50	1.0"	14" x 65"	100	124
AQUA-NS150MB	40,000	65	1.0"	16" x 65"	150	150

*Other customized models available on request

Please give us a call on 042 3542039-40 or email us at sales@water2000.com.pk and one of our professional team member will happily demonstrate how we can save your significant cost and greatly improve the performance of your water or wastewater treatment plant.