

Introduction Of Mixed-Bed Demineralizer

Mixed Bed demineralizer is a demineralizer in which the cation and anion resin beads are mixed together. Mixed bed demineralizer plant embodies a single column to produce a very high water quality by the many ion exchange reactions that continually occur as the water passes through the Mixed Bed of resins, which is applied for use to a variety of industries.

Product Features

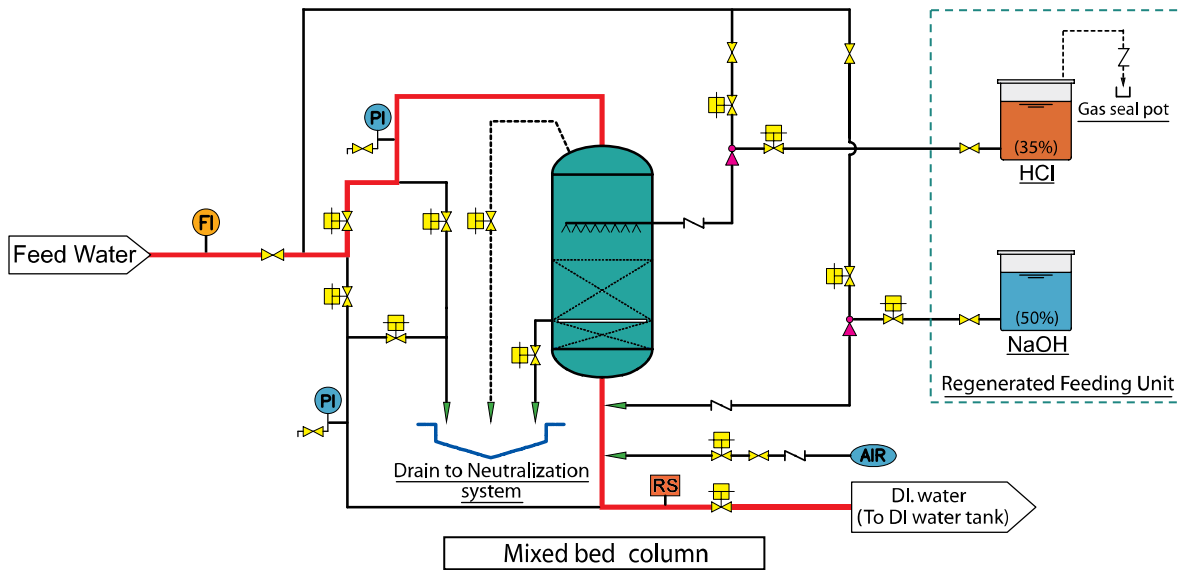
- ▶ Use high grade of mixed resin are cation and anion resins.
- ▶ Mixed in a single vessel to produce the water is extremely pure.
- ▶ Produce high quality of deionized water of less than or equal $1M\Omega$ - cm.
- ▶ Regeneration under programmable logic controller with automatic pneumatic valve.
- ▶ Constructed of corrosion-resistant ensure longevity and system purity.

Product Applications

1. Removed cation and anion in water.
2. De – Alkalization.
3. Heavy metal removal.
4. Nitrate and Sulfate removal.
5. Sugar solution color removal.
6. Condensate polishing.
7. Others.



Flow Diagram of Automatic Mixed bed



Product Specifications of Mixed Bed Demineralizer Unit : MB model

| Model | Service Flow (m ³ /Hr) | Tank Diameter (mm) | Straight Height (mm) | Chemical Consumption | | Resin Volume | | Unit Dimension (w x d x h) | Weight | |
|----------|-----------------------------------|--------------------|----------------------|----------------------|--------------|--------------|-----------|----------------------------|--------------|----------------|
| | | | | 35%HCl (Kg) | 50%NaOH (Kg) | Cation (l) | Anion (l) | | Product (Kg) | Operating (Kg) |
| MB – 250 | 1 – 2 | 250 | 1825 | 5.5 | 6 | 20 | 30 | 2000 x 1000 x 2500 | 300 | 490 |
| MB – 350 | 3 – 4 | 350 | 1825 | 10.0 | 15 | 35 | 65 | 2000 x 1000 x 2500 | 350 | 650 |
| MB – 430 | 5 – 6 | 430 | 1825 | 14.0 | 20 | 50 | 100 | 2000 x 1000 x 2500 | 500 | 900 |
| MB – 530 | 7 – 9 | 530 | 1825 | 24.5 | 35 | 85 | 165 | 2200 x 1200 x 2500 | 700 | 1300 |
| MB – 580 | 10 – 11 | 580 | 1825 | 28.5 | 40 | 100 | 200 | 2500 x 1200 x 2500 | 800 | 1470 |
| MB – 670 | 12 – 14 | 670 | 1825 | 38.5 | 55 | 150 | 300 | 2500 x 1500 x 2500 | 1000 | 1850 |
| MB – 870 | 15 – 20 | 870 | 1825 | 48.5 | 65 | 200 | 350 | 2600 x 1500 x 2500 | 1000 | 2150 |

Remarks : Out of Scope ➔ Feed water, DI supply water, regenerate wastewater outlet and neutralization system , Air compressor unit

- ▶ For feed water conductivity will be recommended at 50 µs/cm.
- ▶ For automatic unit use compressed air supplied for pneumatic valve.
- ▶ For mixing resin use air blower with pressure about 3,000-4,000 mmAq.
- ▶ Wide range of product besides above item are available.
- ▶ All design and specifications will be subject to change with or without prior notice.



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