

## **INDION**<sup>®</sup> New Generation

### Two Bed Deionisers with Degasser Tower

INDION Industrial Two Bed Upflow Deionisers Type CA & CDA units meet the requirements of producing small quantities of demineralised water. Available in a wide range with maximum flow rates from 1.0 to 15.0 m<sup>3</sup>/h. Flow rates can be enhanced to 35 m<sup>3</sup>/h by installing two or more units in parallel.

Type CA units consists of a cation unit incorporating a strong acid cation exchanger and an anion unit incorporating a strong base anion exchanger. Both cation and anion units are made of fibre alass reinforced plastic (FRP)/ glass reinforced plastic (GRP). Type CDA units include a degasser for treating high alkalinity waters.

## **Features**

- The units are free standing, compact and are easy to install and maintain
- Complete with equipment for regeneration of ion exchange resins
- All parts of the unit are of plastic construction, corrosion resistant and practically requires no maintenance
- Units are modular in construction enabling easy capacity enhancement

## **Applications**

 All applications like laboratory and metal plating units requiring small quantities of demineralised water

## **Average Treated Water Quality**

- pH : 7.5 – 9.5
- Conductivity at 25°C : 10-30  $\mu$ S/cm  $: 0.5 \text{ mg/l} \text{ as SiO}_2$
- Reactive silica



## Specifications (CA units)

- Two FRP /GRP pressure vessles are used and provided with internal fittings and initial charge of cation and anion exchange resins
- One set of regeneration equipment including • hydraulic ejectors, acid and alkali tank
- One set of frontal pipework and valves
- One base frame (optional) for mounting cation and anion units
- One conductivity meter to monitor treated water quality

## Specifications (CDA units)

CDA units includes the following in addition to the above

- One atmospheric degasser filled with ball rings
- One air blower
- One degassed water tank of low density Polyethylene
- One degassed water pump
- One lot of Interconnecting piping and valves

#### **Technical Specification**

#### Cation/Anion

| Model   |            | Inlet/ Outlet | Dimensions    |                    | Flow Rate |       | Working Pressure     |                      | Regenerants                     |                                |
|---------|------------|---------------|---------------|--------------------|-----------|-------|----------------------|----------------------|---------------------------------|--------------------------------|
|         |            | Connections   |               |                    |           |       |                      |                      | Cation                          | Anion                          |
|         |            |               | Vessel<br>Dia | Vessel<br>(Height) | Min.      | Max.  | Min.                 | Max.                 | Hydrochloric<br>Acid 30%<br>w/v | Sodium<br>Hydroxide<br>48% w/v |
| Cation  | Anion      | mm            | mm            | mm                 | m³ /h     | m³ /h | Kg/cm <sup>2</sup> g | Kg/cm <sup>2</sup> g | Kg                              | Kg                             |
| AC SQ 1 | NGSBA SQ 1 | 32            | 335           | 1388               | 0.25      | 2.5   | 2.0                  | 3.5                  | 20                              | 13                             |
| AC SQ 2 | NGSBA SQ 2 | 32            | 362           | 1659               | 0.25      | 2.5   | 2.0                  | 3.5                  | 27                              | 17                             |
| AC SQ 3 | NGSBA SQ 3 | 32            | 400           | 1671               | 0.35      | 3.5   | 2.0                  | 3.5                  | 40                              | 25                             |
| AC SQ 4 | NGSBA SQ 4 | 50            | 475           | 2060               | 0.50      | 6.0   | 2.0                  | 3.5                  | 53                              | 33                             |
| AC SQ 5 | NGSBA SQ 5 | 50            | 552           | 1735               | 0.60      | 6.0   | 2.0                  | 3.5                  | 67                              | 42                             |
| AC SQ 6 | NGSBA SQ 6 | 50            | 610           | 2163               | 0.75      | 7.5   | 2.0                  | 3.5                  | 107                             | 67                             |
| AC SQ 7 | NGSBA SQ 7 | 63            | 770           | 2336               | 3.0       | 10.0  | 2.0                  | 3.5                  | 167                             | 104                            |
| AC SQ 8 | NGSBA SQ 8 | 63            | 927           | 2281               | 3.0       | 15.0  | 2.0                  | 3.5                  | 240                             | 150                            |

#### Degasser

| Model    | FRP Degasser Tower |        |           |                           |                | Blov      | wer   | LLDPE Degasser Water Tank |                  |       |  |
|----------|--------------------|--------|-----------|---------------------------|----------------|-----------|-------|---------------------------|------------------|-------|--|
|          | Degasser Tower     |        | Flow Rate | Type of<br>Packing<br>MOC | Qty            | Flow Rate | Motor | Water<br>Tank<br>Capacity | Pump<br>Capacity | Motor |  |
|          | Dia                | Height |           |                           |                |           |       |                           |                  |       |  |
|          | mm                 | mm     | m³/hr     | Pall                      | m <sup>3</sup> | m³/min    | H.P   |                           | m³/hr            | H.P   |  |
| NGDGS 20 | 200                | 1500   | 2         | Rings                     | 0.05           | 1         | 0.5   | 500                       | 2                | 0.85  |  |
| NGDGS 25 | 250                | 1500   | 3         | PP                        | 0.075          | 1         | 0.5   | 500                       | 4                | 1.4   |  |
| NGDGS 30 | 300                | 1500   | 4         |                           | 0.1            | 1.4       | 0.5   | 500                       | 4                | 1.4   |  |
| NGDGS 35 | 350                | 1500   | 6         |                           | 0.15           | 1.4       | 0.5   | 500                       | 6                | 2.5   |  |

Note: Feed water should be free from turbidity, organic matter, heavy metals, free residual chlorine and oil & grease.

Please furnish a detailed mineral analysis to confirm the output between regeneration (OBR) from the ion exchange unit.

Regenerant effluent required to be bulked and neutralized prior to disposal.

To the best of our knowledge the information contained in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice. Please contact our regional/branch offices for current product specifications.

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