

## **INDION®** New Generation Manual & Auto Softeners

The Indion NG Softeners (NGS) are intended to remove hardness present in feedwater. The unit incorporates a strong acid cation resin in sodium form which removes hardness present in water and produces soft water. On exhaustion, the unit is regenerated with 15% w/v solution of sodium chloride.

The unit incorporates the counter-current regeneration technique. The flow of water during the service cycle is in a direction opposite to that of the regenerant. The system produces treated water having very low hardness typically less than 5 ppm as CaCO<sub>3</sub>.

NGS manual and auto softeners are designed to treat up to 50 m<sup>3</sup>/h of feedwater.

### Features

- The unit is free standing and requires no special foundation.
- The unit is pre-assembled, tested prior to dispatch, easy to install and commission.
- A multiport valve with a hand-operated lever is provided for ease of operation.
- The entire unit is of plastic construction and is corrosion free. The pressure vessel is of Fibre Reinforced Plastic (FRP) construction.
- The unit is complete with regeneration equipment and ejector for the injection of regenerant.

### Applications

- All applications requiring soft water with very low hardness especially in small quantities
- Laundry & Textile processing
- Boiler feed
- Heating and Ventilation Air Conditioning System (HVAC)
- Hospitality Industry



### Specifications

- One FRP pressure vessel fitted with plastic internal fittings
- A multiport valve with hand operated lever
- An initial charge of strong acid cation exchange resin in sodium form (Indion 220 Na+)
- One combined salt tank of LLDPE/FRP with fittings and brine filtering media
- Two pressure gauges one each at inlet and outlet
- One rate of flow indicator (optional)
- Automation of NG Softeners is carried out using an auto multiport valve or a Programmable Logic Controller (PLC) that energises a set of solenoid valves which in turn operate the butterfly control valves located on the unit

## Technical Specifications

Model	NGS 3A	NGS 3B	NGS 6B	NGS 9B	NGS 14B	NGS 20B	NGS 30B	NGS 40B	NGS 50B
Flow Rates (m <sup>3</sup> /h)									
Minimum	0.3	0.3	0.6	0.9	1.4	2.0	3.0	4.0	5.0
Maximum	3.0	3.0	6.0	9.0	10.0	20.0	30.0	40.0	50.0
Working Pressure (kg/cm <sup>2</sup> )									
Minimum	2	2	2	2	2	2	2	2	2
Maximum	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
*Output/Regeneration (m <sup>3</sup> ) (200 ppm Total Hardness as CaCO <sub>3</sub> )	14	28	50	84	130	168	224	308	406
Treated Water Hardness ppm CaCO <sub>3</sub>	<5	<5	<5	<5	<5	<5	<5	<5	<5
Salt/Regeneration (kg)	8	16	24	48	72	96	128	176	232
Inlet/Outlet/Drain Connection (PVC Socket Union)									
Inlet (mm)	32	50	50	50	50	63	90	90	110
Outlet (mm)	32	50	50	50	50	63	90	90	110
Drain (mm)	32	50	50	50	50	63	90	90	110
Dimensions									
Vessel Dia (mm)	257	335	400	552	610	770	927	1074	1226
Vessel Height (mm)	1124	1388	1671	1735	2163	2336	2281	2292	2470

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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