

# /ND/DN®

### **SWIFT** Plus Demineralizer

The latest Indion Swift range comprises a family of automatic twin-bed deionizers incorporating state-of-the-art counter-flow ion exchange technology previously available only in large, custom designed plants.

The operational cycle of these rapid regeneration, packaged units is controlled by volume throughout, which is pre-programmed in PLC according to the type of feed water. The ion exchange resins are never fully exhausted ensuring optimum deionized water production at all times.

Regeneration takes just 35 minutes – after a minimum service cycle of two hours – minimizing the need for both, a standby plant and storage of large volumes of water. As regeneration of the cation and anion beds is simultaneous, the effluent streams are largely selfneutralizing, reducing waste disposal costs and environmental impact.

Indion Swift is exceptionally compact, and skid-mounted on a corrosion-resistant frame which also accommodates a stainless steel multi-purpose pump. In addition to optimizing the performance of the plant during service and regeneration, the pump provides several recirculation options to maintain high quality of water in the treated water tank.

### **SWIFT** Plus

Indion Swift Plus features an additional cation exchange stage which is accommodated on the standard Swift skid. As a result, Swift Plus produces mixed bed quality water having resistivity of greater than 1mg. $\Omega$ -cm for a minimum capital outlay. Running cost is low because no additional regenerant chemicals are required and no extra effluent is produced.



### **Standard Features**

- Mixed bed quality water at minimum cost
- Incorporates an additional cation polishing stage for mixed bed quality
- Average resistivity of purified water is 10 mg.Ω-cm & neutral pH
- Small footprint, no larger than a two vessel Indian Swift
- No additional regenerant chemicals required
- Swift Plus provides up to 330 m³/d on a feed water of 100 ppm, total anion feed
- High chemical efficiency
- 35 minutes regeneration time
- Near neutral effluent reduces disposal costs
- Stainless steel process pump
- Automatic control PLC
- Message display provides continuous read-out of system status
- Flow display provides information on flow rates, throughout and number of regenerations
- Audible alarm and 'no flow' alarm circuit
- Can be connected to level sensors in chemical tanks to prevent regeneration when insufficient chemicals are available
- Minimal installation and commissioning costs

# Technical Specifications - **SWIFT** Plus Range

Model	P-1	P-2	P-3	P-4	P-5	P-6	P-7	P-8	P-10 <sup>+</sup>
Max. Flow (m³/h)	2.25	3.75	5.25	7.50	12.00	16.00	25.00	35.00	50.00
TREATED WATER QUALITY Conductivity (μS/cm) Resistivity (mg.Ω-cm) pH	1-0.1 1-10 5-7	1-0.1 1-10 5-7	1-0.1 1-10 5-7	1-0.1 1-10 5-7	1-0.1 1-10 5-7	1-0.1 1-10 5-7	1-0.1 1-10 5-7	1-0.1 1-10 5-7	1-0.1 1-10 5-7
CAPACITY DATA Output/Regeneration (m³) (100 ppm Total Anion as CaCO₃ incl. SiO₃)	14	21	28	35	63	84	126	180	326
REGENERATION DATA Regeneration Time (Approx.) (mins)	35	35	35	35	35	35	35	35	35
Chemicals per Regeneration 32% Hydrochloric Acid (litres) 32% Sodium Hydroxide (litres)	7.4 6.9	11.0 10.4	14.8 13.9	18.4 17.3	33.2 31.3	44.2 41.6	84.9 86.7	108.8 110.9	177.0 180.3
Effluent Volume per Regeneration (m³)	0.48	0.82	1.04	1.22	2.10	2.75	5.3	6.8	12.0
Max. Effluent Flow (m³/h)	2.5	4.4	5.0	6.5	11.2	14.6	18.25	25.5	60.0
Bulk Effluent pH	6-8	6-8	6-8	6-8	6-8	6-8	6-8	6-8	6-8
Feed Water Data Supply Quality Suitable potable water free from suspended solids, max temp 40°C									(max temp 30°C
Inlet/Outlet Connections PVC Socket Union (mm)	32/25	40/32	50/32	50/40	80/50	80/50	100/80	100/80	150/100
Drain Connections (mm)	20	25	32	32	40	50	80	80	100
ELECTRICAL DATA Supply 415V 3ph 50Hz Power Consumption (kw)	1.5	1.5	2.2	3.0	5.5	5.5	7.5	11.00	< 18
AIR SUPPLY DATA Min./Max. Pressure (bar)	5.5/7.5	5.5/7.5	5.5/7.5	5.5/7.5	5.5/7.5	5.5/7.5	5.5/7.5	5.5/7.5	5.5/7.5
DIMENSIONS Width (mm) Height (mm) Depth (mm) Headroom Required (mm)	1600 2000 900 1000	1600 2000 900 1000	1700 2100 950 1000	1700 2100 950 1000	2080 2500 1300 1000	2080 2500 1300 1000	3500 3000 2000 1000	3500 3000 2000 1000	4500 3500 3000 1000
WEIGHT (Approx.) Delivered Wt. (kg.) Working Wt. (kg.)	457 625	500 725	1000 1350	1000 1450	1100 1850	1300 2050	1500 2700	1600 3000	2500 7500

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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