



Deionisers/Demineralisers

High Purity Water Treatment Systems

Purion

Product Guide

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Please note: Images in this product guide may vary and are a representation only. If you have any questions, please contact us for further information.

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PDCI Series

PACKAGED FILTRATION & DEIONISATION SYSTEM FOR HIGH QUALITY WATER FOR POWDER COATING FINAL RINSE TANKS



FEATURES

- Large capacity 150 litre filter and deioniser tanks 355mm dia x 1650mm height
- Automatic Filter to remove sediment, dirt, rust and metal particles
- Automatic Carbon Filter to remove chlorine, chloramines surfactants and organics
- Automatic Twin Column Cation/Anion Deioniser for < 10.0 ms/cm water quality
- Conductivity meter and display for continuous water quality monitoring
- Single push-button Deioniser regeneration
- Filter and Deioniser Controls mounted on display board for easy access
- LED lights to indicate system status
- Mains ON/OFF switch
- Pump over-ride switch
- Test points for Carbon Filter, Cation and Anion tanks mounted on display board for easy access
- Inlet pressure gauge
- 316 Stainless Steel recirculation pump. Optional Press-Control with run-dry protection
- Pump suction strainer to prevent impeller fouling
- Automatic switching to town water for filter backwashing and deioniser regeneration
- Plumbed with non-corroding UPVC pipe, fittings and valves
- Mounted on heavy duty poly pallet with Stainless Steel frame and PVC sheet backboard.
- Uses standard 240v 50 hz power

Four simple plumbing connections:

1. Pump suction
2. Treated water return line
3. Wastewater line
4. Rinse tank dump line

SPECIFICATIONS

SYSTEM FLOW RATE

Variable up to 50.0 lpm with 20.0 lpm preferred flow rate for consistent high quality water.

SYSTEM RATED PRESSURE

700kpa

SYSTEM OPERATION PRESSURE

- Recirculation 285kpa
- Backwash & regeneration pressure minimum 420 kpa

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Deionisers / Demineralisers

High Purity Water for Industry



BSDI SERIES

PACKAGED FILTRATION & DEIONISATION SYSTEMS FOR HIGH PURITY WATER PRODUCTION FOR GENERAL INDUSTRY

Ideal for batch processing



TWO MODELS, TWO FLOW RATES
22.0 litres per minute
&
100.0 litres per minute

FEATURES

- Inlet pressure limiting valve and isolation valve
- Automatic Carbon Filter to remove chlorine, chloramines, surfactants and organics
- Automatic Twin Column Cation and Anion Deioniser for < 10.0 ms/cm water quality
- Nuclear Grade deioniser resins
- Conductivity meter and display for continuous water quality monitoring
- Automatic shut-off via stainless steel solenoid valve if water quality exceeds set-point
- Single push-button Deioniser regeneration
- Filter and Deioniser Controls front-mounted for easy access
- LED lights to indicate system status
- Mains ON/OFF switch
- Stainless steel test points for Carbon Filter, Cation and Anion tanks water testing
- Inlet pressure gauge
- Rinse valve to rinse deioniser to quality
- Plumbed with non-corroding UPVC pipe, fittings and valves
- Mounted on Stainless frame and PVC sheet backboard.

GENERAL

SYSTEM RATED PRESSURE:

600kpa

SYSTEM OPERATING PRESSURE:

Backwash & regeneration minimum 420 kpa

PLUMBING:

25mm Inlet, 25mm Treated water, 20mm Wastewater

OPTIONAL:

Wastewater Neutralising Tank

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Deionisers / Demineralisers

Low Conductivity/TDS, High Purity Water Systems



FLOW-THRU SERIES

ECONOMICAL INLINE, FLOW-THROUGH NUCLEAR GRADE MIXED BED ION EXCHANGE RESIN SYSTEMS FOR HIGH PURITY WATER PRODUCTION

WATER QUALITY:

10.0 Megohm to *18.3 megohm resistance equivalent to 0.1 μ S cm⁻¹ to 0.055 μ S cm⁻¹ respectively

TYPICAL APPLICATIONS:

AUTOCLAVES · HUMIDIFIERS · LABORATORIES · PHARMACEUTICAL · COSMETICS MANUFACTURE ·
REVERSE OSMOSIS POLISHERS · PRINTING PRESSES · LASER CUTTERS · WATER CUTTERS ·
JEWELLERY MANUFACTURE



WATER QUALITY MONITOR:
GREEN LIGHT FOR GOOD QUALITY,
RED LIGHT W/- AUDIBLE ALARM
FOR POOR QUALITY

MODEL	Resin Qty - Litres	*Litres Capacity @				**Max Flow lpm	Dimensions (cms)
		100 ms/cm	200 ms/cm	300 ms/cm	300 ms/cm		
WTDI06	6	3,840	1,920	1,440	960	6.0	40Wx16Dx68H
WTDI07	18	WS3	48 x 72	80	566.0	566.0	130 x 142 x 350
WTDI08	29	18,500	9,250	6,940	4,625	29.0	40Wx21Dx133H
WTDI09	40	25,520	12,760	9,570	6,380	40.0	40Wx24Dx143H
WTDI10	56	35,720	17,860	13,395	8,930	56.0	40Wx26Dx160H
WTDI12	75	47,840	23,920	17,940	11,960	60.0	40Wx31Dx154H
WTDI13	94	59,980	29,990	22,490	14,995	60.0	40Wx34Dx160H
WTDI14	138	88,040	44,020	33,015	22,010	60.0	40Wx37Dx188H

Standard systems are supplied with a Hylite Water Quality Monitor with 200k ohm endpoint. Monitor lights glows green for good quality, red with an audible alarm for poor quality. Powered by 240v/12v wall-mount transformer supplied. *Litres of treated water before exhaustion, based on inlet water ms/cm conductivity shown. **Dependant on inlet supply flow and pressure. Higher flow rates may be used for polishing and/or recirculation loops. NOTE: *To achieve consistent 18.3 megohm quality a second smaller demineraliser 'polisher' can be used. E.g Model DI12K followed by DI6K.

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Low Conductivity/TDS, High Purity Water Systems



CARTRIDGE SERIES

ECONOMICAL INLINE DUAL-PASS FLOW-THROUGH NUCLEAR GRADE MIXED BED ION EXCHANGE RESIN CARTRIDGE SYSTEMS FOR HIGH PURITY WATER PRODUCTION

TYPICAL APPLICATIONS:

AUTOCLAVES · HUMIDIFIERS · LABORATORIES · DENTAL · REVERSE OSMOSIS POLISHERS · BATTERY FILLING STATIONS
- FORKLIFTS, GOLF CARTS

WATER QUALITY:

10.0 Megohm to 18.3 megohm resistance equivalent to $0.1\mu\text{S cm}^{-1}$ to $0.055\mu\text{S cm}^{-1}$ respectively

WATER QUALITY MONITOR:

Hylite Monitor with 200k ohm endpoint. Monitor lights glows green for good quality, red with an audible alarm for poor quality. Powered by 240v/12v wall-mount transformer supplied.

Approximate litres of treated water between resin cartridge change based on the mean average conductivities from that cities principal water supply**

MODEL	WTD1CD0H	WTDICD20H	MODEL	WTDI CD10H	WTDICD20H
Adelaide	165	500	Mackay	255	770
Brisbane – Crosby	200	605	Melbourne	950	2870
Brisbane – Nth Pine	305	915	Newcastle	575	1740
Canberra	2305	6965	Perth	180	540
Cairns	805	2240	Sydney	535	1620
Darwin	805	2240	Townsville	535	160



SYSTEM STAGES

Stage 1: INLET PLUMBING - Includes 12mm (1/2") brass compression tee for connection to water supply · Backflow prevention device · Pressure limiting valve to protect system from excess water pressure · Shut-off valve to facilitate cartridge changes · 1/4" high pressure tubing with quick-connect fittings.

Stage 2: FILTRATION - A premium 10 micron extruded carbon block filter cartridge substantially reduces sediment, organics, chlorine and chloramines. Protects the demineraliser resins from degradation and premature fouling.

Stages 3 & 4: DEIONISATION - Two inline deioniser cartridges containing high quality nuclear grade mixed bed ion-exchange resin ensures high purity water up to 18 meg resistivity (0.5ms/cm).

Stage 5: CONDUCTIVITY MONITOR - Treated water passes through a water quality monitor. The monitor displays a green light for good quality water, or a red light and audible alarm for poor quality water, indicating a resin or cartridge change is due. The monitor uses safe 12 volt power from the wall-mount transformer supplied.

Stage 6: DISPENSING - 1/4" tubing with ball valve and quick-connect fittings included for dispensing deionised water. Cartridge Options : Supplied with refillable resin cartridges. Exhausted resin cartridges can be disposed of or washed and refilled.

Cartridge Options : Supplied with refillable resin cartridges. Exhausted resin cartridges can be disposed of or washed and refilled. Cartridge refill packs, bulk resin packs for large users, or complete replacement cartridges with are available.

Specifications: Maximum Flow Rate: WTCD10H 3.0 lpm* WTCD20H 7.0 lpm* Total Resin Quantity: WTCD10H 1.3 litres WTCD20H 4.0 litres
Installed Dimensions (cms): CD10H: 50W x 15D x 50H CD20H: 50W x 15D x 72H

*Litres per minute flow rate dependant on raw water quality and inlet water pressure, ** Guide only, Town water eC can vary dependant on water source/s.



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