MEMBRANE DECARBONATOR

CO_2 REMOVAL WITHOUT CHEMICALS

WITH

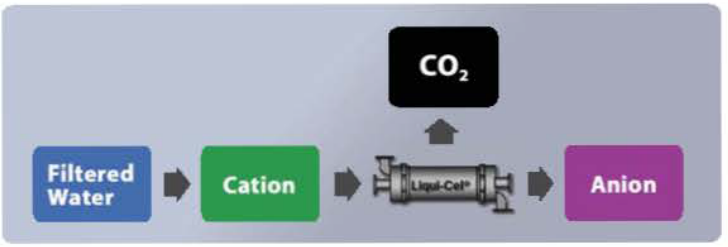
Liqui-Cel® MEMBRANE CONTACTORS

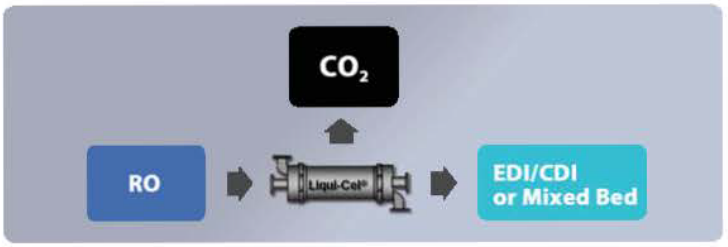
Liqui-Cel.com

Dimensions: 51cm (20") W x 69cm (27") D x 163cm (64") H
Weight: 87kg (190lbs.)

Simple, High Efficiency Decarbonation For Small Water Deionization Systems

- Cut Resin Regeneration Frequency
- Reduce Chemical Use
- Improve Water Quality in EDI/CDI Systems
- Low Operating Costs
- Easy Setup
- Quick Payback





ANNUAL DI WATER SYSTEM REGENERATION COST COMPARISON

	NaOH [1] Use (ton)	HCl [2] Use (ton)	Service [3] Water Use (m^3)	ANNUAL OPERATING COST
Without Membrane Decarbonator	28	17	4,725	$24,698
With Membrane Decarbonator	21	14	3,710	$19,068
			Savings up to	$5,630

All units are in metric.
System Design: 10m^3/hr (44gpm) regenerated 1 time/day
1) NaOH Cost: USD $330/ton 2) HCl Cost: USD $260/ton 3) Filtered Water Cost: $2.10 per m^3
Includes rinsing water and chemical dilution water

1-800-820-9021

info@industrialh2osolutions.com

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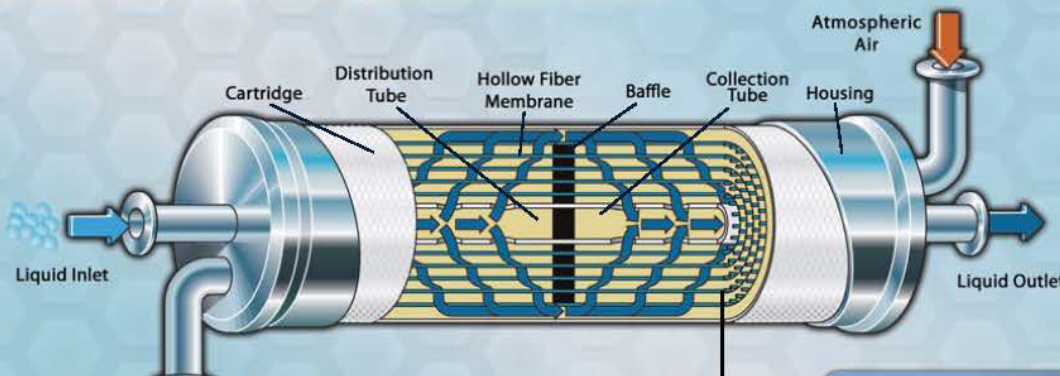
Features		Benefits
Simple Installation and Operation	→	Minimal Setup Time and Low Maintenance
High Performance	→	Up to 95% Removal of Free CO_2 at 25°C
Does Not Require Chemicals to Operate	→	Reduce Chemical Storage Costs and Risk of Employee Exposure; Lower Operating Costs
Clean, In-line Operation	→	Remove CO_2 without Contaminating Water
Operates Using Small Blower in Suction Mode	→	Low Energy Use and Capital Cost
Compact Design, Small Size	→	Can Fit into Many Existing Spaces
Mobility	→	Easily Relocated

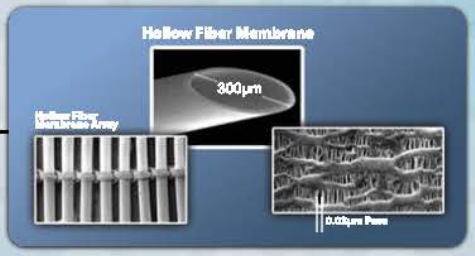
High Performance, Compact Solution



➤ *Efficient*

➤ *Reliable*

➤ *Proven*



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Liqui-Cel® 8x20 Decarbonator Skid

Standard Equipment

- *8 x 20 EXTRA-FLOW Liqui-Cel Contactor mounted in a painted steel frame*
- *Airtech model 3BA1300 motor 0.6 HP (0.45kW) regenerative blower*
  - *110-120V 60Hz 6 amp single phase*
  - *220-230V 50 Hz 3 amp single phase*
- *Liquid trap with high level cut-off switch to protect blower.*
- *Air filter 5µm rating 99% removal*
- *Vacuum & water pressure relief valves*
- *Inlet/outlet water pressure gages 0 - 680 kPa (0 - 100 psi)*
- *Compound vacuum gage for blower 100 to -100 KPa (+15 psi to -30 in Hg)*
- *Temperature gage -20 to 120°C (0-150°F)*
- *Water line: 1 ½ inch schedule 80 PVC piping with inlet & outlet ball valves*
- *Blower line: 1 inch PVC discharge*
- *Drain line: 1 inch PVC with ball valve*
- *On/Off switch with circuit breakers mounted in control panel*

Operating Conditions

Water flow rate: 1.1 – 11 m³/hr (5 – 50 gpm)

Maximum Water Temperature/Pressure
25°C, 4.8 barg (77°F, 70 psig)
40°C, 2.1 barg (104°F, 30 psig)

** 5 micron water pre-filtration and softened or RO water is recommended.*
** Air temperature should not exceed 30°C (86°F). If the water temperature exceeds the air temperature some heat transfer can occur.*
** The unit can be placed in an environment 40°C (104°F). Beware that air temperatures exceeding 30°C (86°F) will reduce membrane life.*

Ordering Info

Model	Voltage	Plug	Connections (lumen side)	Dimensions	Weight (dry)	Weight (shipping)
SK-100-116	110-127V 50-60Hz	US	1.5" Female NPT	51cm (20") - W 69cm (27") - D 163cm (64") - H	86kg (190lbs)	141kg (310lbs)
SK-100-216	220-240V 50-60Hz	No Plug				

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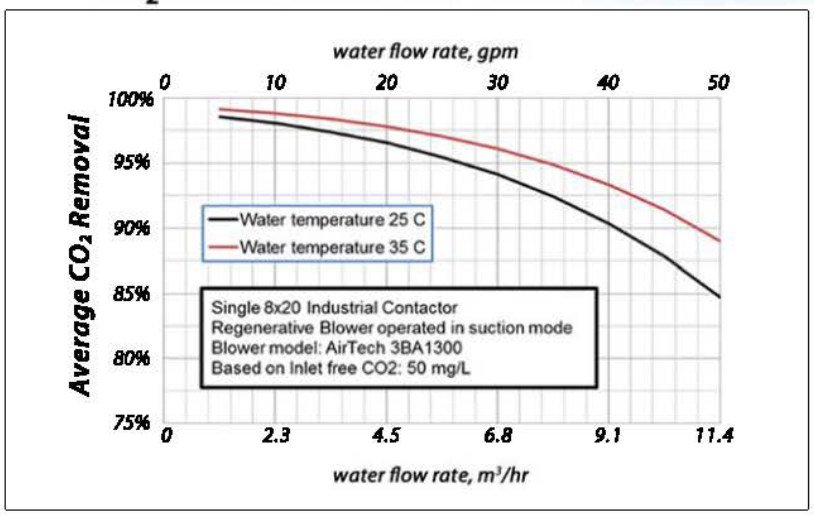
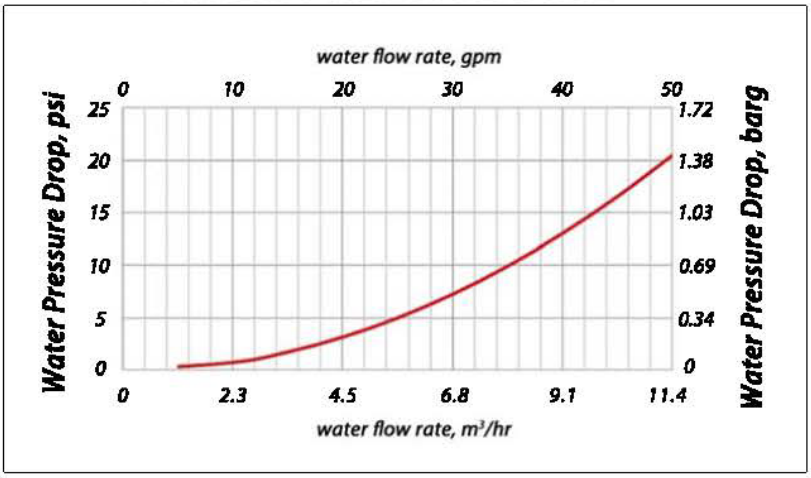
CO_2 REMOVAL PERFORMANCE



SYSTEM PRESSURE DROP



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Certified System
ISO 9001
ISO 14001

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