

Electrolysis System DULCO®Lyse

Innovative disinfection. The benefits for you: Minimum chlorate and chloride content.



Output: Up to 300 m³/h of water disinfection with the lowest concentration of by-products

Electrolysis systems of the type DULCO®Lyse generate ultra-pure hypochlorous acid in a vacuum process. A saturated solution of sodium chloride is produced in a salt-dissolving tank, included in the scope of delivery, and this solution is then electrolysed in a diaphragm cell. Chloride-free sodium hydroxide solution and hydrogen are produced in the cathode chamber, while ultra-pure chlorine gas and dilute residual brine are produced in the anode chamber, separated by the diaphragm from the cathode chamber. The chlorine gas produced is immediately separated from the residual brine and dissolved as hypochlorous acid. The sodium hydroxide solution is temporarily stored and added to hypochlorous acid through a metering pump. The result is a neutral, highly effective and extremely low-chloride and low-chlorate disinfection solution, temporarily stored in

the product tank until metered through separate metering stations. The hydrogen produced is diluted with fresh air by a fan and discharged safely. The diluted residual brine is fully discarded. To this end, the diluted brine is heavily diluted with softened water, neutralised by the addition of sodium hydroxide solution and disposed of in the sewer. Any residual chloride and chlorate is thereby disposed of and not mixed with the process water. DULCO®Lyse systems can thus be compared with pure chlorine gas in terms of their oxidation strength and chloride and chlorate content in the process water. The salt dissolving water comes from a softening system integrated in the DULCO®Lyse system, thereby preventing the formation of lime deposits and ensuring the long service life of the electrolytic cell.

Your benefits

- Ultra-low chlorate content for disinfection with minimal by-products
- Extremely low chloride content for maximum protection and freedom from corrosion within the plant
- Environmentally-friendly, highly effective disinfection
- Long-term freedom from germs, without any transport, storage or handling of concentrated chemicals
- Handling of chemicals is reduced (only sodium chloride is required)
- Compact, space-saving design

Field of application

- Food industry
- Beverage industry

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Technical Data

Power supply: 1 x 230 Volt (V AC/1P/N/PE/50 Hz)

Dimensions (H x W x D): 2,100 x 1,250 x 610 mm

	Type/output	DULCO [®] Lyt production at 400 ppm	Power uptake	Salt solution tank volume	Cabinet	Order no.
	g/h	l/h	kW	l		
DULCO [®] Lyse 100	100	250	1.10	210	stainless steel cabinet	1041424
DULCO [®] Lyse 100	100	250	1.10	210	open cabinet	1062093
DULCO [®] Lyse 200	200	500	1.50	210	stainless steel cabinet	1043987
DULCO [®] Lyse 200	200	500	1.50	210	open cabinet	1062104
DULCO [®] Lyse 300	300	750	1.90	210	stainless steel cabinet	1043988
DULCO [®] Lyse 300	300	750	1.90	210	open cabinet	1062135

Scope of delivery:

DULCO[®]Lyse electrolysis systems are assembled ready-wired in a sealed stainless steel or open cabinet

- PLC (Programmable Logic Controller) in the attached control cabinet
- Duplex water softening system
- Salt-dissolving tank with level monitoring
- Ultrasound level probe for the DULCO[®]Lyt product tank
- Piping between the salt-dissolving storage tank and DULCO[®]Lyse system
- Hardness control measuring device
- pH4 + pH7 buffer solution
- 25 kg salt for commissioning

Not included in the scope of delivery:

- DULCO[®]Lyt product tank
- DULCO[®]Lyt metering station