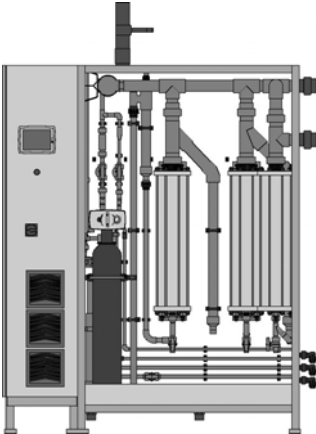


Output of 50 – 2,400 g/h of sodium hypochlorite (5 g/l)



Electrolysis systems of the type CHLORINSITU® II generate sodium hypochlorite with a concentration of 5 g/l.

A saturated solution of sodium- or potassium chloride is produced in a salt dissolving tank, included in the scope of delivery for this purpose, which, after appropriate dilution, is electrolysed in an open tubular cell. The hypochlorite (NaOCl or KOCl) solution is collected in a (day)storage tank and, from there, metered according to requirements using separate metering pumps.

Due to the moderate pH value of 8.5 – 9 of the produced hypochlorite, it affects the pH of the treated water significantly less than if conventional sodium hypochlorite (NaOCl) with a pH of 12 – 13.5 were used. Much less acid is required to adjust the pH value, enabling savings of up to 80%.

The hydrogen, which is always being produced during electrolysis is strongly diluted with fresh air through an ATEX 95 approved fan and discharged safely.

Both the salt dissolving and diluting water comes from a softener unit - integrated in the system, preventing the formation of lime deposits and ensuring the long service life of the electrolytic cell.

There is therefore no need for acid rinsing of the machine.

Electrolysis systems of type CHLORINSITU® II are especially suitable for applications where a robust and clearly laid out technology is required and where the entrainment of residual sodium chloride into the water being treated is not a problem.

Your benefits

- ✓ Robust, simple technology
- ✓ Safe system control with remote diagnosis by Remote Control Engineer
- ✓ Cost-effective operation thanks to the use of sodium- or potassium chloride as an inexpensive raw material and lower chemical consumption for pH adjustment
- ✓ Compact, space-saving design
- ✓ Improved working conditions for operating personnel
- ✓ No risk of confusing dangerous chemical tanks

Technical details

- ✓ Modern Siemens PLC with large illuminated display Simatic TP 7 Comfort panel
- ✓ Smartview feature on Simatic TP 7 Comfort panel optional
- ✓ Integrated Remote Control Engineer for remote diagnosis and troubleshooting

Field of application

- ✓ Agricultural application – based on KCl (Potassium Chloride) salt
- ✓ Potable water
- ✓ Process water
- ✓ Waste water
- ✓ Swimming pool water - outdoor pools

Scope of delivery:

Electrolysis systems of type CHLORINSITU® II are mounted, ready-wired with a PLC, in a powder-coated stainless steel frame in the control cabinet. They include a Remote Control Engineer for remote diagnosis and troubleshooting, integrated water softener system, open tubular cells, ATEX 95 compliant hydrogen ventilation system and separate salt dissolving tanks and level monitoring unit. The system also includes Ultrasonic level sensors to be mounted in the (day)storage tank to be set up on site for sodium- or potassium hypochlorite.

A duplex water softener is fitted as standard for systems producing more than 1,800 g/h.

Automatic monitoring of water hardness downstream of the softening system can be offered as an option.

Note:

Electrolysis systems of type CHLORINSITU® II, III, V and V Plus are offered and planned to meet customer specifications. This is true both for the system documentation and the subsequent supply of spare parts and maintenance.

Technical Data CHLORINSITU® II

Power supply: 1 x 230 V (50 – 150 g/h) (VAC/1P/N/PE/50 Hz)

Power supply: 3 x 400 V (> 200 g/h) (VAC/3P/N/PE/50 Hz)

Capacity	Fuse	Power uptake	Max. salt consumption	Max. volume of process water	Product outlet Height	Dimensions L x W x H (mm)	Brine tank	Recomm. capacity storage tank
g/h	A	kW	kg/d	l/h	mm	mm	liter	liter
50	16	0.78	4	10	1,188	1,050 x 600 x 1,550	130	300
100	16	1.15	8	20	1,589	1,250 x 600 x 2,000	130	500
150	16	1.53	12	30	1,589	1,250 x 600 x 2,000	200	700
200	3 x 16	1.90	16	40	1,589	1,250 x 600 x 2,000	200	1,000
300	3 x 16	2.65	24	60	1,589	1,250 x 600 x 2,000	200	1,500
400	3 x 16	3.40	32	80	1,589	1,250 x 600 x 2,000	200	2,000
500	3 x 20	4.15	40	100	1,589	1,250 x 600 x 2,000	380	2,500
600	3 x 25	4.90	48	120	1,589	1,250 x 600 x 2,000	380	3,000
800	3 x 35	6.40	65	160	1,589	1,250 x 600 x 2,000	380	3,500
1,000	3 x 35	7.90	80	200	1,589	1,250 x 600 x 2,000	520	4,500
1,200	3 x 50	9.40	95	240	1,589	1,250 x 600 x 2,000	520	5,500
1,400	3 x 50	10.90	110	280	1,589	1,250 x 600 x 2,000	520	6,000
1,600	3 x 63	12.40	130	320	1,589	1,250 x 600 x 2,000	760	7,000
1,800	3 x 63	13.90	155	360	1,589	1,650 x 600 x 2,000	760	8,000
2,000	3 x 63	15.40	175	400	1,589	1,650 x 600 x 2,000	760	9,000
2,200	3 x 80	16.90	190	440	1,589	1,650 x 600 x 2,000	760	10,000
2,400	3 x 80	18.40	210	480	1,589	1,650 x 600 x 2,000	760	11,000