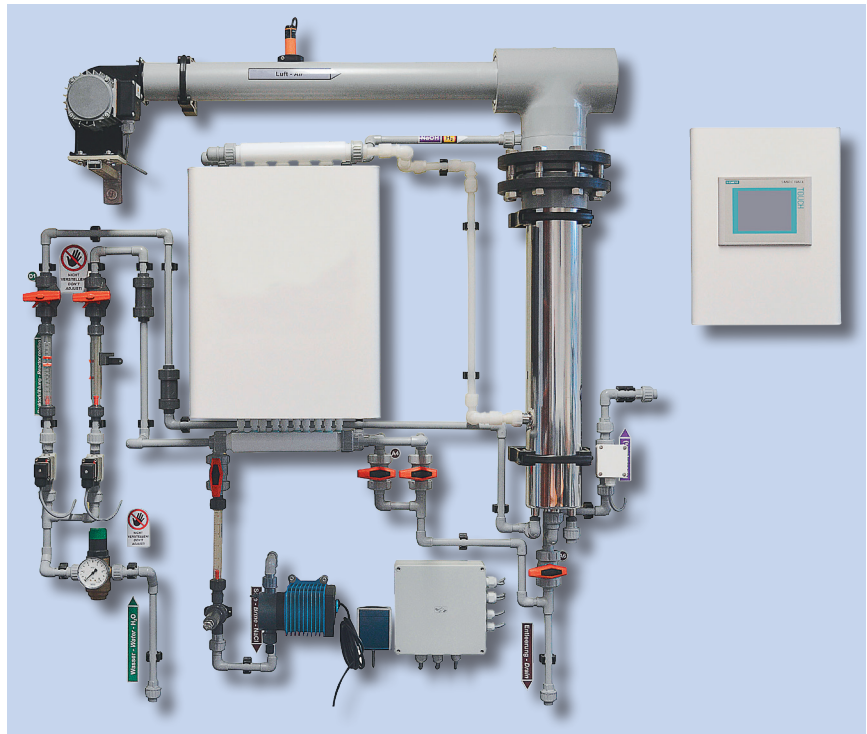


1.1.1.

DOSADes Membrane electrolysis

Demand-controlled and non-hazardous sodium hypochlorite production for disinfection of drinking water or pool water, for example, in a closed circuit – right on-site.



Product description:

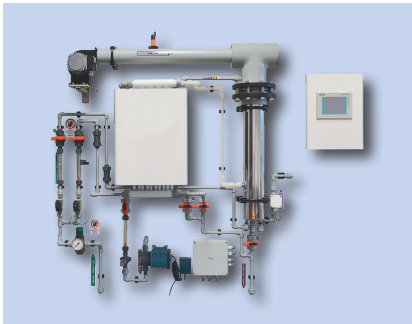
- Unit producing sodium hypochlorite (NaClO, disinfection agent)
- Fully automatic product production on site (storage in product reservoir onsite)
- Safe handling through closed system and low concentration
- Easy operator guidance
- Disinfectant production at low cost

Areas of application:

- Unit producing sodium hypochlorite (NaClO, disinfection agent)
- Fully automatic product production on site (storage in product reservoir onsite)
- Safe handling through closed system and low concentration
- Easy operator guidance
- Disinfectant production at low cost

Scope of supply:

- **DOSADes Membrane electrolysis:**
 - Unit as shown above, or with adapted capacity
 - Sturdy mounting board (ready to be connected)
 - Control cabinet
 - Storage tank
 - Water softening unit



Process description:

- By means of electrolysis a sodium hypochlorite solution is produced from a sodium chloride solution made of softened water and standardised salt (in compliance with DIN 14808), the so-called brine, and again softened water. During this reaction, hazard-free base products (water and salt) dissociate by means of electrolysis to form chlorine, sodium chloride solution and hydrogen. The hydrogen is highly diluted and then discharged. Sodium hydroxide solution and chlorine react to form a 3 % sodium hypochlorite solution that is conducted to a product storage tank.

Ordering data:

Type:	Capacity: h g Cl ₂ /h	Capacity: d kg Cl ₂ /d	Item number:
Membrane electrolysis 200	200	4.8	60196000
Membrane electrolysis 300	300	7.2	60196010
Membrane electrolysis 400	400	9.6	60196020
Membrane electrolysis 500	500	12.0	60196040
Membrane electrolysis 1000	1000	24.0	60196050
Membrane electrolysis 1500	1500	36.0	60196060
Membrane electrolysis 2000	2000	48.0	60196070
Membrane electrolysis 2500	2500	60.0	60196080
Membrane electrolysis 3000	3000	72.0	60196090
Membrane electrolysis 4000	4000	96.0	60196100
Membrane electrolysis 5000	5000	120.0	60196110
Membrane electrolysis 6000	6000	144.0	60196120

Technical data:

Parameter:	Concentration:	Min. salt consumption:	Water consumption:	Inlet pressure:	Softening capacity:	Net weight:	Footprint:	Operating temperature**:
Type:	g Cl ₂ /l	kg/h	l/h*	bar	°dH	kg	m ²	°C
200	25-30	0.42	~ 20	≥ 3	< 0.1	~ 150	~ 5	10-0
300		0.63	~ 30			~ 166	~ 5	
400		0.84	~ 40			~ 190	~ 5	
500		1.06	~ 50			~ 218	~ 6	
1000		2.15	~ 100			~ 362	~ 8	
1500		3.20	~ 150			~ 406	~ 10	
2000		4.25	~ 200			~ 444	~ 10	
2500		5.20	~ 250			~ 489	~ 12	
3000		6.25	~ 300			~ 658	~ 15	
4000		8.35	~ 400			~ 789	~ 18	
5000		10.55	~ 500			~ 878	~ 20	
6000		12.55	~ 600			~ 1170	~ 26	

(*Drinking water, 5 ... 15 °C, softened, ** Valid for cooled sections. Uncooled sections can heat up to 55 °C.)

Technical data:

Parameter:	Energy consumption:	Electrode voltage:	Electrode current:	Water consumption (cooling):	Water consumption (product):	Total water consumption:
Type:	kVA	VDC	ADC	liter	liter	liter
200	2.4	8–10	80 ... 90	~ 12	~ 8	~ 20
300	3.2	12–15		~ 18	~ 12	~ 30
400	4.2	6–20		~ 24	~ 16	~ 40
500	5	20–25		~ 30	~ 20	~ 50
1000	10	40–50		~ 60	~ 40	~ 100
1500	15	60–75		~ 90	~ 60	~ 150
2000	20	80–100		~ 120	~ 80	~ 200
2500	25	100–125		~ 150	~ 100	~ 250
3000	30	120–150		~ 180	~ 120	~ 300
4000	40	160–200		~ 240	~ 160	~ 400
5000	50	200–250		~ 300	~ 200	~ 500
6000	60	240–300		~ 360	~ 240	~ 600

All units

Electrolysis cells:	Half-life of the NaClO solution at:	pH of the NaClO solution:	Max. sound pressure level:	Exhaust air with hydrogen share:	Operating pressure:
	15 °C	pH	dB(A)	m ³	bar
(all units)	> 4 days	~ 12	< 70	150	< 1

