

PEM WATER ELECTROLYSIS BIPOLAR PLATE

■ MAIN COATING CHARACTERISTICS

- Maximum corrosion resistance
- H₂ embrittlement protection
- Low contact resistance
- Efficient thermal conductivity
- Low cost per unit



ADVANTAGES

- In-house expertise and quality validation testing of your samples with full data documentation and test results.
- Robust design, simulation capability to verify process and plate designs prior to production.
- Equipment throughput capacity allows for rapid industrial scalability from prototyping production to MW capacity.
- Environmentally friendly facility with material recycling capacity.

PRODUCT MATRIX

Parameter	Loki				Baldr				Tyr				Hel			
Number of Cells	25	50	75	100	25	50	75	100	25	50	75	100	25	50	75	100
Active Area/cm²	78	78	78	78	155	155	155	155	311	311	311	311	624	624	624	624
H ₂ Flow Rate/NLPM	41	82	122	163	82	163	245	327	163	327	490	653	327	653	980	1306
O ₂ Flow Rate/NLPM	20	41	61	81	41	81	122	162	81	162	243	324	162	324	487	649
Max Water Flow Rate/LPM	5	10	15	20	10.0	20	30	40	20.0	40	60	80	40.3	81	121	161
Water Consumption Rate/L/hr	1.96	3.92	5.89	7.85	3.9	7.85	11.8	15.7	7.8	15.7	23.5	31.4	15.7	31.4	47.1	62.8
Thermal Power/kwt	1.75	3.50	5.25	7.00	3.5	7.00	10.5	14.0	7.0	14.0	21.0	28.0	14.0	28.0	42.0	56.0
Electric Input Power/kwe	10	21	31	41	21	41	62	83	41	83	124	166	83	166	249	332
Voltage/V(DC)	45	89	134	178	45	89	134	178	45	89	134	178	45	89	134	178
Current/A(DC)	233	233	233	233	466	466	466	466	932	932	932	932	1870	1870	1870	1870

Parameter	Freya				Njord				Odin			
Number of Cells	25	50	75	100	25	50	75	100	25	50	75	100
Active Area/cm²	1247	1247	1247	1247	2499	2499	2499	2499	5004	5004	5004	5004
H ₂ Flow Rate/NLPM	653	1306	1959	2612	1306	2612	3919	5225	2612	5225	7837	10450
O ₂ Flow Rate/NLPM	324	649	973	1298	649	1298	1946	2595	1298	2595	3893	5190
Max Water Flow Rate/LPM	80.5	161	242	322	161.0	322	483	644	322	645	967	1289
Water Consumption Rate/L/hr	31.4	62.8	94.2	126	62.8	126	188	251	126	251	377	502
Thermal Power/kwt	28.0	56.0	84.0	112	56.0	112	168	224	112	224	336	448
Electric Input Power/kwe	166	332	498	664	332	664	996	1327	664	1327	1991	2655
Voltage/V(DC)	45	89	134	178	45	89	134	178	45	89	134	178
Current/A(DC)	3750	3750	3750	3750	7500	7500	7500	7500	15000	15000	15000	15000

SINGLE CELL PERFORMANCE SPECIFICATIONS

