Stack electric							
Current density *	A/cm2	0.05	0.10	0.20	0.40	0.60	1.00
Ave cell voltage *	mV	839	797	756	703	661	588
Current (gross)	A	15	30	60	120	180	300
Voltage	V	168	159	151	141	132	118
Power (gross)	kW el	3	5	9	17	24	35

Stack anode							
Stoichiometry *	-	3.0	2.0	1.3	1.3	1.3	1.3
Hydrogen flow	Nl/min	62.7	83.6	108.7	217.4	326.2	543.6
Hydrogen flow	g/sec	0.09	0.13	0.16	0.33	0.49	0.81

Stack cathode in							
Stoichiometry *	-	2.2	2.0	1.8	1.8	1.8	1.8
Air flow	Nl/min	109.5	199.1	358.4	716.8	1075.2	1792.1
Air flow	g/sec	2.4	4.3	7.7	15.4	23.2	38.6
Air flow	kg/h	8.5	15.4	27.8	55.6	83.4	138.9

Stack thermal							
P therm LHV	kW	1.2	2.7	6.0	13.2	21.3	39.9
P therm HHV	kW	1.9	4.1	8.7	18.7	29.5	53.6
delta HHV - LHV	kW	0.7	1.4	2.7	5.5	8.2	13.7
Coolant inlet temp *	°C	60	60	60	60	60	60
Coolant outlet temp *	°C	61	63	66	67	68	70
Coolant delta T	K	1	3	6	7	8	10
Coolant flow LHV [2]	l/min	17.9	13.1	14.3	27.1	38.3	57.4
Coolant flow HHV [2]	l/min	27.7	19.7	20.8	38.3	53.1	77.0

Stack cathode out							
RH *	%	100%	100%	100%	100%	100%	100%
pws at coolant outlet temp	kPa abs	20.84	22.83	26.12	27.30	28.52	31.12
Pressure out	kPa abs	120	120	125	131	137	149
Product water out	g/sec	0.3	0.6	1.1	2.2	3.4	5.6
Consumed oxygen	g/sec	0.2	0.5	1.0	2.0	3.0	5.0
Dry cathode out	g/sec	2	4	7	13	20	34
Wet cathode out	g/sec	2	4	8	16	24	39
Enthalpy out	kJ/kg	405	445	497	499	500	503
P enthalpy out	kW	1	2	3	7	10	17

Stack power in (hydrogen)							
Hydrogen feed	mol/sec	0.05	0.06	0.08	0.16	0.24	0.40
P chem H2 LHV	kW	11	15	20	39	59	98
P chem H2 HHV	kW	13	18	23	46	69	116

Stack efficiency (LHV)							
Electric efficiency	%	67%	64%	60%	56%	53%	47%
Fuel efficiency	%	22%	32%	46%	43%	41%	36%

* given values

[1] 20°C and 50% compressor efficiency

[2] WEG 50vol% at 60°C