

System Specifications

Specification	Addressing Customer Spec	Description	Value	Accuracy	Results
1	5	Temperature Upper Limit	70°C	+/- 1°	Pass
2	5	Temperature Lower Limit	0°C	+/- 1°	Pass
3	7	Voltage Upper Limit	100V	+/- 1V	Pass
4	7	Voltage Lower Limit	0V	+/- 1V	Pass
5	8	Current Upper Limit	5A	Not Controlling	-
6	8	Current Lower Limit	100µA	Not Controlling	-
7	10	Humidity	< 15%	+/- 5%	Pass
8	1	Spacing Upper Limit	5cm	+/- 1mm	Pass
9	1	Spacing Lower Limit	1cm	+/- 1mm	Fail
10	2	(2x) Spacing Upper Limit	3cm	+/- 1mm	Non-Ideal Pass
11	2	(2x) Spacing Lower Limit	1 cm	+/- 1mm	Non-Ideal Pass
12	15	Labview Emergency Stop	N/A	+/- 1sec	Pass
13	3	Labview timer	N/A	+/- 1sec	Pass
14	6	Upper Magnetic Stirrer Speed	N/A	N/A	Pass
15	6	Lower Magnetic Stirrer Speed	N/A	N/A	Pass
16	9	Display Voltage (Labview)	N/A	+/- 1V	Pass
17	9	Display Temperature (Labview)	N/A	+/- 1°	Pass
18	9	Display Current (Labview)	N/A	Not Controlling	Pass
19	11	Upper Explosive Limit of H _{2(g)}	75%	Avoid	Pass
20	11, 14	Lower Explosive Limit of H _{2(g)}	4%	Avoid	Pass
21	19	Ease of Loading Materials	10min	+/- 1min	Pass
22	19	Ease of Unloading Materials	10min	+/- 1min	Pass

Comments
Chiller control parameters exceed this value
Chiller control parameters exceed this value
Power supply will provide up to upper limit
Power supply will provide down to the lower limit
Did not need to control
Did not need to control
Low humidity of 5.1%
Measurement of 5.10 cm
Measurement of 3.50 cm, but can use the wings to be close to the 1cm mark
Measurement of 4.85 cm
Measurement of 1.20 cm
Implemented within the labview
Implemented within the labview
Speed setting at 5 out of 10
Speed setting at lowest
Implemented within the labview
Implemented within the labview
Implemented within the labview
Can't reach this value
Even with 4 days of running, this value can't be reached
Lowering electrodes instead of raising the reactor
Lowering electrodes instead of raising the reactor