

STACKING TEST

GROUP 4

2nd December 2016
Verison 1

Abstract

This test is used to see how many blue styrofoam blocks can be stacked. We noticed after seven tests that it was able to pick up a maximum of 2 blocks.

Contents

1 BACKGROUND	1
1.1 Edit History	1
1.2 Test Information	2
2 GOAL	2
3 PROCEDURE	2
4 EXPECTED RESULT	3
5 TEST REPORT	3
6 CONCLUSION	3
7 ACTION	3
8 DISTRIBUTION	3

1 BACKGROUND

1.1 Edit History

Jake Zhu: 2016-10-28, Initial set up

Mamoun Benchekroun: 2016-11-11, Added abstract section

Jake and Mamoun: 2016-11-24:, Added Procedure, Expected Result and Added Table

Jake Zhu 2016-11-30, Added Conclusion, Action and Distribution

1.2 Test Information

Tester: Mamoun, Richie, Jake

Author: Mamoun, Jake

Hardware Version: 3.03

Software Version: 04d37f5

2 GOAL

To find out the max number of blocks that can be stacked.

3 PROCEDURE

Setup/Assumptions:

1. Assume that the robot has been built with the light sensor and ultrasonic sensor on its centre.

Test:

1. Upload the StackingTest.java onto the robot
2. Set the green zone at a specific location.
3. Put the robot at a specific point outside the green zone.
4. Press a button to close the grabbers
5. Place the blue block within the closed grabbers
6. Push another button to tell it to go back into the green zone.
7. Record whether it is able to stack several blocks. Make note if the tower falls or if
8. Repeat steps 2-7 4 times in order to figure out the max number of blocks that can be stacked.

4 EXPECTED RESULT

We expect the robot to be able to stack more than one block.

5 TEST REPORT

Trial	Blocks
1	1
2	2
3	1
4	1
5	2
6	1
7	1

6 CONCLUSION

The robot does not do a very good job of stacking. It was only able to stack in two tests. We do not expect it to work very well during the final demo.

7 ACTION

An error in getting the robot back to the correct position is causing this error. We believe that the software team would have to correct their

8 DISTRIBUTION

Software Team