#### SORTING MACHINE BASED ON WEIGHT BY USING LOAD CELL

By

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#### BACHELOR'S DEGREE

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#### STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgment is made in the thesis.

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#### **ABSTRACT**

#### SORTING MACHINE BASED ON WEIGHT BY USING LOAD CELL

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A sorting engine is a machine capable of sorting a large group of different objects into a specific category, such as colour, weight, size, or shape. This type of machine is widely used in industry. Most of the sorting of escargot in Indonesia is still done manually. The machine that I developed is a sorting machine by weight but uses a Load cell as a weight. Load cells help improve sorting accuracy. The object is placed on the carrier, the carrier will move along the conveyor chain. There is a servo that will drop the object into the tray labeled according to the weight category (small, medium, and large). In this way, heavier objects fall earlier and lighter objects fall later. By applying this sorting method, industrial productivity will increase. At the same time, it reduces the chances of errors occurring.

Keywords: Load Cell, Weight Sorting, Arduino, Chain Conveyor, Inventor.



### **DEDICATION**

I dedicate this works to God, my advisor, my family, my friends, the people closest to me who always support me, and of course for the future of my beloved country, Indonesia.



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# **TABLE OF CONTENTS**

STATEMENT BY THE AUTHOR	2
ABSTRACT	3
DEDICATION	5
ACKNOWLEDGEMENTS	6
TABLE OF CONTENTS	7
LIST OF FIGURES	10
LIST OF TABLES	12
CHAPTER 1 - INTRODUCTION.	
1.1 Background & Problem Statement	13
1.2 Significance of study	14
1.3 Scope and limitations	14
1.4 Research Questions	
1.5 Hypothesis	
CHAPTER 2 - LITERATURE REVIEW	15
2.1 Theoretical Perspectives	15
2.1.1 Autodesk Inventor Professional	15
2.1.2 3D Print	16
2.1.3 Pulse Width Modulation (PWM)	17
2.1.4 DC Motor	18
2.1.6 Sensor LoadCell	20
2.1.7 HX711	21
2.1.8 Sensor Proximity Infrared	22
2.1.9 Servo SG90	23

2.2 Previous Work or Design	24	
2.2.1 Adrian Tanadi thesis in 2017		
2.2.2 Ignatius Brian Timothy Thesis in 2018	25	
2.2.3 Kevin Febianto Galiny Thesis in 2019	26	
2.2.4 George Hagi Thesis in 2020	27	
2.3 Objective	28	
CHAPTER 3 – DESIGN AND METHODOLOGY	29	
3.1 Conceptual Design	29	
3.2 System Block Diagram / Algorithm Flowchart	30	
3.3 Detail design and Components Design	31	
3.3.1 Frame	31	
3.3.2 Chain	32	
3.3.3 Gear	32	
3.3.4 Shaft		
3.3.5 Pillow Block		
3.3.6 Servo	34	
3.3.7 Infrared Sensor	34	
3.3.8 Acrylic	35	
3.3.9 Weighing Bridge	36	
3.3.10 Carrier	37	
3.3.11 Electrical Wiring	38	
3.3.12 Dc Motor	39	
3.3.13 PWM Speed Control	40	
3.3.14 Program	41	
3.4 Design Calculation and/or Modeling	43	
3.4.1 Motor Calculation	43	
3.4.2 Chain Length Calculation	44	

3.5 Prototype fabrication	
3.5.1 Frame	
3.5.2 Chain conveyor	
3.5.3 Acrylic	
3.5.4 Carrier, Bracket, and Weighing Bridge48	
CHAPTER 4 –TESTING AND DISCUSSION OF RESULTS49	
4.1 Testing and Experimental Plans	
4.2 Test Results	
4.2.1 Sorting Test	
4.2.2 ANOVA Analysis	
4.2 Discussion of Results and Error Diagnoses	
CHAPTER 5 – CONCLUSIONS AND RECOMMENDATIONS55	
5.1 Conclusions	
5.2 Recommendations for future work	
GLOSSARY	
REFERENCES	
APPENDIX 59	
CURRICULUM VITAE	

## LIST OF FIGURES

Figure 2. 1 Autodesk Inventor Professional	15
Figure 2. 2 3D Printer	16
Figure 2. 3 DC Motor	18
Figure 2. 4 Arduino	19
Figure 2. 5 Load Cell Sensor	20
Figure 2. 6 Load Cell Wiring	20
Figure 2. 7 HX711	21
Figure 2. 8 Infrared Proximity Sensor	22
Figure 2. 9 Infrared Sensor Working System	22
Figure 2. 10 Servo SG90.	23
Figure 2. 11 Adrian Tanadi's Thesis	24
Figure 2. 12 Ignatius Brian Timothy's Thesis	
Figure 2. 13 Kevin Febianto Galiny's Thesis	26
Figure 2. 14 George Hagi's Thesis	27
Figure 3. 1 Overall Sorting Machine Design	29
Figure 3. 2 Sorting Machine System Flowchart	30
Figure 3. 3 Sorting Machine Frame Design	31
Figure 3. 4 Chain RS 40-1 K1 1L	32
Figure 3. 5 Gear RS 40 x 28T	32
Figure 3. 6 Shaft Design for Chain Conveyor	33
Figure 3. 7 Pillow Block Bore 15mm	33
Figure 3. 8 Servo SG90	34
Figure 3. 9 Infrared Sensor	34
Figure 3. 10 Acrylic Design for Sorting Machine	35
Figure 3. 11 Weighing Bridge Design for Sorting Machine	36
Figure 3. 12 Carrier Design for Sorting Machine	37
Figure 3. 13 Electrical Wiring for Sorting Machine	38
Figure 3. 14 DC Motor for Sorting Machine	39
Figure 3. 15 PWM Speed Control for Sorting Machines	40

Figure 3. 16 Void Store Weight	41
Figure 3. 17 Void Check Weight	41
Figure 3. 18 Void Carrier Pass	42
Figure 3. 19 Void Loop	42
Figure 3. 20 The Formula for Chain Length	44
Figure 3. 21 Finished Frames for Sorting Machine	45
Figure 3. 22 Finished Chain Conveyor for Sorting Machine	46
Figure 3. 23 Finished Acrylic for Sorting Machine	47
Figure 3. 24 Finished Weighing Bridge for Sorting Machine	48
Figure 3. 25 Finished Carriers and Brackets for Sorting Machines	48
Figure 4. 1 Results of The Prototype	49
Figure 4. 2 Graph of All Sorting Test Results	



## LIST OF TABLES

Table 3. 1 Dimensions of The Frame	31
Table 3. 2 Components Connection to Arduino's Pin	38
Table 3. 3 DC Motor Spec	39
Table 3. 4 PWM DC Motor Controller Spec	40
Table 3. 5 Known Numbers	43
Table 4. 1 Time to change with the next carrier = 1part/2.1s, Sorting success = 83.3%	
Table 4. 2 Time to change with the next carrier = 1part/1.4s, Sorting success = 93.3%	⁄ <sub>0</sub>
	51
Table 4. 3 Time to change with the next carrier = $1$ part/1s, Sorting success = $50\%$	51
Table 4. 4 Time to change with the next carrier = $1$ part/0.8s, Sorting success = $0\%$	51
Table 4. 5 Time to change with the next carrier = $1 \text{part}/0.7 \text{s}$ , Sorting success = $26.6\%$	<b>6</b>
	51
Table 4. 6 Time to change with the next carrier = 1part/0.5s, Sorting success = 10%	52
Table 4. 7 Time to change with the next carrier = $1$ part/0.37s, Sorting success = $0$ %	52
Table 4. 8 Time to change with the next carrier = $1$ part/0.3s, Sorting success = $0\%$	52
Table 4. 9 Anova Analysis	53