

## CHAPTER 7

### CONCLUSION

#### 6.1. Conclusion

Based on analysis and discussion on chapter 5, it can be answered:

1. The Vulcanized silicone rubber and its casting product are good. The product is as detail as the master, which is mean the cured silicone rubber is also has sharp imprints.



Figure 7.1. Both Side of Silicone Rubber Mold

---



(a) The Imprints

(b) Casting Product

Figure 7.2. Result of Vulcanizing and spin casting process

2. These are the specification of vulcanizer machine for spin casting technology

Table 7.1. Specification Table

SPECIFICATION	
Dimension	550mm x 455 mm x 100mm
Weight	81 kg
Pressure	2500 pounds max
Dimension of frame mold	Ø300mm x 35mm max
POWER SUPPLY	
Input Voltage	220V AC,50/60 Hz
Power Consumption	4000 W max
Operation Temperature	30°C - 400°C max
PRICE	
Vulcanizer	Rp. 8.500.000,00

Construction of The Vulcanizer is shown at Appendix

3. Machine cost per hour for vulcanizer is IDR 6,965.00

### **6.2. Suggestion**

For future research, it is suggested to conduct the research focus on the silicone rubber as a mold material for spin casting technology; hence the best silicone rubber for spin casting technology can be found.



## REFERENCES

Mott, Robert L., 1999 *Machine Elements in Mechanical Design*, New Jersey : Prentice-Hall, Inc.

Nayatani, Y., Eiga, T., Futami, R., Miyagawa, H., 1984, *The Seven New QC Tools Practical Applications of Managers*, Japan: 3A Corporation

Prasmadi, Bayu., 2003, *Perancangan Alat Cetak Pakan Ayam*, Skripsi Program Studi Teknik Industri Fakultas Teknik Industri Universitas Atma Jaya Yogyakarta.

Sularso, Ir., Suga, Kiyokatsu, 1997, *Dasar Perencanaan dan Pemilihan Elemen Mesin*, Jakarta: Pradnya Paramita

Vezzetti, E., 2007, *Spin casting characterization: An experimental approach for the definition of runners design guidelines*, Journal of Materials Processing Technology, Article in Press, doi:10.1016/j.jmatprotec.2007.04.134

<http://en.wikipedia.org/wiki/Asbestos>, 2009, Asbestos, accessed on 23 May 2009 at 05:00

<http://en.wikipedia.org/wiki/CastIron>, 2009, Cast Iron, accessed on 23 May 2009 at 04:50

<http://en.wikipedia.org/wiki/Thermocouple>, 2009,  
Thermocouple, accessed on 9 February 2009 at  
20:55

<http://en.wikipedia.org/wiki/Thermostat>, 2009,  
Thermostat, accessed on 9 February 2009 at 20:30

[http://en.wikipedia.org/wiki/Shear\\_stress](http://en.wikipedia.org/wiki/Shear_stress), accessed on  
10 February 2009 at 20:48

[http://syque.com/quality\\_tools/toolbook/Tree](http://syque.com/quality_tools/toolbook/Tree) , 2009,  
Tree Diagram, accessed on 2 March 2009 at 22:00

<http://www.ebookee.com/HegbomThor>, Integrating  
Electrical Heating Element.pdf, Heating Element,  
accessed on 25 February 2009 at 05:00

<http://www.ebookee.com/Incropera>, Fundamentals of Heat  
and Mass Transfer.pdf, Heating Element, accessed  
on 25 February 2009 at 05:30