VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY
HCM UNIVERSITY OF TECHNOLOGY
FACULTY OF MECHANICAL ENGINEERING - MECHATRONICS DEPARTMENT

ENGINEERING INTERNSHIP REPORT

Air Compressor Modeling using MATLAB

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Acknowledgements

Acknowledgements should be expressed as a special thanks to staff members of industrial companies, your supervisors, your collaborator/teammates. This chapter should not be longer than 1 page.

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Abstract

Describe relevancy of the project and its task/ target. A short description of the technical prerequisites for executing the project. The chapter is required by the company. In any case, it should not be longer than 1 page, ideally 1/2 page.

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Chapter 1

Overview of the Company

1.1 History of the Organization

Create a morphological box, which is a thinking in functions and sequence of work steps.

	Sub functions	Solutions of the sub functions				
		1	2	3	4	5
A	Sub function 1	**solution A1 (1) (3)**	solution A2	solution A3		
B	Sub function 2	solution B1 (1) (2) (3)	solution B2 (2)	**solution B3 (2)**	solution B45	
C	Sub function 2		solution C2 (2)	**solution C3 (1)**		solution C5

Table 1.1: A morphological box with 3 concept variants

Legend
(1) = thermal solution
(2) = mechanical solution
(3) = MEM solution

For each bold option, if there are many concept variants, we also use Table 1.2. In this example, we choose sub function B1 as the optimal solution with 3 variants.

	Sub functions	Solutions of the sub functions		
		1	2	3
B	Sub function 2			
Ba	Type	Simple	Complex	Mixed
Bb	Shape	Round	Square	Triangle
Bc	Size (m)	7x2	2x2	3x5

Table 1.2: A morphological box with 3 concept variants

Chapter 2

Summary and Conclusions

Last chapter. Provide discussions: what should be done/ has been reached; difficulties in the making of this project. Describe logical relation of the previous chapters. (optional) give advice for a reasonable continuation of the project.

During the internship, I had a chance to get acquainted with a new working environment. I have accumulated experience in industry knowledge as well as experience skills above Marghitu, 2009.

I was trained in problem solving skills in many stages, trying to complete the job in the shortest time, boldly exchanging and sharing knowledge. At the same time, it also fosters a lot of knowledge about graphic software as well as programming skills to solve the problems learned in school but professionally and saves more time Khac Liem, 1984.

Shortcomings: the skill is not mature which still takes a long time to execute; the ability to think and propose design plans is limited due to the lack of practical experience and in-depth knowledge Khac Liem, 1984.

Solution: practice more software skills, add additional specialized knowledge that is lacking.

latex
mathematics
Chezy equation
Glossary name Complicated name (thuật ngữ tiếng Việt)

Appendix A

Appendix

A.1 List of Abbreviations

A.2 List of Tables

Should be limited unless the table is out of context at that part of writing How to reference table:

- abc xyz, Table A.1.

- abc xyz, see Table A.1.

- abc xyz shows the following table. (direct referencing)

- abc xyz shows Table A.1

Pr	Parameters				Pr	Parameters				Pr	Parameters			
	P_3	u_1	u_2	u_3		P_3	u_1	u_2	u_3		P_3	u_1	u_2	u_3
1	2.5	2	2	3	31	6.5	4	2	3	61	12	3	2	4
2	2.5	2	2.24	4	32	7	3	2.24	3	62	12	4	2.24	2
3	2.5	4	2.5	4	33	7	4	2.5	4	63	12.5	3	2.5	3
4	3	2	3.15	3	34	7	3	3.15	4	64	12.5	3	3.15	4
5	3	2	3.55	3	35	7	2	3.55	3	65	12.5	4	3.55	2
6	3	4	4	2	36	7	3	4	4	66	12.5	3	4	4
7	3	2	2	3	37	7.5	4	2	2	67	12.5	4	2	3
8	3	4	2.24	3	38	7.5	4	2.24	3	68	12.5	4	2.24	2
9	3.5	3	2.5	2	39	7.5	4	2.5	3	69	13	4	2.5	4
10	3.5	4	3.15	2	40	8	4	3.15	3	70	13	3	3.15	4
11	3.5	3	3.55	2	41	8	4	3.55	2	71	13	2	3.55	2

	P_3	u_1	u_2	u_3		P_3	u_1	u_2	u_3		P_3	u_1	u_2	u_3
12	3.5	3	4	4	42	8	4	4	3	72	13	3	4	2
13	4	4	2	3	43	8	2	2	3	73	13	4	2	3
14	4	3	2.24	3	44	8.5	2	2.24	2	74	13	3	2.24	3
15	4	3	2.5	4	45	8.5	2	2.5	3	75	13	2	2.5	4
16	4	4	3.15	2	46	8.5	3	3.15	2	76	13	4	3.15	4
17	4	3	3.55	3	47	8.5	2	3.55	2	77	13.5	4	3.55	4
18	4	3	4	2	48	8.5	4	4	3	78	14	3	4	2
19	4	4	2	3	49	9.5	2	2	3	79	14	2	2	4
20	4	4	2.24	3	50	9.5	4	2.24	4	80	14	3	2.24	2
21	4.5	3	2.5	2	51	10	4	2.5	4	81	14	3	2.5	4
22	4.5	3	3.15	3	52	10	4	3.15	3	82	14.5	4	3.15	4
23	5.5	4	3.55	4	53	10.5	4	3.55	4	83	14.5	3	3.55	4
24	5.5	2	4	3	54	10.5	2	4	4	84	15	3	4	2
25	6	3	2	4	55	10.5	2	2	4	85	15	2	2	3
26	6	2	2.24	4	56	10.5	2	2.24	2	86	15	4	2.24	3
27	6	4	2.5	4	57	10.5	2	2.5	2	87	15.5	3	2.5	3
28	6	4	3.15	3	58	11	4	3.15	3	88	15.5	3	3.15	4
29	6	4	3.55	3	59	11	3	3.55	3	89	16	4	3.55	2
30	6.5	2	4	3	60	11.5	2	4	4	90	16	4	4	3

Table A.1: A long table

A.3 List of Figures

Should be limited unless the figure is out of context at that part of writing

A.4 Important Standards

A.5 Bill of Materials

A.6 Drawings (in drawing roll)

Could be included in this appendix section as figures

A.7 Manufacturer Catalogues (in separate folder)

Appendix B

Drawings (if you don't have drawing rolls)

B.1   Bill of Materials

B.2   Assembly drawing

B.3   Component drawings: 1

B.4   Component drawings: 2

B.5   Component drawings: 3

Glossary

Chezy equation Chezy equation,

$$a = b + c$$

which is commonly used. 8

complicated name (thuật ngữ tiếng Việt) glossary description. 8

glossary name glossary description. 8

latex Is a mark up language specially suited for scientific documents. 8

mathematics Mathematics is what mathematicians do. 8

References

Khac Liem, L. (1984). *Huong dan Thiet ke Mon hoc Nguyen Ly May*. Service Education School HCMC.

Marghitu, D. B. (2009). *Mechanisms and Robots Analysis with MATLAB*. Dordrecht Springer.

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