

STUDY THE MICROSTRUCTURE AND
MECHANICAL PROPERTIES OF NICKEL-
ALUMINIUM INTERMETALLIC ALLOY

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STUDY THE MICROSTRUCTURE AND
MECHANICAL PROPERTIES OF NICKEL-ALUMINIUM
INTERMETALLIC ALLOY

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for the award of the degree of
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SUPERVISORS' DECLARATION

I hereby declare that I have checked the thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Bachelor of Applied Science (Honours) Material Technology.

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

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DEDICATION

It is with my deepest gratitude and warmest affection that
I dedicate this thesis to my beloved parents
Mohamad Sodikin Bin Salimin and Siti Sabariah Binti Rohani
Who give constant source of knowledge and inspiration in finishing my thesis

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TABLE OF CONTENTS

	PAGE
SUPERVISOR'S DECLARATION	iii
STUDENT'S DECLARATION	iv
DEDICATION	v
ACKNOWLEDGEMENTS	vi
ABSTRACT	vii
ABSTRAK	viii
TABLE OF CONTENTS	ix
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF SYMBOLS	xiii
LIST OF ABBREVIATIONS	xiv
CHAPTER 1 INTRODUCTION	1
1.1 BACKGROUND OF THE PROBLEM	1
1.2 STATEMENT OF THE PROBLEM	2
1.3 OBJECTIVES OF THE STUDY	2
1.4 SCOPE OF THE STUDY	3
1.5 ORGANIZATION OF THE THESIS	3
CHAPTER 2 LITERATURE REVIEW	4
2.1 METAL	4
2.2 CLASSIFICATION OF ALLOY	4
2.3 NICKEL ALUMINIUM INTERMETALLIC ALLOY	5
2.4 PREPARATION OF ALLOY	6
2.4.1 CASTING METHOD	6
2.4.2 FORGING METHOD	6
2.4.3 MECHANICAL ALLOYING METHOD	7
2.4.4 AGATE MORTAR-PESTLE GRINDING METHOD	7
2.5 HEAT TREATMENT	7

CHAPTER 3	RESEARCH METHODOLOGY	9
3.1	INTRODUCTION	9
3.2	CHEMICALS AND SOLVENT	10
3.3	EQUIPMENT	10
3.4	SAMPLE PREPARATION	10
3.5	HEAT PROCESSING	11
3.6	SAMPLE CHARACTERIZATION	12
3.6.1	X-RAY DIFFRACTION (XRD)	12
3.6.2	SCANNING ELECTRON MICROSCOPE (SEM)	13
3.6.3	VICKERS HARDNESS TEST	14
3.6.4	DENSITY DETERMINATION	14
3.4	FLOW CHART	15
CHAPTER 4	RESULTS AND DISCUSSION	16
4.1	REACTION BETWEEN NICKEL AND ALUMINIUM POWDER	16
4.2	MORPHOLOGY OF NI-AL ALLOY UNDER SEM	16
4.3	X-RAY DIFFRACTOMETER ANALYSIS	20
4.3.1	CALCULATION OF LATTICE PARAMETERS	20
4.3.2	COMPUTATION OF WILLIAMSON-HALL PLOT	26
4.4	DENSITY OF NI-AL INTERMETALLIC ALLOY	29
4.5	HARDNESS ANALYSIS	30
CHAPTER 5	CONCLUSION AND RECOMMENDATIONS	30
5.1	CONCLUSION	32
5.2	RECOMMENDATION FOR FUTURE WORK	33
REFERENCES		35

LIST OF TABLES

Table 3.1: Parameters of heat treatment for Nickel-Aluminium intermetallic alloy.....	11
Table 4.1: The comparison result of density for Ni-Al intermetallic alloy.....	28
Table 4.2: Hardness testing result of Ni-Al alloy before and after sintered.....	30

LIST OF FIGURES

Figure 2.1: Schematic temperature/time cycle featuring the classical sintering process..	8
Figure 3.1: Binary phase diagram of Ni – Al system.....	9
Figure 3.2: The schematic diagram of working principle of XRD instrument.....	12
Figure 3.3: Interaction between electron and specimen in SEM instrument.....	13
Figure 3.4: Flow chart of research activity.....	15
Figure 4.1: XRD pattern for NiAl ₃ alloy after sintered at 800 °C.....	17
Figure 4.2: XRD patterns for Ni ₂ Al ₃ alloy after sintered at 550 °C.....	18
Figure 4.3: XRD pattern for NiAl alloy after sintered at 600 °C.....	19
Figure 4.4: XRD pattern for Ni ₅ Al ₃ after sintered at 550 °C.....	20
Figure 4.5: XRD pattern for Ni ₃ Al after sintered at 1100 °C.....	21
Figure 4.6: Williamson-hall plot for NiAl ₃ alloy.....	22
Figure 4.7: Williamson-hall plot for Ni ₂ Al ₃ alloy.....	22
Figure 4.8: Williamson-hall plot for NiAl.....	23
Figure 4.9: Williamson-hall plot for Ni ₅ Al ₃ alloy.....	23
Figure 4.10: Williamson-hall plot for Ni ₃ Al alloy.....	24
Figure 4.11: SEM images of NiAl ₃ alloy at (a) x2000 and (b) x20000 magnification...25	25
Figure 4.12: SEM images of Ni ₃ Al alloy at (a) x2000 and (b) x20000 magnification...25	25
Figure 4.13: SEM images of NiAl alloy at (a) x2000 and (b) x20000 magnification.....26	26
Figure 4.14: SEM images of Ni ₅ Al ₃ alloy at (a) x2000 and (b) x20000 magnification..26	26
Figure 4.15: SEM images of Ni ₂ Al ₃ alloy at (a) x2000 and (b) x20000 magnification..26	26
Figure 4.16: Hardness value of different composition of Ni-Al intermetallic alloy pallet after sintering at their specific temperature.....	29

LIST OF SYMBOLS

\sim	-	Approximately
%	-	Percent
μ	-	Micron (10^{-6})
λ	-	Wavelength
2θ	-	Bragg angle
$^{\circ}\text{C}$	-	Degree Celcius
F g^{-1}	-	Farad per gram
π	-	3.14159
r	-	Radius
h	-	Height
g/cm^3	-	Gram per centimeter cube
kgf	-	Kilogram-force
HV	-	Vickers pyramid number
ρ	-	Density

LIST OF ABBREVIATIONS

NI-AL	-	Nickel Aluminium intermetallic Alloy
MA	-	Mechanical Alloying
XRD	-	X-ray Diffraction
SEM	-	Scanning Electron Microscopy