

PART PROGRAMMING AND MANUFACTURING
OF VARIOUS COMPONENTS
ON CNC VERTICAL MILLING MACHINE

by

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Project Report

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ABSTRACT

This project deals with the Manufacturing of Various components on CNC vertical milling machine.

First the theory of the project was prepared with the basic principles of Numerical Control following a general study of Bridgeport IMKII, TNC 155 Heidenhain control. Also a few words about programming, machining forces, trigonometric formulas and cost comparisons.

The main part of this project is the part programming for the manufacture of two (2) complex geometrical components and the geometrical shape of "CYPRUS" with "Troodos", "Pentadactylos" and the "CYPRUS - letters", using linear interpolation, circular interpolation, canned cycles and sub-routines.

CONTENTS

PAGE

Acknowledgements

Abstract

contents

introduction

CHAPTER 1:

1.	Principles of Numerical Control	1
1.1	General	1
1.2	Control Modes.	3
1.2.1	Point to point control with straight line machining.	4
1.2.2	Continuous path control.	5
1.3	Types of interpolation	6
1.3.1	Linear interpolation	6
1.3.2	Circular interpolation	7
1.4	Input Data	8
1.4.1	Geometrical Data	9
1.4.2	Technological Data	9
1.5	Precision	10
1.6	Absolute and Incremental Dimensions	11
1.6.1	Absolute	11
1.6.2	Incremental	12
1.7	Zero Points and Reference points	13
1.7.1	Machine Zero Point	13
1.7.2	Machine Reference Point	14
1.7.3	Workpiece Zero Point and Program Zero point.	14
1.8	Canned Cycles	14
1.8.1	Categories	15
1.9	Subroutines	17
1.9.1	Programming of Subroutines.	18

CHAPTER 2

2. BRIDGEPORT Vertical Milling Machine Series I Interact MK 2.	20
2.1 Bridgeport IMKII features.	20
2.2 Machine Concept	21
2.3 Brief Description of Control.	22
2.4 Machine Control Features.	23
2.4.1 Power enable button.	23
2.4.2 Coolant 3 way switch	23
2.4.3 Cycle start / stop buttons	24
2.4.4 Emergency stop button	24
2.4.5 Feedrate potentiometer	24
2.4.6 Spindle speed override	24
2.5 HEIDENHAIN TNC 155	25
2.5.1 Programming at the machine	28
2.5.2 External Programming	28
2.5.3 Program management	29
2.5.4 Central tool memory	29
2.5.5 Test graphics	30
2.6 Heidenhain FE 401	31
2.6.1 How to storage a program.	32

CHAPTER 3

3. Programs and programming	33
3.1 Introduction	33
3.2 Definition	33
3.3 Design and contents of the NC program	34
3.3.1 Instructions of a block	35
3.4 Programming procedure	36
3.4.1 Manual Programming	37
3.4.1.1 Procedure of manual programming	38
3.4.1.2 Requirements for manual Part Programming	39
3.5 Safety	39

CHAPTER 4

4. Machining forces	41
4.1 Cutting speed	41
4.2 Rate of Metal Removal	42
4.3 Horse power	42
4.4 Torque on Spindle due to milling	43
4.5 Machining Time.	43

CHAPTER 5

5. Trigonometric formulas for programmer	44
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CHAPTER 6

6. Cost Comparison	49
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CHAPTER 7

7. Part Programming	52
7.1 CYPRUS	53
7.1.1 Part programming	56
7.2 Complex Geometrical Component A	66
7.2.1 Part programming	69
7.3 Complex Geometrical Component B	74
7.3.1 Part programming	77

CONCLUSIONS

APPENDICES

REFERENCES