

### INDUSTRIAL TRAINING FINAL REPORT

#### PENANG AUTOMATION CLUSTER SDN BHD

N0. 760–2, JALAN CASSIA SELATAN 3/5,
TAMAN PERINDUSTRIAN BATU KAWAN BANDAR CASSIA, BATU KAWAN,
14110. PENANG

#### Prepared by:

Name : NURUL HUSNA BINTI AHMAD SAZILI

Matric No. : 202184'

Programme : CEE111

Training Period : 3 SEPTEMBER – 22 DISEMBER 2024

Visiting Lecturer : PN. NORMASNI

## INDUSTRIAL TRAINING FINAL REPORT

By:

#### NURUL HUSNA BINTI AHMAD SAZILI

202184

Fulfilled the training at:

#### PENANG AUTOMATION CLUSTER SDN BHD

No. 760–2, JALAN CASSIA SELATAN 3/5,

TAMAN PERINDUSTRIAN BATU KAWAN BANDAR CASSIA, BATU KAWAN, 14110, PENANG

An industrial training report submitted for partial fulfilment of the requirement for the Diploma in Electrical Engineering

**SEPTEMBER 2024** 

#### TABLE OF CONTENTS

TABLE OF CONTENTS	ii
LIST OF FIGURE	iii
LIST OF TABLE	iv
LIST OF ABBREVIATION	v
LIST OF APPENDICES	vi
CHAPTER 1: INTRODUCTION	5
1.1 Company Background	5
CHAPTER 2 : JOB RESPONSIBILITIES	
2.1 Task Execution	
2.1.1 TNR Machine assembling	8
2.1.1.1 Work procedure	10
2.1.1.2 Modern Tool Usage	20
2.1.2 PP1 Module assembling.	21
2.1.2.1 Work procedure	22
2.1.2.2 Modern Tool Usage	31
2.1.3 Engraving process.	36
2.1.3.1 Work procedure	37
2.1.3.2 Modern Tool Usage	38
2.1.4 Acrylic Perspex Polishing	39
2.1.4.1 Work procedure	39
2.1.4.2 Modern Tool Usage	40
2.2 Problem Solving Skills.	43
2.2.1 Engineering Problems.	43
2.2.2 Problems Encountered and Solutions	43

# CHAPTER 1 INTRODUCTION

#### 1.1 Company Background

Penang Automation Cluster Sdn Bhd. (PAC) is located at Taman Perindustrian Batu Kawan, Penang. This company is a joint venture company that is established on 16<sup>th</sup> January 2017 by the three technology-savvy manufacturers, namely ViTrox Corporation Berhad, Pentamaster Technology (M) Sdn Bhd and Walta Engineering Sdn Bhd. Their mission is to further enhance the local supply chain ecosystem and spur PAC to be the world class standard fabrication cluster, Mr. Fong Chee Kong joined PAC on 18<sup>th</sup> January 2021 as the 4<sup>th</sup> shareholder. He brings over 30 years of experience in precision fabrication industry.



PAC was incorporated in Malaysia on 24th June, 2016. This one-stop metal component supply the chain hub for Multi-National Companies (MNCs) and Local Large Companies (LLCs) that came with a bold vision to build and manage the local supply chain ecosystem on advanced, innovative and cost-effective engineering, specializing in sheet metal & structure fabrication, precision tooling, precision CNC machining and metal surface finishing / treatment services (with superior quality and delivery packages). Apart from supporting and funding the cluster development, PAC also aims to uplift the local metal fabrication / CNC machining SME capabilities to the world-class standard as well.



Figure 1-1: Penang Automation Cluster SDN. BHD.

Furthermore, PAC focuses on designing, developing and manufacturing high precision metal fabrication components, modules, and systems for various industries. The cluster offers services such as Technological Design & Development, Value Added Engineering Development, Metrology Shared Services, 3-D prototyping, Smart Manufacturing System, and Technical Training to the Automation Cluster Companies.

This company consist of 17 total of departments unit. I was placed to be in unit 6 which is module assembly department. In this department, the scope job are to assemble machines and module part that have been received from other departments. Each of the machines has its own work instruction step and procedure that must be followed.