

STUDENT REPORT
MANUFACTURING PROCESS
PRODUCTION 2 AND ASSEMBLY



Arranged by:

(Name – Student Number)

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Assistant Code	:	
Team	:	
Tutorial Class	:	
Yogyakarta, (Date, Month, Year)		
(Assistant)		

INTEGRATED MANUFACTURING SYSTEMS LABORATORY
INDUSTRIAL ENGINEERING STUDY PROGRAM
INDUSTRIAL TECHNOLOGY FACULTY
INDONESIAN ISLAMIC UNIVERSITY

2024



CHAPTER 3

PRODUCTION 2 AND ASSEMBLY

3.1 Tutorial Objectives

The objectives of the manufacturing process tutorial are as follows:

1. Practitioners know and understand the theory of the Dobot, *Scroll Saw Machine*, welding machine and hand grinding machine.
2. Practitioners know and understand the working principles of the Dobot, *Scroll Saw Machine*, welding machine and hand grinding machine.
3. Practitioners know and understand the tools used.
4. Practitioners are able to operate the machines to make *Name Tag* and *Steel Base Barrier Assembly*.

3.2 Tutorial Assignments

1. Study and understand the instructional video.
2. Study and understand the teaching module.
3. Analyze the functions and process flow machining.
4. Create an Operation Process Chart (OPC) and process planning sheet.

3.3 Work Steps

Contains the steps for making the *Name Tag part* and *Steel Base Barrier assembly*.

3.4 Production Planning

3.4.1 Operation Process Chart

Contains the OPC for making the *Name Tag part* and *Steel Base Barrier assembly*.

3.4.2 Process Planning Sheet

PROCESS PLANNING SHEET		
Number :	Page :	
Part Number :	Image file :	
Part Name :	Material :	
	Dimension	Length :



Created by :				Width :			
Date :				Height :			
Proce ss num.	Operati on Descrip tion	Workst ation	Setup	Tools	Setup time (s)	Process time(s)	Total time(s)
			Tools				
1.							
etc.							

3.4.3 Engineering Drawing

Contains the engineering drawing of the Name Tag part that has been made.

3.5 Name Tag Part Analysis

3.5.1 Name Tag Part Description

Contains the description of the Name Tag part and the dimension.

3.5.2 Dobot

- Dobot Explanation*
- Dobot Function*
- Steps for Using Dobot*
- Dobot PPE*
- Dobot Analysis*

Practitioners mention the challenge faced and the solutions that can be implemented to prevent the mistakes from recurring.

3.5.3 Mesin Scroll Saw

- Penjelasan Mesin Scroll Saw Machine Explanation*
- Fungsi Mesin Scroll Saw Machine Function*
- Steps for Using the Scroll Saw Machine*
- Scroll Saw Machine PPE*
- Scroll Saw Analysis*



Practitioners mention the challenge faced and the solutions that can be implemented to prevent the mistakes from recurring.

3.6 *Assembly Part Analysis*

3.6.1 Welding Machine

- a. Welding Machine Explanation**
- b. Welding Machine Function**
- c. Steps for Using Welding Machine**
- d. Welding Machine PPE**
- e. Welding Machine Analysis**

Practitioners mention the challenge faced and the solutions that can be implemented to prevent the mistakes from recurring.

3.6.2 Hand Grinding

- a. Hand Grinding Machine explanation**
- b. Hand Grinding Machine function**
- c. Steps for using the Hand Grinding Machine**
- d. Hand Grinding Machine PPE**
- e. Analysis of the use of the Hand Grinding**

Practitioners mention the challenge faced and the solutions that can be implemented to prevent the mistakes from recurring.



BIBLIOGRAPHY

**FORMAT STUDENT REPORT**

Keterangan	Ketentuan
<i>Page Size</i>	A4
<i>Margins</i>	<i>Top: 3 cm, Bottom : 3 cm, Right : 3 cm, Left 4 cm</i>
<i>Alignment</i>	Paragraf : <i>Justify</i> Gambar, Tabel, <i>Caption</i> : <i>Center</i>
<i>Font</i>	Times New Roman
<i>Font Color</i>	Hitam
<i>Caption</i>	Caption menggunakan caption otomatis. <i>Caption</i> gambar atau grafik terletak di bawah gambar, <i>caption</i> tabel terletak di atas tabel
Sitasi dan Daftar Pustaka	Menggunakan format APA
Hapus tulisan warna merah dan format student report saat melakukan konsultasi student report	