

STUDENT REPORT
MANUFACTURING PROCESS
PRODUCTION 2 AND ASSEMBLY



Arranged by:

(Name – Student Number)

(Name – Student Number)

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

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 hacksaw machine, Frais Milling, Bench Drilling machine and Frais drilling machine.
2. Practitioners know and understand the working principles of the hacksaw machine, Frais Milling, Bench Drilling machine and Frais drilling machine.
3. Practitioners know and understand the tools used.
4. Practitioners are able to operate the machines to make Steel Mate part.

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 Steel Mate part.

3.4 Production Planning

3.4.1 Operation Process Chart

Contains the OPC for making the Top Frame part.

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 :			
Process num.	Operation Description	Workstation	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 Steel Mate part that have been made.

3.5 Steel Mate Part Analysis

3.5.1 Steel Mate Part Description

Contains the description of the Steel Mate part and the dimension.

3.5.2 Hacksaw Machine

- Hacksaw Machine Explanation
- Hacksaw Machine Function
- Steps for Using the Hacksaw Machine
- Hacksaw Machine PPE
- Hacksaw Machine Analysis

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

3.5.3 Frais Milling Machine

- Penjelasan Mesin Frais Milling Machine Explanation
- Fungsi Mesin Frais Milling Machine Function
- Steps for Using the Frais Milling Machine
- Frais Milling Machine PPE
- Frais Milling Machine Analysis



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

3.5.4 Bench Drilling Machine

- a. Bench Drilling Machine explanation**
- b. Bench Drilling Machine function**
- c. Steps for using the Bench Drilling Machine**
- d. Bench Drilling Machine PPE**
- e. Bench Drilling Machine Analysis**

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

3.5.5 Frais Drilling Machine

- a. Frais Drilling Machine Explanation**
- b. Frais Drilling Machine function**
- c. Steps for using the Frais Drilling Machine**
- d. Frais Drilling Machine PPE**
- e. Frais Drilling Machine Analysis**

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



BIBLIOGRAPHY

**STUDENT REPORT FORMAT**

Information	Provision
Page Size	A4
Margins	Top: 3 cm, Bottom : 3 cm, Right : 3 cm, Left 4 cm
Alignment	Paragraph : Justify Images, Tables, Caption : Center
Font	Times New Roman
Font Color	Black
Caption	Captions use automatic captions. Caption pictures or graphics located below the picture, caption the table is located above the table
Citation and Bibliography	Use APA format
Delete the red writing and student report format when consulting student reports	