INDUSTRIAL PRACTICE REPORT

AT MACANAN JAYA CEMERLANG COMPANY

Written by :

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INTERNATIONAL INDUSTRIAL ENGINEERING STUDY PROGRAM

FACULTY OF INDUSTRIAL TECHNOLOGY

UNIVERSITY OF ATMA JAYA YOGYAKARTA

YOGYAKARTA

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APPROVAL

The industrial practice report which is written based on the industrial practice at PT Macanan Jaya Cemerlang during the period at July 2, 2018 until August 4, 2018 by :

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has been approved.

Yogyakarta, November 2, 2018

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PT. MACANANJAYA CEMERLANG
PENERBIT DAN PERCETAKAN

SURAT KETERANGAN MAGANG

NOMOR : 01 / MJC / HRD-GA / VIII / 2018

Yang bertanda tangan dibawah ini :

Nama	**: Hendy Hasianto**
Jabatan	**: Manager HRD & GA**
Perusahaan	**: PT. Macanan Jaya Cemerlang**

Dengan ini menerangkan bahwa :

Nama	**: Noel Kurnia Lahardo**
Fakultas / Jurusan	**: Teknik Industri Kelas Internasional**
Universitas	**: Atmajaya Yogyakarta**

Telah melakukan magang di perusahaan kami selama 1 (satu) bulan, mulai tanggal 02 Juli sampai dengan 3 Agustus 2018.

Dalam menjalankan magang di dalam perusahaan kami yang bersangkutan telah menunjukkan sikap disiplin dan dedikasi yang baik, untuk itu kami ucapkan terimakasih.

Demikian surat ini kami buat, untuk dapat di pergunakan sebagaimana perlunya.

Klaten, 3 Agustus 2018

PT. MACANANJAYA CEMERLANG
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Hendy Hasianto
Manager HRD & GA

FOREWORD

First of all, the student wants to thank God for His blessings and guidance during the student's time in PT. Macanan Jaya Cemerlang from July 2 2018 until August 4 2018.And also for His guidance to finish the Industrial Practice Report.

The purpose of the Industrial Practice Report is to fulfill one of requirements from University of Atma Jaya Yogyakarta for the students to finish the bachelor program.And also to introduce the real Industrial world to the students, that only learn from the theories before.From the real Industrial world the students can learn how to implement the theories that have been learned before, and what are the real problem faced by the Industrial world.

Also the student wants to give thanks for the people that have been related and helped the students to finish the Industrial Practice Report.With all the respects, the student wants to give thanks for :

a. Almighty God for all His blessings and guidance to finish the Industrial Practice Report
b. Mr. TB. Hanandoko, S.T., M.T. as student's supervisor from Faculty that have guided the student to finish the Industrial Practice Report
c. Mr. Slamet Riyanto, S.T. as student's supervisor in PT. Macanan Jaya Company that have helped and guided the student in the Industrial Practice
d. The student's parents that have motivated and supported the student to finish the Industrial Practice Report
e. The student's relatives and friends that have motivated and helped the student to finish the Industrial Practice Report

After all, the student realizes that the Industrial Practice Report isn't perfect at all.For that the student open up to critics and recommendations.However the student hope that the Industial Practice Report can be useful for others.If there's any mistaken words, the student ask for aplogy.

Yogyakarta, 5-11-2018

Noel Kurnia Lahardo

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CHAPTER 1

PREFACE

In this first Chapter consist of 3 parts, that are Purpose, Background, and also Place & Time of Industrial Practice in Macanan Jaya Cemerlang Company.

1.1. Background

Department of Industrial Engineering (PSTI), Faculty of Industrial Technology, University of Atma Jaya Yogyakarta (PSTI UAJY), commands all students to do technical practice along with the stated curriculum in department. PSTI UAJY sees industrial practice as a media for students to know the environment of work, industry, and also grow, elevate, and innovate the ethic of professional working, as an Industrial Engineering graduate ahead.

Industrial practice can be said as a professional simulation for Industrial Engineering students. The paradigm is that within technical practice working days, students work in their chosen company. Work, in this statement includes planning, designing, improvement, implementation, and solution. Therefore, in technical practice, the activities done by students are :

a. Recognizing the scoop of company.

b. following the business process continously of a company.

c. Doing the assignments given by supervisor or field coach.

d. Observing the system.

e. Compiling written report.

f. Doing technical practice's examination.

Industrial Engineering is a field of study related with planning, designing, improvement, and installation of an integrated system, consists of Man, Machine, Material, Method, Money, Energy, Environment, andInformation. In addition, scope of Industrial Engineer are an integrated system between aspects mentioned above(Man, Machine, Material, Method, Money, Energy, Environment, andInformation). This means that in doing the responsibilities, Industrial Engineer has to see the activities based on its integrated system's point of view.

Area of comptencies for Industrial Engineer are including:

1. Work System Design and Analysis.
2. Production Planning and Controlling.
3. Inventory Management.
4. Quality Control System.
5. Material System.
6. Logistics andSupply Chain Management.
7. Product Design and Improvement.
8. Occupational Safety and Health.
9. Manufacturing Facility Planning.
10. Organizational Management.
11. Cost Analysis.
12. Industrial Feasibility Analysis.
13. CAD/CAM and Process Design, and others.

1.2. Purpose

Things to be achieved through the implementation of industrial practice are:

a. Practice self-discipline
b. Practice the ability to interact with employees
c. Practice the ability to adapt with working environment
d. Observe directly the activity of company in running the production and business
e. Complete the theories in college with the real condition in factory
f. Enhance the knowledge about production and business system

1.3. Place & Time of Industrial Practice

The Industrial Practice activity took place at Macanan Jaya Cemerlang Company, Ki Hajar Dewantoro street No.22, Karanganom, Klaten Utara, Kabupaten Klaten, Jawa Tengah.The Industrial Practice at Macanan Jaya Company started

from 2 July 2018 and ended in 4 August 2018.The working time of Industrial Practice at Macanan Jaya Company is a regular working time, that is from 07.00 a.m. - 03.00 p.m. with 1 hour duration of break time that being rolled every week (11.30 a.m. - 12.30 p.m.) for the first week and (12.00 a.m. - 13.00 p.m.) for the next week.

During the Industrial Practice at Macanan Jaya Cemerlang Company, the writer placed in Finishing Department with Mr. Slamet Riyadi as Head of Finishing Department is the writer's Field Supervisor.

CHAPTER 2

OVERVIEW OF COMPANY

In this second Chapter, consist of 3 parts, that are Company's Brief History, Organizational Structure, and Company's Management for the Industrial Practice's place Macanan Jaya Cemerlang Company.

2.1. Company's Brief History

In this sub-chapter will be discussed about the History of Company's Growth and Company's Sertification in Macanan Jaya Cemerlang Company.

2.1.1. History of Company's Growth

Macanan Jaya Cemerlang Company is a printing & publisher company that located in Ki Hajar Dewantoro street No.22, Karanganom, Klaten Utara, Kabupaten Klaten, Jawa Tengah or simply in Klaten.Macanan Jaya Cemerlang Company covers area of 48.252 square meters with building of 14.231, 02 square meters, with Pendirian Perseroan Terbatas No. 72 tanggal 25 Oktober 1991.

Therefore the beginning of Macanan Jaya Cemerlang Company establishment started at 3 November 1978, when at that time established an individual company named INTAN, that because of market's rising demand especially in book publishment that made the individual company need to divide itself into several companies, including one of them is Macanan Jaya Cemerlang Company.Finally in 30 July 1978 with the legal validation from H. Subekti, SH as a notary with the number Akte 12/78, Badan Usaha CV. Intan changed into limited company named PT. Intan Pariwara Penerbit dan Percetakan.Therefore in 1 February 1992, PT. Intan Pariwara divided into Intan Group because of the rapid growth of the company and to obtain the focused and professional workers.Companies that included in the Group are :

1. PT. Intan Pariwara
2. PT. Sinar Dahana Indah Boga
3. PT. Balarajasa Bakti Satya
4. PT. Macanan Jaya Cemerlang

So can be concluded that Macanan Jaya Cemerlang Company have legally established in 1 February 1992 along with the change of Intan Pariwara became Intan Group.

The reason that the company use the name of Macanan Jaya Cemerlang is because "Macanan" is the place where the company build, that is at Padukuhan Macanan.Whereas "Jaya" & "Cemerlang" are the expectation for the company itself so that the company can be glorious and brilliant until the end of time.Since 1992, Macanan Jaya Company have gain trust to do procurement project for school books in national scale from some famous publishers in Indonesia, including Intan Pariwara Company that is from their Group's Company itself.

In 1998, Macanan Jaya Cemerlang Company expanded their business into the packaging industry with doing some label printing & packaging for some food products from Garuda Food and some other food company in Indonesia.

Start from 2003, the company oftenly trusted to be the work partner for several Government Department, in the Central Level and also Regional Level to do the printing for some programs.In 2004 & 2009, Macanan Jaya Company trusted to do the project from Central KPU (Komisi Pemilihan Umum) to print the election's ballot.

Supported with the work of 414 professionals (permanent workers) and 326 daily workers (until March 2011) that worked with the system of Quality Management of ISO 9001 : 2008, Macanan Jaya Cemerlang will be ready to face the modern era.Affordable price, punctuality, and quality are the guarantee.Whereas the objective is to satisfy every parties.

PT MACANAN JAYA CEMERLANG
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Figure 2.1. Logo of Macanan Jaya Company

2.1.2. Certification

There are 3 certifications that Macanan Jaya Company got, that are ISO 9001:2008, ISO 14001:2004, and OHSAS 18001:2007.Here are the explanation for each certification :

a. ISO 9001 : 2008

   This certification means that Macanan Jaya Company already fulfill the international requirements in the aspect of Quality Management in the production side and service side.

Figure 2.2. ISO 9001 : 2008

b. ISO 14001 : 2004

This certification means that the company already fulfill the international requirements related with the management of environmental safety so that all of the processes and products did not harm the environment and committed to keep the environment safety.

Figure 2.3. ISO 14001 : 2004

c. OHSAS 18001 : 2007

This certification means that the company already fulfill the international requirements related with management of Occupational Health & Safety in every work they did and committed to keep workers safe from health & safety risks.

Figure 2.4. OHSAS 18001 : 2007

2.2. Organization Structure

In this Sub-Chapter will be discussed about Organization Structure of Macanan Jaya Cemerlang Company, and also the Job Description for each Department.Here are the Organization Structure of the Company :

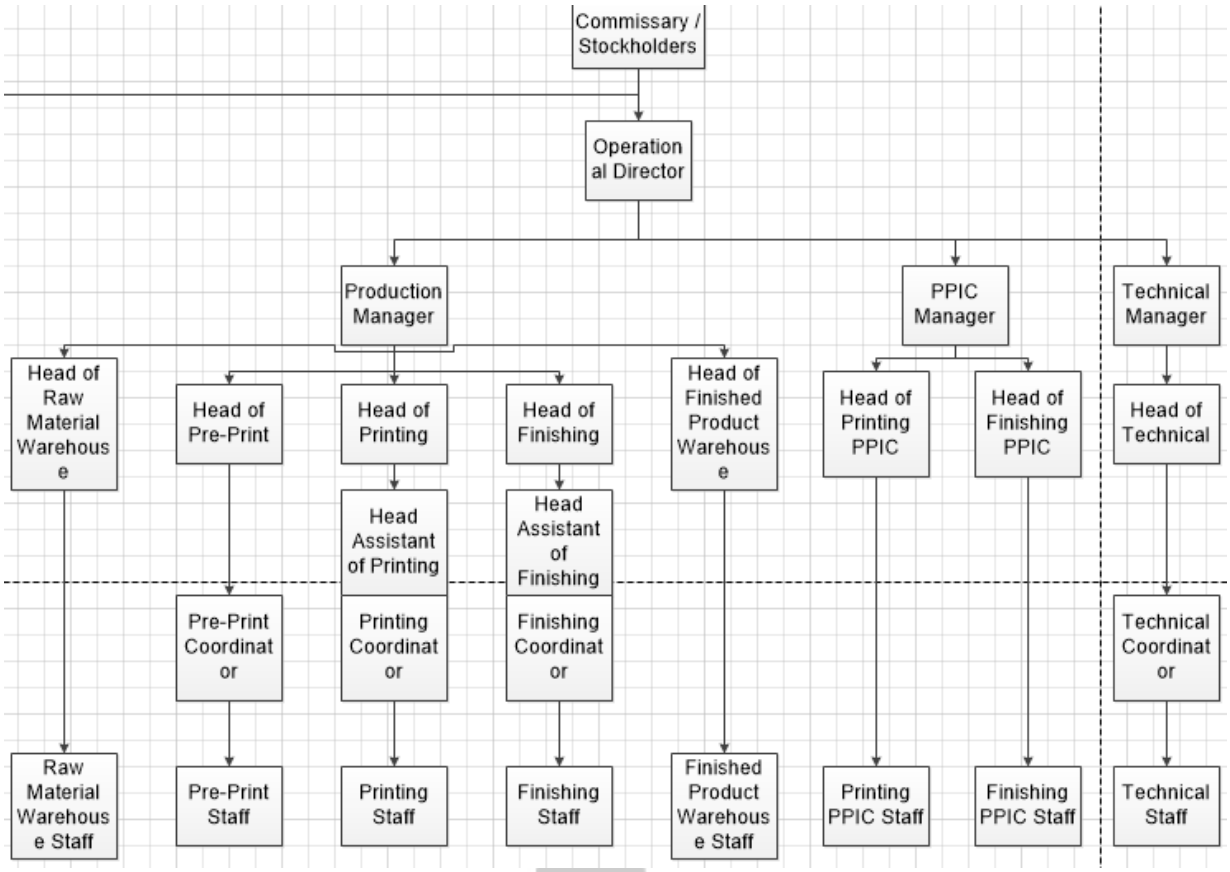

Figure 2.5. Organization Structure of the Company

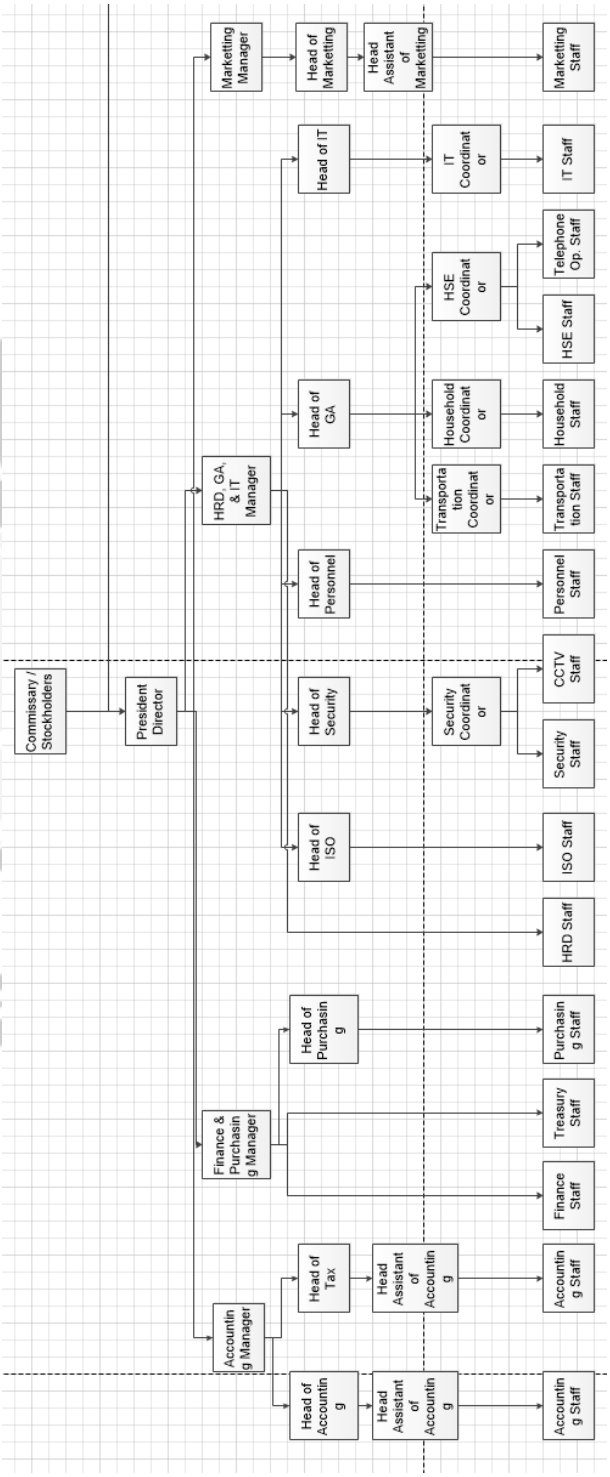

Figure 2.6. Organization Structure of the Company

2.2.1. Job Description For Each Department

Here will be discussed the Job Description for each Department/Division that the Company have from its Organization Structure :

a. President Director
   i. Planning :
      a) Strategy Planning
      b) Policy Planning
      c) Work Program Planning
   ii. Personal & Coordination
      The President Director share and coordinate the work that have been planned for Jobholders so the Jobholders can work effectively & efficiently.
   iii. Directing
      a) Giving motivations for the Jobholders
      b) Solve problems that can't be solved by employees
      c) Ensure that the Jobholders/employees work to achieve the Company's goal
   iv. Supervision
      a) Ensure that planned procedure & policy have been implemented nicely
      b) Keeping the Company's assets
b. Operational Director
   i. Help the President Director in doing his/her job
   ii. Responsible in the Production, PPIC, and Technical Department
   iii. Doing the standard operational related with all of the job in the Company
   iv. Doing supervision on the Production Process in the Company.
c. Accounting Department
   i. Doing the accounting for all of the transactions in the Company
   ii. Managing the Tax payment for the Company
d. Finance & Purchasing Department

i. Doing the supervision in the raw material & office stationary bills
ii. Deciding the Cost of Goods Sold (COGs) for the order accepted
iii. Doing the purchasing of raw material & office stationary
iv. Doing the purchasing for supporting material

e. HRD, GA, & IT Department
   i. Design and implement the policy of household in the Company
   ii. Managing the security & safety in the Company
   iii. Managing the employee to work based on the Standard Operations
   iv. Doing the training and coaching for the new employee
   v. Doing the supervision in the employee's work
   vi. Doing the recruitment for the employee
   vii. Doing the development of software for the Company (non production)
   viii. Doing the development and maintenance of hardware.

f. Marketting Department
   i. Doing the selling transaction
   ii. Doing the promotion for the Company
   iii. Creating new links so that the product distribution of the Company can be expand
   iv. Aceepting the orders from customer
   v. Accepting the customer's complaints

g. Production Department
   i. Doing the book manufacturing
   ii. Planning the design of the book that will be produced
   iii. Doing the Production machine & tools maintenance
   iv. Doing the inventory control for the material
   v. Doing the inspection in the production process

h. PPIC Department
   i. Creating the Production scheduling
   ii. Doing the inventory control & planning
   iii. Managing the final product's shipment

i. Technical Department

i. Doing the Maintenance & Repair of the production machine & tools
ii. Doing the maintenance & repair for the Company's facilities like lamps, CCTV, and AC

2.3. Company's Management

In this Sub Chapter, will be discussed about the Macanan Jaya Cemerlang's Company Management including Vision & Mission, QHSE Policy, Employment, and Facilities.

2.3.1. Vision & Mission

The Company's Vision : Being a Multinational Printing Company that Independent and Professional.

The Company's Mission :

a. Increasing the Production Facilities, Human Resources and Organization quality continously
b. Increasing market segmentation, product's diversification and extensification

2.3.2. QHSE Policy

Here are the Company's QHSE Policy statement :

a. Increasing product quality & punctuality of order fulfillment for customer's satisfaction with continous improvement and keep the safety and environment
b. Committed to obey legal rules and other terms related to environment & work safety aspect
c. Committed to prevent environment destruction
d. Committed to prevent injury or disease caused by the work
e. Committed to continously improve the QHSE management system

2.3.3. Employment

Here are the working time for the Company's employee :

Employee	Monday - Friday			Saturday		
	Shift 1	Shift2	Shift 3	Shift 1	Shift2	Shift 3
Security & Household	06.00 - 14.00	14.00 - 22.00	22.00 - 06.00	06.00 - 14.00	14.00 - 22.00	22.00 - 06.00
Operators	07.00 - 15.00	14.45 - 22.45	22.30 - 06.30	07.00 - 15.00	14.45 - 22.45	22.30 - 06.30
Non Operators	07.30 - 15.45			07.00 - 12.00		

Figure 2.7. Employee's Working Time Table

Employee	Shift 1		Shift 2		Shift 3	
	Monday - Thursday	Friday	Monday - Thursday	Friday	Monday - Thursday	Friday
Operators	11.30 - 12.30 / 12.00 - 13.00	11.30 - 12.30	18.00 - 19.00	18.00 - 19.00	02.00 - 03.00	02.00 - 03.00
Non Operators	11.30 - 12.30 / 12.00 - 13.00	11.30 - 13.00				

Figure 2.8. Employee's Break Time

2.3.4. Facilities

There are many facilities in the Macanan Jaya Company, such as :

a. Security Post

   There are 3 Security Post in the Company, 2 of them are in the front side in each entrance.The other one is in the back side, alongside with the smoking room.For the Security Post at the front side also there is a smoking room but only for the Northern side.

b. Mosque

   There is only 1 mosque in the Company, for the employees or guests to do the worship.

c. Cooperation

There is a Cooperation in the Company, that sells many kind of daily needs just like Supermarket.But mostly it sells food & beverages, and also provides Fotocopy machine.

d. Cafetaria

There is a Cafetaria in the Company, where the employee get a free lunch.

e. Motorcycle Parking Lot

There is a 2 stage motorcycle parking lot in the Company, although it's already 2 stages but it's still too crowded for the employee's motorcycle.

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CHAPTER 3
REVIEW OF COMPANY'S SYSTEM

3.1. Company's Business Process

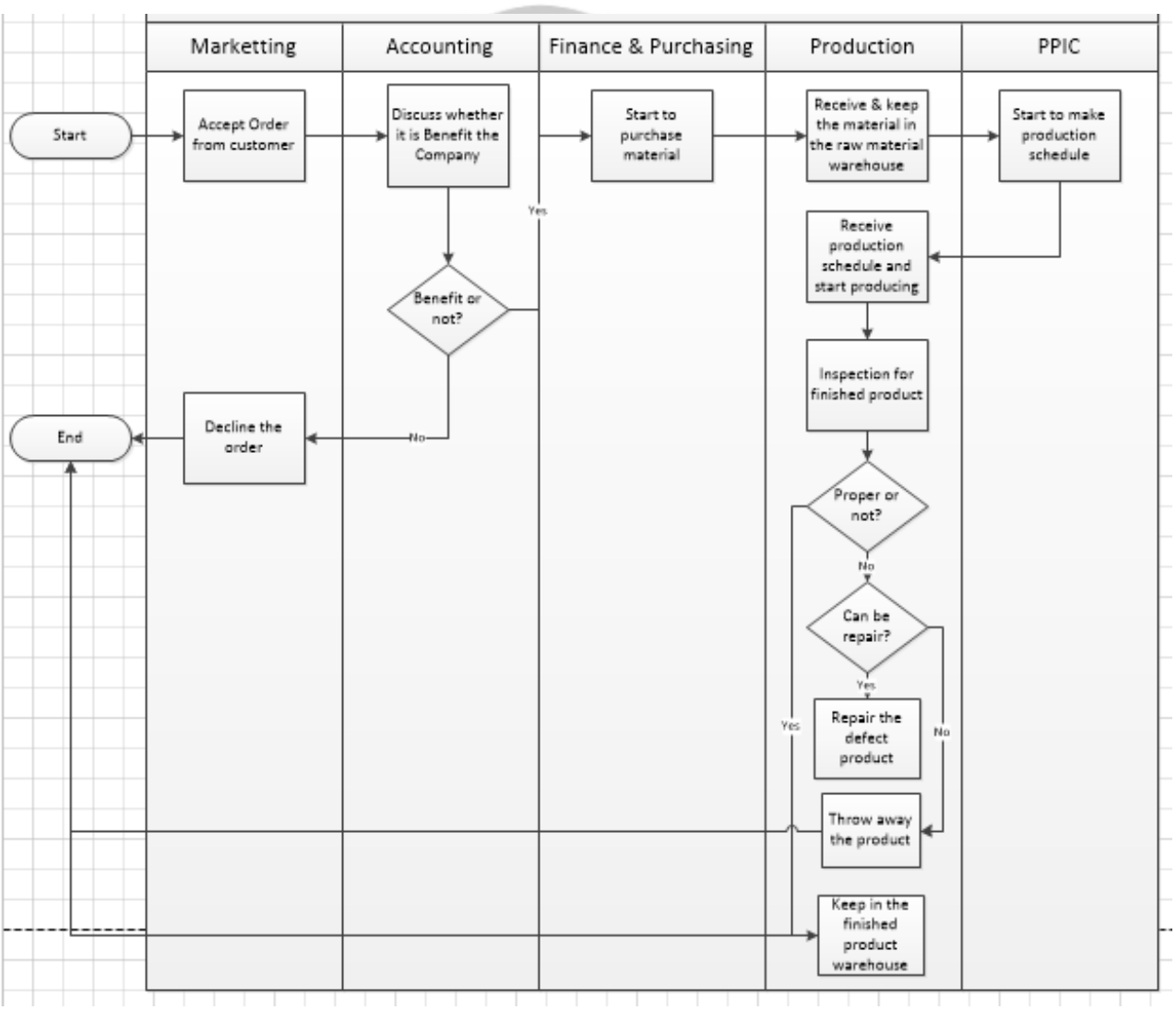

Figure 3.1. Company's Business Process

In the Macanan Jaya Company Business Process, it begins in the Marketting Department where the order from customers are accepted.After the order was accepted, will be discussed with Accounting Department if the order will benefit the Company or not.If it is benefit the Company, then will be comunicated to Finance & Purchasing Department to do the purchasing of raw material & supporting material.Materials that have been ordered then kept in the raw material warehouse, and then for the working schedule will be done by PPIC Department.After that the manufacturing process will be done by Production Department, along with the inspection.And then the finished product will be kept in the finished product warehouse, while the broken product will be selected to be repaired or thrown away.

3.2. Products Produced

In this Sub Chapter will be discussed about the products that produced by the Macanan Jaya Company :

a. Student's Book (Print Book)

   This book uses HVS paper for its material, and using different material for the cover.

b. Homework Book

   This book uses CD paper, and using different material for the cover.

c. IQRO Book

   This book uses CD paper also, but don't use any cover or the cover is also using CD paper.

d. Leaflet/Brochure

   The leaflet product is based on order, it isn't oftenly get the production.

3.3. Production Process

In the Macanan Jaya Company, the Production Process can be divided into 4, those are :

a. Design

   In this process, Marketting Department will accept the order and specification from customer.Customer will communicate how they want the product will be to the Marketting Department, and then Marketting will make it as specifications and pass it to Pre-Print Division under Production Department.

b. Pre-Print

   Material from Marketting will be transferred into computer to be managed using CTCP machine.After that the plate printing was done, and then the plate will be checked.After checked, then the plate will be passed to Printing Division.

c. Printing

   After receiving the plate from Pre-Print Division, printing trial will be done to see the result of printing.If the coordinator of Printing already check & accepted the result, then the mass printing can be started.

d. Finishing

   After receiving printing results from Printing Division, the papers will be folded with folding machine become Katern.Then those Katerns will be sequenced until it ready to be a book.Then the sequenced Katern will be binded by the binding machine and gathered with its cover and being a book.After that those books wiil be inspected and sorted, if there's a defect then will be repaired if it isn't defect then will be packed and put into box.

3.4. Production Facility

a. Plate Printing Machine

   This machine located in Pre-Print Division, used to print plates.The plate used is an alumunium plate.

b. Printing Machine

   This machine located in Printing Division, used to print papers that will be books.

c. Folding Machine

This machine located in the Finishing Department, used to fold papers into Katerns.

d. Binding Machine

This machine used to gather the Katerns into sequence along with its cover, and then binded into book.

Figure 3.2. Binding Machine

e. Cutting Machine

This machine used to cut the book's side so the book will be tidy.

Figure 3.3. Cutting Machine

f. UV Machine

This machine used to make Coverbook looks shining.

g. Forklift

This forklift used to move raw materials into different places.

h. Pallette

Pallette used to ease the gather of raw material, work in process, or even finished product.

i. Handtruck

Same as forklift it is used to move materials or work in process, but with lower load.

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CHAPTER 4
STUDENT'S SCOPE REVIEW

In this fourth chapter consist of four parts that are Working Scope, Responsibility and Authority of Work, Working Method, and Result of Work.

4.1. Working Scope

In this sub-chapter will be discussed about where the writer placed in the company, and the description of the department.What is the job of the student, and who the student worked with.

The first is the student placed in the Finishing Department, especially in Binding machines.In the Finishing Department especially in Binding machines, is a process to gather some papers that will be book called "Katern" and its Cover so it formed a final book.For the Binding Machines there are actually 3 machines, that are Yoshino A, Yoshino C, and Yoshino D.For Yoshino A machine the maximum speed is 7.000 Rph(Rotation per Hour), while for Yoshino C can reach 12.000 Rph, and for Yoshino D can reach until 13.000 Rph.So for Yoshino A it is not the main Binding machines, only as the helper or oftenly used for repair process.Yoshino A machine can only handle up to 9 Katerns, while Yoshino D machine can handle until 20 Katerns, and Yoshino C is only 12 Katerns maximum.

In the Binding Machines, there are some processes for the Katern.The first one is gathering process, when the machine gather Katerns as the sequence so that it formed a book (without cover) and then passed to the next process.Before it goes to the next process actually there are sensor in the machine that will detect the thickness of the book, if it isn't normal the machine will stop.It means that there are doubled Katern then the operator should take it first.Then the next process is gluing process where those books will be glued on its left side so that the Cover can be put.After that the Cover will be put into the book, and then it will be stacked for 5 - 10 books and then gets inspected.If the book past the inspection then it will be packed on plastic, while the book that aren't past inspection will be gathered to be repaired.

Therefore there were some tasks that the student done during industrial practice time in PT. Macanan Jaya Cemerlang company :

4.1.1. Counting of Broken Katerns

The student's task in this Department is to compare Yoshino C & Yoshino D machine efficiency.The student get the task directly from the student's supervisor Mr. Slamet.To do this task, the student need to know how many Katerns broken that the machine caused, the Speed & Output Rate of the machine, and the total output of the machine and then the comparison can be done.To do the task, the student surely cooperate with Mr. Slamet as the Head of Finishing Department and also the student's supervisor and almost all of Binding Machines operator.

In order to do the task from Mr. Slamet as the student's supervisor, a table contains informations about the title of book, date, no. SPO, amount of katern, speed of Yoshino machine, type of Yoshino machine, output rate, and amount of katern broken in certain duration time need to be conducted.So every day in the Industrial Practice days the student bring the table to gather the data of broken katerns from Yoshino C & Yoshino D machine. Figure 4.1 is the example of broken katerns table conducted by the student :

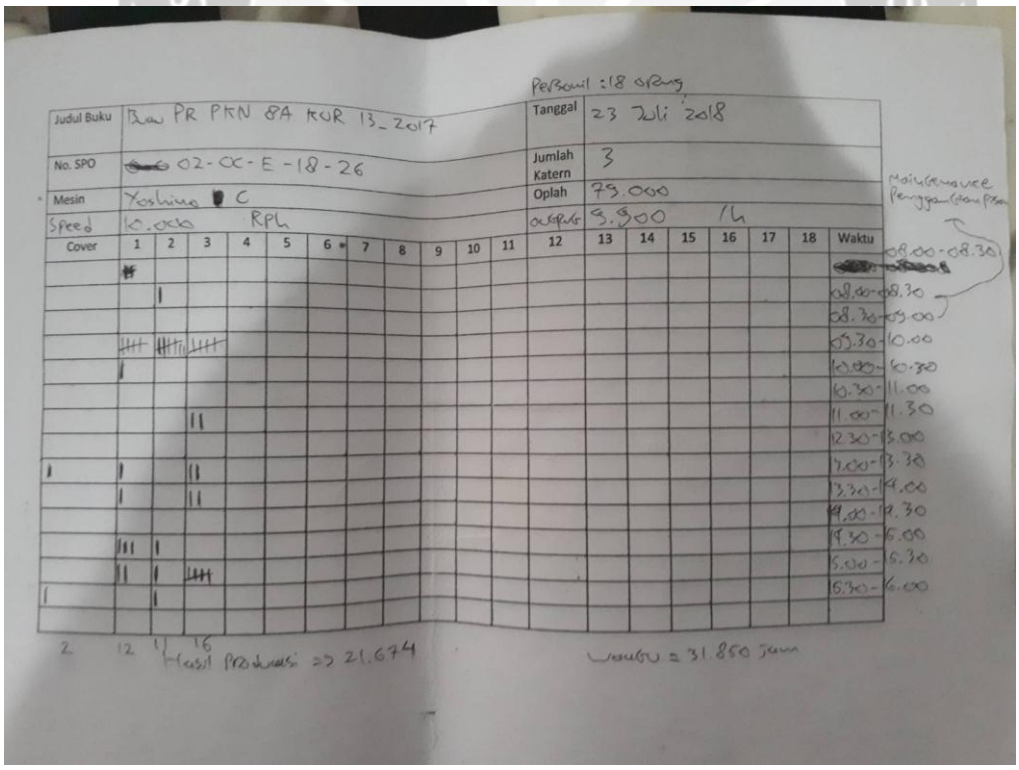


Figure 4.1. Example of Broken Katerns Table

To fill columns of title of book, date, no. SPO, amount of katern, type of Yoshino machine, and oplah the student needed to come to the Yoshino machine and see the Moving Ticket from the katerns that will be processed by the machine.Moving Ticket is a sheet that always there in the katern's pallette that will be processed.The function of Moving Ticket is to give information about the content of a pallette, so operators that delivered the pallette and operators that will process the katerns in the pallette won't be mistaken.The information from the Moving Ticket will be transferred to the broken katerns table by the student.This activity done by the student before the katerns started to be processed.Figure 4.2 is the example of a Moving Ticket :

MOVING TICKET

NOMOR URUT MT 056/RP/07/2018-D-0181

BUKU SISWA KELAS 6 TEMA 4 GLOBALISASI

NOMOR SPO	052/OL/07/2018		
HALAMAN	JDL/CR-III/IV		
KATERN	1	TOTAL KATERN	6
OPLAH	50,000	UKURAN JADI	21 x 29.7
NO. URUT PALET	2	JML TOTAL PALET	5
HASIL PRODUKSI	10,400	HASIL EKSEMPLAR	10,400

Keterangan :

Tanggal : 27 Juli 2018
Shift / Kelompok : Shift 1
Mesin / Proses : D388 B
Operator : FERDY TANTO
Hasil Rusak : 0

Jam Mulai : 27-07-2018 10:58:48
Jam Selesai : 27-07-2018 14:32:20

Figure 4.2. Example of Moving Ticket

Meanwhile for the column of speed, and output rate the student got the information directly from the monitor of the Yoshino machine.From the monitor can be seen informations like the speed of Yoshino machine, actual output, and total output.For the speed, the student noted the maximum speed of the Yoshino machine when processing the katerns.For the output rate the student calculated it manually, with the data of output per minutes from the monitor of Yoshino machine times by 60 minutes.Figure 4.3 is the monitor of Yoshino machine where the student got the data from :

Figure 4.3. Monitor of Yoshino Machine

To fill the broken katerns column, firstly the student filled the duration of 30 minutes time started from the katerns began to be processed.Then for every 30

minutes once started from the katerns began to be processed, the student came to the Yoshino machines to check how many katerns have been broken.The student have to cooperate with the operators of Yoshino machines first to asked them to not directly thrown away the broken katerns.If the student found any broken katerns from the Yoshino machines, then the student will filled the amount of broken katerns in the broken katerns table based on the no. of katern and the duration's time.After the student filled the broken katerns table then the student thrown away the broken katerns into the trash can.The student also helped the operators to identify and separate the broken katerns with only folded or doubled katerns.The example of broken katern can be seen in figure 4.4 :

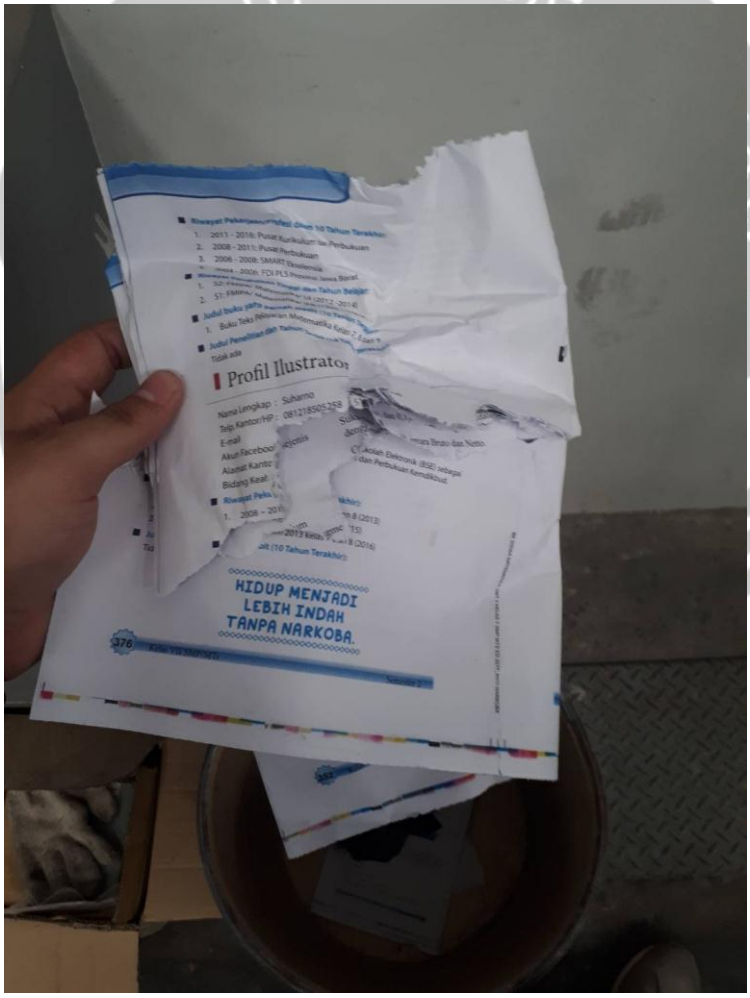


Figure 4.4. Example of Broken Katern

4.1.2. Visited Pre-print Department

Besides did the counting for broken katerns, the student also did another activities in the company.For the first week for example in the first until third day, the student went around the company to see the processes and facilities in the company.Also the student got some tasks from Mr. Slamet as the supervisor to compare the effectivity output for Yoshino C & Yoshino D machine but only for the trial first.

In the second week, the effectivity comparison of Yoshino C & Yoshino D machine have just begun.In this second week the student also visited Pre - print department with Mr. Heri as the Head of Department.At the Pre - print department the student seen the processes before printing process, such as montage until plate printing.The output of plate printing process will be checked the quality through the Densitometer test to knew how many dots level in the plate.There is also oven treatment for the plate to increase its durability and capability for printing.

There were also some broken plates that can't longer be used.Those broken plates were mainly folded, so it can't longer be used to be printed.For the example can be seen in figure 4.5 :

Figure 4.5. Example of Broken Plate

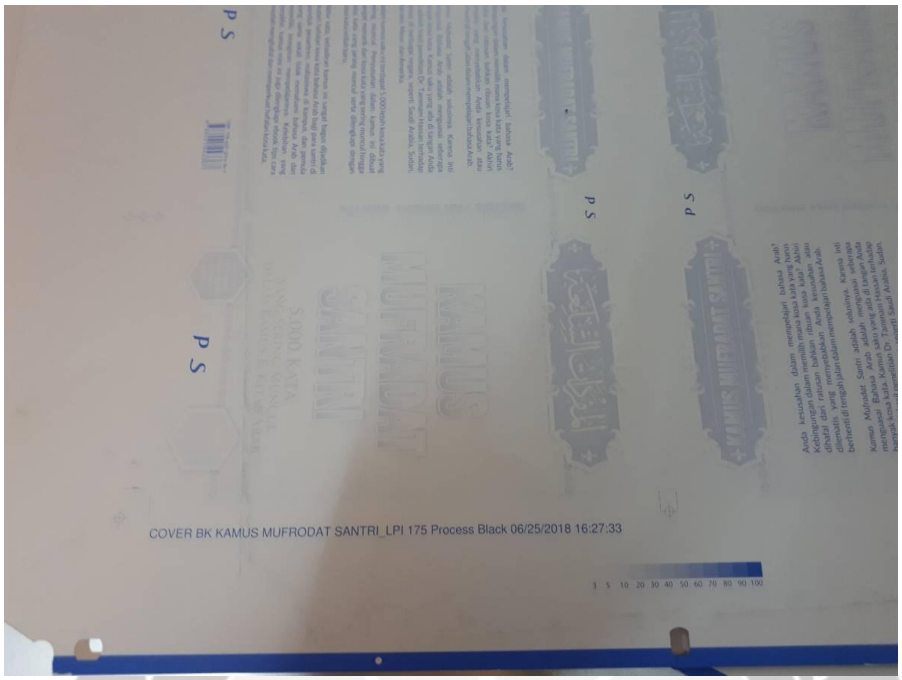


Figure 4.6. Example of Plate

4.1.3. Visited PPIC Department

In the third week, besides did counting for the broken katerns the student also visited the PPIC department.In the PPIC department the student got the information of the method used by PPIC department to make daily production schedule, that was shortest deadline method.Means that the order that have the nearest deadline will be done first.There were some meaning of codes in the No. SPO :

a. OC = Order from Intan Pariwara
b. OL = Order from outside Intan group
c. PRO = Project / tending
d. PW = Representative from Solo
e. PWS = Representative from Semarang
f. PWJ = Representative from Jakarta

4.1.4. Recapitulation of Production Amount & Defect Product Amount

In the fourth and fifth week, the student mainly focused in the Finishing department especially Binding machines.The student started to gather the

information of total production amount for several products and also the amount of its defect products.Those information can be seen in figure 4.5 :

Date	No. SPO	Amount of Production	Finished Product	Defect Product
17 Juli 2018	02-OC-E-18-16	88440	83690	4750
	025/PRO/07/2018	24296	23416	880
	021/PRO/07/2018	23584	22034	1550
19 Juli 2018	043/OL/07/2018	9440	8950	490
	008/PRO/06/2018	9790	9405	385
	02-OC-E-18-23	96400	94430	1970
	03-OC-G-18-05	14625	14150	475
20 Juli 2018	026/PRO/07/2018	24176	23120	1056
	028/PRO/07/2018	5862	5710	152
	02-OC-G-18-03	5915	5741	174
	02-OC-E-18-25	95790	93877	1913
21 Juli 2018	043/OL/07/2018	96590	92799	3791
23 Juli 2018	02-OC-E-18-26	76840	74520	2320
24 Juli 2018	031/PRO/07/2018	5784	5504	280
25 Juli 2018	02-OC-E-18-24	103650	100648	3002
	01-OC-G-18-01	46455	43655	2800
27 Juli 2018	061/PRO/07/2018	24528	24233	295
	01-OC-F-18-49	40360	38914	1446
	067/PRO/07/2018	9810	9435	375
28 Juli 2018	072/PRO/07/2018	6120	6050	70
31 Juli 2018	063/PRO/07/2018	49440	48762	678
	058/OL/07/2018	49350	48700	650
1 Agustus 2018	051/PRO/07/2018	24000	22960	1040
	050/PRO/07/2018	24888	24501	387
3 Agustus 2018	041/PRO/07/2018	19345	18690	655
	066/OL/07/2018	20200	19993	207
	01-OC-F-18-05	15820	14600	1220

Figure 4.7. Amount of Production & Defect Products

From the figure 4.7 can be seen the Amount of Production is the total production including defect products.Meanwhile for the Finished Product column got from Amount of Production column minus Defect Product column.The informations in figure 4.5 can be got from a computer in the Finishing department, but to access the information an account was required.So the student just wrote the No.SPO and date first to Mr. Slamet as the supervisor and then Mr. Slamet will access and wrote the information for the student.

4.2. Responsibility and Authority of Work

The student placed in Finishing Department with the mission from supervisor to note the broken Katerns from Yoshino C & Yoshino D Machine and then compare the efficiency.The Responsibility and Authority of student are :

a. The student allowed to directly observe the machine & processes
b. The student allowed to ask the operator directly about the process & machine
c. The student allowed to communicate with the supervisor if there is a thing that unclear
d. The student allowed to visit another department, as long as it isn't bother the activity or processes.
e. The student responsible in counting the broken Katerns along with the number of katern
f. The student responsible in calculating the Output Rate of Yoshino D & Yoshino C Machine
g. The student responsible in give the copy of weekly broken Katern report to the supervisor Mr. Slamet

4.3. Working Method

To ease the explanation of the student's working method, here is the flowchart of student's work :

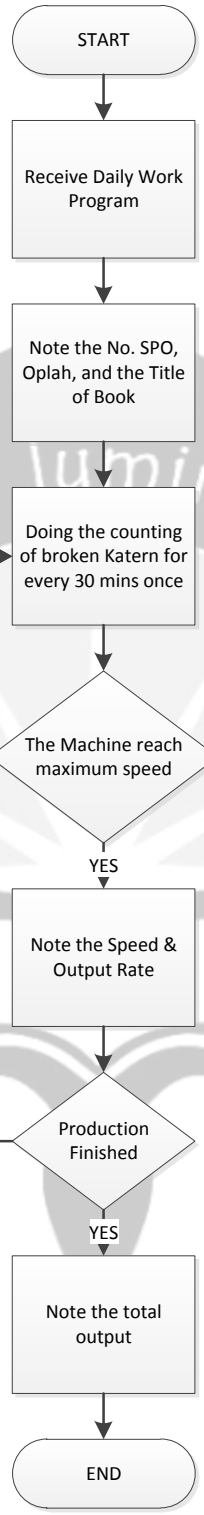


Figure 4.8. Flowchart of Student's Working Method

Figure 4.8 shows the Flowchart of student's working method, start from receiving daliy work program until note the total output from Yoshino machines.The Flowchart shows the flow of student's work to finish the task given by Mr. Slamet as the student's supervisor.

4.4. Result of Work

4.4.1. Student's Weekly Document (Counting Broken Katerns)

One of the result of the student's work is the weekly document that the student give to Mr. Slamet as supervisor.The document is only for Binding Machine Yoshino C & Yoshino D.Here is the example of the student's weekly document result of work :

Judul Buku	Buku PR PKN 8A KUR 13_2017			**Tanggal**	23 Juli 2018
No. SPO	02 - OC - E - 18 - 26			**Jumlah Katern**	3
Mesin	Yoshino C			**Oplah**	79000
Speed	10.000 Rph			**Output Rate**	9.900 / h
Cover	1	2	3	Waktu	
		1		08.00 - 08.30	
Maintenance				08.30 - 09.30	
	5	7	5	09.30 - 10.00	
	1			10.00 - 10.30	
				10.30 - 11.00	
			2	11.00 - 11.30	
Istirahat				11.30 - 12.30	
				12.30 - 13.00	
1	1		2	13.00 - 13.30	
	1		2	13.30 - 14.00	
				14.00 - 14.30	
	3	1		14.30 - 15.00	
	2	1	5	15.00 - 15.30	
1		1		15.30 - 16.00	
2	12	11	16	Total	

Figure 4.9. The Example of the Student's Weekly Document Result of Work

From figure 4.9 can be seen the data of broken katerns for Buku PR PKN 8A KUR 13_2017, on July 23rd 2018.With the amount of katern 3, means that the book needed three different katerns to be fully completed.The Yoshino C machine indicates where the book processed, for the oplah is the total amount of books needed or demanded.The speed of 10.000 Rph means that when the machine processed the book, its maximum speed reach 10.000 Rph.Rph is Rotation per Hour means that if the machine is on 10.000 Rph then the machine could produce 10.000 books in an hour.For the output rate of 9.900 per hour is the real output from the machine, that manually calculated by the student.According to Mr. Slamet as the student's supervisor the actual output will always be under the maximum speed, because not everytime the machine was in the maximum speed condition.

Judul Buku	Buku PR IPA 8A KUR 13_2017			**Tanggal**	25 Juli 2018		
No. SPO	02 - OC - E - 18 - 24			**Jumlah Katern**	6		
Mesin	Yoshino D			**Oplah**	106000		
Speed	11.000 Rph			**Output Rate**	10.920 / h		
Cover	1	2	3	4	5	6	Waktu
							07.00 - 07.30
	3	1					07.30 - 08.00
	2			1	2	1	08.00 - 08.30
			1	1			08.30 - 09.00
	2			1	1		09.00 - 09.30
	5						09.30 - 10.00
			1		1		10.00 - 10.30
	1	1		1	2		10.30 - 11.00
							11.00 - 11.30
	13	2	2	4	6	1	Total

Figure 4.10. The Example of the Student's Weekly Document Result of Work

From figure 4.10 can be seen the data of broken katerns for Buku PR IPA 8A KUR 13_2017, on July 25th 2018. With the amount of katern 6, means that the book needed three different katerns to be fully completed.The Yoshino D machine indicates where the book processed, for the oplah is the total amount of books needed or demanded that is 106.000 books.The speed of 11.000 Rph means that when the machine processed the book, its maximum speed reach 11.000 Rph..For

the output rate of 10.920 per hour is the real output from the machine, that manually calculated by the student.

4.4.2. Effectivity Comparison of Yoshino C & Yoshino D Machine

For the effectivity comparison between Yoshino C & Yoshino D, the student uses method of OEE (Overall Equipment Effectiveness).Where to calculate OEE the student needs to calculate Availability, Performance, and Quality Rate first.Here are the formula of OEE and its factors :

$$OEE = AR\ x\ PE\ x\ QR$$

Figure 4.11. Formula of OEE

$$AR = \frac{loading\ time - downtime}{loading\ time} x100\%$$

Figure 4.12. Formula of Availibility Rate

For the Availibility Rate, the data can be get from working time minus planned down time, or simply available time minus breakdown time divided by available time.Available time in this context is the amount of time scheduled for Yoshino machine to finish the process.Meanwhile for the downtime is the time lost by breakdowns or set ups for the Yoshino machine.

$$PE = \frac{Processed\ Amount\ \times T\ CT}{Operating\ Time} x100\%$$

Figure 4.13. Formula of Performance Effectivity

For the Performance Effectivity, the data can be get from processed amount data means the total production of the Yoshino machine times by theoretical cycle time.Theoretical cycle time is time needed to finish a product from Yoshino machine.Operating time or running time is the actual time needed by the Yoshino machine to finish the process.

$$QR = \frac{(\sum processed - \sum defect)}{(\sum processed)} x100\%$$

Figure 4.14. Formula of Quality Rate

For the Quality Rate, the data can be get from the total amount of product processed by the Yoshino machine minus total defect from the Yoshino machine divided by the total amount of product processed.

From the formulas can be calculated the effectivity of the Binding Machine Yoshino D & Yoshino C using Microsoft Excel as seen in figure 4.15 :

Date	No. SPO	Machine	Total Production	Total Defect Product	Available Time	Running Time	Breakdown Time	Cycle Time	AR	PE	QR	OEE
17 Juli 2018	021/PRO/07/2018	Yoshino C	23584	1550	1440	1400	20	3.6635007	98.61111	61.71429	93.42775	56.85746
17 Juli 2018	025/PRO/07/2018	Yoshino D	24296	880	1440	1320	10	3.5561409	99.30556	65.45455	96.378	62.6457
19 Juli 2018	008/PRO/06/2018	Yoshino D	9790	385	480	410	10	2.9417773	97.91667	70.2439	96.06742	66.07564
19 Juli 2018	043/OL/07/2018	Yoshino C	9440	490	480	380	20	3.0508475	95.83333	75.78947	94.80932	68.86151
20 Juli 2018	028/PRO/07/2018	Yoshino D	5862	152	360	320	10	3.6847492	97.22222	67.5	97.40703	63.92336
20 Juli 2018	02-OC-G-18-03	Yoshino D	5915	174	360	280	20	3.6517329	94.44444	77.14286	97.05833	70.71392
27 Juli 2018	061/PRO/07/2018	Yoshino D	24528	295	615	650	50	1.5044031	91.86992	56.76923	98.79729	51.52659
27 Juli 2018	01-OC-F-18-49	Yoshino C	40360	1446	1011	1200	40	1.5029732	96.04352	50.55	96.41724	46.81057
31 Juli 2018	063/PRO/07/2018	Yoshino C	49440	678	1219.8	1250	45	1.4803398	96.31087	58.5504	98.62864	55.61709
31 Juli 2018	058/PRO/07/2018	Yoshino D	49350	650	615	607	40	0.7477204	93.49593	60.79077	98.68288	56.08829
1 Agustus 2018	051/PRO/07/2018	Yoshino C	24000	1040	615	650	55	1.5375	91.05691	56.76923	95.66667	49.45231
1 Agustus 2018	050/PRO/07/2018	Yoshino D	24888	387	615	580	30	1.4826422	95.12195	63.62069	98.44503	59.57622
3 Agustus 2018	041/PRO/07/2018	Yoshino C	19345	655	495	470	30	1.5352804	93.93939	63.19149	96.61411	57.35178
3 Agustus 2018	066/OL/07/2018	Yoshino D	20200	207	1167	1087	30	3.4663366	97.42931	64.41582	98.97525	62.11676

Figure 4.15. Calculation of Yoshino D & Yoshino C Machine Effectivity

From the calculation can also get the summary table of the OEE from Yoshino D & Yoshino C machine wtih the average value as seen in figure 4.16 :

	OEE	
Date	**Yoshino D**	**Yoshino C**
17 Juli 2018	62.645703	56.85745784
19 Juli 2018	66.07563716	68.86150758
27 Juli 2018	51.52658814	46.81057235
31 Juli 2018	56.08829111	55.61708505
1 Agustus 2018	59.5762187	49.45230769
3 Agustus 2018	62.11675608	57.35178148
Average	**59.67153237**	**55.82511867**

Figure 4.16. Summary Table of OEE

So can be concluded that almost all of the time, Yoshino D machine have a higher effectivity compared to Yoshino C machine.This can be caused by the age of machine which Yoshino D that is still new, compared to Yoshino C that is older.And it is also caused by the setting of the machine by the operators in each machine.

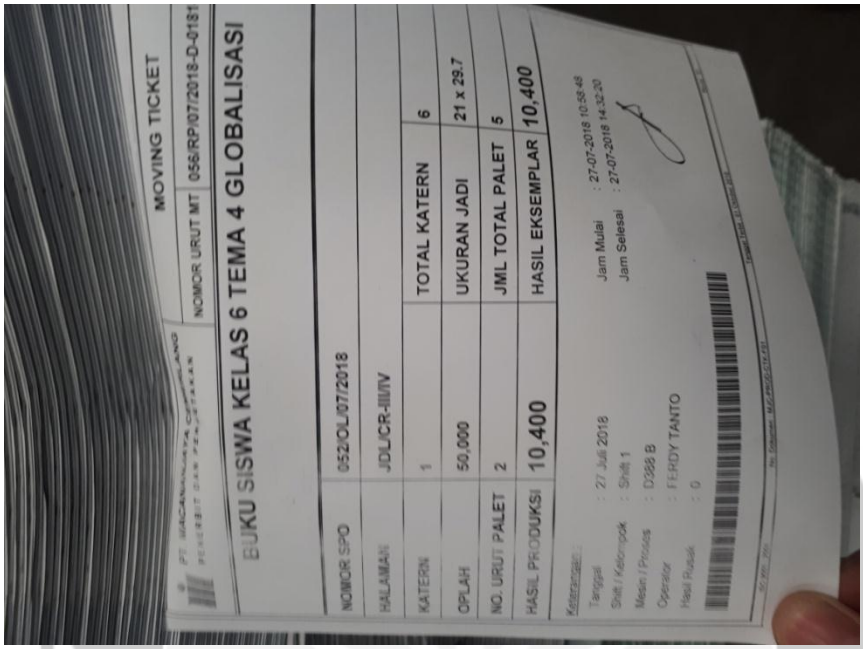
CHAPTER 5

CLOSING

From the work that the student have done, can be concluded that :

a. The actual output from Yoshino machine is always under the maximum speed because the machine isn't always in maximum speed condition.
b. Yoshino D machine have a better OEE average compared to Yoshino C machine's OEE average
c. Availibility Rate is affected by available time & breakdown time
d. Performance Effectivity is affected by total amount of production, cycle time, and operating time or running time
e. Quality Rate is affected by total amount of finished product and total amount of defect product.

APPENDIX



MOVING TICKET

NOMOR URUT MT 056/RP/07/2018-D-0181

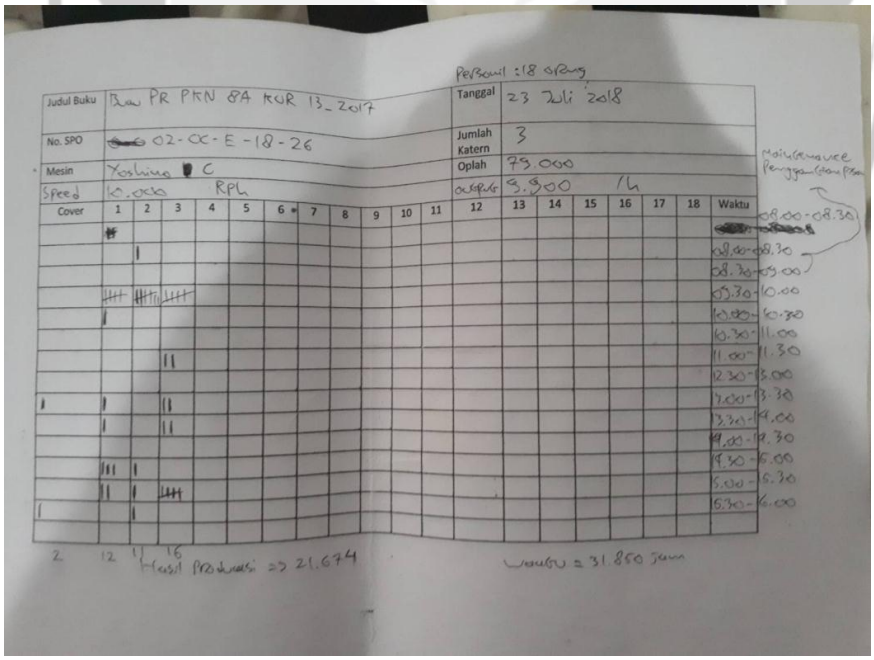
BUKU SISWA KELAS 6 TEMA 4 GLOBALISASI

NOMOR SPO	052/OL/07/2018		
HALAMAN	JDL/CR-III/IV		
KATERN	1	TOTAL KATERN	6
OPLAH	50,000	UKURAN JADI	21 x 29,7
NO. URUT PALET	2	JML TOTAL PALET	5
HASIL PRODUKSI	10,400	HASIL EKSEMPLAR	10,400

Keterangan:

Tanggal : 27 Juli 2018
Shift / Kelompok : Shift 1
Mesin / Proses : D366 B
Operator : FERDY TANTO
Hasil Rusak : 0

Jam Mulai : 27-07-2018 10:58:48
Jam Selesai : 27-07-2018 14:32:20



Perbonil : 18 orang

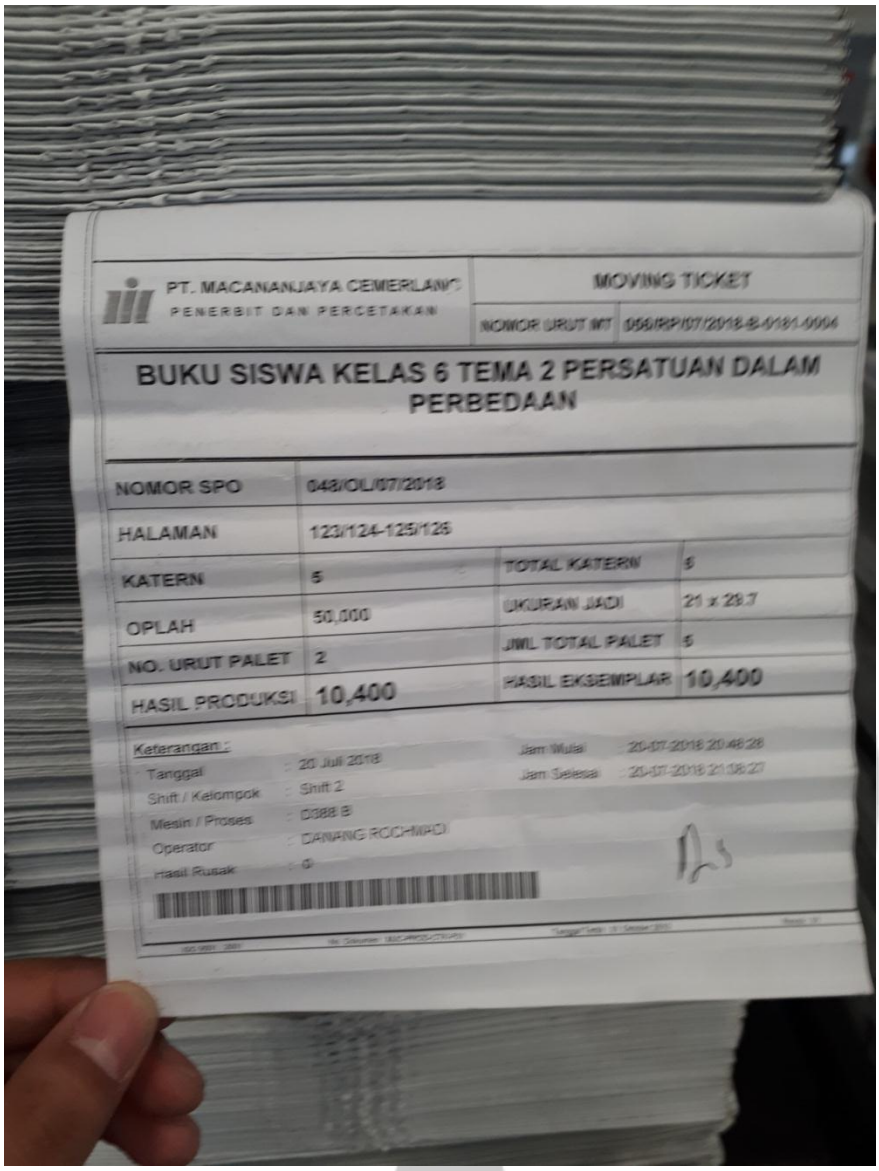
Judul Buku	Buku PR PKN 8A KUR 13_2017	Tanggal	23 Juli 2018
No. SPO	02-CC-E-18-26	Jumlah Katern	3
Mesin	Yoshino C	Oplah	75.000
Speed	10.000 RPH	output	5.500 /h

Cover	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Waktu
																			08.00-08.30
																			08.00-08.30
																			08.30-09.00
																			09.30-10.00
																			10.00-10.30
																			10.30-11.00
																			11.00-11.30
																			12.30-13.00
																			13.00-13.30
																			13.30-14.00
																			14.00-14.30
																			14.30-15.00
																			15.00-15.30
																			15.30-16.00
2	12	11	16																

Hasil Produksi => 21.674

Waktu = 31.850 Jam

Mainkemauan Penggantian Pisau



PT. MACANANJAYA CEMERLANG
PENERBIT DAN PERCETAKAN

MOVING TICKET

NOMOR URUT MT 058/RP/07/2018-B-0181-0004

BUKU SISWA KELAS 6 TEMA 2 PERSATUAN DALAM PERBEDAAN

NOMOR SPO	048/OIL/07/2018		
HALAMAN	123/124-125/126		
KATERN	5	TOTAL KATERN	5
OPLAH	50,000	UKURAN JADI	21 x 29.7
NO. URUT PALET	2	JWL TOTAL PALET	5
HASIL PRODUKSI	10,400	HASIL EKSEMPLAR	10,400

Keterangan :

Tanggal : 20 Juli 2018
Shift / Kelompok : Shift 2
Mesin / Proses : D388 B
Operator : DANANG ROCHMADI
Hasil Rusak : 0

Jam Mulai : 20-07-2018 20:46:28
Jam Selesai : 20-07-2018 21:08:27

Date	No. SPO	Machine	Total Production	Total Defect Product	Available Time	Running Time	Breakdown Time	Cycle Time	AR	PE	QR	OEE
17 Juli 2018	021/PRO/07/2018	Yoshino C	23584	1550	1440	1400	20	3.663501	98.6111	61.7143	93.4277	56.8575
17 Juli 2018	025/PRO/07/2018	Yoshino D	24296	880	1440	1320	10	3.556141	99.3056	65.4545	96.378	62.6457
19 Juli 2018	008/PRO/06/2018	Yoshino D	9790	385	480	410	10	2.941777	97.9167	70.2439	96.0674	66.0756
19 Juli 2018	043/OL/07/2018	Yoshino C	9440	490	480	380	20	3.050847	95.8333	75.7895	94.8093	68.8615
20 Juli 2018	028/PRO/07/2018	Yoshino D	5862	152	360	320	10	3.684749	97.2222	67.5	97.407	63.9234
20 Juli 2018	02-OC-G-18-03	Yoshino D	5915	174	360	280	20	3.651733	94.4444	77.1429	97.0583	70.7139
27 Juli 2018	061/PRO/07/2018	Yoshino D	24528	295	615	650	50	1.504403	91.8699	56.7692	98.7973	51.5266
27 Juli 2018	01-OC-F-18-49	Yoshino C	40360	1446	1011	1200	40	1.502973	96.0435	50.55	96.4172	46.8106
31 Juli 2018	063/PRO/07/2018	Yoshino C	49440	678	1219.8	1250	45	1.48034	96.3109	58.5504	98.6286	55.6171
31 Juli 2018	058/PRO/07/2018	Yoshino D	49350	650	615	607	40	0.74772	93.4959	60.7908	98.6829	56.0883
1 Agustus 2018	051/PRO/07/2018	Yoshino C	24000	1040	615	650	55	1.5375	91.0569	56.7692	95.6667	49.4523
1 Agustus 2018	050/PRO/07/2018	Yoshino D	24888	387	615	580	30	1.482642	95.122	63.6207	98.445	59.5762
3 Agustus 2018	041/PRO/07/2018	Yoshino C	19345	655	495	470	30	1.53528	93.9394	63.1915	96.6141	57.3518
3 Agustus 2018	066/OL/07/2018	Yoshino D	20200	207	1167	1087	30	3.466337	97.4293	64.4158	98.9752	62.1168

	OEE	
Date	Yoshino D	Yoshino C
17 Juli 2018	62.645703	56.85745784
19 Juli 2018	66.07563716	68.86150758
27 Juli 2018	51.52658814	46.81057235
31 Juli 2018	56.08829111	55.61708505
1 Agustus 2018	59.5762187	49.45230769
3 Agustus 2018	62.11675608	57.35178148
Average	**59.67153237**	**55.82511867**

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
1.	Senin, 2-7-2018	08.00-08.45	Pertemuan dengan Kabag dan staf-staf	
		09.00-11.30	Berkunjung ke bagian Pra-cetak	
		12.00-13.00	Istirahat	
		13.00-14.45	Mengamati proses gabhering pada mesin Binding	
		16.00	Pulang	

Catatan penting harian:
Proses sebelum pencetakan (Pra-cetak) meliputi Montage hingga pencetakan plat dan ada oven treatment untuk memperkangan dan memperlama kapasitas cetak untuk plat.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda Tangan & Stempel Perusahaan
1.	Selasa, 3-7-2018	08.00-11.00	Berkunjung ke bagian laminating dan perbaikan	
		12.00-13.00	Istirahat	
		13.30-14.45	Menghitung efisiensi mesin Yoshino A,C, dan DC Gugas dari pembimbing lapangan)	
		15.00	Pulang	

Catatan penting harian:
Komunikasi antar departemen sangatlah penting untuk mencegah banyaknya buku cacat yang diproduksi.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Jumat, 6-7-2018	07.30-11.30	Mengamati pengambilan barang jadi (kerusakan yang sering terjadi apa saja)	
		12.00-13.00	Istirahat	
		13.30-14.45	Mengamati kerusakan barang jadi	
		15.00	Pulang	

Catatan penting harian:
Buku-buku cacat yang dikirim ke perbaikan tidak dibedakan menurut kerusakannya.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Sabtu, 7-7-2018	07.30-09.00	Mengamati dan mencoba menghitung Defect Rate dari mesin Yoshino C dan D	
		09.30-10.30	Mencoba memilah dan menghitung kaleng yang rusak	
		12.00	Pulang	

Catatan penting harian:
Kerusakan kaleng pada proses gabhening biasa terjadi karena penyenggolan antar kaleng tersebut.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Selasa, 10-7-2018	08.00-11.00	Memulai pemilahan dan Penghitungan kaleng rusak	
		11.30-12.30	Istirahat	
		12.30-14.45	Memilah dan menghitung kaleng rusak pada mesin Yoshino D	
		15.00	Pulang	

Catatan penting harian:
Semakin tipis kaleng (materialnya maupun jumlah lapisannya) maka kemungkinan rusaknya akan semakin besar.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda Tangan & Stempel Perusahaan
	Rabu, 11-7-2018	07.00-11.30	Pengamatan pada mesin Toshino D	
		11.30-12.30	Istirahat	
		12.30-14.45	Pemilahan dan penghitungan hasil produksi pada mesin Toshino D	
		15.00	Pulang	

Catatan penting harian:
Proses babbeling dengan mesin pada pagi hari lebih besar kemungkinan rusaknya karena gerbadong mesin belum terlalu panas.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
1.	Kamis, 12-7-2018	07.30-11.30	Memilah dan mencatat katern rusak karena proses pada mesin Yoshino D	
		11.30-12.30	Istirahat	
		12.30-14.45	Memilah dan mencatat katern rusak pada mesin Yoshino D	
		15.00	Pulang	

Catatan penting harian:
Kualitas kertas dan setting pada penjepit katern sangat berpengaruh pada rusak/Gidangnya katern.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
1.	Jumat, 13-7-2018	08.00 - 11.30	Memilah dan menghitung kabel rusak pada mesin Yoshino D	
		11.30 - 12.30	Istirahat	
		12.30 - 15.00	Memilah dan menghitung kabel rusak pada mesin Yoshino D	
		15.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Sabtu, 14-7-2018	07.00-08.00	Menunggu jalan sehat selesai	
		08.00-12.00	Memilah dan menghitung kaleng rusak pada mesin Yoshino D	
		12.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Senin, 16-7-2018	08.00-09.00	Memilah dan mencatat kaleng rusak pada mesin Toshino D	
		09.00-11.00	Berkunjung ke Departemen PPIC	
		12.00-13.00	Istirahat	
		13.00-14.00	Memilah dan mencatat kaleng rusak pada mesin Toshino D	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Selasa, 17-7-2018	07.00 - 12.00	Mulai membandingkan mesin Yoshino C dan D	
		12.00 - 13.00	Istirahat	
		13.00 - 16.00	Memilah dan menghitung kaleng rusak pada mesin Yoshino C dan D	
		16.00	Pulang	

Catatan penting harian:
Mesin Yoshino C memiliki kecepatan maksimum 12.000 Rph dan jumlah kaleng maksimal

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Kamis, 19-7-2018	08.00-12.00	Memilah dan menghitung ukuran ~~[illegible]~~ Rusak pada mesin Yoshino C dan D	
		12.00-13.00	Istirahat	
		13.00-16.00	Mengamati, memilah, dan menghitung ukuran Rusak pada mesin Yoshino C dan D	
		16.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Jumat, 20-7-2018	07.00 - 12.00	Memilah dan mencatat material rusak pada mesin Toshino C dan D	
		12.00 - 13.00	Istirahat	
		13.00 - 14.30	Memilah dan mencatat material rusak pada mesin Toshino C dan D	
		15.00	Pulang	

Catatan penting harian:
Karena dengan kecebalan yang kecil, baik material karet/jumlah lokomotif yang kecil akan lebih sering terjadi kerusakan.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda Tangan & Stempel Perusahaan
	Sabtu, 21-7-2018	07.00 - 08.00	Senam Pagi	
		09.00 - 12.00	Memilah kabel ~~[illegible]~~ rusak pada mesin Toshiba C dan D	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Senin, 23-7-2018	08.00 - 11.30	Memilah dan menghitung kabel rusak pada mesin Yoshino C dan D	
		11.30 - 12.30	Istirahat	
		12.30 - 16.00	Memilah dan menghitung kabel rusak pada mesin Yoshino C dan D	
		16.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Selasa, 24-7-2018	07.00-09.30	Memilah dan menghitung material rusak pada mesin Toshiro D	
		10.00-11.30	Mengamati proses gabbering pada mesin Toshiro D	
		11.30-12.30	Istirahat	
		12.30-15.00	Mengamati proses perbaikan di departemen perbaikan	

Catatan penting harian:
- Ada maintenance pada mesin Toshiro D selama 30 menit dari jam 08.00.
- Mesin Toshiro C tidak beroperasi pada shift 1 ini dikarenakan cover untuk material juga sedang baik dahulu.

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Rabu, 25-7-2018	07.00-11.30	Memilah dan menghitung daging rusak pada mesin Toshiba C dan D	
		11.30-12.30	Istirahat	
		12.30-15.30	Memilah dan menghitung daging rusak pada mesin Toshiba C dan D	
		15.30	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

085-OSR/Ind-FTI-UAJY/18-VIII/2017

Revisi 00

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda Tangan & Stempel Perusahaan
	Jumat, 27-7-2018	08.00-11.30	Memilah dan menghitung kaleng rusak pada mesin Toshiba C dan D	
		11.30-12.30	Istirahat	
		12.30-15.00	Memilah dan menghitung kaleng rusak pada mesin Toshiba C dan D	
		15.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

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Revisi 00

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Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda Tangan & Stempel Perusahaan
	Sabtu, 28-7-2018	07.00-08.00	Senam pagi	
		09.00-10.30	Memilah dan menghitung kaleng rusak pada mesin Yoshino D	
		11.00-12.00	Mengamati proses Gas-welding pada mesin Yoshino C	
		12.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Senin, 30-7-2018	07.00 - 09.00	Mengamati mesin yes-nino C dan D	
		09.00 - 11.00	Izin pulang untuk mengirim e-mail ke kampus dan mengambil laptop	
		12.00 - 13.00	Istirahat	
		13.00 - 15.00	Memisil laporan dan input data	
		15.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
1.	Selasa, 31-7-2018	07.00-12.00	Memilah dan menghitung kaleng rusak pada mesin Yoshino C dan D (sebagai perbandingan)	
		12.00-13.00	ISHOMAHAT	
		13.00-14.00	Memilah dan menghitung kaleng rusak pada mesin Yoshino C dan D (sebagai perbandingan)	
		15.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

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Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Rabu, 1-8-2018	08.00-12.00	Memilah dan menghitung karena rusak pada mesin Toshiba C dan D	
		12.00-13.00	Istirahat	
		13.00-15.00	Input data ke Microsoft Excel	
		15.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Kamis, 2-8-2018	08.00 - 12.00	Mengamati proses Gaching pada mesin Yoshino C dan D	
		12.00 - 13.00	Istirahat	
		13.00 - 14.30	Mengambil dokumentasi di departemen Finishing / mesin Bending	
		15.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

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Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda tangan & stempel perusahaan
	Jumat, 3-8-2018	07.00-09.00	Input data ke Microsoft Excel	
		09.00-11.30	Memilah dan mencatat kabel rusak pada mesin Yoshino C dan D	
		11.30-12.30	Istirahat	
		12.30-14.45	Memilah dan mencatat kabel rusak pada mesin Yoshino C dan D	
			Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

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Catatan Harian Pelaksanaan Kerja Praktek/ Magang

No.	Hari, Tanggal	Jam	Kegiatan	Tanda Tangan & Stempel Perusahaan
	Sabtu, 4-8-2018	07.00-08.00	Jalan sehat	
		08.00-11.00	Mengambil dokumentasi pada departemen Finishing (mesin Binding)	
		11.00-11.45	Berpamitan kepada seluruh operator, staff, dan kabag departemen Finishing	
		12.00	Pulang	

Catatan penting harian:

Catatan dari pembimbing lapangan:

Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta
Lembar Bimbingan Pelaksanaan dan Penyusunan
Laporan Kerja Praktek/ Magang

Nama Mahasiswa : Ikee Kurnia Lahando
NPM : 1519028953
Perusahaan tempat KP : PT. Macanan Jaya Cemerlang
Tanggal pelaksanaan KP : 2 Juli 2018 - 9 Agustus 2018
Dosen Pembimbing : Ir. Hananto Kusuo, S.T., M.T.

No	Tanggal	Agenda	Tanda Tangan Dosen Pembimbing
1		Penyerahan surat pembimbingan dan Konsultasi persiapan Kerja Praktek	
2		Laporan atau konsultasi penugasan dari perusahaan	
	30 Agustus 2018	Laporan pertama setelah pelaksanaan Kerja Praktek dan konsultasi penyusunan laporan	
	20-9-2018	Penyerahan draft laporan Kerja Praktek untuk pertama kali	
		Pengesahan laporan Kerja Praktek	