



# **Daffodil** *International* **University**

INTERNSHIP REPORT

ON

Lovello Ice Cream Industry “Taufika  
Foods And Agro Industries”

**Submitted To:**

Prof.Dr.Md. Bellal Hossain

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Submission Date: 15.05.19

## Letter of Transmittal

Date: 15.05.19

To

Professor Dr. Bellal Hossain

Head

Department of Nutrition and Food Engineering

Faculty of Allied Health Science

Daffodil International University

Subject- Submission of internship report on “Taufika foods and Agro Industries Limited”

Dear Sir,

It is a great pleasure and honor for me to have the opportunity to submit Internship report as a part of the Nutrition and Food Engineering (NFE) program curriculum.

I have prepared this report based on the acquired taste knowledge during my internship period in “Levello Ice-Cream” under “Taufika foods and Agro Industries Limited”. It is great achievement to work under your active supervision. This report is based on “study on ice-cream and flavored Milk production and processing”. I have got to opportunity to work in levello ice-cream industry which is concern of Taufika foods and Agro Industries Limited.

This is the first time the project gave me both academic and practical exposures. First of all I have gained knowledge about the organizational culture of a prominent consumer product producing organization of the country. Secondly the project gave me the opportunity to develop a network with the corporate environment.

I therefore, would like to place this report to you judgment and suggestion. You kind advice will encourage me to perform better planning in future.

Sincerely Yours,

Srabone Binte Kabir

ID: 152-34-399

Department of Nutrition and Food Engineering©Daffodil International University

## CERTIFICATION OF APPROVAL

I am pleased to certify that the internship report on Levello Ice-cream concern “Taufika foods and Agro Industries Limited”, conduct by Srabone Binte Kabir bearing ID: of the department of Nutrition and Food Engineering has been approved for presentation and defense/vivavoice.

I am pleased to hereby certify that the data and finding presented in the report are the authentic work of srabone Binte Kabir. I strongly recommendations and defense/vivavoice. srabone Binte Kabir bears a strong moral character and a very pleasant personality. It has indeed a great pleasure working with him. I wish him all success in life.

A photograph of a handwritten signature in black ink on a white piece of paper. The signature is written over a blue stamp that partially reads "Department of Nutrition and Food Engineering" and "Daffodil International University". The date "13/11/18" is also visible in the signature.

.....

Professor Dr. Bellal Hossain

Head

Department of Nutrition and Food Engineering

Faculty of Allied Health Science

Daffodil International University

## Acknowledgements

First of all, my gratitude goes to the almighty Allah for giving me the patience and capability to complete my duty and responsibilities in a well and sound health. Then my parents, who had put me on the map and supported me in every situation.

I would like to express my gratitude to **Professor. Dr. Md Bellal Hossain**, Head of the Dept. of Nutrition and Food Engineering, Daffodil International University for creating this enormous scope of practical knowledge in the curriculum and providing me valuable guidance to complete my work.

My deepest respects and thankfulness to **BM Rabbany**, Chief Human Resource Manager Lovello Ice Cream Ltd, and for allowing me to complete the internship in Lovello Ice cream.

I greatly appreciate **Md. Rafiqul Islam Assistant** Manager Quality Assurance Dept, **Md Shahadot Hosan**, Deputy Manager Admin & Compliance, **Md. Abdul Mojid** , Assistant General Manager Production, **Md. Mostafa**, Deputy Manager, Electrical Dept. for giving me valuable time, sharing knowledge and teaching me various practical aspects of industrial life and organizational behavior.

I am bound to the Executives, Junior Executives, Lab Assistants of the Quality Assurance Dept. **Saddam Hosan**, officer (QA), **Md. Liton Miah** Asst. Production Officer, **Md. Tarikul Islam** Asst. Quality Assurance Officer, **Md. Shamim Hosan**, Asst. Manager, Mechanical Dept. **Md. Mozibur Rahman** Sr. Tech Officer. **Md. Mafuzur Rahman** Electrical Dept. Designation (TE).

**Md. Mamun**, Mechanical Dept. Designation (Operator), **Md. Amir Shohel**, Refrigeration Unit, Designation (Tech. Officer), Admin, Distribution of Lovello Ice cream for supervising, helping and sharing valuable information and cooperation.

## DEDICATION

All the hard work behind this thesis only possible by the grace of almighty Allah. This project is dedicated to my father, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mom, who taught me that even the largest task can be accomplished if it is done one step at a time. I also dedicate this to my younger brother who always appreciate me. I dedicate this to my supervisors who helped me to complete this project.

## Executive Summary

The Internship was conducted at Taufika Foods and Agro Industries Ltd. in Lovello Ice Cream from 09 February 2019 .This factory mainly manufactures difference types of Ice Cream.

To prepare Ice cream is used to milk, sugar, stabilizers, emulsifiers, water, food grade flavor, food grade color, fruit pulp, skim milk powder, butter oil, coconut oil, glucose. After preparing the mixing tank of ice cream pasteurized and homogenize. In Ice cream they mainly check physical, chemical, microbiological test for quality control.

Major objective of this report is to identify the actual health hazard and quality control of Lovello Ice cream Ltd and also develop the production and quality control. In this regard, Customers are very important for every business. My report is based on the hazardous free and qualified Lovello Ice cream. the report contains information of the organization itself, Sanitation, hygienic facilities of the overall industries and Collected qualified raw materials.

Also involve the raw materials test, safe production, ultimately quality check of the final product than marketing. Also I have discussed about safe production and quality control of Lovello Ice Cream.

# CONTENTS

## PAGE

Letter of Transmittal .....	i
CERTIFICATION OF APPROVAL .....	iii
Acknowledgements.....	iv
DEDICATION .....	v
Executive Summary .....	vi
Table of Content .....	ix
List of figure .....	ix
Chapter-1 .....	01-02
1.1Introduction .....	01
1.2Origin of the report.....	02
1.3Objectives.....	02
1.4General objectives .....	02
1.5Specific objectives.....	02
1.6The internship and study purpose.....	03
Chapter-2.....	04-05
2.1Company profile.....	04
2.2Mission.....	04
2.3 Vision .....	04
2.4 Business concern of Taufika group.....	05
Chapter 3 .....	06-17
Production .....	06
3.1 Ice cream production.....	06
3.2 Major Ingredients of Ice cream .....	07
3.3 Ice-cream manufacturing process in lovello: .....	08-09
3.4 Types of ice-cream .....	10
3.5 List of Machine .....	10
3.6 List of Mixing.....	11
3.7 Tank and their Capacity .....	12
3.8 freezer and their capacity .....	12
3.9 Flow Diagram of Ice-cream .....	13

3.9.1 Stick Range: Choc blast .....	13
3.9.2 Cup range: Vanilla Cup.....	14
3.9.3 Cone range: vanilla cone .....	15
3.9.4 lovello premium: Choc blast .....	15
3.10 cone biscuits production.....	16
3.10.1 Mixing procedure: .....	16
3.10.2 Flow diagram of cone biscuits products:.....	17
3.11 Use of packaging materials: .....	17
Chapter-4 .....	18-21
Department support in production.....	18
4.1 quality assurance (QA) Department.....	18
4.2 objectives:.....	18
4.3 Responsibilities of the quality assurance Department.....	18
4.4 Tests operated by quality assurance department: .....	18
4.5 Production Unit .....	19
4.6 Engineering Department .....	20
4.7 Refrigeration Unit .....	21
4.8General store .....	21
4.9 Distribution Department.....	21
4.10 Human Resources and administration Department.....	21
Chapter-5 .....	22
Machines and maintenance .....	22
5.1Machines and maintenance .....	22
5.2Ammonia Plant and Refrigeration.....	22
5.3 Boiler Unit.....	22
5.4 CIP(clean in place ) .....	22
5.5Effluent treatment plant.....	23
5.6 Flow diagram of effluent Treatment Plant (EIP) .....	23
Chapter6.....	24
Conclusion.....	24



## LIST OF FIGURES

FIGURES	PAGE
Figure 1.1 : Lovello Ice Cream Lovello.....	01
Figure 3.1 : Ice Cream.....	06
Figure3.3 : Ice-cream manufacturing process in Lovello.....	09
Figure 3.5 : Rollo Machine.....	10
Figure 3.5 Comet C2 .....	11
Figure 3.5 SL-600 .....	11
Figure 3.8 : Table of Freezer & capacity.....	12
Figure 3.8 : Table of Freezer & capacity .....	12
Figure 3.9.1 : Flow Diagram of Choc-bar Ice Cream.....	13
Figure 3.9.2 Cup range: Vanilla Cup.....	14
Figure 3.9.3 Cone range: vanilla cone.....	15
Figure 3.9.4 : Flow Diagram of Choc blast.....	15
Figure 3.10.1 : Flow Diagram of Mixing procedure.....	16
Figure 3.10.2 : Flow diagram of cone biscuits products .....	17
Figure 5.4: Flow Diagram of CIP(clean in place).....	22
Figure 5.6 : Flow diagram of effluent Treatment Plant(EIP).....	23



## Chapter-1

### Introduction

1.1 Taufika foods and Agro Industries Limited market new brand ice-cream. In Bangladesh name is lavello. Lavello has earned good reputation and place with in a very short period time. Lavello ice-cream was launched on February 14, 2016 in Bangladesh. It has been producing halal, helthy and yeummy products . Imported high quality raw materials and modern technology use to make lavello ice-cream. For the first time, it has brought premium quality ice-cream named shahi, khajur, malai, with 100% natural khajur flavor. Many varieties of ice-cream has being delivered to all classes and segments of consumers around our country. Those are mini cone, couple tub, hidden heart single and heart beats single in mini size. Lavello ice-cream industry has been spreading its good sales and distribution network and create curiosity among peoples heart to another heart. Its innovative production, operation, communication create a good connection to consumer. It to be the beats of Bangladesh.

It is a first moving consumer. Goods (FMCG) industry certified by ISO/FSSC 22000, BSTI, Halal.

I thought this industry help us to improve the practical and theoretical knowledge.



Figure 1.1 : Lovello Ice Cream logo

## **1.2 Origin of the report**

Mainly student gain theoretical knowledge in the study period but now a day. In job sector students need some practical experiences. An internship program helps him/her to gain practical experiences.

So, Daffodil International University includes an internship program at the final stage and it is very much helpful for students of nutrition and food engineering student. I have tried my best to work situation theoretical knowledge to work situation.

## **1.3 Objectives**

There are two objectives of this study

1. General objective
2. Specific objective

## **1.4 General objectives**

This internship report is prepared to complete the bachelor of nutrition and food engineering (NFE) degree under the faculty of Daffodil International University.

## **1.5 Specific objectives**

This study entails the following aspects:

- To have a practical knowledge on food processing, quality control, packing and storage..
- To get practical experience about the working environment of factory.
- To achieve a practical experience on processing quality control,packaing storage,hygin of lavello ice-cream “Taufika foods and Agro Industries Limited”  
This study gives an overview of Bangladesh ice-cream industry.

## **1.6 The internship and study purpose**

The internship program and the study have following purpose:

- To get knowledge and activates of the lovello ice-cream.
- To view the processing of ice-cream products in the modern technology based plants.

## **Chapter-2**

### **Company profile**

It is a First Moving Consumer Goods (FMCG) types industry in Bangladesh, Founded in 2015. It is certified from ISO/FSSC 22000, BSTI, Halal.

Head office of Lovello Ice cream industries located at plot-80, Road-2, Banani (chairmanbari), Level-4A and 4B, Dhaka-1213, Bangladesh.

Factory location Bashaile, Kathali, 6 no. valuka union parishad, Valuka, Mymensingh.

Company website [WWW.Lovello.club](http://WWW.Lovello.club)

### **2.2 Mission**

Sharing the love of quality ice cream!

To provide quality products & services that consistently exceed customers' expectations through the use of technology, dedicated and skilled employees and the spirit of teamwork.

### **2.3 Vision**

- To be a great place to work and influence people to be the best they can be.
- Commitment to integrity and always conduct ourselves honestly and honorably.
- To provide a portfolio of quality products that meet the desires and needs in the market.
- Build partnerships with our suppliers and customers to create mutual value.
- Dedicate ourselves to social responsibilities through involvement in local community support.
- Minimize our carbon footprint on the environment by reducing, reusing and recycling.
- Maintain profitability by maximizing markets, having new products, efficient workforce and processes.
- Growth through continued market development and acquisitions related to our business model.

## **2.4 Business concern of Taufika group**

1. Taufika Engineering Ltd. (TEL)
2. Taufika Energy Co Ltd. (TECL)
3. Taufika Foods & Agro Industries Ltd. (TFAIL)
4. Bel Construction Sdn Bhd.
5. Deltamerge Sdn Bhd.

## Chapter 3 Production

### 3.1 Ice cream production

Mainly Ice cream is a frozen dairy Product made from milk and cream and combination of fruits, liquid glucose, sugar, syrup, color, flavor etc. By adding stabilizer and other ingredients make a mixer and stirred this mixer to incorporate air spaces and cooled below the freezing point of water to prevent ice crystal forming. Mainly use of liquid glucose prevent the forming of bubbles and ice crystal from mixing unit to storage of Ice cream. By air pushing (over run) in the freezer turn the mixer into cream (-5°C) and the result is a smooth, semi-solid foam that is solid at very low temperature (<35°F/2°C). Mainly used 50% - 100% over run.

$\% \text{ of overrun} = \frac{\text{weight of mix} - \text{weight ice cream}}{\text{weight of ice cream}} \times 100$



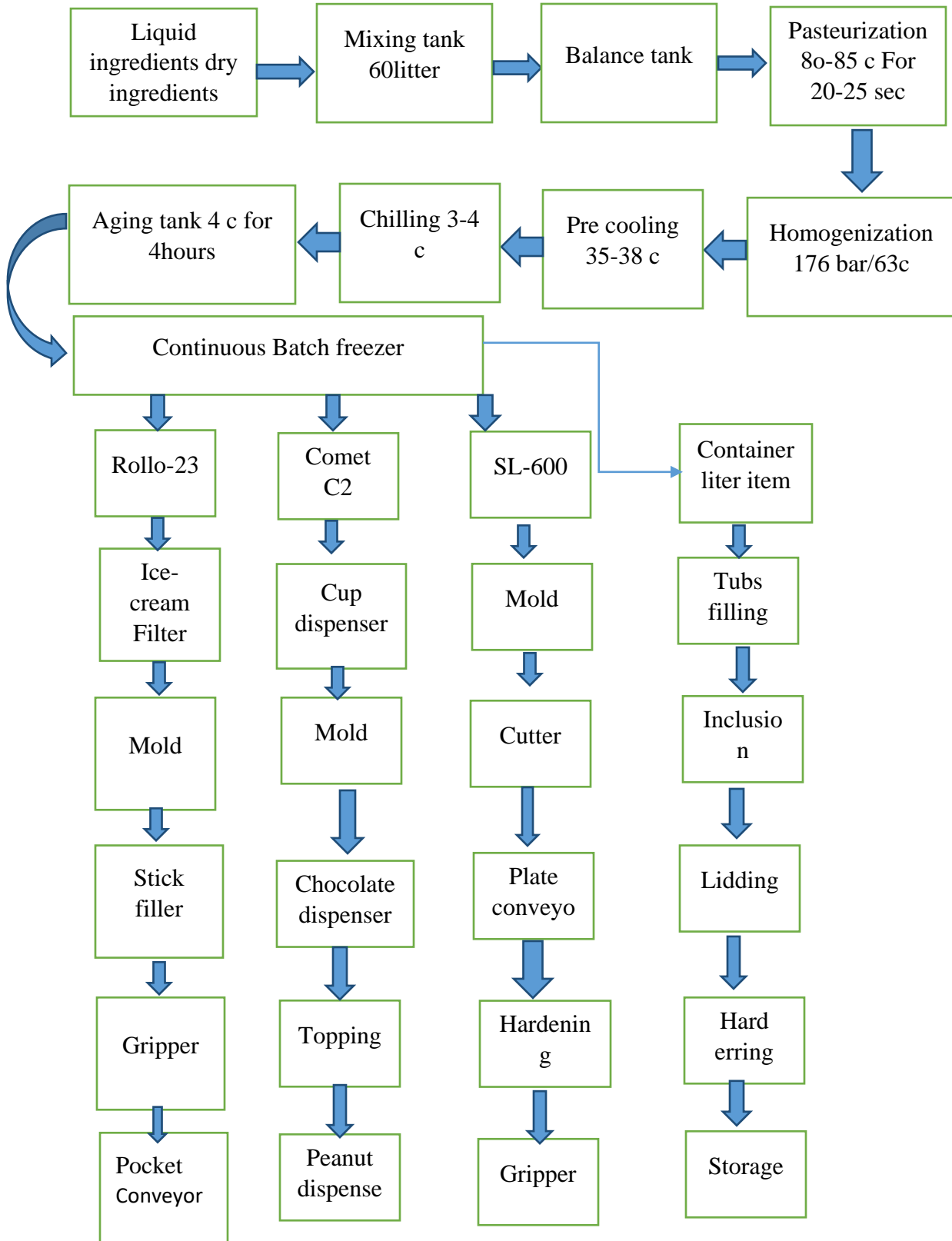
Figure 3.1 : Ice Cream

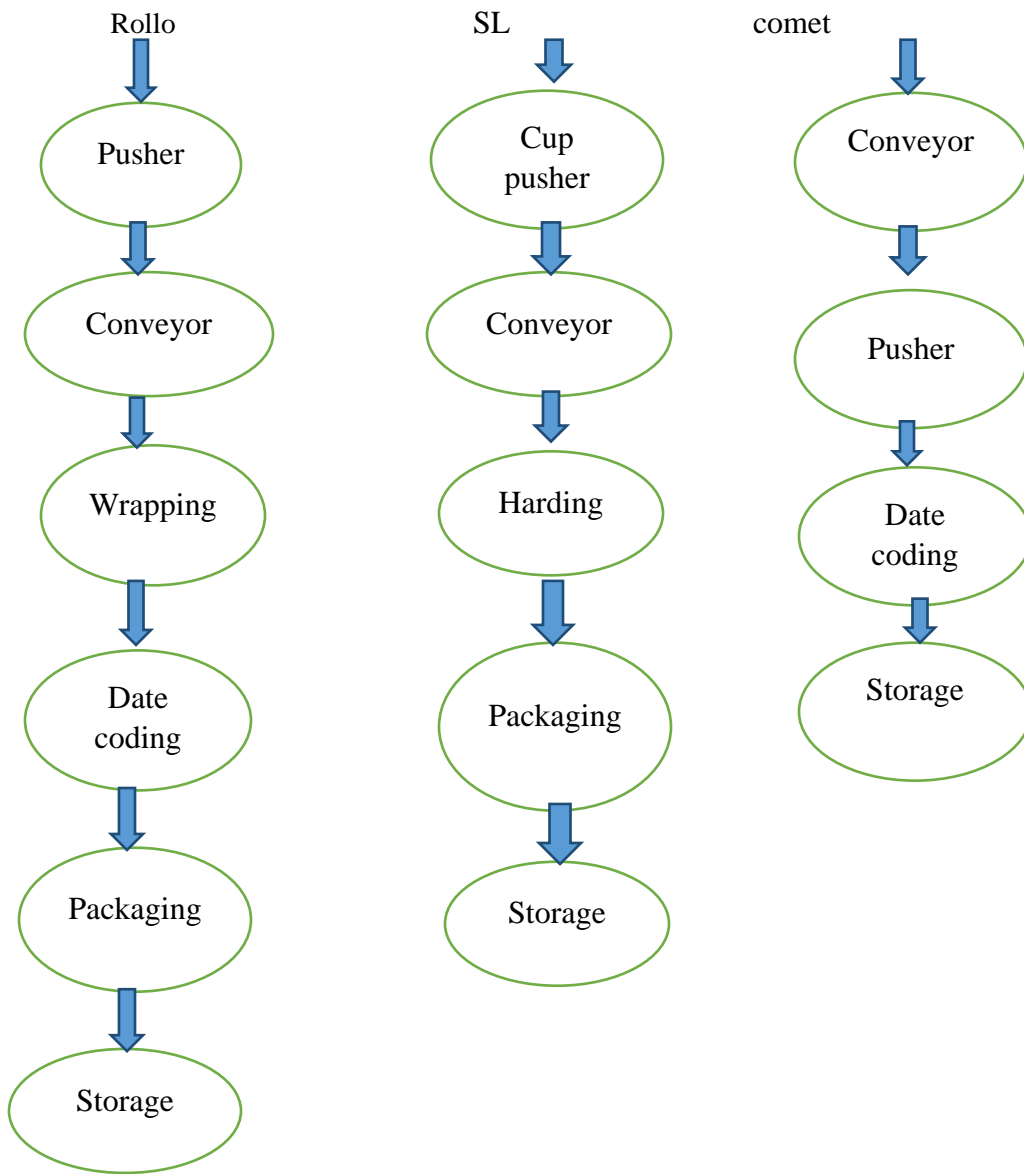


## **3.2 Major Ingredients of Ice cream**

1. Skim Milk Powder (SMP)
2. Full Cream Milk Powder (FCP)
3. Sugar
4. Liquid glucose
5. Butter oil
6. Vegetable fat
7. Coconut oil
8. Emulsifier
9. Stabilizer
10. Water
11. Color
12. Flavor

### 3.3 Ice-cream manufacturing process in Lovello:





**Figure3.3 : Ice-cream manufacturing process in Lovello**

### 3.4 Types of ice-cream

The following ice-cream products are manufacturing at Lovello ice-cream unit.

✚ **Stick Range:**

1. Choc-bar
2. Shell and Core
3. Lemon loly
4. “69” Loly
5. Orange loly
6. Hidden heart
7. Heart Beats
8. Kulfi

✚ **Cup range**

1. 50ml vanilla
2. 50ml strawberry
3. 50ml mango
4. 50ml chocolate
5. 100ml (vanilla, chocolate, mango, strawberry)
6. Swirly sundae

✚ **Cone Range**

1. Vanilla cone (Maxi, Mini)
2. Chocolate (Maxi, Mini)
3. Chocolate (Maxi)

✚ **Family Pack**

1. 250ml (vanilla, chocolate, cont. mango, strawberry)
2. 500ml (vanilla, chocolate, mango, strawberry)
3. 1000ml (vanilla, chocolate, mango, strawberry)
4. Double Sundae (Vanilla+ caramel)
5. Double Sundae (Vanilla+ Mango)
6. Double Sundae (Vanilla+ Strawberry)

✚ **Lovello Premium Category**

1. 1000ml Shahi Khajur Malai
2. 1L Round shape cake
3. 1.5L Heart Shape Cake
4. Choco blast

✚ **Lovello Parlor Category**

1. Ambrosia

### 3.5 List of Machine

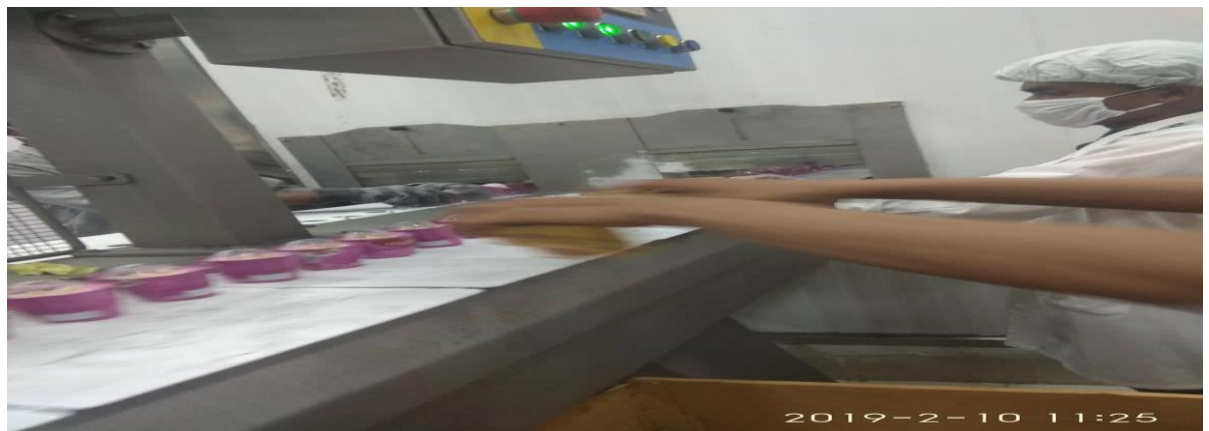
- ✚ Rollo-23
- ✚ Comet-C2
- ✚ SL-600
- ✚ Freezer



Figure 3.5 : Rollo Machine



**Figure 3.5 : Comet C2**



**Figure 3.5 : SL- 600**

### **3.6 List of Mixing**

They has two mixing tanks used in Ice-cream units

- ✚ Mixing tank 1 capacity-2500kg
- ✚ Mixing tank 1 capacity-2200kg

### 3.7 Tank and their Capacity

Tank	Capacity
Aging Tank-1	2500L
Aging Tank-2	2200L
Aging Tank-3	2200L
Aging Tank-4	2200L
Aging Tank-5	2200L
Aging Tank-6	1000L
Aging Tank-7	1000L

Figure 3.7: Table of Tank & capacity

### 3.8 freezer and their capacity

Freezer S.L.	Freezer Types	Capacity
01	Continuous Freezer	700
02	Continuous Freezer	300
03	Continuous Freezer	700
04	Continuous Freezer	300
05	Continuous Freezer	700

Figure 3.8 : Table of Freezer & capacity

### 3.9 Flow Diagram of Ice-cream

#### 3.9.1 Stick Range: Choc-bar

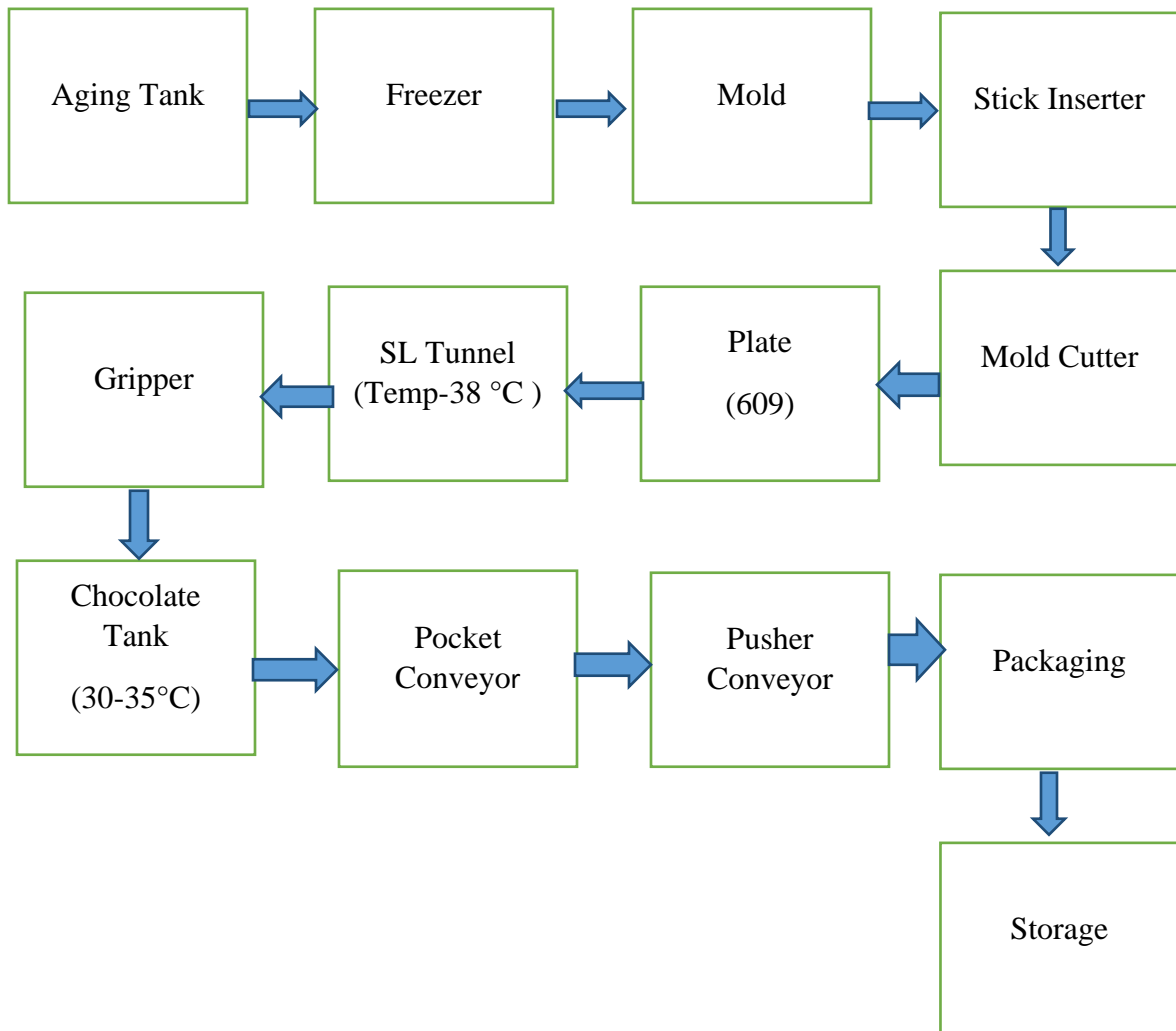
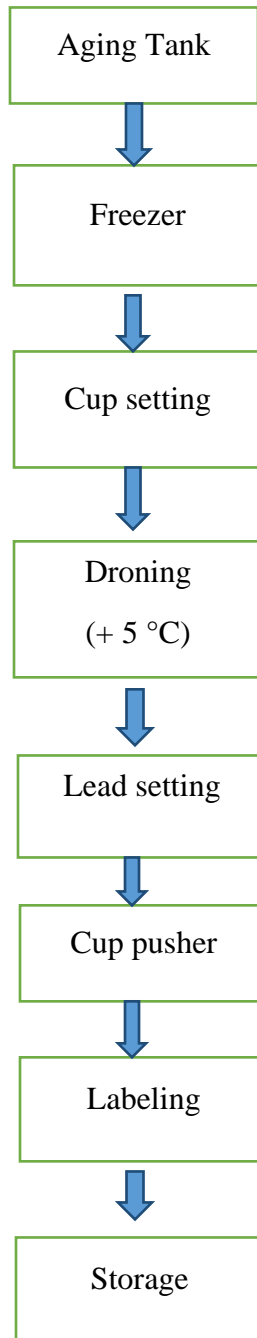


Figure 3.9.1 : Flow Diagram of Choc-bar Ice Cream

### 3.9.2 Cup range: Vanilla Cup



**Figure 3.9.2 Cup range: Vanilla Cup**



### 3.9.3 Cone range: vanilla cone

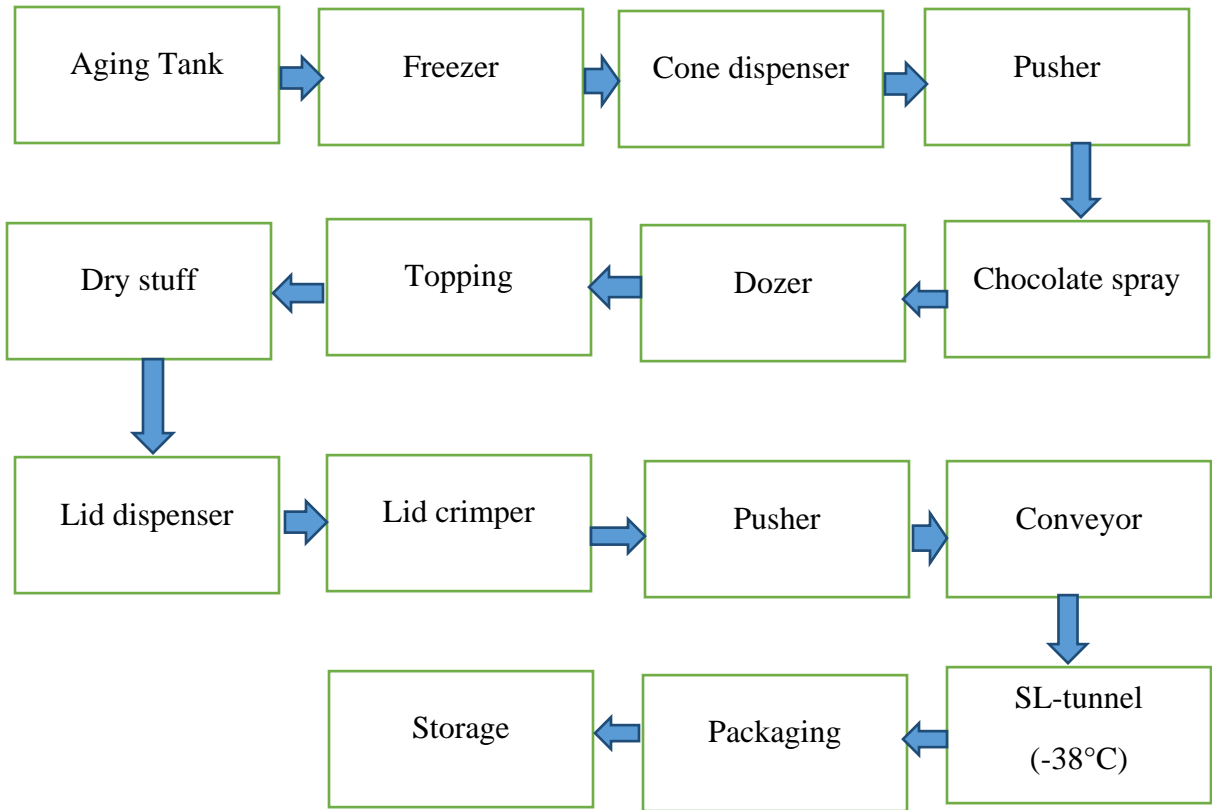


Figure 3.9.3 Cone range: vanilla cone

### 3.9.4 lovello premium: Choc blast

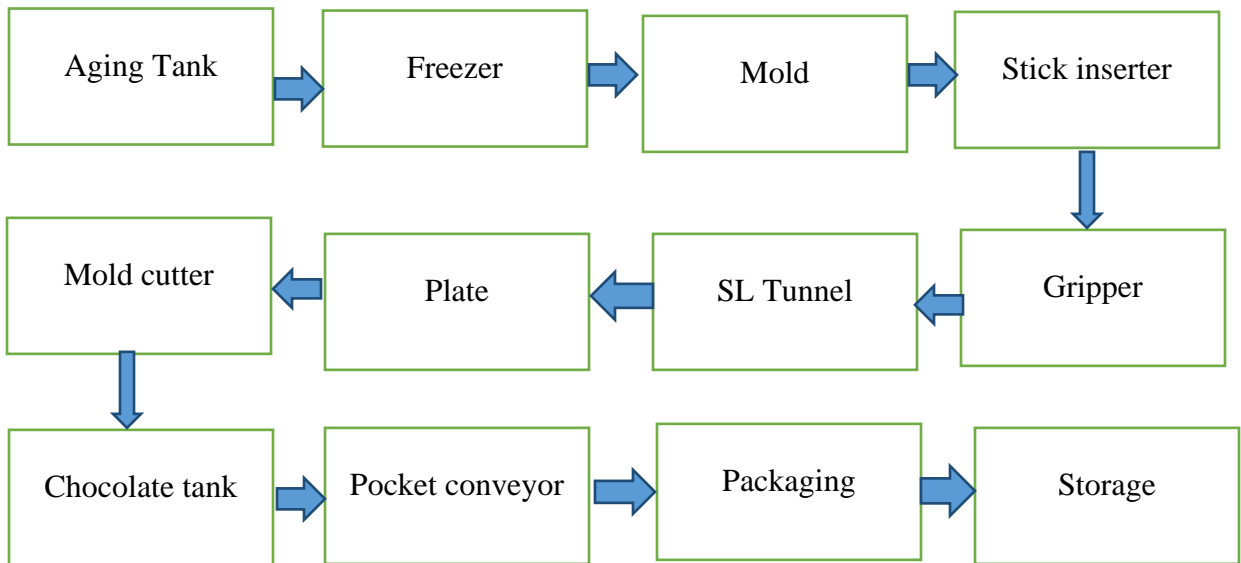


Figure 3.9.4 : Flow Diagram of Choc blast

### 3.10 cone biscuits production

Lovello Ice-cream industry has its own cone biscuits productions plants. These cone biscuits are used for cone ice-cream.

- Machine name: cone baking oven
- Capacity of the machine : 78pcs per min
- Actual f the machine: 7278pcs per min
- Backing temperature: 75-81°C
- Batch: 200kg

#### 3.10.1 Mixing procedure:

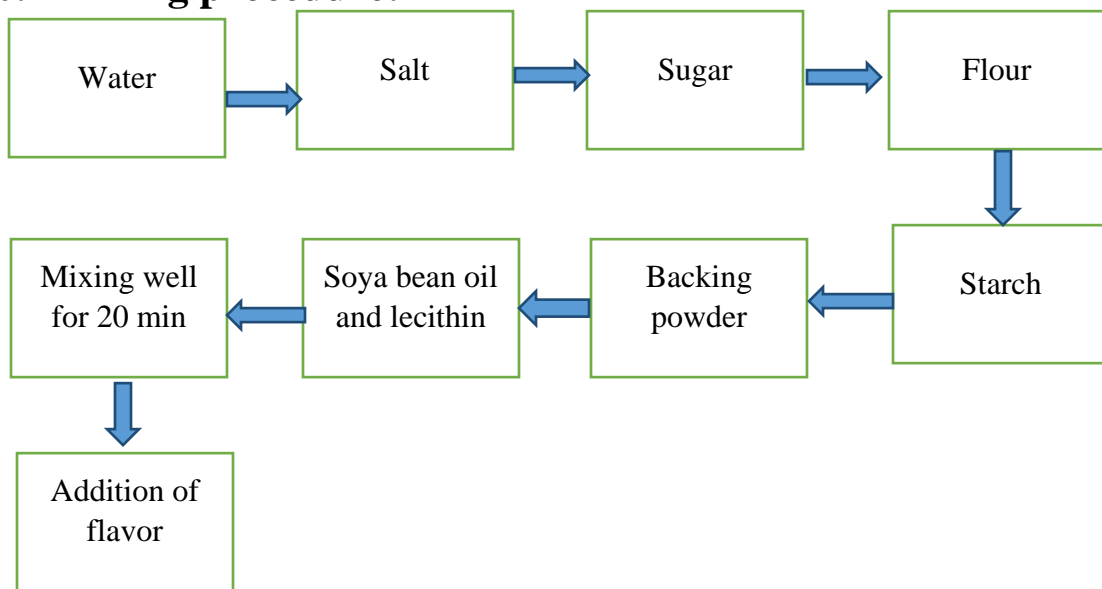


Figure 3.10.1 : Flow Diagram of Mixing procedure

### 3.10.2 Flow diagram of cone biscuits products:

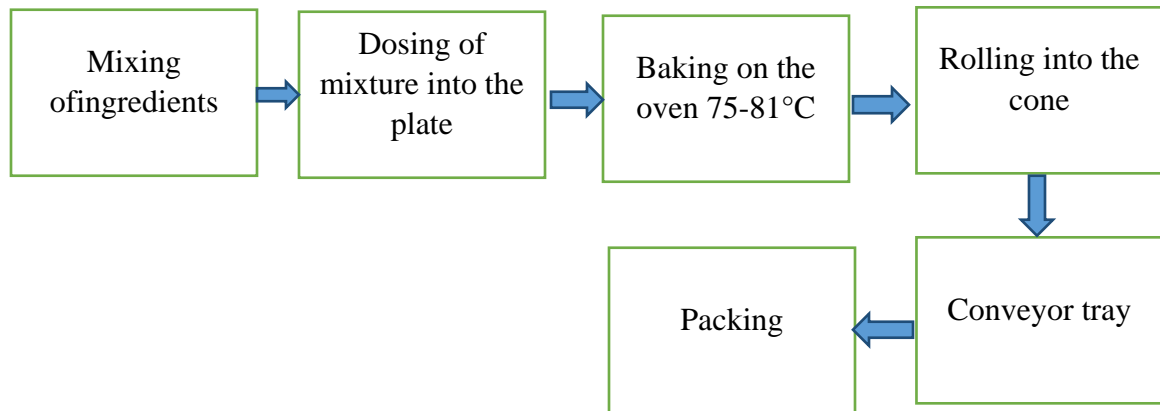


Figure 3.10.2 : Flow diagram of cone biscuits products

### 3.11 Use of packaging materials:

- ALO clip
- Plastic cup
- Plastic Packet
- 3 ply outer carton

## Chapter-4

### Department support in production

#### 4.1 quality assurance (QA) Department

Quality Assurance is the main part of an organization. The duty of quality assurance department is maintain best quality. Because lovello ice-cream all time focus on their products quality without QA they will not supply their products into markets.

#### 4.2 objectives:

- Production line and process control
- Ensure good manufacturing practices (GMP)
- Maintain Effluent treatment Plant(EIP)

#### 4.3 Responsibilities of the quality assurance Department

1. Maintain chemical and microbiological test of incoming raw materials.
2. Controlling the quality of the ongoing products.
3. Testing the raw or same processed raw materials for further use in the production.
4. Producing valuable suggestion to the other department.
5. Maintains the effluent treatment plant(EIP)

#### 4.4 Tests operated by quality assurance department:

The quality assurance Department facility can be divided into two parts:

1. Food analysis Lab
2. Microbiology Lab

## **4.5 Production Unit**

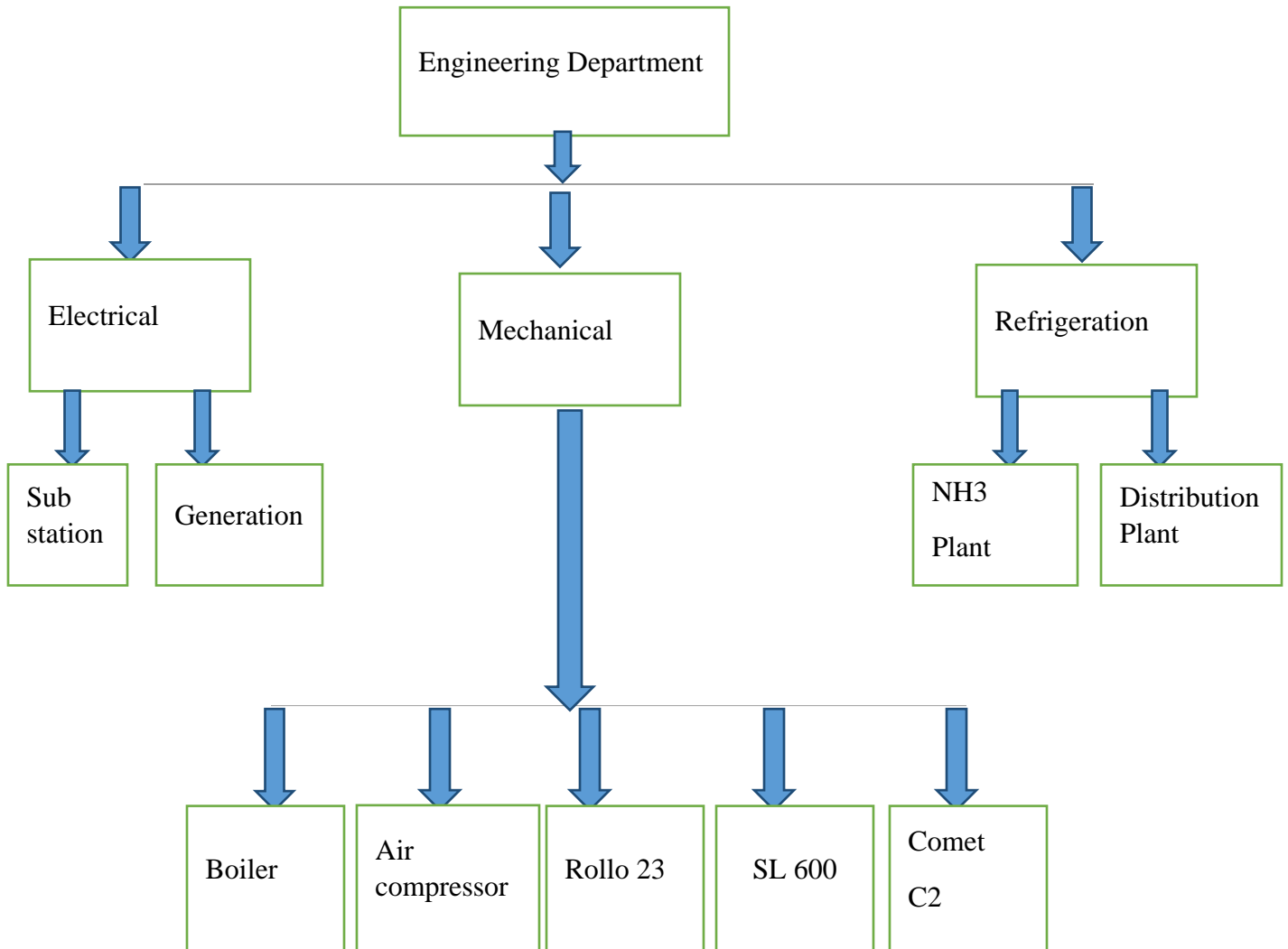
Production department holds the responsibilities for which the company is established. Main responsibilities of production unit is produce best quality product.

Three types of workers are available in the production department.

1. Permanent works,
2. Casual workers,
3. Monthly based workers

## 4.6 Engineering Department

The Engineering department of these following sectors:



**Figure 4.6 :Flow Diagram Engineering Department**

## 4.7 Refrigeration Unit

Freon and NH<sub>3</sub> are used as refrigerant in refrigeration.

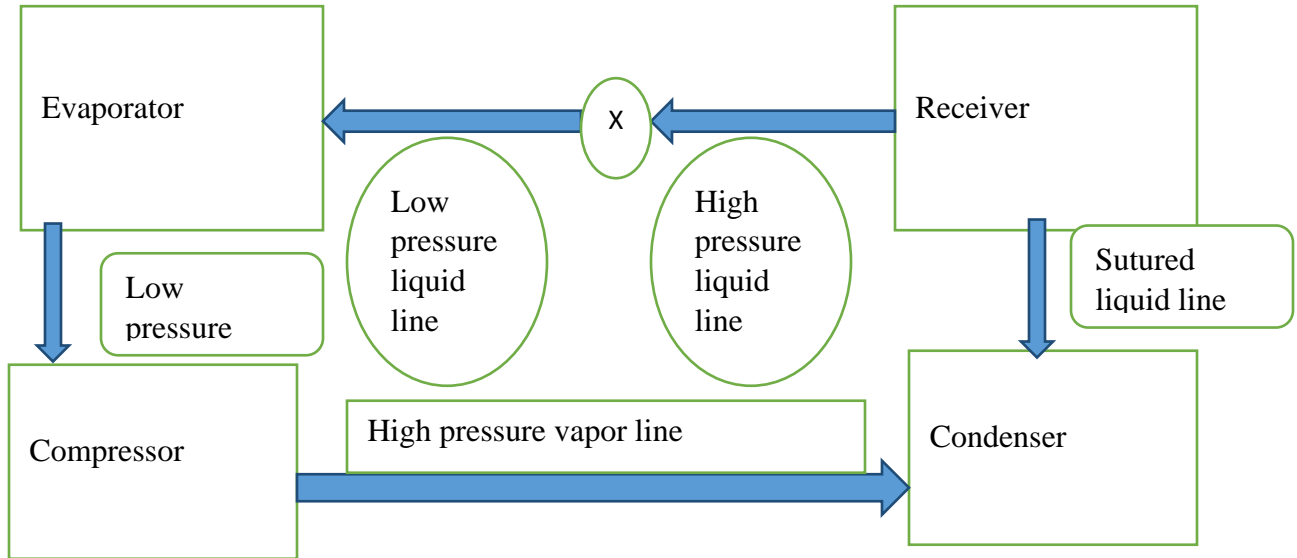


Figure 4.7: Schematic Diagram of Refrigeration Unit

## 4.8 General store

General store of an industry, as the “blood circulation system” General store of lovello ice-ream industry supplying the incoming raw materials.

## 4.9 Distribution Department

Distribution Department is the most important which takes huge responsibilities to transport the finished products in its peak condition in controlled and modified temperature and environment.

## 4.10 Human Resources and administration Department

In any organization from begging even before the organization starts to run, human resources and administration department maintain all work of organization.

## Chapter-5

### Machines and maintenance

#### 5.1 Machines and maintenance

Industries mainly needed to proper maintenance of their machineries.

#### 5.2 Ammonia Plant and Refrigeration

- Compressor
- Condenser
- Sherfam trap
- High pressure receiver
- Low pressure receiver
- Liquid pump
- Evaporator

#### 5.3 Boiler Unit

For major unit operation such as clean in place (CIP), the production department, needs a continuous supply steam. For supplying steam the unit has an operational boiler.

#### 5.4 CIP(clean in place )

General CIP procedure in as follows:

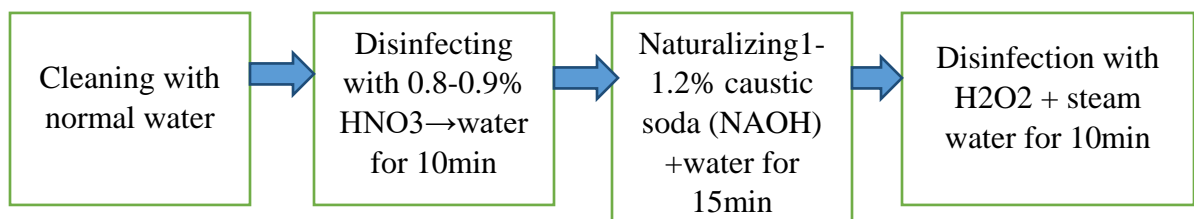


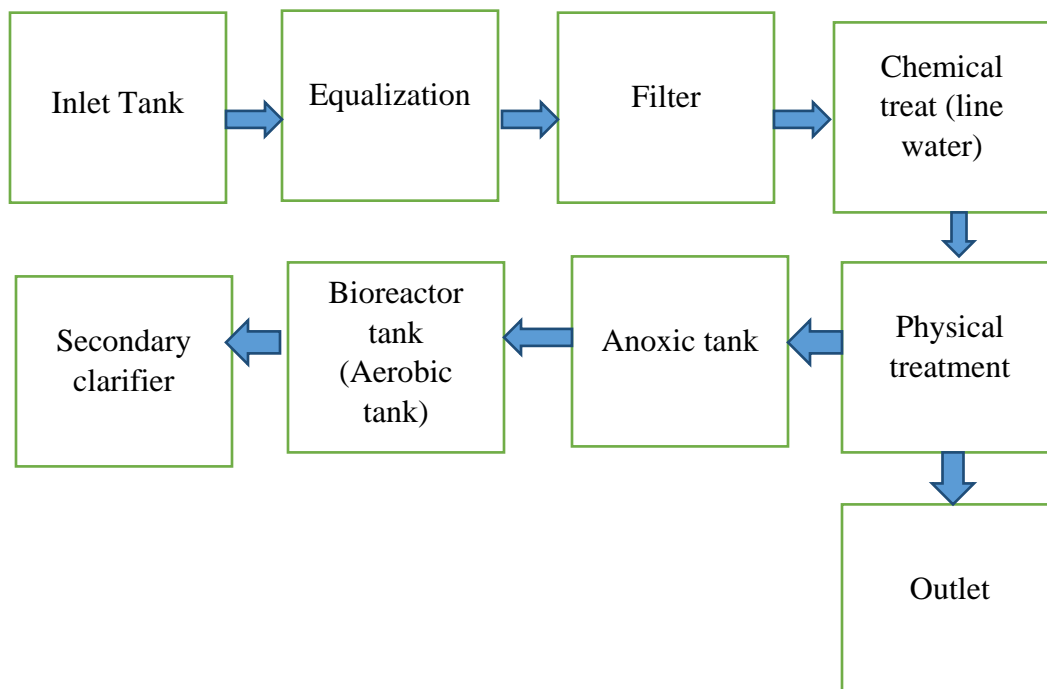
Figure 5.4: Flow Diagram of CIP(clean in place )



## 5.5 Effluent treatment plant

The effluent treatment Plant (EIP). This plant located inside the factory. Lovello ice-cream industry processed their waste water by physical, biological and chemical treatment.

## 5.6 Flow diagram of effluent Treatment Plant(EIP)



**Figure 5.6 : Flow diagram of effluent Treatment Plant(EIP)**

## **Chapter-6**

### **Conclusion**

Lovello ice-cream is one of the quality full and many new concept base ice-cream manufacturing industry in Bangladesh. I feel proud for that I have got opportunity to train myself in this company. Trainers who are responsible for the Lovello ice-cream are very sincere and best guider to me. They have given me enough to try to give ideas about each section of the engineering department completely. Hope this experience will be useful in my real life.