



Internship report on:

**Ice-cream Process of Taufika Foods and Agro Industries
Ltd.**

Submitted to:

Prof. Dr. Md. Bellal Hossain

Head of the Department

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Submitted By:

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Date of Submission: 24 June, 2019

	Letter of Transmittal	
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Date: 24 June, 2019
Prof. Dr. Bellal Hossain Head
Department of Nutrition and Food Engineering
Faculty of Allied Health Sciences
Daffodil International University

Subject: Submission of Internship report.

Dear Sir,

With due respect to state that, I am here by submitting my Internship report, which is a part of the BSc in NFE program curriculum. It is a great achievement to work under active supervision. This report is based on, Igloo Ice Cream and Milk Unit. This Internship gave me both academic and practical exposures.

I will be highly obliged if you are kind enough to receive this report and provide your valuable judgment.

Sincerely yours,

Md. Atikur Rahman
ID: 162-34-557
Department of Nutrition and Food Engineering
Faculty of Allied Health Science
Daffodil International University

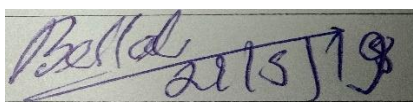
	Certificate Approval	
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I am pleased to certify that, My internship report on Lovello Ice-cream at Taufika foods

and Agro Industries Ltd. conducted by Md.Atikur Rahman bearing ID:-162-34-557 of Department of Nutrition and Food Engineering has been approved for Defense/Viva Exam under my supervision MdAtikur Rahman worked at Taufika foods and Agro-Industries Ltd.

I am pleased to hereby certify that the data and test presented in the report are authentic work

of Md. Atikur Rahman . I strongly recommended the report present by Md.Atikur Rahman for further academic recommendation and defense/viva-voce. Md.Atikur Rahman bears a strong moral character and a very pleasant personality. I wish his all success in life.



Professor Dr. Md. Bellal Hossain
Head
Department of Nutrition and Food Engineering
Daffodil International University

	Acknowledgements	
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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. MdBellal 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, **MdShahadotHosan**, 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.,**Md. Saddam Hosan**, officer (QA), **Md. Liton Miah** Asst. Production Officer,**Md. Tarikul Islam** Asst. Quality Assurance Officer, **Md. ShamimHosan**, 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.

	Abstract	
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The Internship was conducted at Taufika Foods and Agro Industries Ltd. in Lovello Ice Cream from **09 February, 2019 to 15 March, 2019**. This factory mainly manufactures difference types of IceCream.

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.

	Profile	
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In my Bachelor of Science Degree in Nutrition and Food Engineering, I got an opportunity to work at Taufika Foods and Agro Industries Ltd Lovello Ice-Cream which is the part of my Internship program. The duration of my internship was 09- February-2019 to 15- March -2019. Taufika Foods and Agro Industries Ltd in Lovello Ice-Cream is a very popular and dairy based company in Bangladesh, which is situated in Bashile, Kathali, 6 no. Valuka Union Parishad, Mymensingh. Lovello Ice-Cream has many type of department. My concern to all this department getting some knowledge.

The motto of Lovello Ice-Cream “Beats of My Heart” suits best to define its various type of products, with more than 50 stock keeping units and 52 items product for retailers and business entrepreneurs. Ice creams of Lovello ice-cream is not only made for only the retailers but also the company is finely serving the demand of the commercial clients of the food business such as premium ice cream serving parlors and Ice cream cake. To reach every pocket of the country the company has established 11 points of major distributors or dealers all over the Bangladesh.

As the student of Nutrition and Food Engineering of Daffodil International University Three students were given the opportunity to complete our internship five weeks in Lovelloice-cream.

	History	
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Lovello is a manufacture under Taufika foods and agro industries ltd. Taufika foods and agro industries it is an organization under Taufika group. Taufika has established at 2005 by Md. EkramulHaque. He is an engineer and he worked almost 20 years for a foreign company in Malaysia. Then after 2000, he came back in Bangladesh and launched this group. The group started Taufika engineering LTD (TEL) which involved in engineering business and build of steel and RCc building, project management and Turnkey general civil construction etc. Since when it has started, it is manufacturing only healthy, Halal and savory Lovello Ice Cream prepared of imported high quality raw materials using state-of-the-art technology.

Lovello, confide in confirming long-term presence by being profitable and successful. They, so deeply take on customers' suggestion, give best attempt and improve as well as add new volumes to their business so that they can confirm anointing in this extremely competitive ice cream industry. This technique has qualify them to effectively dispute the challenge. And that challenge is to stay competitive with the front edge technologies and making quality full product and having a good portion of market share. Close competitor of lovello is polar, it have already same amount of shares in the market So , from here its clear Lovello commits in producing value added products and showing the business's commitment to utilize resources effectively.

Lovello introduce the extensive choice of ice cream to its consumers, compare with other competitors in the market. Lovello is Introducing a total of fifty seven items .But popular ones are couple toub, hidden heart, heart beats, kulfi, shell & cone, Choco bar, Choco blast and family pack items. Lovello has good flavors than what helping them to compete in the industry and constantly introducing new and innovative items. With times lovello is giving the indication of become leading ice cream seller in this industry.

They Started with Choc-bar, which is now contributing 11% of the total sales mainly, constructs of Choco bar and mini choc. Both of those are vanilla flavored and implicated with chocolate and deliver consumers an energetic feeling and they satisfy themselves into it. Then our next analysis about Hidden heart which has already five

	Processing of Lovello Ice-cream	
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Lovello Ice-cream has own ice cream processing Plant in Bhaluka, Mymensingh. They always ensure to quality during processing. The most of raw materials are collected from Australia, Newzland ,Singapore etc. They are using tetra pak technology machineries during Ice-cream processing. Every steps of processing to maintain ISO and BSTI standard. The following processing unite are used for production of Lovello Ice-cream below:

- ❖ Mixing Unite
- ❖ Production Floor Unite
- ❖ Cone Baking Unite
- ❖ Packaging Unite
- ❖ Engineering Unite

There are 4 Production Lines in Lovello .Following products are produced in these lines.

- Rollo-23
- Comet C2
- Straight Line (SL) 600
- Continuous Freezer

	Mixing Unite	
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Lovell Ice-creams has own Mixing Unite that is most important parts for ice-cream mixing .In this process, pasteurization, hominization process are followed.

Name of Machine: Promix HTST 2000

Capacity: 2000L/hours

Amount of Batch: 2500 kg or 2200 Kg

Types of Mix used:

- 1) White mix>>> 1) vanilla, Mango, Strawberry, toffee
- 2) Choloate Mix
- 3) Mango mix
- 4) Strawberry mix
- 5) Kulfi Mix
- 6) Shahikulfi mix
- 7) Choco blast mix>>> 1) Caramel ripple 3gm, Choco blast coating, Almonds 3 gm.
- 8) Kheer mix
- 9) Malai mix
- 11)Doi mix
- 12) Shehi Khajur Mix (Gur)
- 13) Cake mix>>>Shaisandesh, black forest, Choco beats
- 14) Super premium mix (Fat--14%)

Number of Mixing Tank:

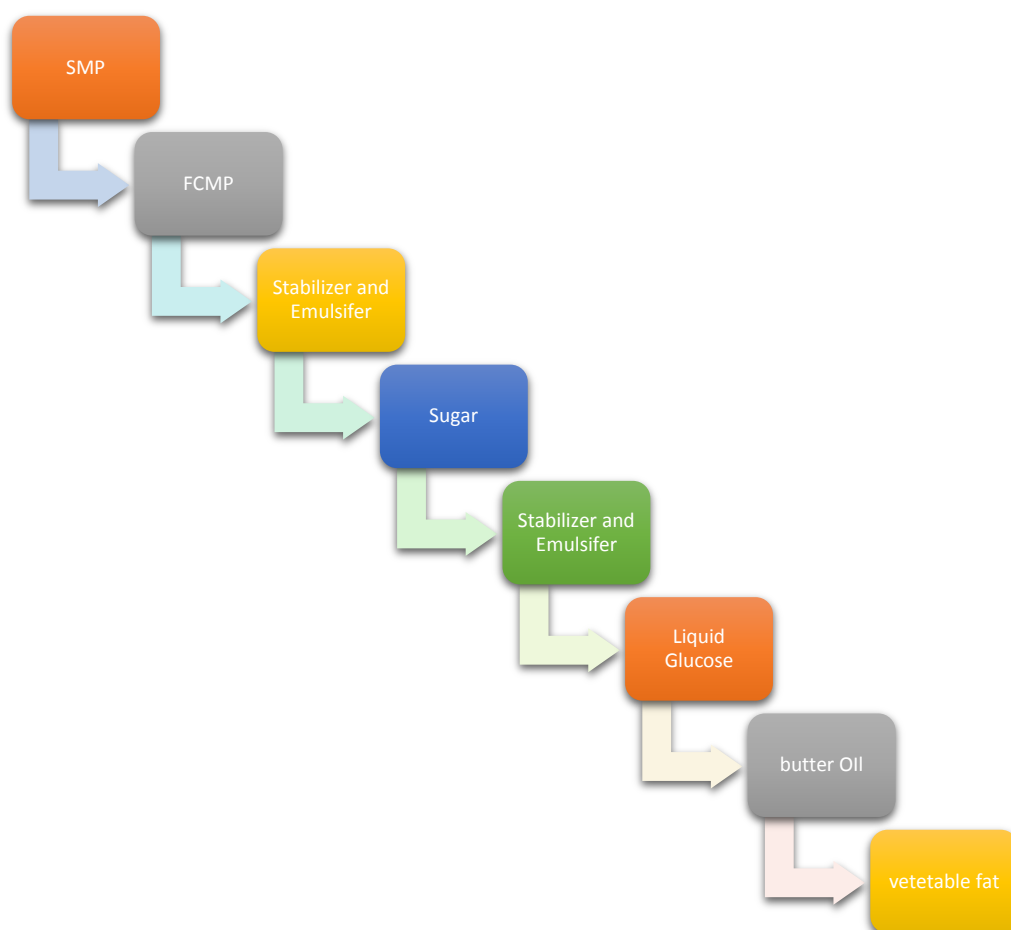
Mixing Tank no-1

Mixing Tank no-2

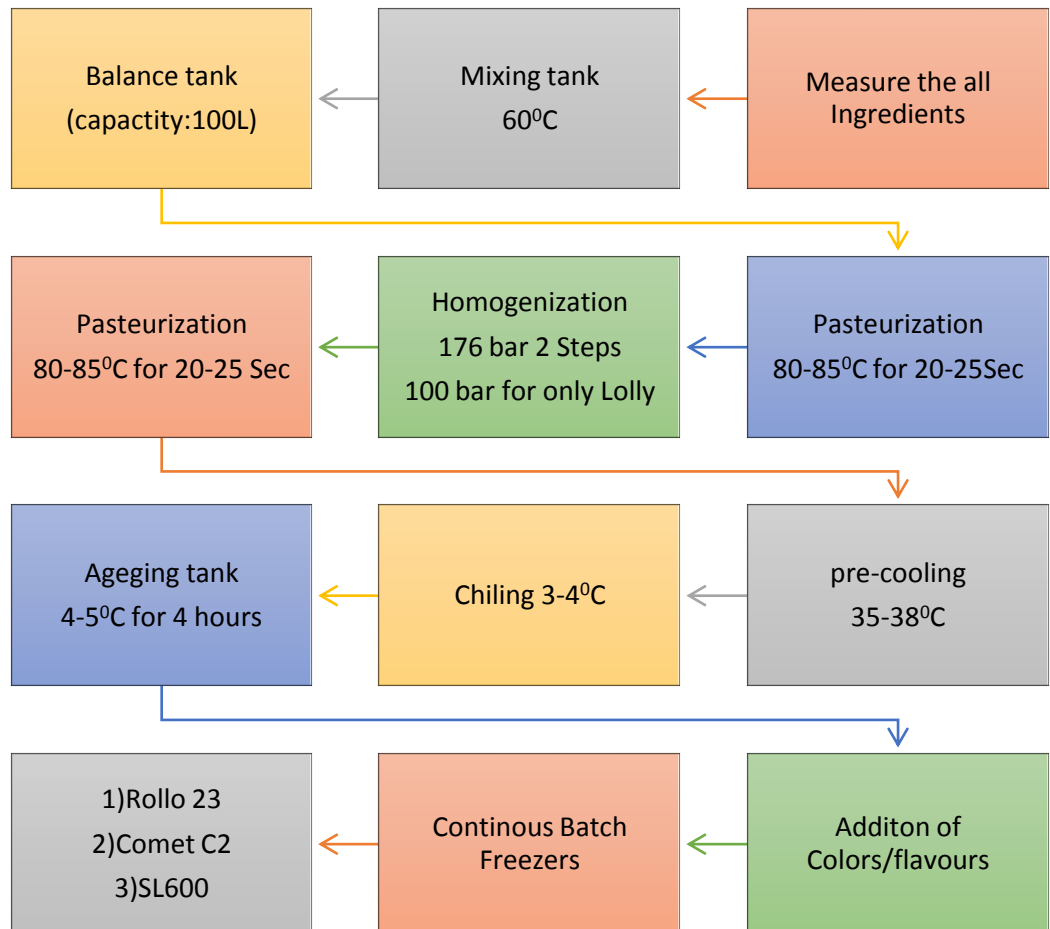
Components for Ice-cream Mix:

Main Ingredients	Inclusions
Skim milk powder (SMP)	Cassata mixed fruits
Full Skim milk powder (FCMP)	English toffee
Sugar	Vanilla cake
Butter oil	Mango chunk
Vegetables Fat	pine apple
Stabilizer	Raisns
Emulsifer	Almonds nut
Liquid Glucose	Nuts
Cocoa powder	Pea Nuts
Colour and Flovurs	Ripple
treated water	coating and chocolate Brownie etc.

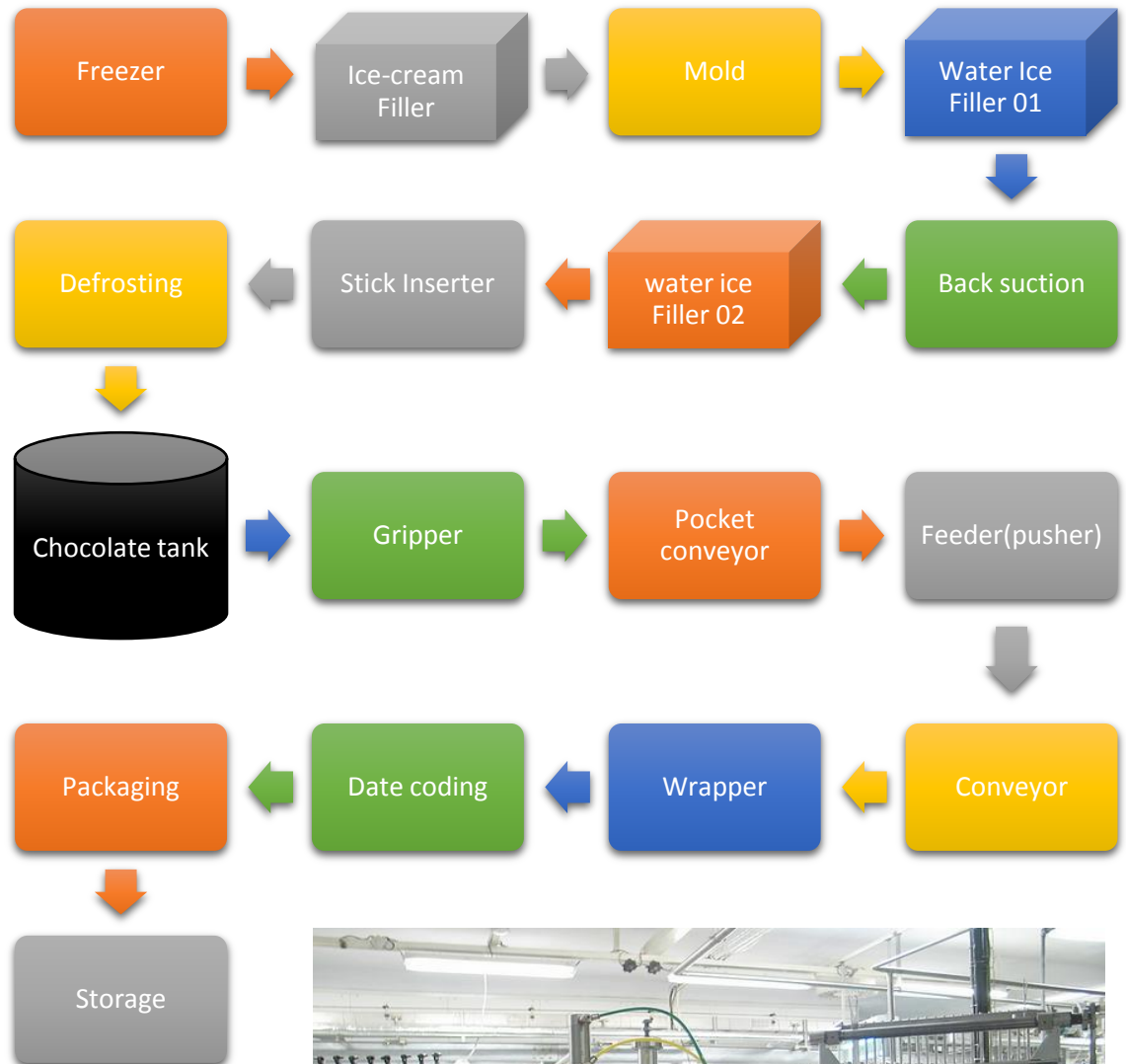
Sequence of Mix:



Flow chart of Mixing Unite



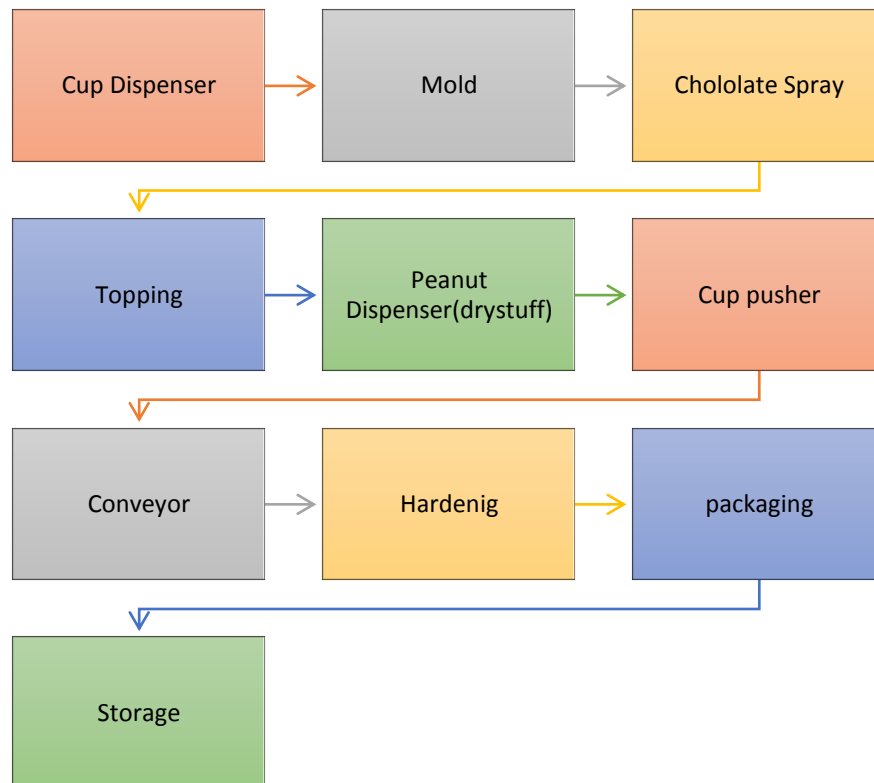
	Terta Hoyer Rollo-23 Machine	
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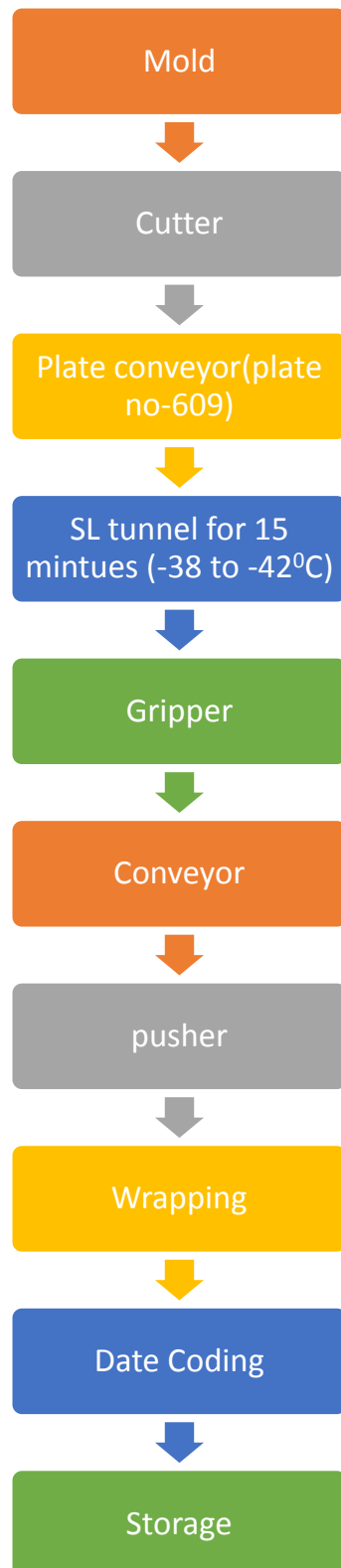
	Comet C2	
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Flow chart of Comet C2



	Hoyer Straight Line 600	
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	Continuous freezer	
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Freezer	Capacity(Liter/Hour)
Continoues Freezer no-1	700
Continoues Freezer no-2	300
Continoues Freezer no-3	700
Continoues Freezer no-4	300
Continoues Freezer no-5	700

	Cone baking Unite	
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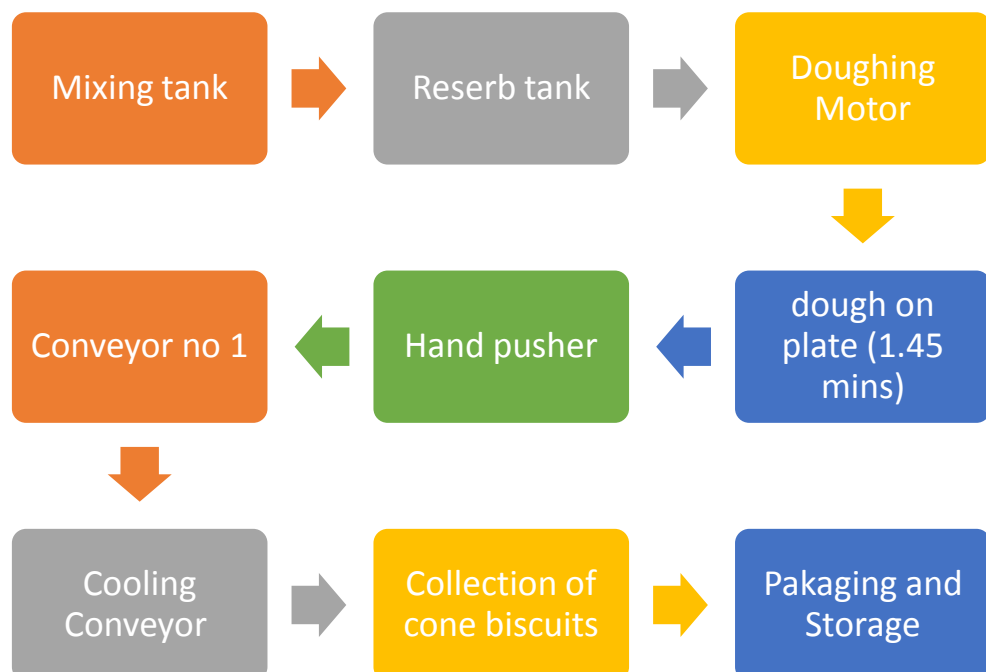


Starland cone baking Machine



Hand pusher

Flow chart of cone baking Machines:



	Conclusions	
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lovello Ice Cream factory is a new Ice Cream Industry in Bangladesh. lovello Ice Cream Factory daily average different types of Ice Cream Production about 45,000 Litter. This Internship Report help us from many side about Ice Cream. Like- Raw material collection, Quality control, Manufacturing process and finished product quality checkup of Ice Cream and Ice CreamProducts.

This study shows how to maintain the hygienic production and quality control of milk & Ice cream. The internship program has covered both hygienic production and quality control of dairy product. To ensuring the quality and hygienic production of milk & ice cream has been taken different types of test parameter, including Physical, Chemical, and MicrobialParameter.

Physical test (Organolapic, specific gravity, homogenization, pasteurization, pH, overrun) Chemical test (soda, hydrogen pre oxide, formalin, protein, fat, lactose, iodine specification, acid value, arsenic, total calcium, CIP, acidity) above these test is done in implementing routinely daily procedure in the lab. Microbiological test is very important especially for final product.The microbiological test is also carried out such as Total Plate Count (TPC), Coliform Count (CC), Yeast Mold count (Fungi) andSalmonella.

Report also represent how to produce Ice Cream as Industrially.