



Stock Taking of the Existing Technologies
for the Potential Entrepreneurs of
AGRO-PROCESSING SECTOR



Small & Medium Enterprise Foundation

**Stock Taking of Existing Technologies
for the Potential Entrepreneurs of
Agro-Processing Sector**

April 2017



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Stock Taking of Existing Technologies for the Potential Entrepreneurs of Agro-Processing Sector

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Foreword

Small and Medium Enterprises (SMEs) play a very crucial role in employment creation and overall economic development of any country. Among the formidable barriers encountered by SMEs access to technology is a prominent one. In a developing country like Bangladesh, SMEs have fallen behind in terms of awareness, adoption and adaptation of updated technologies which prominently describes the productivity enhancement and overall competitiveness of the enterprise.

SME Foundation is working as the apex organization in Bangladesh with the aim of promoting the growth of SMEs of manufacturing and service-oriented field of prioritized sectors of national economy declared by the National Industry Policy 2016. In order to address the growing demands of technical information about prospective products and their production process from new and existing entrepreneurs, the SME Foundation has taken an initiative to develop sector-wise booklets and information stocks containing most basic technical information to develop any product. As a result, four publications from four priority sectors viz. i) Light Engineering Sector; ii) Plastic Sector; iii) Agro-processing Sector and iv) Leather Sector have been prepared.

The sole purpose of this document is to facilitate entrepreneurs and/or potential investors by providing them with a general understanding of the prospective products, raw materials, required technology, necessary machineries, probable investment costs and broad description of sourcing ideas.

SM Shaheen Anwar
General Manager
SME Foundation

Disclaimer

The information presented in this publication provides only a generic collection of ideas on the selected subject. The data were collected from various reliable sources based on certain assumptions and may differ from case to case in real life situations. There is limited warranty on the correctness of the collected data/information whence the publication has been faithfully reviewed by the expert on relevant subject matter. SME Foundation and its employees do not assume any liabilities resulting from any decision taken based on this document. The prospective users of this document are encouraged to undertake detail investigation, accumulate necessary information and consult professionals/technical experts prior to taking any decisive action.

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List of 155 Products Brought Under BSTI Mandatory Certification Marks Schemea

Introduction to Agro-Processing Sector in Bangladesh

Bangladesh is primarily an agrarian economy. Agriculture is the single largest producing sector of economy since it comprises about 30% of the country's GDP and employing around 60% of the total labor force. The performance of this sector has an overwhelming impact on major macroeconomic objectives like employment generation, poverty alleviation, human resources development and food security. Bangladesh is a thickly populated agro-based country gifted with favorable conditions. Hard working people combined with modern knowledge have contributed admirably to make it solvent in our staple food.

The agro-processing sector in Bangladesh currently stands at USD 2.2 billion and grew on average 7.7% per annum between fiscal years 2004-05 and 2010-11. The beverage industry more than doubled during the same period to US \$29 million, showing an average growth rate exceeding 8% per annum. According to Bangladesh Agro-Processors' Association (BAPA), export of agro-processed products from Bangladesh increased from USD 60 million in 2010-2011 to USD 224 million in 2014-2015. With the growing middle class population of over 30 million, the food processing sector is expected to grow positively in the coming years.

According to Export Promotion Bureau the major products that are being exported are: edible oil, sugar, rice, wheat, fruits & vegetables, potatoes, tea and spices. According to Bangladesh Agro-Processors' Association the major products that are being exported are: spices, juice, drinks, biscuits, chanachur, puffed rice, frozen snacks, candy, mustard oil and meat.

Quality control is very important issue for processed food. The quality of raw materials used in the food processing industry is poor. An effective quality control system for ensuring the food safety of final products is an absolute necessity in Bangladesh. The Bangladesh Standards and Testing Institution (BSTI) has formulated standards for all processed food items currently produced in or imported into Bangladesh. These standards, in general, cover raw materials and their quality parameters, hygienic conditions under which products are manufactured, and packaging and labeling requirements.

To promote the agro-processing sector, Bangladesh Bank fixed a \$2.07 billion loan disbursement target under the agriculture-loan policy and programs for the fiscal years (FY) 2015-16, up 5.5 percent over last year. Under this new agri-loan policy FY 2015-16, the private and foreign banks have to provide at least two percent of the total credit to the agriculture sector while the new banks have to provide five percent of their total loans to the sector.

Reference:

- <https://www.export.gov/article?id=Bangladesh-Agricultural-Sector>. Accessed on 20 March, 2017.
- <http://katalyst.com.bd/wp-content/uploads/2017/01/Roles-and-Opportunities-for-Private-Sector-in-Agro-food-Processing-Industry-of-Bangladesh.pdf>

Acronym

BAPA	Bangladesh Agro-Processors' Association
BCPC	Bangladesh Central Product Certification
BDS	Bangladesh Standard
BOPP	Biaxially Oriented Polypropylene
BSTI	Bangladesh Standards and Testing Institution
FOB	Free on Board
LDPE	Low Density Polyethylene
PE	Polyethylene
SME	Small and Medium Enterprise
SMEF	Small and Medium Enterprise Foundation
TSS	Total Soluble Solid

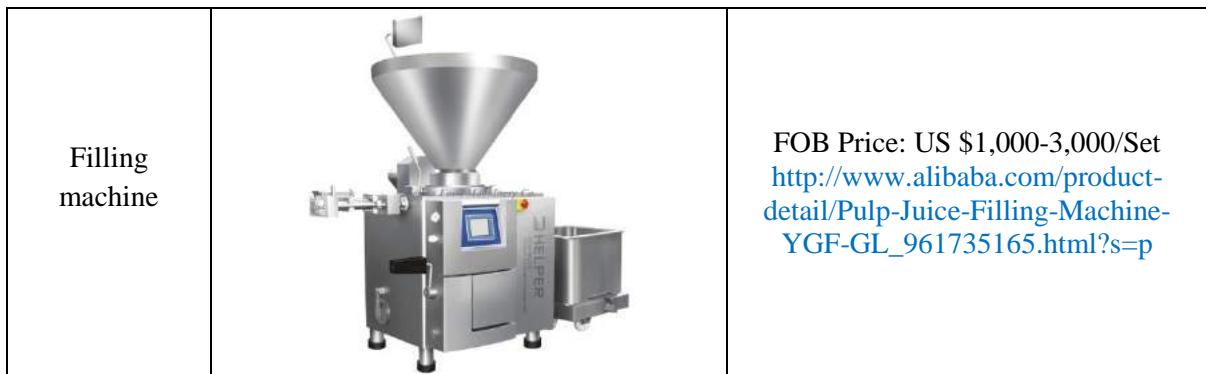
**Stock Taking of Existing Technologies
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Potential Entrepreneurs**

of

‘Agro-Processing Sector’

Product No. 1	Sub-Sector	Code			
Mango Pulp	Fruit and Vegetable Product	HS 2007 - 2303.20			
					
<p>The pulp contains the juice of the fruit. After pulping the pulp contain 67% Total Soluble Solids (TSS). The process ensures that the natural flavor and aroma of the fruit is retained in the final product. It contains about 30 grams of sugary carbohydrates per cup. Mango Pulp/Concentrate is perfectly suited for conversion to juices, nectars, drinks, jams, jelly, ketchup, squash fruit cheese and various other kinds of beverages. It can also be used in puddings, bakery fillings, fruit meals for children and flavors for food industry, and also to make the most delicious ice creams, yoghurt and confectionery.</p>					
<p>Raw Material</p> <ul style="list-style-type: none"> • Mango • Citric acid • Sodium Benzoate • Sodium Metabisulphite • 2% Brine Solution • Ascorbic acid 					
<p>Source of Raw Material</p> <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (www.meplbd.com) • Famous Iberchem. (Contact: 01678032038) 					
<p>Packaging Materials</p> <p>Can/poly bag/food grade plastic drum</p>					
<p>Source of Packaging Materials</p> <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (www.tanjimgroup.com) 					
<p>Machineries Required</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="vertical-align: top; width: 25%;">Sorting conveyer</td> <td style="text-align: center; vertical-align: middle; width: 50%;">  </td> <td style="vertical-align: top; width: 25%;"> FOB Price: US \$5000-8000/Set http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p </td> </tr> </table>			Sorting conveyer		FOB Price: US \$5000-8000/Set http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
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Stoning, pulping and screening machine		FOB Price: US \$1000-6000/Set http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html
Agitator/ Mixer		FOB Price: US \$500-3,000/Unit http://www.alibaba.com/product-detail/500L-industrial-liquid-mixer-electric-heating_1146533201.html?s=p
Reserve tank		FOB Price: US \$900-12,000/Set http://www.alibaba.com/product-detail/juice-tank_722154279.html?s=p



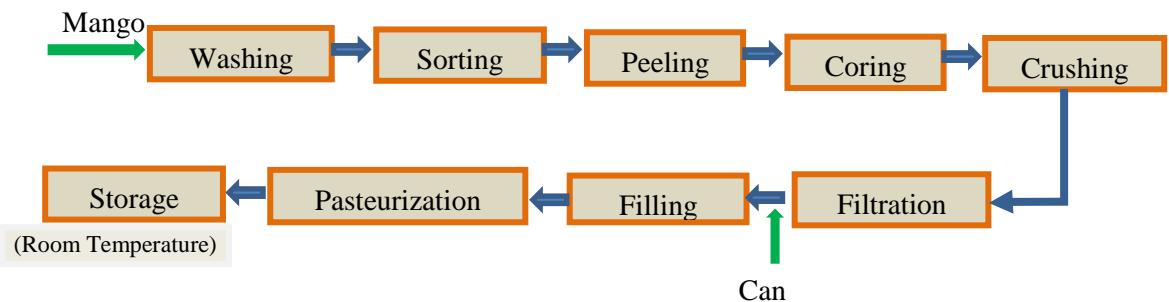
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Tick BD Engineering & Consulting Ltd (<http://bd1015349587.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd. (<http://bd1008074282.fm.alibaba.com/productlist.html>)

Process Flow



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- EIRI BOARD OF CONSULTANTS & ENGINEERS. FRUIT BEVERAGES AND PROCESSING WITH MANGO PRODUCTS. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE.
- <http://www.hscode.org>

Product No. 2	Sub-Sector	Code
Pineapple Squash	Fruit and Vegetable Product	HS 2007– 2008.99 BDS 506
		
<p>This is a type of fruit beverage containing at least 25 per cent fruit juice and 40 to 50% total soluble solid (TSS), 1.25% acidity and 350 ppm sodium metabisulphite or sodium benzoate. It is diluted before serving.</p>		
Raw Material		
<ul style="list-style-type: none"> • Pineapple • Sugar • Citric acid • Sodium metabisulphite • Permitted color 		
Source of Raw Materials		
<ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (Contant no- 01678032038) 		
Packaging Materials		
Glass bottles/Pet bottle		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808 • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) • Bengal Glass (http://www.bengalglass.com) 		
Machineries Required		
Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p

Stoning, pulping and screening machine		FOB Price: US \$1000-6000/Set) http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html
Agitator/ mixer		FOB Price: US \$500-3,000/Unit http://www.alibaba.com/product-detail/500L-industrial-liquid-mixer-electric-heating_1146533201.html?s=p
Filling machine		FOB Price: US \$3,000-50,000/Set) http://www.alibaba.com/product-detail/2013-new-bottled-juice-filling-machine_1354338868.html?s=p

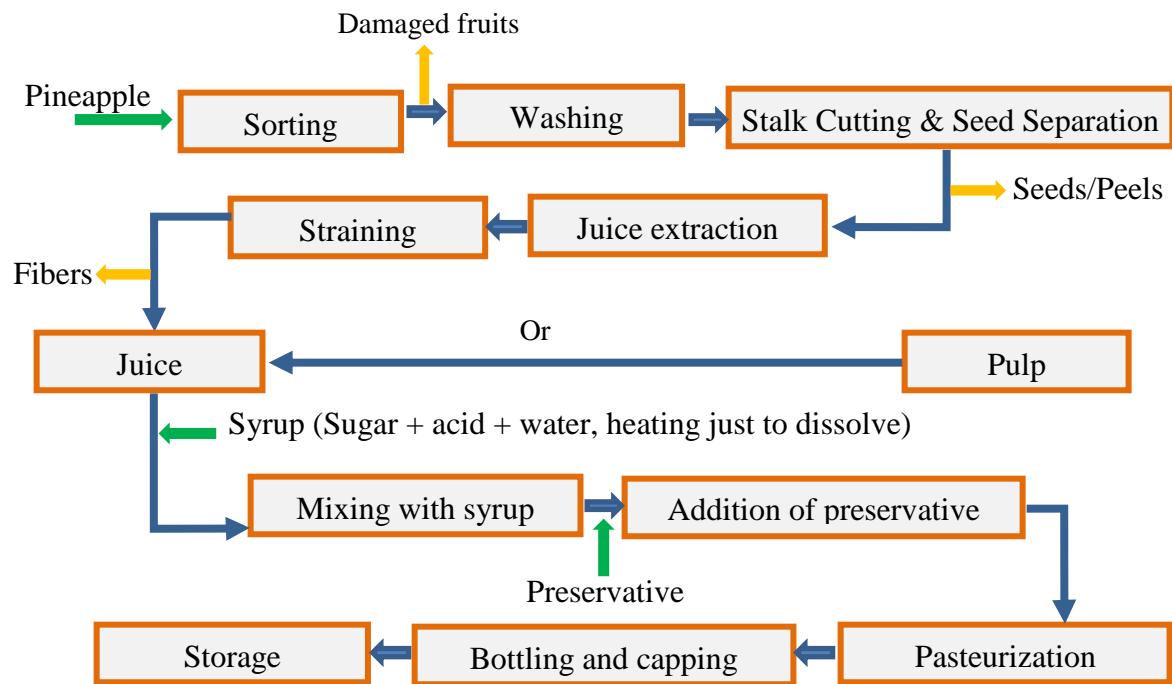
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- NATIONAL SMALL INDUSTRIES CORPORATION. 2012. INDIAN TECHNOLOGIES for setting up of New Micro & Small Enterprises.
- <http://www.bsti.gov.bd/list.html>
- <http://www.hscode.org>

Product No. 3	Sub-Sector	Code
Mango Juice	Fruit and Vegetable Product	HS 2007- 2009810 BDS CAC 247- 2008
		
<p>Prepared juice is adjusted to 12 to 15% TSS and 0.3% acidity. It contains a variety of both vitamins and minerals. Each cup of mango juice adds more than feasible source of both vitamins A and C to any diet. Mango juice also provides a good source of calcium and iron. Iron helps the body to eliminate free radicals, while calcium assists with the formation of healthy teeth and bones.</p>		
Raw Material		
<ul style="list-style-type: none"> • Mango • Citric acid • Sugar • Water 		
Source of Raw Materials		
<ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (mob no- 01678032038) 		
Packaging Materials		
Glass bottles/Can/Pet bottle		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Contant no- 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) • Bengal Glass (http://www.bengalglass.com) 		
Machineries Required		
Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
Stoning, pulping and screening machine		FOB Price: US \$1000-6000/Set) http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html

Agitator/ Mixer		FOB Price: US \$500-3,000/Unit http://www.alibaba.com/product-detail/500L-industrial-liquid-mixer-electric-heating_1146533201.html?s=p
Jacketed kettle		FOB Price: US \$980-1,800/Set http://www.alibaba.com/product-detail/tilting-jacketed-kettle-used-for-cooking_678493616.html
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
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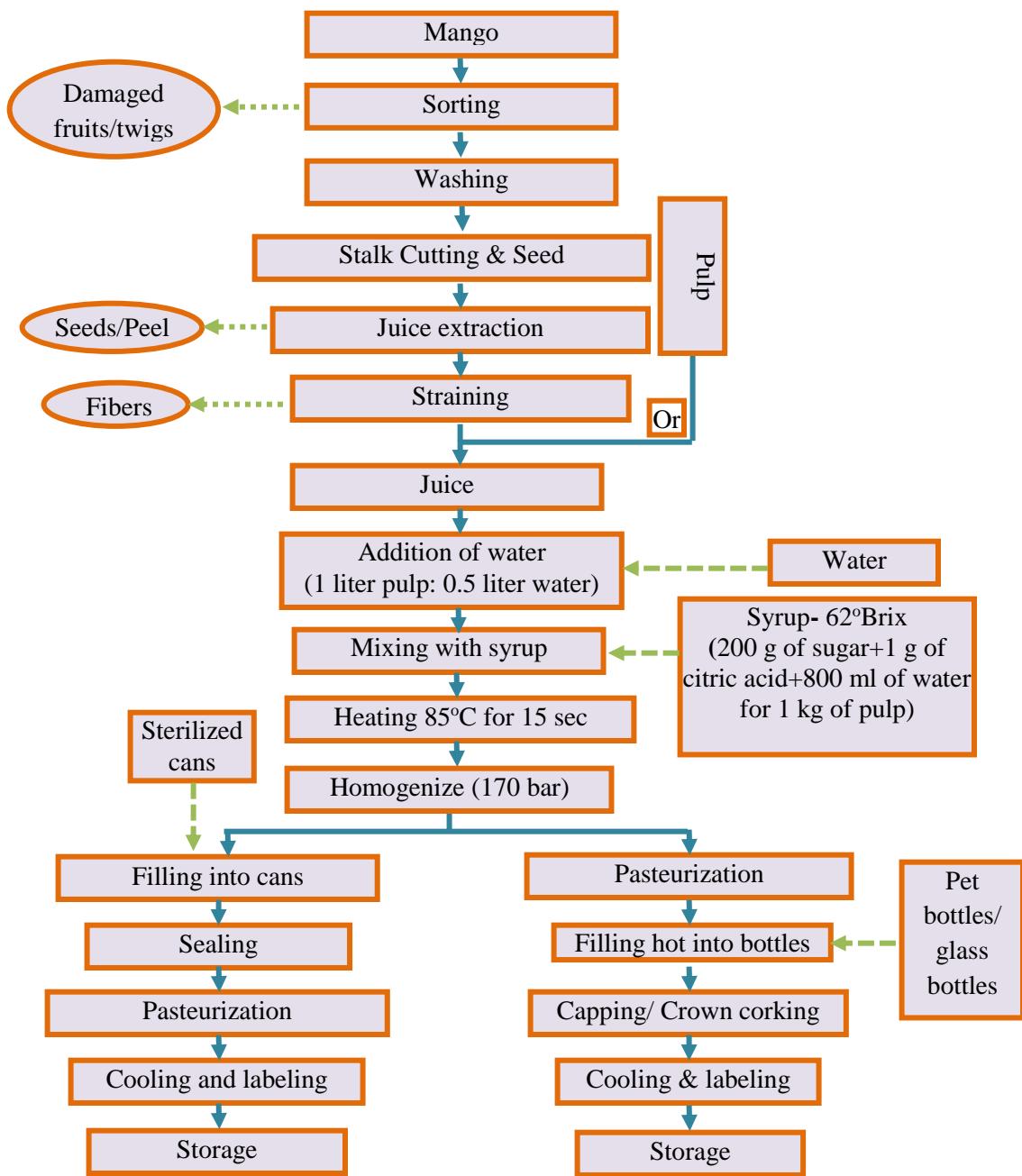
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- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd. (<http://bd1008074282.fm.alibaba.com/productlist.html>)

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- <http://www.bsti.gov.bd/list.html>
- <http://www.hscode.org>

Product No. 4	Sub-Sector	Code			
Pineapple Jelly	Fruit and Vegetable Product	HS 2007- 2007.91.99 BDS CAC 79			
					
<p>Jelly is semi-solid product prepared by boiling a clear, strained solution of pectin-containing fruit extract, free from pulp with addition of sugar and acid. A perfect jelly should be clear, sparkling, transparent, well-set but not too stiff and should have the original flavor of the fruit and attractive color.</p>					
Raw Material <ul style="list-style-type: none"> • Pineapple • Pectin • Citric acid • Sugar • Water • Color 					
Source of Raw Materials <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact- 01678032038) 					
Packaging Materials <p>Glass jars / Plastic cup</p>					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Bengal Glass (http://www.bengalglass.com) 					
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Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p			

Pineapple peeler, corer & slicer Machine		FOB Price: US \$1,000-1,800/Set http://www.alibaba.com/product-detail/Good-Stainless-steel-Slicing-Pineapple-peeler_1870904891.html
Steam jacket kettle		FOB Price: US \$1,500-2,500/Set http://www.alibaba.com/product-detail/Surri-Stainless-Steel-steam-jacketed-kettle_1087361381.html
Juice strainer		FOB Price: US \$500-1,000/Set http://www.alibaba.com/product-detail/High-Quality-And-Lowest-Price-Filtering_1007931423.html
Filling machine		FOB Price: US \$5,300-5,500/Unit http://www.alibaba.com/product-detail/Hot-sale-automatic-rotary-jelly-jam_1484759760.html

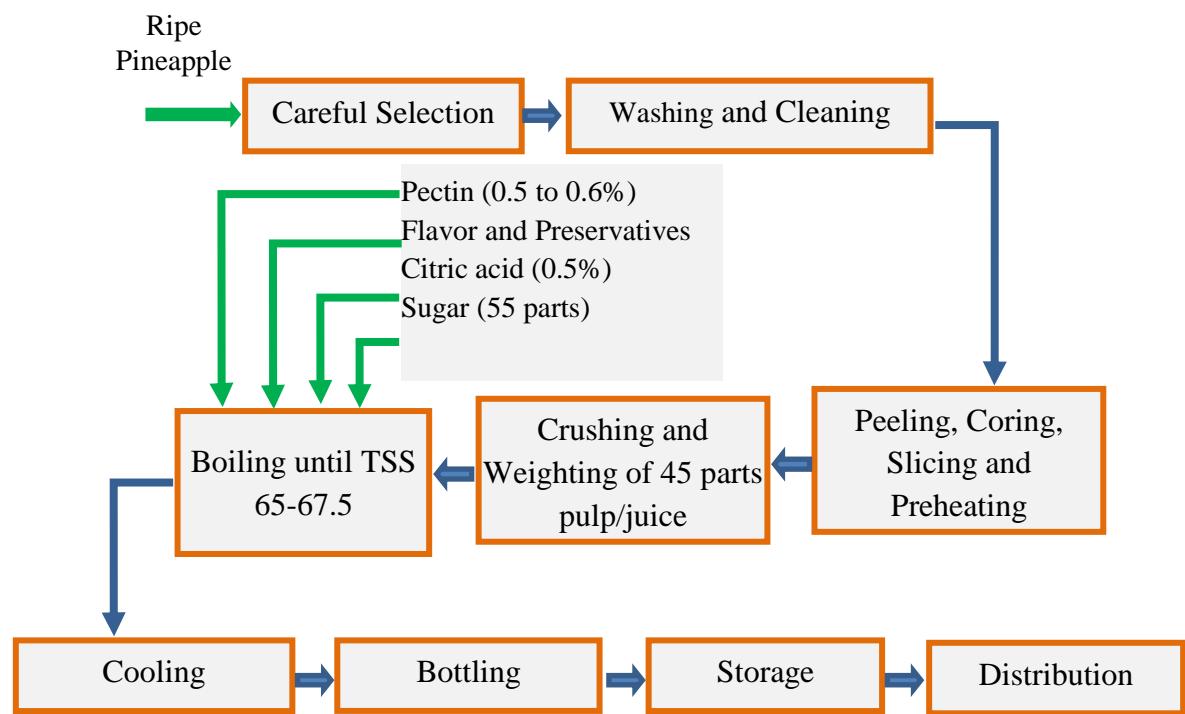
Source of Machineries

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- <http://www.bsti.gov.bd/list.html>

Product No. 5	Sub-Sector	Code			
Pineapple Jam	Fruit and Vegetable Product	HS 2007.91.99 BDS CAC 79			
					
<p>Jam is a product made by concentrating fruit pulp (usually 45 parts fruit pulp by weight) with sufficient amount of sugar (usually 55 parts sugar by weight) until it contains 65-67% TSS. Gel formation is dependent on the presence of pectin, which at a pH of 3.2-3.4 and in the presence of a high concentration of sugar has the property of forming a viscous semi-solid.</p>					
Raw Material <ul style="list-style-type: none"> • Pineapple • Citric acid • Sugar • Pectin 					
Source of Raw Materials <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (mob no- 01678032038) 					
Packaging Materials <p>Glass jars</p>					
Source of Packaging Materials <p>Bengal Glass (http://www.bengalglass.com)</p>					
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Filling machine		FOB Price: US \$5,300-5,500/Unit http://www.alibaba.com/product-detail/Hot-sale-automatic-rotary-jelly-jam_1484759760.html

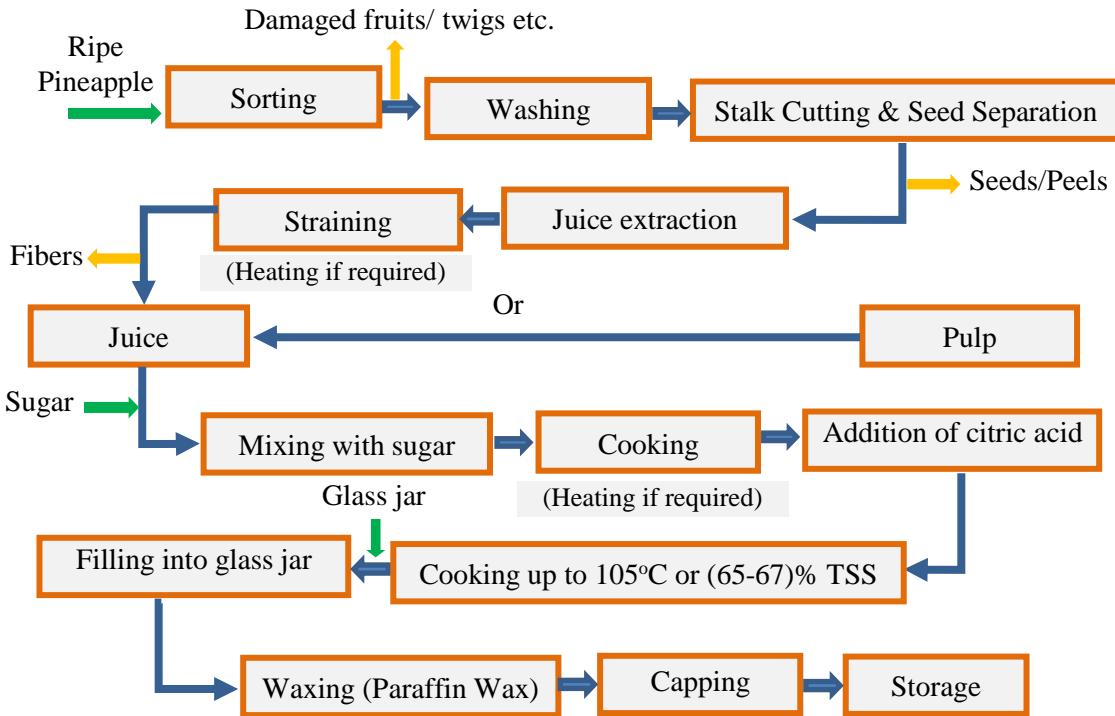
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- EIRI BOARD OF CONSULTANTS & ENGINEERS. PRESERVATION & CANNING OF FRUITS AND VEGWTABLES. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. FRUIT BEVERAGES AND PROCESSING WITH MANGO PRODUCTS. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE.
- NATIONAL SMALL INDUSTRIES CORPORATION. 2012. INDIAN TECHNOLOGIES for setting up of New Micro & Small Enterprises.
- Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning.
- <http://www.bsti.gov.bd/list.html>

Product No. 6	Sub-Sector	Code
Mango Pickle	Fruit and Vegetable Product	HS 200190 BDS CAC 160



Green mango pickle is a hot, spicy pickle with a sour taste that is eaten as a condiment. Sometimes the mangoes are fermented with lactic acid bacteria. While the mangoes are not fermented vinegar, salt and oil are used as preservative to extent shelf life. Spices are used for taste.

Raw Material

- Green mango
- Salt
- Red chili
- Clove
- Vinegar
- Cumin
- Cardamom
- Aniseed
- Sugar
- Cinnamon
- Black pepper
- Coriander powder
- Mustard oil

Source of Raw Materials

Local market

Packaging Materials

Glass jar

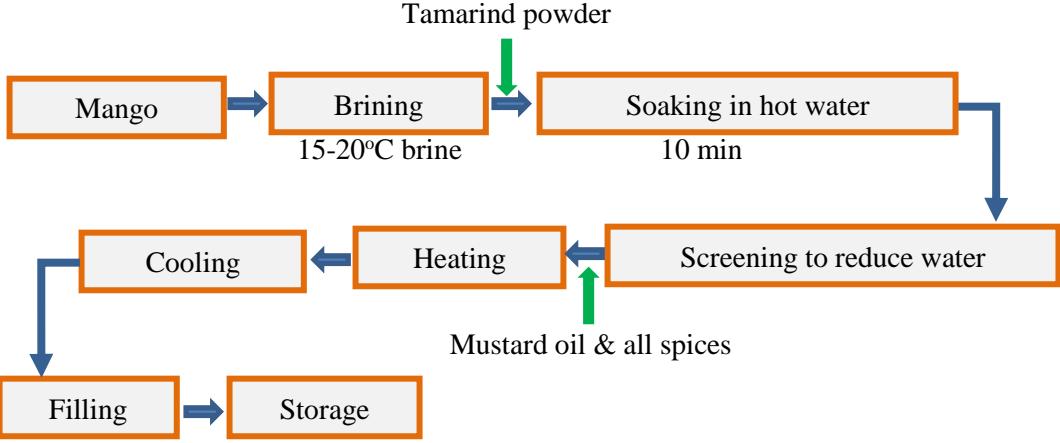
Source of Packaging Materials

Bengal Glass (<http://www.bengalglass.com>)

Machineries Required

Sorting conveyer		FOB Price: US \$5000-8000/Set http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
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Mango washer		FOB Price: US \$355-3,555/Set http://packaging-solution.co.in/fruit-washer.html
Mango peeler		FOB Price: US \$355-3,555/Set http://www.alibaba.com/product-detail/mango-peeling-machine-best-selling_1441304696.html?s=p
Cutting machine		FOB Price: US \$300-3,500/Set http://www.alibaba.com/product-detail/31-2014-New-hot-mango-slicer_630676517.html
Storing tank		FOB Price: US \$900-1,000/Set http://www.alibaba.com/product-detail/1000L-Stainless-Steel-Storage-Tank_60150433856.html?s=p
Steam jacket kettle		FOB Price: US \$1,500-2,500/Set http://www.alibaba.com/product-detail/Surri-Stainless-Steel-steam-jacketed-kettle_1087361381.html

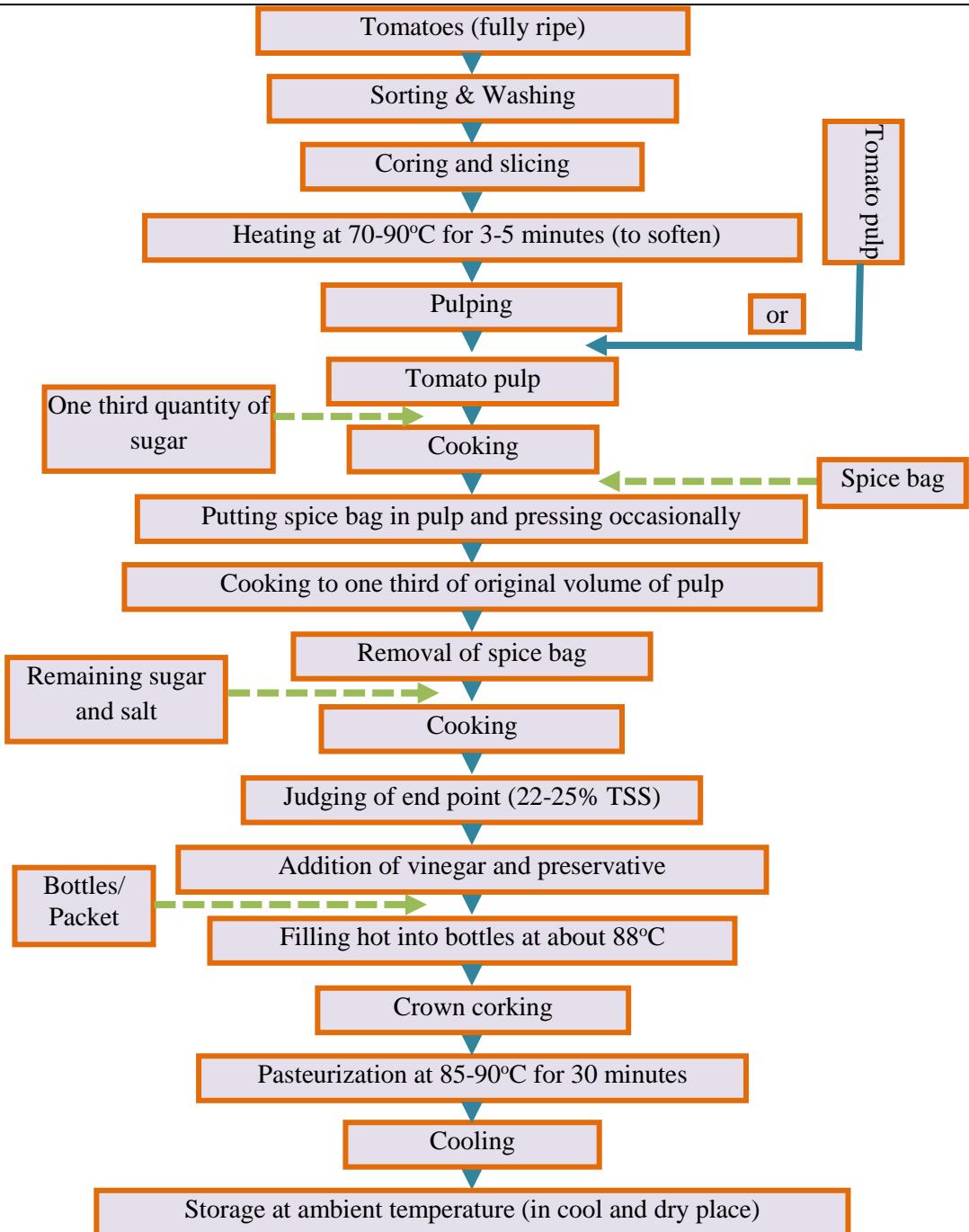
Filling machine		FOB Price: US \$3,500-5,500/Set http://www.alibaba.com/product-detail/chutney-filling-machine_123099790.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		
Process Flow		
 <pre> graph TD Mango[Mango] --> Brining[Brining 15-20°C brine] Brining --> Soaking[Soaking in hot water 10 min] Soaking --> Cooling[Cooling] Soaking --> Heating[Heating] Heating --> Mustard[Mustard oil & all spices] Mustard --> Heating2[Heating] Heating2 --> Cooling Cooling --> Filling[Filling] Filling --> Storage[Storage] Tamarind[Tamarind powder] --> Soaking Tamarind --> Heating Tamarind --> Heating2 </pre>		
References		
<ul style="list-style-type: none"> NATIONAL SMALL INDUSTRIES CORPORATION. 2012. INDIAN TECHNOLOGIES for setting up of New Micro & Small Enterprises. EIRI BOARD OF CONSULTANTS & ENGINEERS. FRUIT BEVERAGES AND PROCESSING WITH MANGO PRODUCTS. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE. EIRI BOARD OF CONSULTANTS & ENGINEERS. PRESERVATION & CANNING OF FRUITS AND VEGETABLES. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE. http://www.bsti.gov.bd/list.html 		

Product No. 7	Sub-Sector	Code			
Tomato Ketchup	Fruit and Vegetable Product	BDS 530 BCPS 1079			
					
<p>Ketchup is a table sauce. It is a sweet and tangy sauce, typically made from tomatoes, vinegar, a sweetener, and assorted seasonings and spices. Tomato ketchup is often used as a condiment with various dishes that are usually served hot, including chips/fries, burgers, sandwiches, hot dogs, eggs, and grilled or fried meat. It is sometimes used as a basis or ingredient for other sauces and dressings.</p>					
<p>Raw Material</p> <ul style="list-style-type: none"> • Tomato pulp • Cumin • Vinegar • Chopped onion • Cinnamon • Sugar • Salt • Garlic (chopped) • Sodium benzoate • Clove • Cardamom • Aniseed • Chopped ginger • Black pepper (powder) • Red chili powder 					
<p>Source of Raw Materials</p> <p>Local market</p>					
<p>Packaging Materials</p> <p>Glass jar/pouch pack/ pet bottle</p>					
<p>Source of Packaging Materials</p> <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) • Bengal Glass (http://www.bengalglass.com) 					
<p>Machineries Required</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Sorting conveyer</td> <td style="width: 33%; text-align: center;">  </td> <td style="width: 33%; vertical-align: top;"> FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p </td> </tr> </table>			Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p			

Fruit and vegetable washer		FOB Price: US \$355-3,555/Set http://packaging-solution.co.in/fruit-washer.html
Steam Jacket Kettle		FOB Price: US \$1,500-2,500/Set http://www.alibaba.com/product-detail/Surri-Stainless-Steel-steam-jacketed-kettle_1087361381.html
Tomato pulper		FOB Price: US \$900-1,400/Set http://www.alibaba.com/product-detail/tomato-pulper-with-high-quality-and_1663073376.html
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/Pasteurizer_371954097.html
Glass bottle filling machine		FOB Price: US \$800-30,000/Set http://www.alibaba.com/product-detail/Bottle-jam-sauce-liquid-water-beverage_856311246.html

Packet filling machine		FOB Price: US \$1,000-3,000/Set http://www.alibaba.com/product-detail/relish-filing-packing-machine_1126426664.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) • Tick BD Engineering & Consulting Ltd(http://bd1015349587.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		

Process Flow



References

- NATIONAL SMALL INDUSTRIES CORPORATION. 2012. INDIAN TECHNOLOGIES for setting up of New Micro & Small Enterprises.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. FRUIT BEVERAGES AND PROCESSING WITH MANGO PRODUCTS. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. PRESERVATION & CANNING OF FRUITS AND VEGETABLES. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE.
- Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning.
- <http://www.bsti.gov.bd/list.html>

Product no. 8	Sub-Sector	Code			
Mango Chutney	Fruit and Vegetable Product	HS 200190 BDS 521			
					
<p>Chutney is a fruit relish made from fruits and/or vegetables and nuts with sweet and sour blend of herbs, spices, sugar and vinegar. Chutney is served as a condiment with foods such as meats, poultry, and sandwiches.</p>					
Raw Material <ul style="list-style-type: none"> • Green mango • Refine sugar • Refine salt • Sodium benzoate • Mango flavor • Ascorbic acid • Red chili powder • Cardamom powder • Cumin seed powder • Cinnamon powder • Starch powder • Acetic acid • Ginger paste • Garlic paste • Ginger paste • Aniseed paste • Water • Citric acid 					
Source of Raw Materials Local market					
Packaging materials Pouch pack/glass jar					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) • Bengal Glass (http://www.bengalglass.com) 					
Machineries Required <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; vertical-align: middle; width: 33%;"> Mango washing machine </td> <td style="text-align: center; vertical-align: middle; width: 33%;">  </td> <td style="text-align: center; vertical-align: middle; width: 34%;"> FOB Price: US \$500-4,000/Set http://www.alibaba.com/product-detail/194-Large-Capacity-Mango-Washing-Machine_672698696.html </td> </tr> </table>			Mango washing machine		FOB Price: US \$500-4,000/Set http://www.alibaba.com/product-detail/194-Large-Capacity-Mango-Washing-Machine_672698696.html
Mango washing machine		FOB Price: US \$500-4,000/Set http://www.alibaba.com/product-detail/194-Large-Capacity-Mango-Washing-Machine_672698696.html			

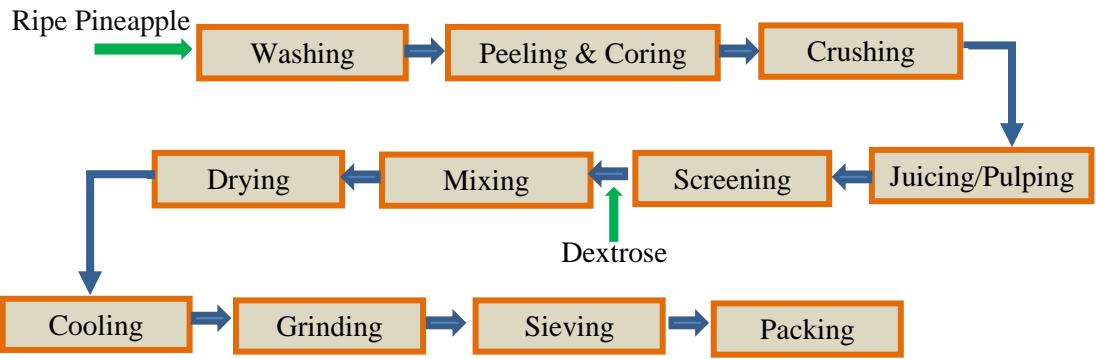
Peeling machine		FOB Price: US \$500-600/Set http://www.alibaba.com/product-detail/2014-hot-sale-and-good-quality_1962846638.html
Destoning machine		FOB Price: US \$1,000-2,500/Unit http://www.alibaba.com/product-detail/hot-sale-mango-destoning-machine_1477021192.html
Boiler		FOB Price: US \$315/Unit http://www.alibaba.com/product-detail/Commerce-Boiled-Water-Machine-For-Export_60109981974.html
Blender		FOB Price: US \$1,000-2,000/Set http://www.alibaba.com/product-detail/Mango-Chutney-Machine_60030088186.html

Weighing machine		FOB Price: US \$1,000-20,000/Set http://www.alibaba.com/product-detail/Automatic-Check-Weigher-Weighing-machine_1489404564.html
Steam jacket kettle		FOB Price: US \$300-800/Set http://www.alibaba.com/product-detail/steam-jacketed-kettle-jacketed-kettle-jacket_547116484.html
Cooling conveyer		FOB Price: US \$500-5,000/Set http://www.alibaba.com/product-detail/cooling-machine-for-food_1820644917.html
Packing machine		FOB Price: US \$1,000-5,000/Set http://www.alibaba.com/product-detail/Full-automatic-India-chutney-packaging-machine_60156389246.html

Source of Machineries
China, Taiwan, Japan, Pakistan, India etc.
Local Supplier of Machineries
<ul style="list-style-type: none"> IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html)
Process Flow
<pre> graph LR MM[Mature Mango] --> W[Washing] W --> PD[Peeling/Deseeding] PD --> CS[Cutting/ slicing] CS --> B[Boiling] B --> BL[Blending] BL --> MI[Mixing with all ingredients] MI --> CO[Cooking] CO --> CL[Cooling] CL --> PA[Packing] CS -- feedback --> B CO -- feedback --> B </pre>
References
<ul style="list-style-type: none"> http://nchfp.uga.edu/how/can_06/mango_chutney.html http://www.bernardin.ca/pages/recipe_page/51.php?pid=506 http://www.pickyourown.org/mango_chutney.htm http://extension.oregonstate.edu/fch/sites/default/files/documents/sp_50_757_fruitpickleschutney.pdf http://www.hscodeclist.com/bbs/board.php?bo_table=HScode&wr_id=1264&sca=20

Product No. 9	Sub-Sector	Code			
Pineapple Powder	Fruit and Vegetable Product	HS 200820			
					
<p>Pineapple Powder, a yellowish free flowing powder of typical flavor, taste and retain all the nutrition values of Pineapple. It is rich in vitamin A, vitamin C, potassium, iron, phosphorus and calcium. It is used as a flavoring agent in ice cream, sweets, confectionery, bakery & biscuit products, baby foods, fruit chutney, snack food; food premixes for sweets, soft drink concentrates, milk based products, etc. Pineapple is rich in enzymes which help to remove dead cells and refresh the skin. It is also used as facial masks. Juice concentration and spray drying are carried out at low temperature to retain flavor, color and nutrition values.</p>					
Raw Material <ul style="list-style-type: none"> • Ripe Pineapple • Aqueous solution of Dextrose (optional) 					
Source of Raw Material Local market					
Packaging Materials Pouch pack/PE					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 					
Machineries Required <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Sorting conveyer</td> <td style="width: 50%; text-align: center;">  </td> <td style="width: 25%; vertical-align: top;"> FOB Price: US \$ 5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p </td></tr> </table>			Sorting conveyer		FOB Price: US \$ 5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
Sorting conveyer		FOB Price: US \$ 5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p			

Washing machine		FOB Price: US \$1,500-6,000/Set http://www.alibaba.com/product-detail/2015-professional-pineapple-washing-machine-for_60261561503.html?spm=a2700.7724838.35.1.sHiH9u
Peeling machine		FOB Price: US \$200-1,000/Set http://www.alibaba.com/product-detail/Advanced-automatic-pineapple-peeling-machine-pineapple_60185038788.html?spm=a2700.7724838.35.1.Bh16Nm
Juicing machine		FOB Price: US \$1,000-6,500/Set http://www.alibaba.com/product-detail/Durable-and-easy-to-operate-Pineapple_881124196.html?spm=a2700.7724838.35.1.Lj0rYj
Agitator/Mixer		FOB Price: US \$500-3,000/Unit http://www.alibaba.com/product-detail/500L-industrial-liquid-mixer-electric-heating_1146533201.html?s=p
Spray dryer		FOB Price: US \$5,000-1,500,000/Set http://www.alibaba.com/product-detail/High-Speed-Centrifugal-Spray-dryer_202346740.html

Filling machine		FOB Price: US \$1,000-3,000/Set http://www.alibaba.com/product-detail/GD-YT80-Automatic-pineapple-juice-packing_60214721599.html?spm=a2700.7724838.35.1.72Q0py
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (Contact- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		
Process Flow		
 <pre> graph TD A[Ripe Pineapple] --> B[Washing] B --> C[Peeling & Coring] C --> D[Crushing] D --> E[Juicing/Pulping] E --> F[Screening] F --> G[Mixing] G --> H[Drying] H --> I[Cooling] I --> J[Grinding] J --> K[Sieving] K --> L[Packing] D --> E E --> F F --> G G --> H H --> I I --> J J --> K K --> L Dextrose --> G Dextrose --> E </pre>		
References		
<ul style="list-style-type: none"> http://nutrawiki.org/pineapple-powder/ http://www.indo-world.com/juice_powder/pineapple_juice_powder.htm http://www.gracefruit.com/additives/pineapple-powder.html https://www.zaubra.com/import-pineapple-powder-hs-code.html https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwiUwrHQr-XMAhXKPI8KHUQMBBrEQFgnMAA&url=http%3A%2F%2Fepg.science.cmu.ac.th%2Fjour nal%2FdI.php%3Fjournal_id%3D26&usg=AFQjCNHoggI5RVKZ9Wp5Ou7hVDIWeYhggw&c ad=rja http://www.foreign-trade.com/reference/hscode.cfm 		

Product No. 10	Sub-Sector	Code			
Canned Pineapple	Fruit and Vegetable Product	HS 20082000 BDS CAC 42			
					
<p>Canning is an important, safe method for preserving food if practiced properly. The canning process involves placing foods in jars or similar containers and heating them to a temperature that destroys micro-organisms that cause food to spoil. During this heating process air is driven out of the jar and as it cools a vacuum seal is formed. This vacuum seal prevents air from getting back into the product bringing with it contaminating micro-organisms. Canning provides a shelf life typically ranging from one to five years, although under specific circumstances it can be much longer.</p>					
<p>Raw Material</p> <ul style="list-style-type: none"> • Pineapple • Sugar • Water 					
<p>Source of Raw Material</p> <p>Local market</p>					
<p>Packaging Materials</p> <p>Can</p>					
<p>Source of Packaging Materials</p> <p>Local market</p>					
<p>Machineries Required</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Sorting conveyer</td> <td style="width: 50%; text-align: center;">  </td> <td style="width: 25%;"> FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p </td> </tr> </table>			Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p			

Sterilizer retort		FOB Price: US \$2,000-50,000/Set http://www.alibaba.com/product-detail/small-sterilizer-retort-for-fish-can_310874083.html
Movable rack		FOB Price: US \$10-100/Set http://www.alibaba.com/product-detail/movable-shelf-storage-racks-double-deep_60064338013.html?s=p
Filling, Seaming & labeling machine	  	FOB Price: US \$2,000-10,000/Set http://www.alibaba.com/product-detail/factory-price-fish-can-filling-machine_60061016232.html

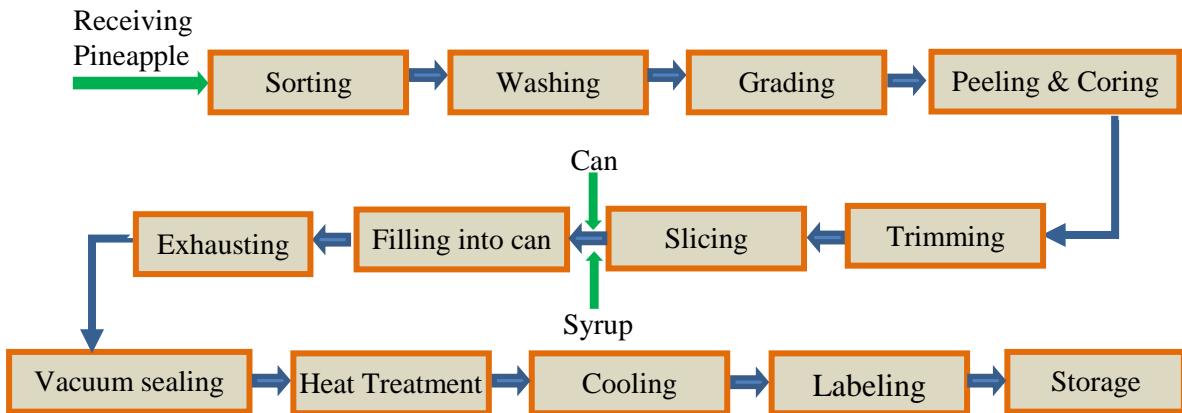
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Tick BD Engineering & Consulting Ltd (<http://bd1015349587.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd. (<http://bd1008074282.fm.alibaba.com/productlist.html>)

Process Flow



References

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- http://nchfp.uga.edu/how/can_02/pineapple.html
- <http://www.pineappleindia.com/Pineapple-Processing.html>
- <http://www.epa.gov/ttnchie1/ap42/ch09/final/c9s08-1.pdf>
- http://www.industry.org.il/_UploadsCl/dbsAttachedFiles/foodcanningprocesses%281%29.pdf

Product No. 11	Sub-Sector	Code
Green Mango Squash	Fruit and Vegetable Product	HS 200899 BDS 506
		
This is a type of fruit beverage containing at least 25 per cent fruit juice and 40 to 50% total soluble solid (TSS), 1.25% acidity and 350 ppm sodium metabisulphite. It is diluted before serving.		
Raw Material		
<ul style="list-style-type: none"> • Green mango • Sugar • permitted color • Sodium metabisulphite • Citric acid 		
Source of Raw Materials		
<ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur Pte. Ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact- 01678032038) 		
Packaging Materials		
Glass bottles/pet bottle		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) • Bengal Glass (http://www.bengalglass.com) 		
Machineries Required		
Sorting Conveyer		FOB Price: US \$5000-8000 /Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p

stoning, pulping and screening machine		FOB Price: US \$1000-6000/Set) http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html
Agitator/ mixer		FOB Price: US \$500-3,000/Unit http://www.alibaba.com/product-detail/500L-industrial-liquid-mixer-electric-heating_1146533201.html?s=p
Filling machine		FOB Price: US \$ 3,000-50,000/Set) http://www.alibaba.com/product-detail/2013-new-bottled-juice-filling-machine_1354338868.html?s=p

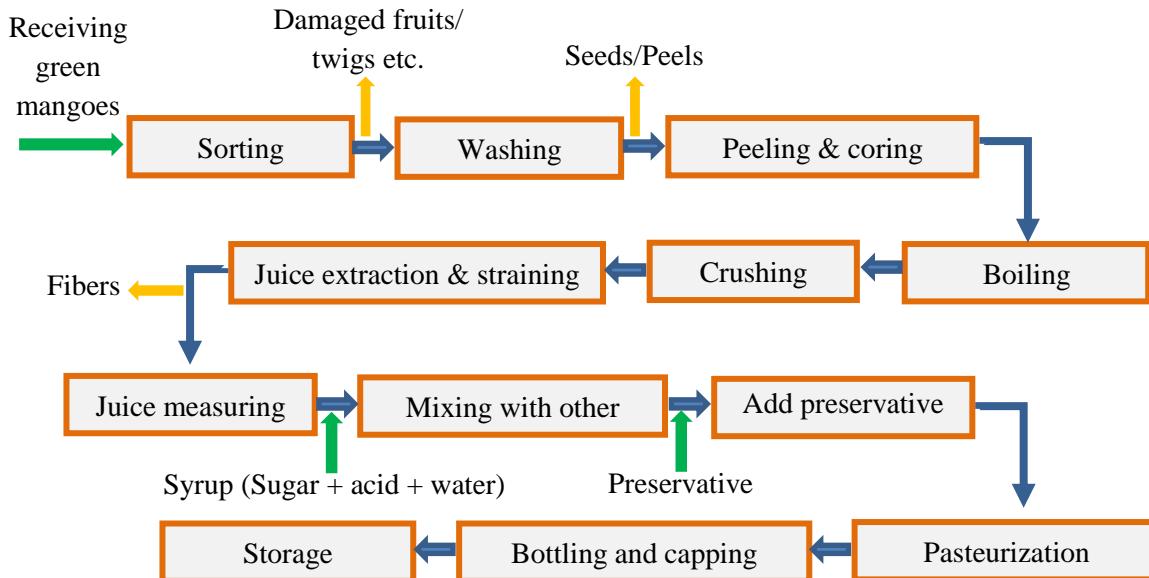
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Tick BD Engineering & Consulting Ltd (<http://bd1015349587.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd.(<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd.(<http://bd1008074282.fm.alibaba.com/productlist.html>)

Process Flow



References

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- http://most.comsatshosting.com/Files/PCSIR_Peshawar/mango%20squash%20feasibility%20You th%20Business%20Loan%20_2014_.pdf
- <http://maayeka.com/2012/05/mango-and-mint-squash.html>
- <http://www.indiamart.com/mpsfoodproducts/fruit-squash.html#mango-pudina-squash>
- <http://naiya-recipes.blogspot.com/2013/05/how-to-make-raw-mango-squash.html>
- <http://tribune.com.pk/story/569188/recipe-green-mango-squash/>
- EIRI BOARD OF CONSULTANTS & ENGINEERS. PRESERVATION & CANNING OF FRUITS AND VEGWTABLES. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. FRUIT BEVERAGES AND PROCESSING WITH MANGO PRODUCTS. NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE.
- NATIONAL SMALL INDUSTRIES CORPORATION. 2012. INDIAN TECHNOLOGIES for setting up of New Micro & Small Enterprises.

Product No. 12	Sub-Sector	Code
Concentrated Fruit Juice	Fruit and Vegetable Product	BDS 527:2007
		
<p>Concentrated Fruit Juice is widely available and nutritionally similar to regular juice when prepared properly. The nutritional value of concentrated fruit juices varies, depending upon the type of juice and whether or not there are any additives, such as sugars, contained in the concentrate. 1-cup serving of frozen apple juice concentrate contains 112 calories, 27.58 g of carbohydrates, 26.12 g of sugar, 301 mg of potassium and 1.4 mg of vitamin C, according to the U.S. Department of Agriculture's Nutrient Database. A serving of orange juice from concentrate contains nearly identical values, with the main exception of having 96.9 mg of vitamin C. Fruit juice concentrates are stored frozen.</p>		
Raw Material		
Fruit		
Source of Raw Material		
Local market		
Packaging Materials		
Can/Pet bottle		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Washing machine		FOB Price: US \$1,500-6,000/Set http://www.alibaba.com/product-detail/2015-professional-pineapple-washing-machine-for_60261561503.html?spm=a2700.7724838.35.1.sHiH9u

Sorting Conveyer		FOB Price: US \$ 5000-8000/Set http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
Peeling machine		FOB Price: US \$200-1,000/Set http://www.alibaba.com/product-detail/Advanced-automatic-pineapple-peeling-machine-pineapple_60185038788.html?spm=a2700.7724838.35.1.Bh1Nm
Juicing machine		FOB Price: US \$1,000-6,500/Set http://www.alibaba.com/product-detail/Durable-and-easy-to-operate-Pineapple_881124196.html?spm=a2700.7724838.35.1.Lj0rYj
Evaporator		FOB Price: US \$1000-10000/Set http://www.alibaba.com/product-detail/WZD-Dual-effect-milk-evaporator_1378423025.html?s=p
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/fruit-stoning-machine-fruit-stoning-pulping_732748270.html

Filling machine		FOB Price: US \$3,000-50,000/Set http://www.alibaba.com/product-detail/2013-new-bottled-juice-filling-machine_1354338868.html?s=p
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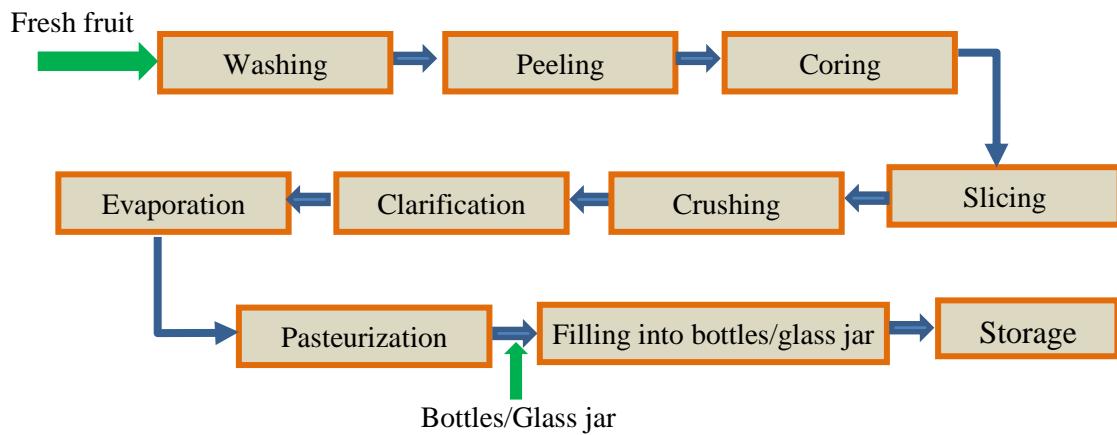
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (Contact- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Tick BD Engineering & Consulting Ltd (<http://bd1015349587.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd. (<http://bd1008074282.fm.alibaba.com/productlist.html>)

Process Flow



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- <http://www.newhealthadvisor.com/Juice-from-Concentrate.html>
- http://www.cargohandbook.com/index.php/Fruit_juices,_concentrated

Product No. 13	Sub-Sector	Code
Drinking Water	Drinks and Beverage	HS 220110 BDS 1240
		
<p>Drinking water or potable water is safe enough to be consumed by humans or used with low risk of immediate or long term harm. Water has always been an important and life-sustaining drink to humans and is essential to the survival of most other organisms. Excluding fat, water composes approximately 70% of the human body by mass. It is a crucial component of metabolic processes and serves as a solvent for many bodily solutes.</p>		
<p>Raw Material</p>		
Surface water/Ground water		
<p>Packaging Materials</p>		
Pet bottle/ plastic jar		
<p>Source of Packaging Materials</p>		
Plastoccats limited (Tel: 02-9340228, 02-9358808)		
<p>Machineries Required</p>		
drinking water treatment plant	FOB Price: US \$5,000-50,000/Piece http://www.alibaba.com/product-detail/drinking-water-treatment-plant_803575577.html	
Raw water pump		FOB Price: US \$200-1,000/Set http://www.alibaba.com/product-detail/submersible-pump-for-raw-water_1911955768.html?s=p

Raw water tank		FOB Price: US \$100-1,000/Set http://www.alibaba.com/product-detail/raw-water-tanks-price_608318500.html
Quartz sand filter		FOB Price: US \$200-30,000/Set http://www.alibaba.com/product-detail/Pre-water-treatment-quartz-sand-filter_789484713.html
Active carbon filter		FOB Price: US \$500-500,000/Piece http://www.alibaba.com/product-detail/Activated-Carbon-Filter_265314368.html
Precision filter		FOB Price: US \$60-2,000/Piece http://www.alibaba.com/product-detail/Precision-Filter-for-water-treatment_624955837.html

Reverse osmosis		FOB Price: US \$3,000-5,000/Set http://www.alibaba.com/product-detail/HOT-sell-ro-reverse-osmosis_1251686222.html
Ozone generator		FOB Price: US \$200-300/Set http://www.alibaba.com/product-detail/High-Quality-Portable-Ozone-Generator-Pure_1751462642.html
UV light sterilizer		FOB Price: US \$85-106/Set http://www.alibaba.com/product-detail/UV-water-sterilizer-for-water-treatment_1622195119.html
Aseptic water tank		FOB Price: US \$1,000-10,000/Unit http://www.alibaba.com/product-detail/Aseptic-Stainless-Steel-Water-Storgae-Tank_254596168.html

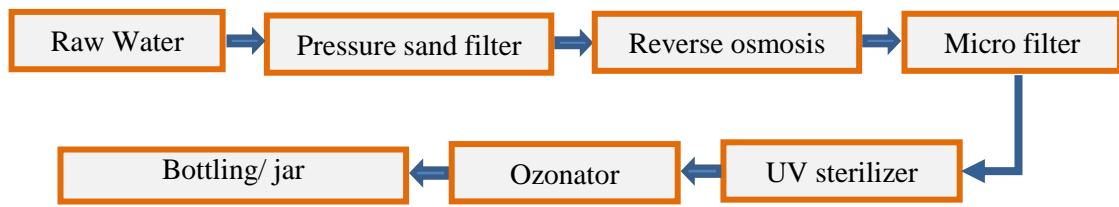
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- Toptech Enterprise. (<http://bd100504945.fm.alibaba.com>)
- Eco Trade Bangladesh (<http://bd1047028827.fm.alibaba.com>)
- NEXTGEN28 (<http://bd107022303.fm.alibaba.com>)
- Water fine (<http://bd1048448101.fm.alibaba.com>)
- Osmo Water Health Technology (<http://bd1048958258.fm.alibaba.com>)
- China Bangla Engineers & Consultants Ltd (<http://bd1008074282.fm.alibaba.com>)

Process Flow



References

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Product No. 14	Sub-Sector	Code
Biscuit	Cereal and Pulse Product	HS 2007- 1905.20.31, 32 BDS 383
		
<p>Biscuit is a term used for a variety of baked, commonly flour based food products. The term refers to a hard, dry, baked product suitable for long-term storage as it contains less than 4% moisture.</p>		
Raw Material <ul style="list-style-type: none"> • Flour • Sugar • Baking powder • Milk • Essence • Hydrogenated vegetable fat/oil 		
Source of Raw Materials <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur Pte. Ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact - 01678032038) 		
Packaging Materials <ul style="list-style-type: none"> Pouch/Plastic jar 		
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Automatic biscuit manufacturing machine		FOB Price: US \$10,000-100,000/Set http://www.alibaba.com/product-detail/china-automatic-soft-and-hard-biscuit_965108566.html?s=p
Dough mixer machine (electric)		FOB Price: US \$600-3000/Set http://www.alibaba.com/trade/search?sb=y&IndexArea=product_en&CatId=&SearchText=doughmixing+Machine

Rotary biscuit cutting machine/ Moulding machine		FOB Price: US \$3,000-12000/set http://www.alibaba.com/product-detail/YJ-400-soft-biscuit-moulding-machine_1301798564.html
Tunnel oven		FOB Price: US \$2,600-3,000/Set http://www.alibaba.com/product-detail/TUNNEL-OVEN-BKS-1418Q-_344141467.html?s=p
Oil spray machine		FOB Price: US \$1,500-3,000/Set http://www.alibaba.com/product-detail/biscuit-oil-spraying-machine_1205848165.html
Cooling Conveyer		FOB Price: US \$2,000-4,000/Set http://www.alibaba.com/product-detail/Wafer-Sheet-Cooling-Machine-of-Wafer_759906288.html
Biscuit Stacking Machine		FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/High-Effeciency-Biscuit-Stacking-Machine_235430448.html?s=p
Packing Machine		FOB Price: US \$4,100-4,900/Set http://www.alibaba.com/product-detail/CE-YB100-automatic-horizontal-flow-packing_1529683816.html?s=p

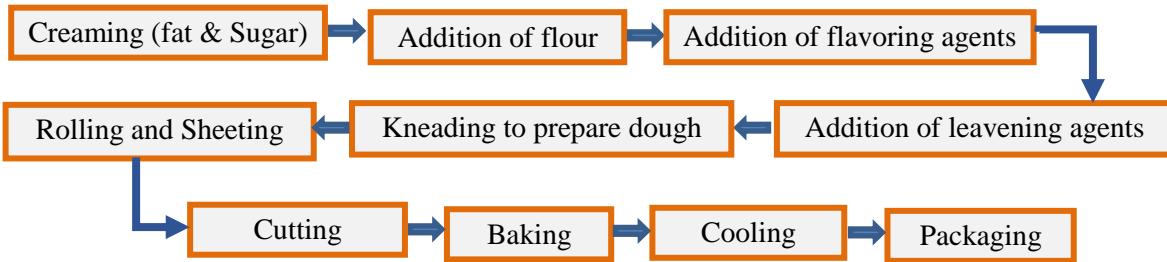
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (Contact no- 02-8954583,028953702, 01911230092, 01714166151)
- NAOGAON ENGINEERING WORKSHOP (<http://bd112311772.fm.alibaba.com/contactinfo.html>)
- NAOGAON TRADE INTERNATIONAL(<http://bd1054595109.fm.alibaba.com/contactinfo.html>)
- Pacific sourcing LTD. (Mob- 01911230092, 01714166151)
- National Engineering Complex (mob- 01819467070, 01715783969)

Process Flow



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Product No. 15	Sub-Sector	Code
Cake	Cereal and Pulse Product	HS 2007- 1905.90 BDS 1574
		
Cake is typically a sweet baked dessert. Flavorful ingredients like fruit purees, nuts, dried or candied fruit or extracts are often added and numerous substitutions for the primary ingredients are possible.		
Raw Material		
<ul style="list-style-type: none"> • Flour • Milk • Egg • Sugar • Oil/Butter • Baking powder • Essence 		
Source of Raw Materials		
<ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur Pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact- 01678032038) 		
Packaging Materials		
BOPP film		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Automatic cake manufacturing line	FOB Price: US \$10,000-500,000/Set http://shhengguang.en.alibaba.com/product/1556067506-219061453/Full_Automatic_Cake_Processing_Line_Equipment_Layer_Cake_Manufacturing_Plant_Equipment_Cake_making_machine.html	
Dough mixer machine		FOB Price: US \$600-3000/Set http://www.alibaba.com/trade/search?fsb=y&IndexArea=product_en&CatId=&SearchText=doughmixing+Machine

Cake forming machine		FOB Price: US \$5,710-7,240/Set http://www.alibaba.com/product-detail/automatic-cake-forming-machine_538276033.html?s=p
Tunnel oven/Electric and gas oven		FOB Price: US \$2,600-3,000/Set http://www.alibaba.com/product-detail/TUNNEL-OVEN-BKS-1418Q_344141467.html?s=p
Cooling conveyer		FOB Price: US \$2,000-4,000/Set http://www.alibaba.com/product-detail/Wafer-Sheet-Cooling-Machine-of-Wafer_759906288.html
Packing machine		FOB Price: US \$4,100-4,900/Set http://www.alibaba.com/product-detail/CE-YB100-automatic-horizontal-flow-packing_1529683816.html?s=p

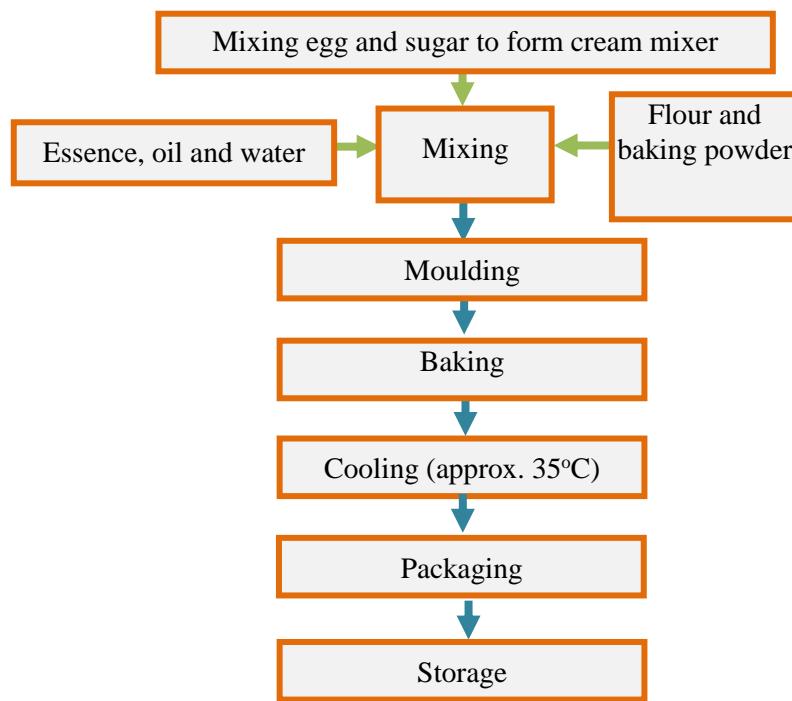
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Pacific sourcing LTD. (Mob- 01911230092, 01714166151)
- NAOGAON ENGINEERING WORKSHOP (<http://bd112311772.fm.alibaba.com/contactinfo.html>)
- NAOGAON TRADE INTERNATIONAL (<http://bd1054595109.fm.alibaba.com/contactinfo.html>)
- National Engineering Complex (Contact- 01715783969, 01819467070)

Process Flow

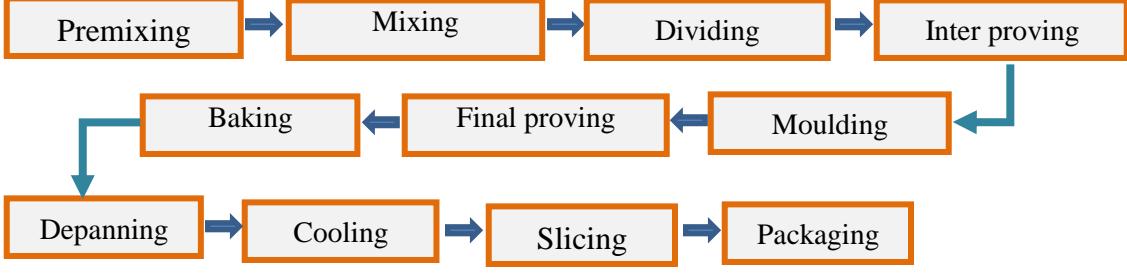


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- <http://www.coi4cake.com>
- <http://www.shumaonline.com/cakemanufacturing.html>

Product No. 16	Sub-Sector	Code
Bread	Cereal and Pulse Product	HS 2007- 1905.90 BDS 382
		
A kind of food made of flour or meal that has been mixed with milk or water, made into a dough or batter, with or without yeast or other leavening agent, and baked.		
Raw Material		
<ul style="list-style-type: none"> • Flour • Whole Egg • Sugar • Salt • Milk/ water • Yeast 		
Source of Raw Materials		
<ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur Pte. Ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact- 01678032038) 		
Packaging Materials		
Polyethylene bag		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Contact- 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Dough mixer machine (electric)		FOB Price: US \$600-3000/Set http://www.alibaba.com/trade/search?fsb=y&IndexArea=product_en&CatId=&SearchText=doughmixing+Machine
Water chiller		FOB Price: US \$480-9,732/Unit http://www.alibaba.com/product-detail/aquarium-water-chiller_1122296735.html

Moulder		FOB Price: US \$500-1300/Unit http://www.alibaba.com/product-detail/Bread-Toast-Moulder-dough-moulder-Manufacturer_1103363020.html?s=p
Proofer		FOB Price: US \$1200-1600/Set http://www.alibaba.com/product-detail/prooffer_1780859329.html
Tunnel oven/ Electric and gas oven		FOB Price: US \$2,600-3,000/Set http://www.alibaba.com/product-detail/TUNNEL-OVEN-BKS-1418Q_344141467.html?s=p
Cooling conveyer		Fob price US \$1,000-20,000/Unit http://www.alibaba.com/product-detail/food-conveying-machine-belt-conveyor-Rubber_1103371117.html
Bread slicer		FOB Price: US \$570-650/Set http://www.alibaba.com/trade/search?fsb=y&IndexArea=product_en&CatId=&SearchText=Bread+slicer

Packing Machine		FOB Price: US \$4,100-4,900/Set http://www.alibaba.com/product-detail/CE-YB100-automatic-horizontal-flow-packing_1529683816.html?s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (Contact no- 02-8954583,028953702, mob- 01911230092, 01714166151) Pacific sourcing LTD. (Contact n0.- 01911230092, 01714166151) National Engineering Complex (Contact no.- 01819467070, 01715783969) NAOGAON ENGINEERING WORKSHOP (http://bd112311772.fm.alibaba.com/contactinfo.html) NAOGAON TRADE INTERNATIONAL(http://bd1054595109.fm.alibaba.com/contactinfo.html) 		
Process Flow		
 <pre> graph TD Premixing[Premixing] --> Mixing[Mixing] Mixing --> Dividing[Dividing] Dividing --> InterProving[Inter proving] InterProving --> FinalProving[Final proving] FinalProving --> Moulding[Moulding] Moulding --> Baking[Baking] Baking --> Depanning[Depanning] Depanning --> Cooling[Cooling] Cooling --> Slicing[Slicing] Slicing --> Packaging[Packaging] Moulding -- feedback --> FinalProving </pre>		
References		
<ul style="list-style-type: none"> NATIONAL SMALL INDUSTRIES CORPORATION. 2012. INDIAN TECHNOLOGIES for setting up of New Micro & Small Enterprises. Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning. http://www.bsti.gov.bd/list.html http://www.madehow.com/Volume-2/Bread.html http://www.bakerybazar.com/2012/08/rusk-manufacturing-process-flow-chart.html http://www.shumaonline.com/flow-diagram-for-bread-manufacturing.html 		

Product No. 17	Sub-Sector	Code
Chanachur	Cereal and Pulse Product	HS 190410 BDS 1564
		
<p>Chanachur is a very popular snack food in Bangladesh. It is available in almost all grocer's shop, even in the most remote villages of Bangladesh. It is rich in calories and protein. Its exact nutritional quality depends on the combination of different ingredients.</p>		
Raw Material <ul style="list-style-type: none"> • Pulse flour • Peanut • Musur dal • Pea • Seasonings 		
Source of Raw Material <p>Local market</p>		
Packaging Materials <p>Pouch pack</p>		
Source of Packaging Materials <p>Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com)</p>		
Machineries Required		
Mixing machine		FOB Price: US \$1,000-5,000/Set http://www.alibaba.com/product-detail/Good-quality-flour-mixing-machine_1883392963.html
Noodle making and cutting machine	 <i>judushangmao1.en.alibaba.com</i>	FOB Price: US \$1,000-5,000/Set http://www.alibaba.com/product-detail/Automatic-magic-instant-MT5-300-Noodle_1620523501.html

Frying machine		FOB Price: US \$1,000-1,000,000/ Set http://www.alibaba.com/product-detail/continuous-peanut-chicken-puffed-snacks-meat_913900543.html
Seasoning machine		FOB Price: US \$400-1,000/Set http://www.alibaba.com/product-detail/Octagonal-snack-food-flavoring-machine-disk_1507996640.html
Cooling conveyer		FOB Price: US \$1,000-20,000/Unit http://www.alibaba.com/product-detail/food-conveying-machine-belt-conveyor-Rubber_1103371117.html
Mixing machine		FOB Price: US \$1,000-7,000/Set http://www.alibaba.com/product-detail/2012-newest-type-food-mixing-machines_708191808.html
Packing machine		FOB Price: US \$1,000-5,000/Set http://www.alibaba.com/product-detail/namkeen-pouch-packing-machine_1835194976.html

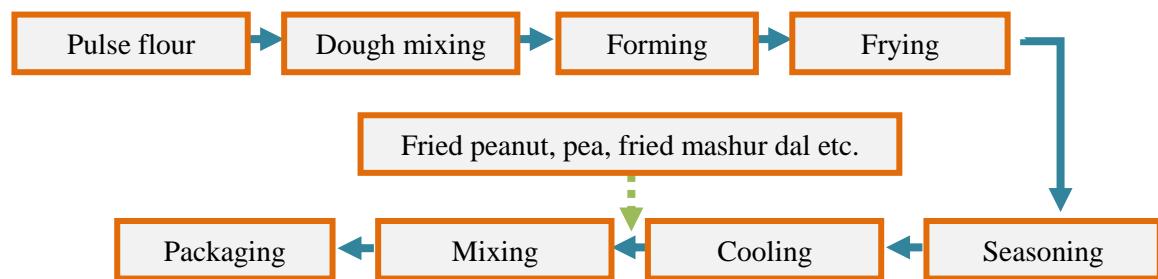
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- Techgen Engineering Ltd. (<http://www.techgenltd.com>)
- Rashed Trade International (<http://lovemee.fm.alibaba.com>)
- ADEEB FUTURE TECH LTD (<http://bd901569718.fm.alibaba.com>)
- NATIONAL WORLD EXPORT& IMPORT (PVT.) CO. LTD (<http://bd114321142.fm.alibaba.com>)
- NAOGAON ENGINEERING WORKSHOP (<http://bd112311772.fm.alibaba.com/contactinfo.html>)
- IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- National Engineering Complex (Mob-01715783969, 01819467070)
- Pacific sourcing LTD. (Mob- 01911230092, 01714166151)

Process Flow



References

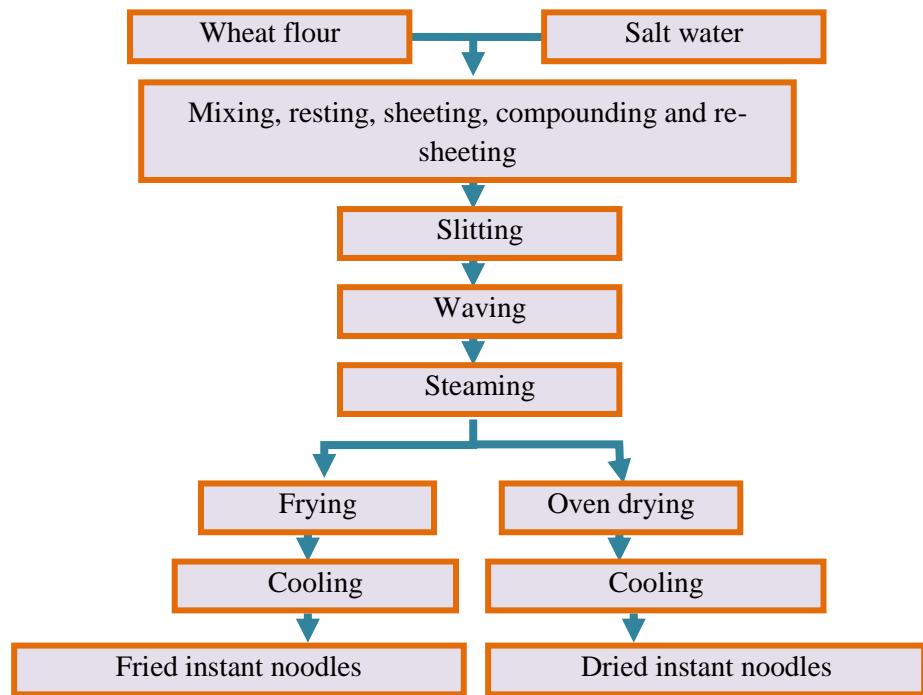
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- <http://www.hscodeplist.com>
- <http://www bsti.gov.bd/list.html>
- <http://www.alibaba.com>

Product No. 18	Sub-Sector	Code
Instant Noodle	Cereal and Pulse Product	HS 190230 BDS 1552
		
Instant noodle is a dried or precooked noodle block, usually sold with a packet of flavoring powder and/or seasoning oil. Dried noodles are usually eaten after being cooked or soaked in boiling water, while precooked noodles can be reheated or eaten straight from the packet.		
Raw Material		
<ul style="list-style-type: none"> • Wheat flour • Salt • Seasonings • Oil • Tasting salt (Monosodium glutamate) • Sugar (optional) 		
Source of Raw Material		
Local market		
Packaging Materials		
Pouch		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Contact no.- 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Instant noodle machine plant		FOB price: US \$25,000-40,000/Set http://slsj.en.alibaba.com/product/515017435-212535072/Instant_Noodle_Machine_Plant.html
Brine mixer		FOB price: US \$1,300-1,500/Set http://www.alibaba.com/product-detail/stainless-steel-150kg-hour-capacity-brine_1063791896.html

Double speed mixer		FOB price: US \$700-4,500/Set http://www.alibaba.com/product-detail/High-quality-automatic-dough-mixer-noodle_1061034087.html
Single sheeting roller		FOB price: US \$1,600-2,300/Piece http://www.alibaba.com/product-detail/composite-noodle-press-machine-for-croissants_1090340979.html
Cutter and divider		FOB price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Hot-sale-factory-selling-noodle-cutter_1703522108.html
steamer		FOB price: US \$1,270-1,600/Set http://www.alibaba.com/product-detail/Single-Layer-Steamer_51689573.html
Fryer		FOB price: US \$1,000-3,000/Set http://www.alibaba.com/product-detail/Automatic-Electric-Fryer_449195962.html

Dryer		FOB price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Instant-noodles-dryer_635117967.html
Air cooler		FOB price: US \$2,000-5,000/Set http://www.alibaba.com/product-detail/Instant-Noodle-Cooling-Machine_905143475.html
Dividing conveyer		FOB price: US \$2,000-300,000/Set http://www.alibaba.com/product-detail/dividing-conveyer-of-instant-noodle-production_268961548.html
Packing machine		FOB price: US \$1,000-7,000/Set http://www.alibaba.com/product-detail/XZB350-Auto-Instant-Noodle-Packing-Machine_470901184.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Techgen Engineering Ltd. (http://www.techgenltd.com) • NAOGAON TRADE INTERNATIONAL(http://www.naogaontrade.com) • Hifs Agro Food Industries (http://hifsagrofood.fm.alibaba.com) • NATIONAL WORLD EXPORT& IMPORT (PVT.) CO. LTD(http://bd114321142.fm.alibaba.com) • IMTEX Packaging (Contact- 02-8954583,028953702, mob- 01911230092, 01714166151) 		

Process Flow



References

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- http://stars689.files.wordpress.com/2010/12/asian-noodle-processing_27.pdf
- http://www.dsm.com/content/dam/dsm/nip/en_US/documents/noodles.pdf
- <http://www.dcmsme.gov.in/reports/food/Noodleagra.pdf>
- <http://www1.dost-dongnai.net/QAST/fileupload/TV/13.pdf>
- <http://www.bsti.gov.bd/list.html>

Product No. 19	Sub-Sector	Code			
Potato Chips	Cereal and Pulse Product	HS 200520 BDS 1556			
					
<p>A potato chip is a thin slice of potato that has been deep fried, baked, kettle-cooked, or popped until crunchy. Potato chips are commonly served as a snack, side dish or appetizer.</p>					
Raw Material <ul style="list-style-type: none"> • Potato • Oil • Flake Salt • Antioxidant • Chilly Powder • Spice Powder • Salicylic acid • Bicarbonate • Tasting salt (Monosodium glutamate) • Preservatives • Flavoring ingredients (powdered sour cream/onion/ barbecue) • Chemicals (phosphoric acid/ citric acid/ hydrochloric acid/calcium chloride) 					
Source of Raw Material <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur Pte. Ltd. (http://www.meplbd.com) • Famous Iberchem. (mob no- 01678032038) 					
Packaging Materials <ul style="list-style-type: none"> • BOPP/LDPE 					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 					
Machineries Required <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top; padding: 10px;"> Conveyer </td> <td style="width: 33%; vertical-align: top; padding: 10px;">  </td> <td style="width: 33%; vertical-align: top; padding: 10px;"> FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p </td> </tr> </table>			Conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p
Conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p			

Washing and peeling machine		FOB Price: US \$499-1,488/Set http://www.alibaba.com/product-detail/Potatoes-Washing-and-peeling-machine-potato_1612679867.html
Checking machine		FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Electric-Food-Metal-Detector-Check-Weighing_1259956876.html
Potato slicer		FOB Price: US \$100-2,000/Set http://www.alibaba.com/product-detail/stainless-steel-spiral-potato-slicer_477041086.html
Rinsing machine		FOB Price: US \$1,000-3,000/Set http://www.alibaba.com/product-detail/potato-chips-rising-machine_585994651.html
Blanching machine		FOB Price: US \$100-1,000/Set http://www.alibaba.com/product-detail/High-quality-PT-1000-blanching-machine_479610825.html

Dewatering machine		FOB Price: US \$100-3,000/Set http://www.alibaba.com/product-detail/Potato-chips-dewatering-machine-potato-chips_1213089309.html
Frying machine (with oil filter)		FOB Price: US \$2,000-80,000/Piece http://www.alibaba.com/product-detail/Frying-Pellet-potato-chips-peanut-Fryer_703936353.html?s=p
De oiling machine		FOB Price: US \$500-2,500/Set http://www.alibaba.com/product-detail/HYTY-Potato-chips-deoiling-machine-0086_930165646.html?s=p
Flavoring machine		FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Stainless-Steel-Drum-Chips-Flavoring-Machine_1861410870.html
Vacuum and nitrogen packing machine/ Nitrogen packing machine		FOB Price: US \$1,000-10,000/Piece http://www.alibaba.com/product-detail/potato-chips-packing-machine_1681952917.html?s=p

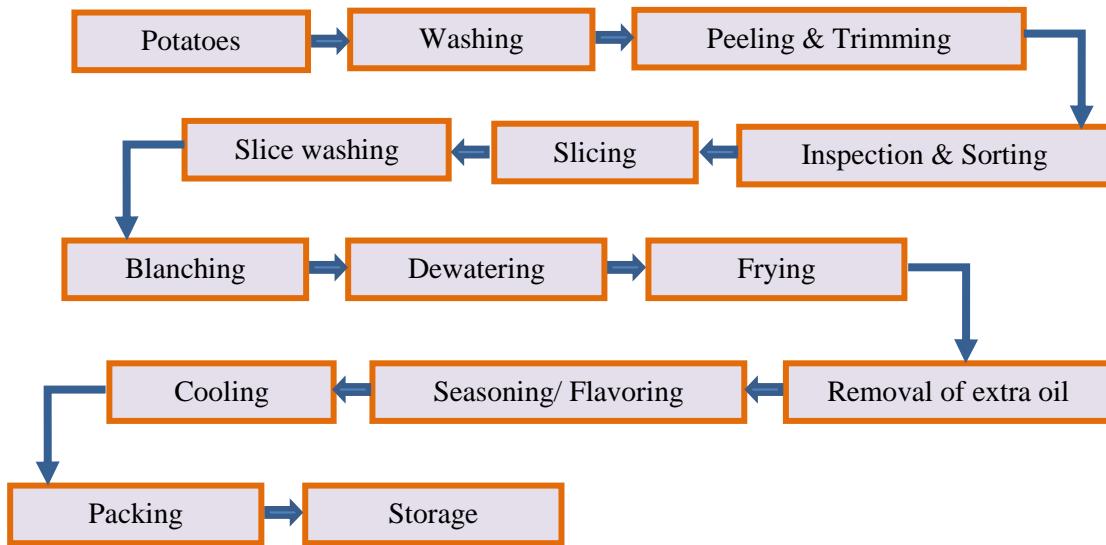
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- Techgen Engineering Ltd. (<http://www.techgenltd.com>)
- NAOGAON TRADE INTERNATIONAL(<http://www.naogaontrade.com>)
- NATIONAL WORLD EXPORT& IMPORT (PVT.) CO. LTD (<http://bd114321142.fm.alibaba.com>)
- IMTEX Packaging (Contact- 02-8954583,028953702, mob- 01911230092, 01714166151)

Process Flow

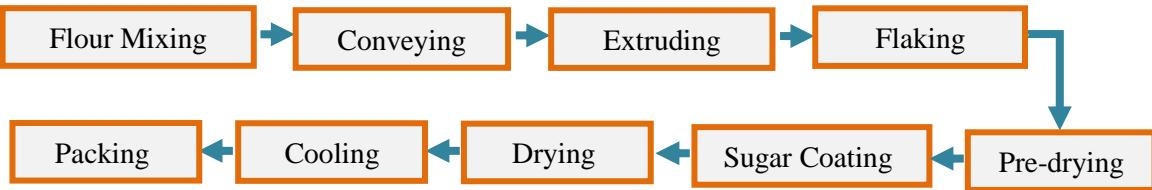


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- http://foodtechnologies.rosenqvists.com/Upload/Folders_productsheets/chips_folder.pdf
- <http://www.potatochipsmakingmachine.com/potato-peeler-machine.html>
- <http://www.snacksfoodproject.com/baked-fresh-potato-chips-snacks-production-line-advance.html>

Product No. 20	Sub-Sector	Code
Corn Flake	Cereal and Pulse Product	HS 190410
		
<p>Corn flakes are popular breakfast cereal originally manufactured by maize. Corn flakes are usually served with milk (cold; sometimes warm or hot). Fruits, such as banana and strawberry, are popular additions. Sugar may be added per one's taste.</p>		
Raw Material <ul style="list-style-type: none"> • Corn flour • Sugar • Water 		
Source of Raw Material <p>Local market</p>		
Packaging Materials <p>pouch pack</p>		
Source of Packaging Materials <p>Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com)</p>		
Machineries Required		
Automated corn flakes processing plant	<p>FOB price: US \$9,000-60,000/Set http://www.alibaba.com/product-detail/New-tech-Frosted-Corn-Flakes-Processing_1865465120.html?s=p</p>	
Mixing machine		<p>FOB price: US \$1,000-5,000/Set http://www.alibaba.com/product-detail/Good-quality-flour-mixing-machine_1883392963.html</p>

Extruder		FOB price: US \$500-40,000/Set http://www.alibaba.com/product-detail/Hot-sale-dough-extruder-with-best_1724807660.html
Flaking machine		FOB price: US \$1,000-6,500/Set http://www.alibaba.com/product-detail/Hot-Seller-Flaking-Machine_603071094.html
Dryer		Fob price: US \$1,000-12,000/Set http://www.alibaba.com/product-detail/Gas-dryer-for-corn-flakes_847772631.html
Sugar Coating machine		Fob price: US \$500-30,000/Set http://www.alibaba.com/product-detail/snacks-Sugar-coating-machine-corn-flakes_768015021.html
Conveyer		Fob price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Corn-Flakes-Belt-Conveyor_427611130.html

Packing machine		Fob price: US \$1,000-9,000/Set http://www.alibaba.com/product-detail/corn-flakes-packing-machine-hs-398model-_526820311.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Techgen Engineering Ltd. (http://www.techgenltd.com) • NAOGAON TRADE INTERNATIONAL(http://www.naogaontrade.com) • NATIONAL WORLD EXPORT& IMPORT (PVT.) CO. LTD (http://bd114321142.fm.alibaba.com) • IMTEX Packaging (Contact- 02-8954583,028953702, mob- 01911230092, 01714166151) 		
Process Flow		
 <pre> graph LR A[Flour Mixing] --> B[Conveying] B --> C[Extruding] C --> D[Flaking] D --> E[Packing] D --> F[Pre-drying] F --> G[Sugar Coating] G --> H[Drying] H --> I[Cooling] I --> J[Packing] </pre>		
Reference		
<ul style="list-style-type: none"> • EIRI BOARD OF CONSULTANTS & ENGINEERS. BREAKFAST, DIETORT FOOD, PASTA & CEREAL PRODUCTS TECHNOLOGY, NEW DELHI. ENGINEERS INDIA RESEARCH INSTITUTE. • Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning. • http://www.madehow.com/Volume-3/Cereal.html • http://hscode.org 		

Product No. 21	Sub-Sector	Code
Wheat Flour	Cereal and Pulse Product	HS 1101 BDS 380:2007
		
Whole-wheat flour is a powdery substance, a basic food ingredient derived by grinding or mashing the whole grain of wheat. Whole-wheat flour provides a nutritional advantage over some white flours due to its vitamin content. Whole-wheat flour contains several vitamins, including folate, riboflavin and vitamins B-1, B-3 and B-5.		
Raw Material		
<ul style="list-style-type: none"> • Wheat • Water 		
Source of Raw Material		
Local market		
Packaging Materials		
PE		
Source of Packaging Materials		
Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com)		
Machineries Required		
Cleaner		US \$500-1,500/Set http://www.alibaba.com/product-detail/low-price-wheat-cleaner-008618237112106_613307573.html
De-stoner		US \$600-4,999/Set http://www.alibaba.com/product-detail/13-New-model-Grain-Cereal-Wheat_724818913.html

Boiler	 hnyongxing.en.alibaba.com	US \$1,500-150,000/Set http://www.alibaba.com/product-detail/6t-h-Horizontal-Automatic-chain-steam_406823412.html
Huller	 ruixuemachinery.en.alibaba.com	US \$500-8,000/Set http://www.alibaba.com/product-detail/China-wheat-huller-manufacturer_1219570536.html
Milling machine	 shuliy.en.alibaba.com	US \$300-1,000/Set http://www.alibaba.com/product-detail/Wheat-Milling-Machine_768000093.html
Shifter	 振英机械	US \$1,000-100,000/Set http://www.alibaba.com/product-detail/Zhenying-Brand-ZYG-High-Frequency-Wheat_526082813.html
Packing machine	 HS-720D	US \$1,000-9,000/Piece http://www.alibaba.com/product-detail/Flour-Packing-Machine-HS-720D_942165993.html

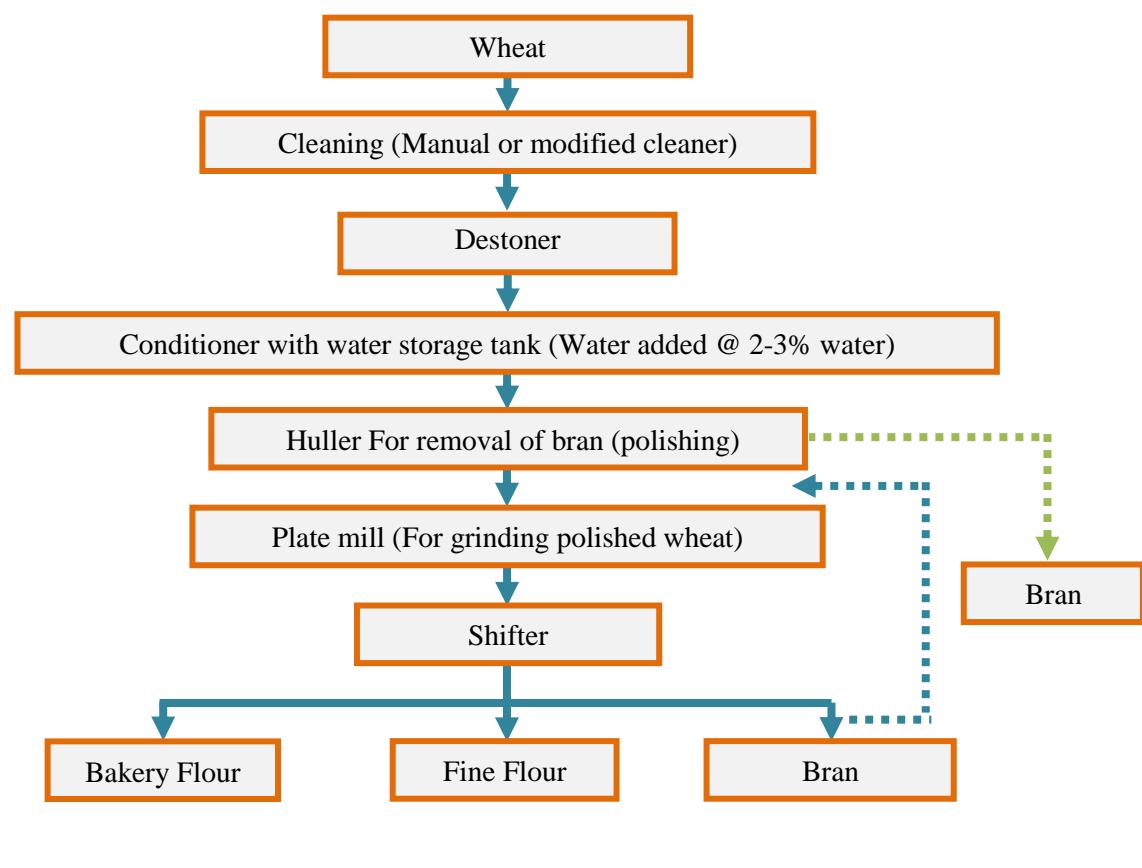
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- Techgen Engineering Ltd. (<http://www.techgenltd.com>)
- Earth Corporation (<http://www.earth-machinery.com>)
- China Bangla Engineers & Consultants Ltd. (<http://www.cbecl.info>)
- Thermotec Engineers (Pvt.) Limited (<http://thermotecengineers.com>)
- ADEEB FUTURE TECH LTD (<http://bd901569718.fm.alibaba.com>)
- NATIONAL WORLD EXPORT& IMPORT (PVT.) CO. LTD (<http://bd114321142.fm.alibaba.com>)
- IMTEX Packaging (Contact no- 02-8954583,028953702, 01911230092, 01714166151)

Process Flow

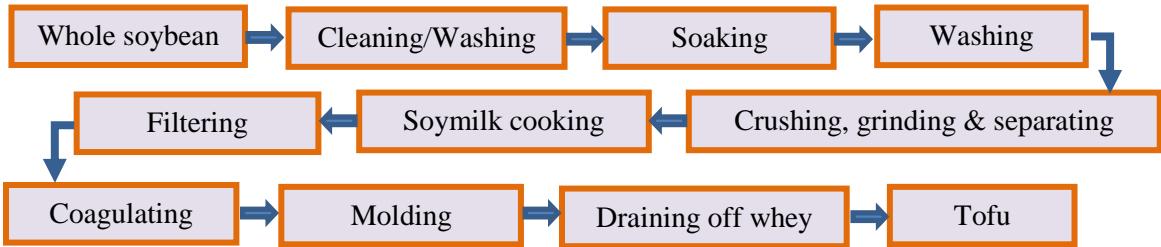


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- <http://www.flourmill86.com/xwnews/wheat-flour-milling-flow-chart-52.html>
- <http://www.dcmsme.gov.in/reports/food/miniflourmillkarnal.pdf>
- <http://www bsti.gov.bd/list.html>
- <http://hscode.org>

Product no. 22	Sub-Sector	Code			
Tofu	Cereal and Pulse Product	HS 220290			
					
<p>Tofu, also known as soya curd, is a soft cheese-like food made by curdling soya milk with a coagulant. It is known for its extraordinary nutritional benefits, as well as its versatility. It has a subtle flavor and can be used in savory and sweet dishes. It is high in protein and calcium and well known for its ability to absorb new flavors through spices and marinades. It is often seasoned or marinated to suit the dish. Due to its chameleon-like qualities and nutritional value, tofu, a staple of Asian cuisines for hundreds of years, has recently become popular in Western vegetarian cooking.</p>					
Raw Material <ul style="list-style-type: none"> • Soybean • water • Coagulant (calcium sulfate or magnesium chloride or nigari) 					
Source of Raw Materials <p>Local market</p>					
Packaging Materials <p>BOPP/polyethylene/pouch pack</p>					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Contact no.- 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 					
Machineries Required <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Soymilk making machine</td> <td style="width: 50%; text-align: center;">  </td> <td style="width: 25%;"> FOB Price: US \$800-1,000/Set http://www.alibaba.com/product-detail/full-stainless-and-good-quality-automatic_1983337298.html </td> </tr> </table>			Soymilk making machine		FOB Price: US \$800-1,000/Set http://www.alibaba.com/product-detail/full-stainless-and-good-quality-automatic_1983337298.html
Soymilk making machine		FOB Price: US \$800-1,000/Set http://www.alibaba.com/product-detail/full-stainless-and-good-quality-automatic_1983337298.html			

Curdng vat		FOB Price: US \$300-12,500/Set http://www.alibaba.com/product-detail/Cheese-curd-vat_1695733316.html
Forming machine		FOB Price: US \$500-4,500/Set http://www.alibaba.com/product-detail/Pressing-Tofu-Machine-Soya-Milk-Maker_60062225950.html
Cutting machine		FOB Price: US \$1-10/Piece http://www.alibaba.com/product-detail/high-efficiency-tofu-cutting-machine_1935926602.html
Packing machine		FOB Price: US \$500-29,000/Set http://www.alibaba.com/product-detail/good-quality-automatic-tofu-packing-machine_1824139289.html?s=p

Pasteurizer		FOB Price: US \$1,000-8,000/Set http://www.alibaba.com/product-detail/Tofu-Pasteurizing-Machine-Tofu-Processing-Machine_1954867172.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (Contact no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		
Process Flow		
 <pre> graph TD A[Whole soybean] --> B[Cleaning/Washing] B --> C[Soaking] C --> D[Washing] D --> E[Filtering] E --> F[Soymilk cooking] F --> G[Crushing, grinding & separating] G --> H[Coagulating] H --> I[Molding] I --> J[Draining off whey] J --> K[Tofu] </pre>		
References		
<ul style="list-style-type: none"> http://www.soya.be/what-is-tofu.php http://www.madehow.com/Volume-2/Tofu.html http://www.westfalia-separator.com/applications/beverage-technology/soy-drinks-and-tofu.html http://ohmyveggies.com/how-to-make-your-own-tofu/ http://www.soyfoods.org/wp-content/uploads/2010/Tofu%20Voluntary%20Standard.pdf https://www.zuba.com/import-SOYAMILK+TOFU+MORI/hs-code-2202-hs-code.html 		

Product no. 23	Sub-Sector	Code			
Papad	Cereal and Pulse Product	HS 190590			
					
<p>Papad is a popular and tasty food item in diet since many centuries. It is essentially a wafer-like product, round in shape and made from dough of powdered pulses, spices, powdered chilly and salt. Variety of pulses and proportion of pulses and spices varies from region to region depending upon preferences of local people. Traditionally, this activity has been confined to household making but in view of increasing demand and availability of machinery, it has now been moving towards industrial scale production.</p>					
<p>Raw Material</p> <ul style="list-style-type: none"> • Flour of pulses • Spices • Common salt • Sodium bicarbonate 					
<p>Source of Raw Materials</p> <p>Local market</p>					
<p>Packaging Materials</p> <p>BOPP/ Pouch pack</p>					
<p>Source of Packaging Materials</p> <ul style="list-style-type: none"> • Plastoccats limited (Contact- 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 					
<p>Machineries Required</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Dough mixer</td> <td style="width: 50%; text-align: center;">  </td> <td style="width: 25%;"> FOB Price: US \$90-990/Set http://www.alibaba.com/product-detail/Commercial-Dough-Flour-Mixer-Electric-Horizontal_723720830.html </td> </tr> </table>			Dough mixer		FOB Price: US \$90-990/Set http://www.alibaba.com/product-detail/Commercial-Dough-Flour-Mixer-Electric-Horizontal_723720830.html
Dough mixer		FOB Price: US \$90-990/Set http://www.alibaba.com/product-detail/Commercial-Dough-Flour-Mixer-Electric-Horizontal_723720830.html			

Dough sheeter with rotary die cutting unit		FOB Price: US \$3,000-12000/set http://www.alibaba.com/product-detail/YJ-400-soft-biscuit-moulding-machine_1301798564.html
Continuous dryer		FOB Price: US \$2,000-50,000/Set http://www.alibaba.com/product-detail/continuous-microwave-vacuum-dryer-for-fruit_60117141505.html?s=p
Conveyer		FOB Price: US \$200-300/Set http://www.alibaba.com/product-detail/Stainless-steel-food-conveyer_60106861848.html?s=p
Stacking Machine		FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/High-Effeciency-Biscuit-Stacking-Machine_235430448.html?s=p
Packaging machine		FOB Price: US \$4,000-5,600/Set http://www.alibaba.com/product-detail/Stainless-steel-Automatic-Papad-Packing-Machine_60108851834.html

Source of Machineries
China, Taiwan, Japan, Pakistan, India etc.
Local Supplier of machineries
<ul style="list-style-type: none"> • IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html)
Flow chart
<pre> graph TD A[Figuring the ingredients] --> B[Mixing/Dough preparation] B --> C[Making small balls from dough] C --> D[Pressing] D --> E[Drying] E --> F[Cooling] F --> G[Packing] C --> G </pre> <p>The flowchart illustrates the sequential steps in papad manufacturing. It begins with 'Figuring the ingredients', followed by 'Mixing/Dough preparation'. This leads to 'Making small balls from dough', which then branches into two paths: one leading to 'Pressing' and another directly to 'Packing'. From 'Pressing', the process moves to 'Drying', then 'Cooling', and finally 'Packing'. There is also a direct arrow from 'Making small balls from dough' to 'Packing'.</p>
References
<ul style="list-style-type: none"> • http://www.ediindia.org/FP%20Profile/03%20Cereal%20&%20Pulse%20Based%20Products/09%20Papad%20Mfg.pdf • http://www.jasenterprise.com/papad-making-automatic-machine.html • http://www.bounteouskarnataka.com/pdf/49-Papad%20Manufacturing.pdf • http://www.cybex.in/HS-Codes/Papad-Hs-Codes-19059040.aspx

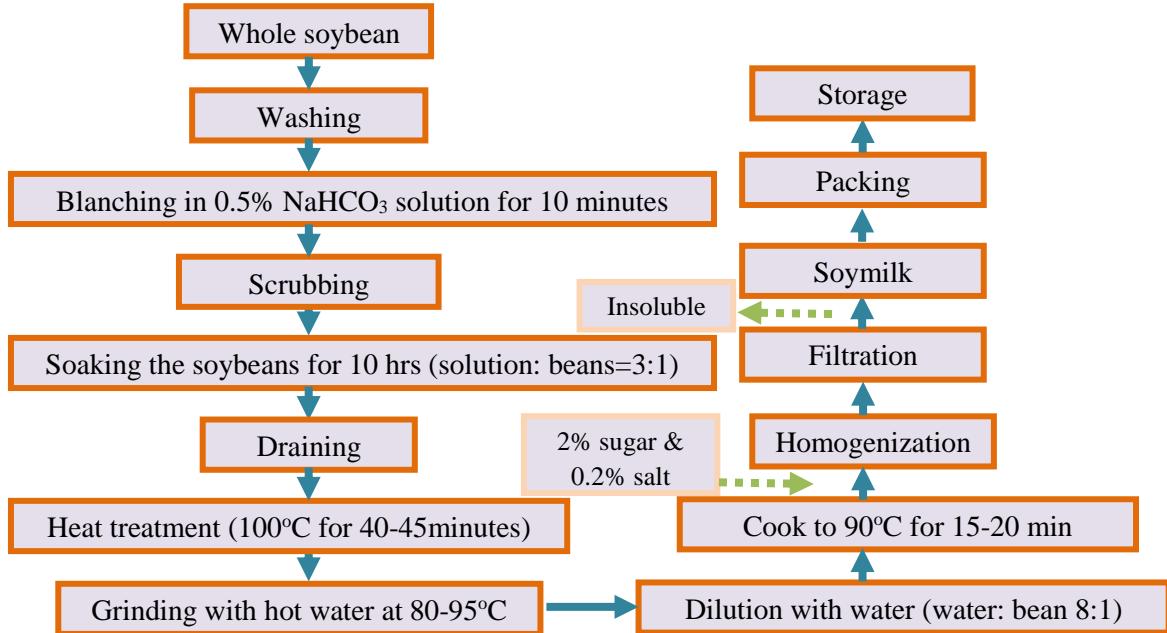
Product no. 24	Sub-Sector	Code			
Soya Nugget	Cereal and Pulse Product	HS 120810			
					
<p>Soya nuggets are commonly referred to as vegetarian meat. It is prepared from defatted (DOC) soya flour by the process of extrusion cooking. During the process, the protein in the flour undergoes structural changes and forms a fiber like network. When soaked in water, the texturized nuggets absorb the water and develop meat like and chewy characteristics. They are a rich source of protein. Among the vegetable proteins they contribute a maximum level of 50% protein. As they are free from cholesterol they are also commonly used as meat substitutes.</p>					
Raw Material <ul style="list-style-type: none"> • Soybean • Water 					
Source of Raw Materials <p>Local market</p>					
Packaging Materials <p>Pouch pack</p>					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Contact: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 					
Machineries Required <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 10px;">Grinder</td> <td style="text-align: center; padding: 10px;"></td> <td style="text-align: center; padding: 10px;"> FOB Price: US \$500-2,000/Piece http://www.alibaba.com/product-detail/spices-powder-making-machine-rice-powder_1963948375.html </td> </tr> </table>			Grinder		FOB Price: US \$500-2,000/Piece http://www.alibaba.com/product-detail/spices-powder-making-machine-rice-powder_1963948375.html
Grinder		FOB Price: US \$500-2,000/Piece http://www.alibaba.com/product-detail/spices-powder-making-machine-rice-powder_1963948375.html			

Mixer		FOB Price: US \$600-2,500/Piece http://www.alibaba.com/product-detail/stainless-steel-water-powder-mixer-machine_469673744.html
Extruder		FOB Price: US \$1,000-25,000/Set http://www.alibaba.com/product-detail/cost-effective-Soya-Nugget-Extruder-Soya_1471302708.html
Multipass Electric Drier		FOB Price: US \$500-5,000/Piece http://www.alibaba.com/product-detail/microwave-tunnel-oven_1976388765.html
Air conveyors (Hoister)		FOB Price: US \$1,000-4,000/Set http://www.alibaba.com/product-detail/Hoister_451175182.html
Packing machine		FOB Price: US \$4,000-20,000/Unit http://www.alibaba.com/product-detail/Automatic-form-fill-seal-pouch-packing_137517655.html

Source of Machineries
China, Taiwan, Japan, Pakistan, India etc.
Local Supplier of Machineries
<ul style="list-style-type: none"> • IMTEX Packaging (ph. no- 02-8954583,028953702, mob- 01911230092, 01714166151) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html)
Flow chart
<pre> graph LR A[Soybean grinding] --> B[Material mixing] B --> C[Conveying] C --> D[Extrusion] D --> E[Conveying] E --> F[Drying] F --> G[Air cooling] G --> H[Conveying] H --> I[Packing] </pre>
References
<ul style="list-style-type: none"> • http://www.indopol.com/html/soya_nuggets.html • http://jnsaixin.en.alibaba.com/product/958872309-200162421/various_capacities_Soya_Chunks_Protein_Processing_Machine_Soya_Nuggets_Machine_Soya_protein_machine.html • http://dir.indiamart.com/impcat/soya-nugget-machine.html • http://www.alibaba.com/product-detail/global-applicable-Soya-Nuggets-Manufacturing-Plant_1764815403.html • http://www.alibaba.com/product-detail/factory-supply-textured-soya-nuggets-making_60077393150.html • http://www.hscodelist.com/bbs/board.php?bo_table=HScode&wr_id=1318&sca=12

Product No. 25	Sub-Sector	Code
Soy Milk	Cereal and Pulse Product	HS 220290 BDS 1621
		
<p>Soy milk is a beverage made from soybeans. Plain soy milk is very nutritive. It is an excellent source of high quality proteins, isoflavones and B-vitamins. Soy milk contains about the same proportion of protein as cow's milk. It is free from the milk sugar (lactose) and is a good choice for people who are lactose intolerant. It is also a good alternative to those who are allergic to the proteins of cow's milk.</p>		
Raw Material <ul style="list-style-type: none"> • Soya bean • Water • Baking soda (NaHCO_3): 		
Source of Raw Material <ul style="list-style-type: none"> • Soya bean: Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur Pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact- 01678032038) 		
Packaging Materials <p>Pouch pack</p>		
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Industrial soy milk processing plant	FOB Price: US \$4,500-6,000/Set http://www.alibaba.com/product-detail/industrial-soy-milk-processing-plant_852651721.html	
Automatic Soya Milk Machine		FOB Price: US \$500-1,500/Set http://www.alibaba.com/product-detail/Automatic-soya-milk-making-machines-soya_1351035999.html

Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Steam Jacket Kettle		FOB Price: US \$1,500-2,500/Set http://www.alibaba.com/product-detail/Surri-Stainless-Steel-steam-jacketed-kettle_1087361381.html
Double Filter		FOB Price: US \$780-1,500/Set http://www.alibaba.com/product-detail/Double-filter_1137328338.html?s=p
Stainless steel pump		FOB Price: US \$100-1,000/Piece http://www.alibaba.com/product-detail/stainless-steel-pump_576768477.html
Storage tank		FOB Price: US \$200-2,000/Set http://www.alibaba.com/product-detail/Customized-Milk-Storage-Tanks-with-CE_1080097523.html

Packing machine		FOB Price: US \$1,000-15,000/Piece http://www.alibaba.com/product-detail/Milk-Bag-Filling-Machine_1645756932.html?s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Tick BD Engineering & Consulting Ltd. (http://bd1015349587.fm.alibaba.com/productlist.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) • IMTEX Packaging (Contact - 02-8954583, 028953702, mob- 01911230092, 01714166151) 		
Process Flow		
 <pre> graph TD A[Whole soybean] --> B[Washing] B --> C[Blanching in 0.5% NaHCO3 solution for 10 minutes] C --> D[Scrubbing] D --> E[Soaking the soybeans for 10 hrs (solution: beans=3:1)] E --> F[Draining] F --> G[Heat treatment (100°C for 40-45minutes)] G --> H[Grinding with hot water at 80-95°C] H --> I[Dilution with water (water: bean 8:1)] I --> J[Cook to 90°C for 15-20 min] J --> K[Homogenization] K --> L[Filtration] L --> M[Soymilk] M --> N[Insoluble] N --> O[Packing] O --> P[Storage] </pre>		
References		
<ul style="list-style-type: none"> • http://www.fao.org/docrep/t0532e/t0532e09.htm • http://www.sspindia.com/soymilk-plant.html • http://www.madehow.com/Volume-5/Soy-Milk.html 		

Product no. 26	Sub-Sector	Code
Soy Sauce	Cereal and Pulse Product	HS 210310 BDS 1718



Soy sauce is made by two methods: the traditional brewing method, or fermentation, and the non-brewed method, or chemical-hydrolyzation. The fermentation method takes few weeks to few months to complete and results in a transparent, delicately colored broth with balanced flavor and aroma. The non-brewed method take only two days to make and are often opaque with a harsh flavor and chemical aroma. Soy sauce has been used to enhance the flavor profiles of many types of food including chicken and beef entrees, soups, pasta, and vegetable entrees etc. It's sweet, sour, salty, and bitter tastes add interest to flat-tasting processed foods. The flavor enhancing properties of the soy extract are recognized to help blend and balance taste. The condiment also has functional preservative aspects in that its acid, alcohol, and salt content help prevent the spoilage of foods.

Raw Material

- Soybean
- Salt
- Fermenting agents
- Wheat
- Water
- Preservatives and other additives

Source of Raw Materials

Local market

Packaging Materials

Glass bottle/ Pet bottle

Source of Packaging Materials

- Plastoccats limited (Tel: 02-9340228, 02-9358808)
- Tanjim Printing & Packaging Ltd. (<http://www.tanjimgroup.com>)
- Bengal Glass (<http://www.bengalglass.com>)

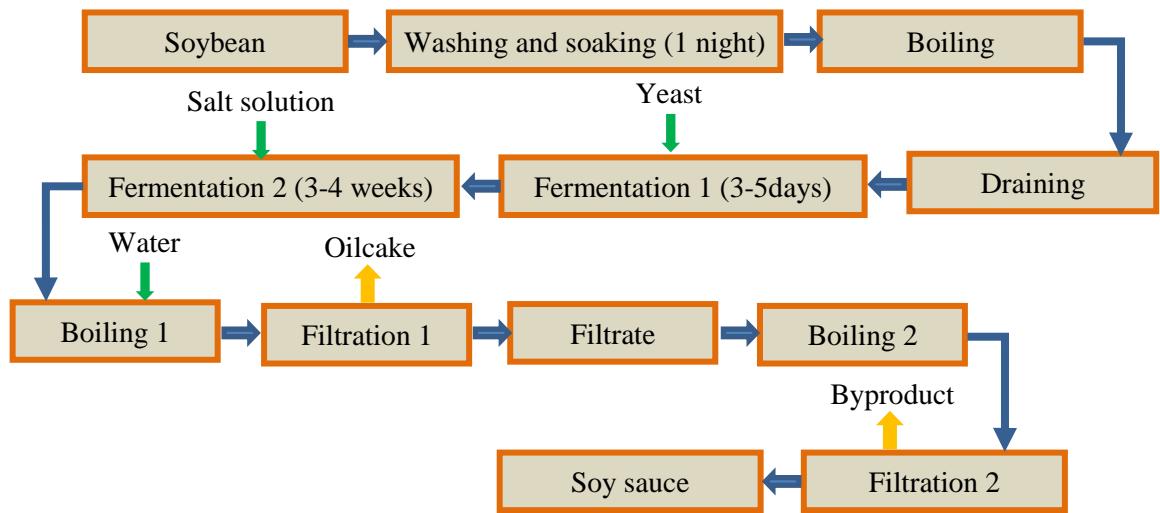
Machineries Required

Roaster		FOB Price: US \$1,000-5,000/Set http://www.alibaba.com/product-detail/High-Quality-Wheat-Roaster_1436361452.html
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Crushing machine		FOB Price: US \$500-2,500/Set http://www.alibaba.com/product-detail/Stainless-Steel-Soybean-Powder-Crusher-Mechanism_1641949855.html
Blending		FOB Price: US \$500-5,000/Unit http://www.alibaba.com/product-detail/beverage-blend-and-mix-machine-Stainless_1112871627.html
Steam jacket kettle		FOB Price: US \$300-800/Set http://www.alibaba.com/product-detail/steam-jacketed-kettle-jacketed-kettle-jacket_547116484.html
Vat		FOB Price: US \$300-12,500/Set http://www.alibaba.com/product-detail/Cheese-curd-vat_1695733316.html
Fermentation tank		FOB Price: US \$1,000-50,000/Set http://www.alibaba.com/product-detail/zy-10-automatic-soy-sauce-making_1719726378.html

Pressing machine		FOB Price: US \$1,000-150,800/Set http://www.alibaba.com/product-detail/hydraulic-pressing-machine_842430598.html?s=p
Pasteurizer		FOB Price: US \$100-10,000/Set http://www.alibaba.com/product-detail/Small-pasteurization-of-milk-machine-with_1902440931.html
Bottling		FOB Price: US \$1,000-100,000/Set http://www.alibaba.com/product-detail/soy-sauce-packing-machine_60106205493.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		

Process Flow

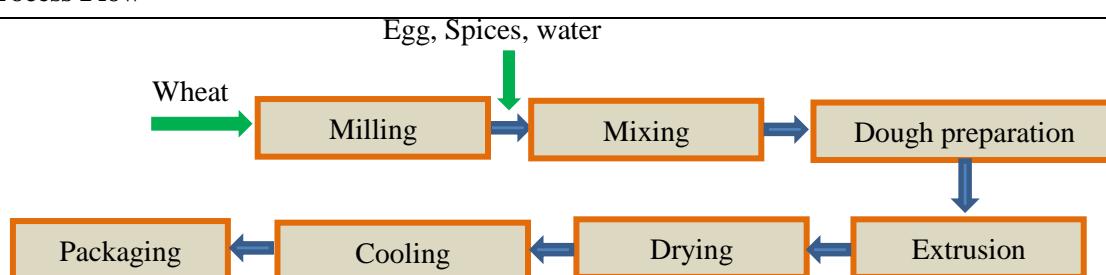


References

- http://en.wikipedia.org/wiki/Soy_sauce
- <http://marusoy.com/process>
- <http://www.lifeonnanchanglu.com/2011/12/twelve-steps-to-making-traditional.html>
- <http://www.madehow.com/Volume-3/Soy-Sauce.html>
- <https://www.youtube.com/watch?v=txWbdnd8xL8>
- http://www.hscodeclist.com/bbs/board.php?bo_table=HScode&wr_id=1253&sca=21
- <http://agroindustriindonesia.blogspot.com/2011/03/how-to-make-soy-sauce.html>

Product No. 27	Sub-Sector	Code			
Macaroni	Cereal and Pulse Product	HS 190211 BDS 384			
					
<p>Macaroni is a universally enjoyed food, and almost every country serves a type of noodle. It is a variety of dry pasta originating from Italy and made with wheat, usually without egg. It is normally cut in short lengths; if cut in lengths with a curve. ½ cup (70g) cooked macaroni contains total Fat 0.5g, total Carbohydrate 22g, Protein 4g and some minerals such as Calcium, Iron, Sodium etc.</p>					
Raw Material <ul style="list-style-type: none"> • Water • Flour of durum wheat • Egg • Herbs and spices such as garlic, basil, and thyme (optional) 					
Source of Raw Material <p>Local market</p>					
Packaging Materials <p>BOPP/PE/Pouch pack</p>					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 					
Machineries Required <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top; padding: 10px;"> Milling machine </td> <td style="width: 33%; vertical-align: top; padding: 10px;">  </td> <td style="width: 33%; vertical-align: top; padding: 10px;"> FOB Price: US \$500-750/Set http://www.alibaba.com/product-detail/Fully-Automatic-Wheat-Flour-Mill-Wheat_1950792410.html?spm=a2700.7724838.30.62.HRj8aK </td> </tr> </table>			Milling machine		FOB Price: US \$500-750/Set http://www.alibaba.com/product-detail/Fully-Automatic-Wheat-Flour-Mill-Wheat_1950792410.html?spm=a2700.7724838.30.62.HRj8aK
Milling machine		FOB Price: US \$500-750/Set http://www.alibaba.com/product-detail/Fully-Automatic-Wheat-Flour-Mill-Wheat_1950792410.html?spm=a2700.7724838.30.62.HRj8aK			

Mixing machine		FOB Price: US \$1,000-100,000/Set http://www.alibaba.com/product-detail/Dry-Powder-Horizontal-Ribbon-Mixer-Horizontal_60121398752.html?spm=a2700.7724838.30.88.UhHaFN
Screw conveyor		FOB Price: US \$500-5,000/Set http://www.alibaba.com/product-detail/Powder-Feeder-Machine-Elevator-Screw-Conveyor_60130014652.html?spm=a2700.7724838.30.79.t0wK7O
Extruder		FOB Price: US \$1,000-25,000/Set http://www.alibaba.com/product-detail/Quality-useful-pasta-making-single-screw_60240540039.html?spm=a2700.7724838.30.10.fuyGSO
Dryer		FOB Price: US \$1,000-15,000/Set http://www.alibaba.com/product-detail/small-pasta-dryer_60308215841.html?spm=a2700.7724838.30.20.mbpvGS
conveyer		FOB Price: US \$5000-8000/Set http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-_469376520.html?s=p

Packaging machine		FOB Price: US \$1,000-1,000,000/Set http://www.alibaba.com/product-detail/pasta-pieces-pillow-bag-automatic-vertical_1847678076.html?spm=a270.0.7724838.30.41.zgjcSO
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		
Process Flow		
 <pre> graph LR Wheat[Wheat] --> Milling[Milling] Milling --> Mixing[Mixing] Egg[Egg, Spices, water] --> Mixing Mixing --> Dough[Dough preparation] Dough --> Extrusion[Extrusion] Extrusion --> Drying[Drying] Drying --> Cooling[Cooling] Cooling --> Packaging[Packaging] </pre>		
References		
<ul style="list-style-type: none"> http://www.madehow.com/Volume-2/Pasta.html http://www3.epa.gov/ttnchie1/ap42/ch09/final/c9s09-5.pdf http://www.fns.usda.gov/sites/default/files/HHFS_MACARONI_ELBOW_DRY_Oct%202012.pdf http://www.ediindia.org/FP%20Profile/03%20Cereal%20&%20Pulse%20Based%20Products/05%20Macaroni.pdf http://www.foreign-trade.com/reference/hscode.htm 		

Product No. 28	Sub-Sector	Code			
Vermicelli/Semai	Cereal and Pulse Product	HS 1902.19.00 BDS 384			
					
<p>Vermicelli is a popular instant food product. It falls under the category of extruded product and is made from wheat flour. At times tapioca or soya bean or groundnut flour is also added. Thus, it is rich in proteins and liked by people from all walks of life, irrespective of age. It is basically a snack food item and at times it is also used as a table enricher. With changing lifestyles, greater awareness about health and preference for instant food items have made vermicelli very popular and an item of mass consumption.</p>					
<p>Raw Material</p> <ul style="list-style-type: none"> • Flour • Salt • Water 					
<p>Source of Raw Material</p> <p>Local market</p>					
<p>Packaging Materials</p> <p>PE/BOPP</p>					
<p>Source of Packaging Materials</p> <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 					
<p>Machineries Required</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Dough mixing machine</td> <td style="width: 50%; text-align: center;">  </td> <td style="width: 25%;"> FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Factory-Direct-Sale-Dough-Mixer-Flour_60428198618.html?spm=a2700.7724838.0.0.gHPQuB&s=p </td> </tr> </table>			Dough mixing machine		FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Factory-Direct-Sale-Dough-Mixer-Flour_60428198618.html?spm=a2700.7724838.0.0.gHPQuB&s=p
Dough mixing machine		FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/Factory-Direct-Sale-Dough-Mixer-Flour_60428198618.html?spm=a2700.7724838.0.0.gHPQuB&s=p			

Lifting conveyer		FOB Price: US \$890-7,990/Set http://www.alibaba.com/product-detail/High-capacity-food-screw-conveyer-for_1897569462.html?spm=a2700.7724838.0.0.Cog80n&s=p
Extruder		FOB Price: US \$100-1,000/Piece https://www.alibaba.com/product-detail/Rice-noodle-maker-machine-vermicelli-extruder_1613729493.html?spm=a2700.7724838.0.0.AtX30w
Boiler		FOB Price: US \$500-15,000/Set https://www.alibaba.com/product-detail/Low-Pressure-Automatic-Steam-Boiler-for_60436817968.html?spm=a2700.7724838.0.0.l0KWhr&s=p
Dryer		FOB Price: US \$2,000-20,000/Set https://www.alibaba.com/product-detail/Hot-air-circulating-tray-dryer_60466398436.html?spm=a2700.7724838.0.0.T1ZfjA&s=p
Packing machine		FOB Price: US \$500-10,000/Set https://www.alibaba.com/product-detail/Automatic-Instant-Noodle-Packaging-Machine-Pillow_491900994.html?spm=a2700.7724838.0.0.2kqdbX&s=p

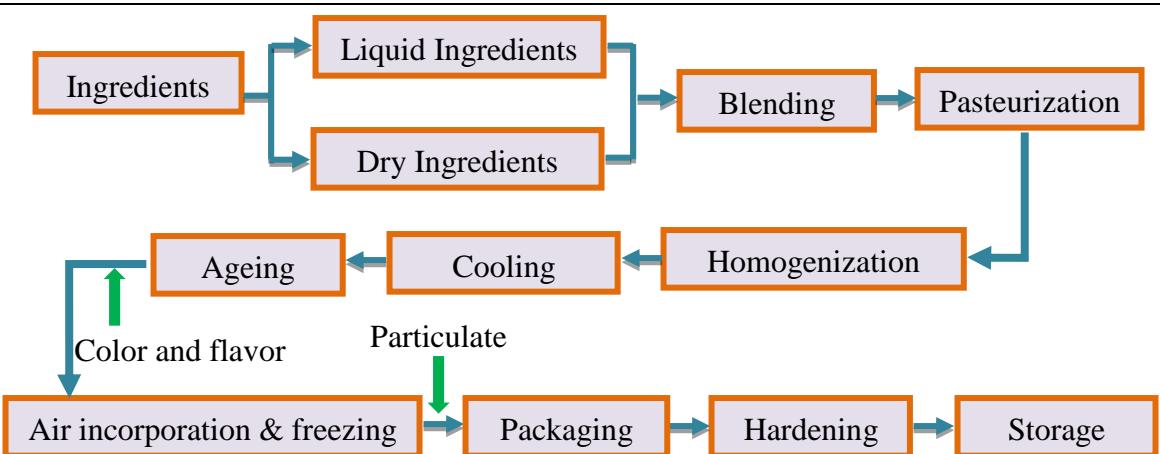
Source of Machineries
China, Taiwan, Japan, Pakistan, India etc.
Local Supplier of Machineries
<ul style="list-style-type: none"> IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html)
Process Flow
<pre> graph LR WF[Wheat flour] --> S1[Steaming] S1 -- "20 minutes" --> M1[Mixing] M1 --> MK[Mechanical kneading] MK --> E[Extrusion] E --> D[Drying] D -- "60°C for 2hrs" --> C[Cooling] C --> P[Packaging] C -- "15 minutes" --> S2[Steaming] S2 --> M1 </pre>
References
<ul style="list-style-type: none"> http://www.mpstateagro.nic.in/Project%20Reports%20pdf/VERMICELLI.pdf http://sri-logambal-engineering-works.b2b.sulekha.com/semiya-making-machine-plant_product_369320 https://www.youtube.com/watch?v=ozhiXHLyhBw http://www.21food.com/products/15-tonns-day-industrial-automatic-stick-rice-vermicelli-making-machine-1805261.html http://agritech.tnau.ac.in/postharvest/pht_wheat_valueaddtn.html

Product No. 29	Sub-Sector	Code
Suji/Semolina	Cereal and Pulse Product	HS 110100 BDS 190:1991, Amend 1:01
		
<p>Semolina is coarse flour and usually made from Durum wheat. It contains the nutritious portion of the grain, which is left behind during the process of milling and sifting the flour. Semolina is commonly used in the manufacturing of pasta because of its high gluten content. It is also known as suji. A quarter-cup serving of dry semolina contains 150 calories i.e. 10 percent of the daily energy intake in a 1500-calorie diet or 8 percent in a 2000 calorie diet. Semolina boosts our intake of several B-complex vitamins, especially folate and thiamin. Collectively, B-complex vitamins support our metabolism and ensure that we can convert food into useable energy. Thiamin also helps our brain and nerves function properly, while folate supports red blood cell production. Consume semolina as a source of selenium.</p>		
Raw Material <ul style="list-style-type: none"> • Wheat & water 		
Source of Raw Material <p>Local market</p>		
Packaging Materials <p>PE/BOPP</p>		
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Milling machine		FOB Price: US \$1,000-5,000/Set https://taifengflourmill.en.alibaba.com/product/1748537498-802207566/High_quality_300_600kg_h_wheat_flour_milling_machines_in_Africa.html?spm=a2700.7724838.0.0.whXMjI&s=p
Screening machine		FOB Price: US \$1,000-10,000/Set https://hnpykj.en.alibaba.com/product/743934929-802008877/xinxiang_high_duty_ultrasonic_flour_screening_machine.html?spm=a2700.7724838.0.0.f92v1j&s=p

Drying/ Roasting Machine		FOB Price: US \$2000-5000/Set https://africa.en.alibaba.com/product/60431966863-213988579/Best_sale_complete_wheat_wheat_flour_roasting_machine.html?spm=a2700.7724838.0.0.K6pRfc&s=p
Packaging machine		FOB Price: US \$1,000-1,200/Set https://foshansoonk.en.alibaba.com/product/60293942537-800265789/Flour_Powder_Packaging_Machine.html?spm=a2700.7724838.0.0.4ij1Mc&s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd.(http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd.(http://bd1008074282.fm.alibaba.com/productlist.html) 		
Process Flow		
<pre> graph LR A[Durum Wheat] --> B[Cleaning] B --> C[Dampening] C --> D[Milling] D --> E[Screening] D --> F[Roasting] E --> F F --> G[Cooling] G --> H[Packaging] </pre>		
References		
<ul style="list-style-type: none"> https://www.youtube.com/watch?v=qM0WUp0mDCo https://www.youtube.com/watch?v=uPJppZsGdC0 https://www.youtube.com/watch?v=yrbb_38R-5I http://www.livestrong.com/article/524684-the-health-benefits-of-semolina/ http://www.satake-europe.com/cereal_milling/semolina_milling.htm https://africa.en.alibaba.com/product/60422639074-213988579/Good_quality_and_best_price_wheat_semolina_flour_making_machine.html?spm=a2700.7724838.0.0.RJx2EI&s=p http://www.melissa.gr/en/pasta-center/production-process/ http://www.foreign-trade.com/reference/hscode.cfm 		

Product No. 30	Sub-Sector	Code
Ice Cream (Liter)	Dairy	HS 2007- 2105 BDS 1083
		
<p>Ice cream is a frozen dessert usually made from dairy products, such as milk and cream and often combined with fruits or other ingredients and flavors. Most varieties contain sugar, although some are made with other sweeteners. In some cases, artificial flavorings and colorings are used in addition to, or instead of, the natural ingredients.</p>		
Raw Material		
<ul style="list-style-type: none"> • Skim Milk Powder • Whey powder • Sugar • Vegetable fat • Liquid glucose • Stabilizer and emulsifier • Flavor • Color 		
Source of Raw Materials		
<ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact no- 01678032038) 		
Packaging Materials		
Plastic box		
Source of Packaging Materials		
Plastoccats limited (Contact: 02-9340228, 02-9358808)		
Machineries Required		
Blending tank		FOB Price: US \$500-20,000/Set http://www.alibaba.com/product-detail/Multi-use-Ice-Cream-Tank-Aging_437029977.html?s=p

Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/pasteurizer-Tube-pasteurizer-tunnel-pasteurizer_620588307.html
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Cooler tank		FOB Price: US \$500-5,000/Set http://www.alibaba.com/product-detail/Farm-use-cooling-milk-tank-milk_464110334.html?s=p
Aging tank		FOB Price: US \$3500-10000/Unit http://www.alibaba.com/product-detail/Ice-cream-aging-tank_1664143387.html
Ice-cream making machine		FOB Price: US \$1,000-3,000/Piece http://www.alibaba.com/product-detail/ice-cream-making-machines_638121617.html?s=p

Filling machine		FOB Price: US \$8888-88888/Set http://www.alibaba.com/product-detail/high-quality-icecream-filling-machine_1629338859.html?s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Star Traders(http://sarwarjahan11.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/contactinfo.html) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) 		
Process Flow		
 <pre> graph LR I[Ingredients] --> LI[Liquid Ingredients] I --> DI[Dry Ingredients] LI --> B[Blending] DI --> B B --> P[Pasteurization] P --> H[Homogenization] H --> C[Cooling] C --> A[Ageing] A --> AI[Air incorporation & freezing] A --> DI AI --> P AI --> Pack[Packaging] Pack --> H H --> Hard[Hardening] Hard --> St[Storage] </pre>		
References		
<ul style="list-style-type: none"> • EIRI BOARD OF CONSULTANTS & ENGINEERS. Hand Book of ICE CREAM. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE. • EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS INDUSTRIES. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE. • EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS AND PACKAGING TECHNOLOGY. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE. • Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning. • http://www.bsti.gov.bd/list.html • http://www.madehow.com/Volume-3/Ice-Cream.html • https://www.uoguelph.ca/foodscience/dairy-science-and-technology/dairy-products/ice-cream/ice-cream-manufacture • http://science.howstuffworks.com/innovation/edible-innovations/ice-cream1.htm 		

Product No. 31	Sub-Sector	Code
Market Milk	Dairy	HS 2007- 0401.10 BDS 851



Milk is an emulsion or colloid of butter fat globules within a water-based fluid that contains dissolved carbohydrates and protein aggregates with minerals. The principal requirements of the neonate are energy (lipids, lactose, and protein), biosynthesis of non-essential amino acids supplied by proteins (essential amino acids and amino groups), essential fatty acids, vitamins and inorganic elements, and water. Milk contains, on average, 3.4% protein, 3.6% fat, and 4.6% lactose, 0.7% minerals and supplies 66 kcal of energy per 100 grams. Market milk refers to the fluid whole milk that is sold to individuals usually for direct consumption.

Raw Material

Raw milk

Source of Raw Materials

Local market

Packaging Materials

Tetra packet/ pet bottle/ glass bottle

Source of Packaging Materials

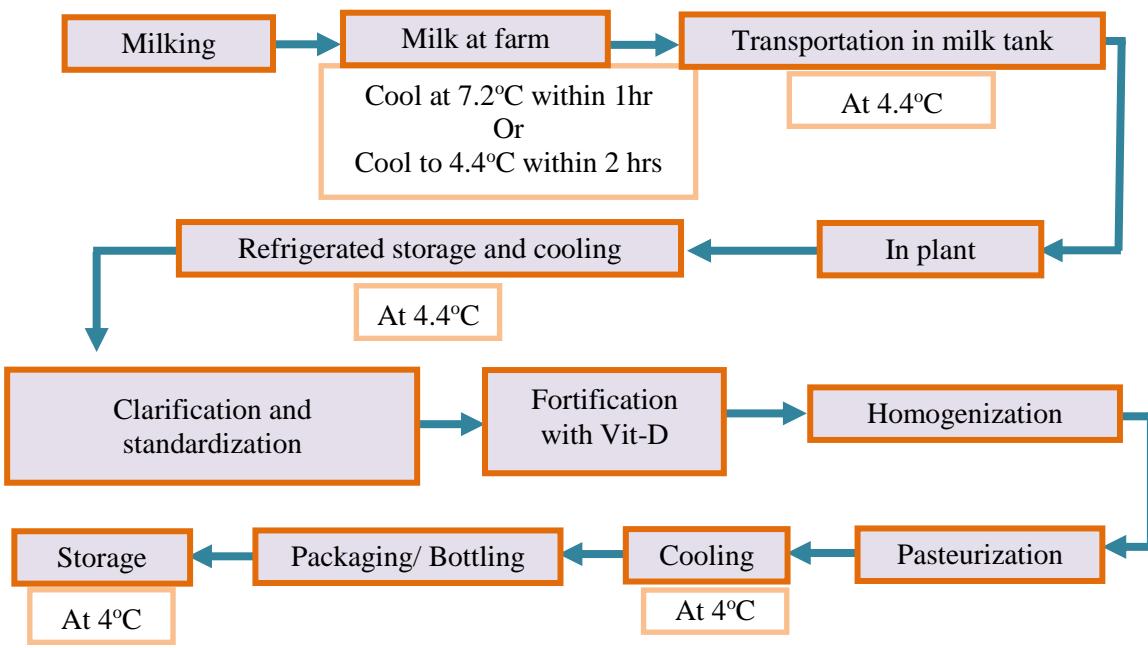
- Plastoccats limited (Tel: 02-9340228, 02-9358808)
- Tanjim Printing & Packaging Ltd. (<http://www.tanjimgroup.com>)
- Bengal Glass (<http://www.bengalglass.com>)

Machineries Required

Clarifier and separator		FOB Price: US \$500-2200/Set http://www.alibaba.com/product-detail/milk-separator_830092874.html
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Cooler tank		FOB Price: US \$500-5,000/Set http://www.alibaba.com/product-detail/Farm-use-cooling-milk-tank-milk_464110334.html?s=p
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/pasteurizer-Tube-pasteurizer-tunnel-pasteurizer_620588307.html
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Packing machine		FOB Price: US \$1,000-15,000/Piece http://www.alibaba.com/product-detail/Milk-Bag-Filling-Machine_1645756932.html?s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Star Traders. (http://sarwarjahan11.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/contactinfo.html) • IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) 		

Process Flow



References

- EIRI BOARD OF CONSULTANTS & ENGINEERS. Hand Book of ICE CREAM. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS INDUSTRIES. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS AND PACKAGING TECHNOLOGY. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning.
- <http://www.bsti.gov.bd/list.html>

Product No. 32	Sub-Sector	Code
Milk Powder	Dairy	HS 2007- 0402.21 BDS CAC 207
		
<p>Powdered milk or dried milk is a manufactured dairy product made by evaporating milk to dryness. One purpose of drying milk is to preserve it. Milk powder has a far longer shelf life than liquid milk and does not need to be refrigerated for its low moisture content.</p>		
Raw Material		
Liquid milk		
Source of Raw Materials		
Local market		
Packaging Materials		
Aluminium coated tin jar		
Source of Packaging Materials		
Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com)		
Machineries Required		
Clarifier and separator		FOB Price: US \$500-2200/Set http://www.alibaba.com/product-detail/milk-separator_830092874.html
Milk cooler tank		FOB Price: US \$500-5,000/Set http://www.alibaba.com/product-detail/Farm-use-cooling-milk-tank-milk_464110334.html?s=p

Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/pasteurizer-Tube-pasteurizer-tunnel-pasteurizer_620588307.html
Evaporator		FOB Price: US \$1000-10000/Set http://www.alibaba.com/product-detail/WZD-Dual-effect-milk-evaporator_1378423025.html?s=p
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Spray dryer		FOB Price: US \$5,000-1,500,000/Set http://www.alibaba.com/product-detail/High-Speed-Centrifugal-Spray-dryer_202346740.html
Filling and sealing machine		FOB Price: US \$4,600-5,350/Set http://www.alibaba.com/product-detail/New-Automatic-Vertical-Milk-Powder-filling_1477021362.html?s=p

Source of Machineries

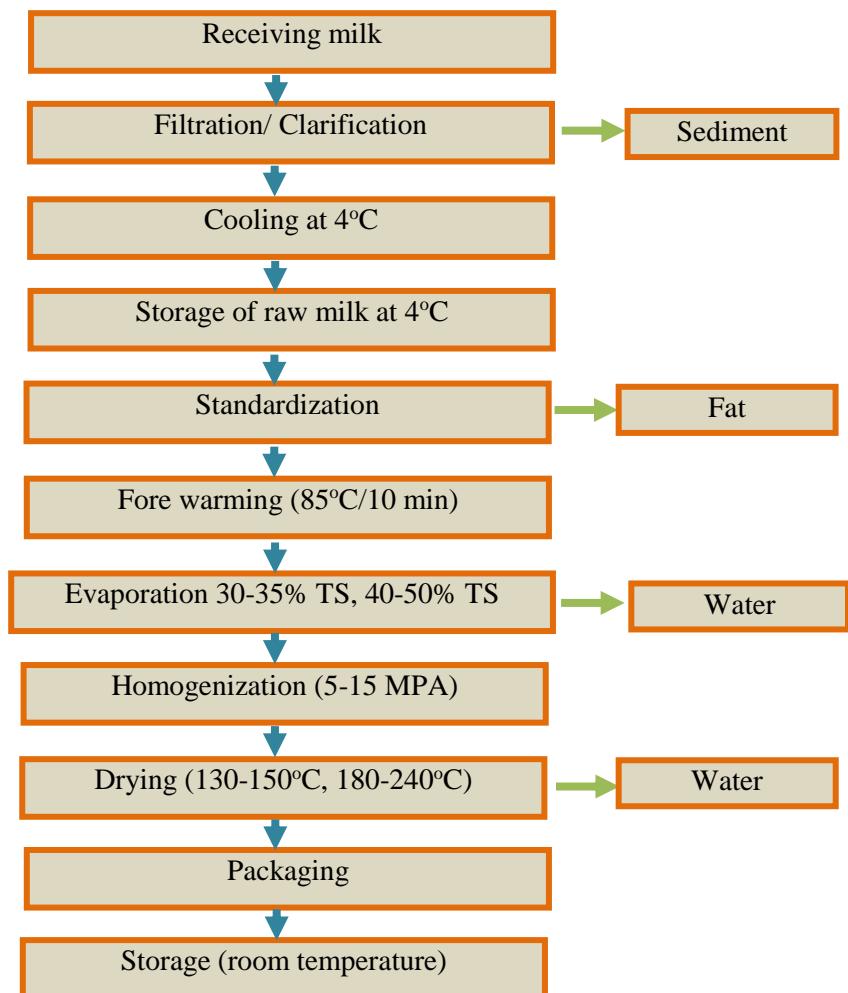
China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- Star Traders. (<http://sarwarjahan11.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd.

- IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)

Process Flow



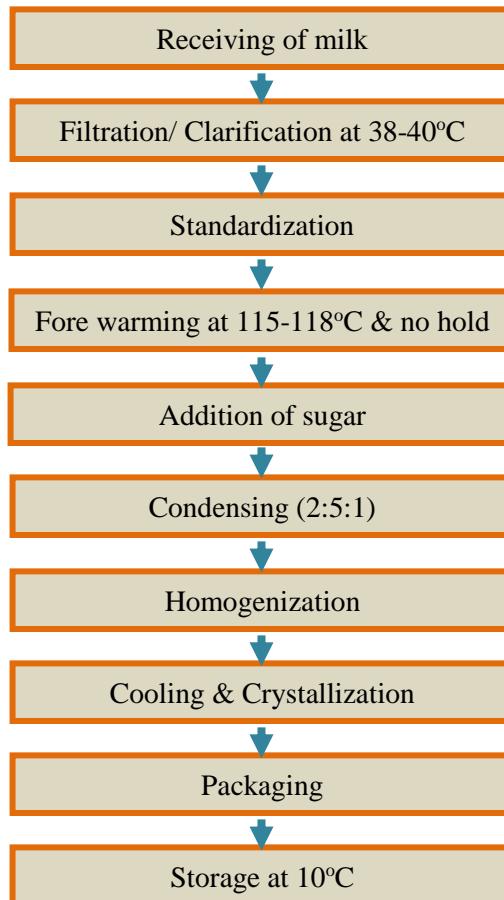
Reference

- EIRI BOARD OF CONSULTANTS & ENGINEERS. Hand Book of ICE CREAM. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS INDUSTRIES. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS AND PACKAGING TECHNOLOGY. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning.
- <http://www.bsti.gov.bd/list.html>

Product No. 33	Sub-Sector	Code
Condensed Milk	Dairy	HS 2007- 0402.99 BDS CAC 252
		
Condensed Milk is cow's milk from which water has been removed. It is most often found in the form of sweetened condensed milk with sugar addition. Sweetened condensed milk is a very thick, sweet product which when canned can last for years without refrigeration if unopened.		
Raw Material		
<ul style="list-style-type: none"> • Milk • Sugar • Water • Crystallization nuclei 		
Source of Raw Materials		
Local market		
Packaging Materials		
Metal can		
Machineries Required		
Milk cooler tank		FOB Price: US \$500-5,000/Set http://www.alibaba.com/product-detail/Farm-use-cooling-milk-tank-milk_464110334.html?s=p
Evaporator		FOB Price: US \$1000-10000/Set http://www.alibaba.com/product-detail/WZD-Dual-effect-milk-evaporator_1378423025.html?s=p

Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/pasteurizer-Tube-pasteurizer-tunnel-pasteurizer_620588307.html
Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Filling and sealing machine		FOB Price: US \$1120-61400/Set http://www.alibaba.com/product-detail/MWFC-condensed-milk-filling-machine_1154407136.html?s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Star Traders. (http://sarwarjahan11.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/contactinfo.html) • IMTEX Packaging (Ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) 		

Process Flow



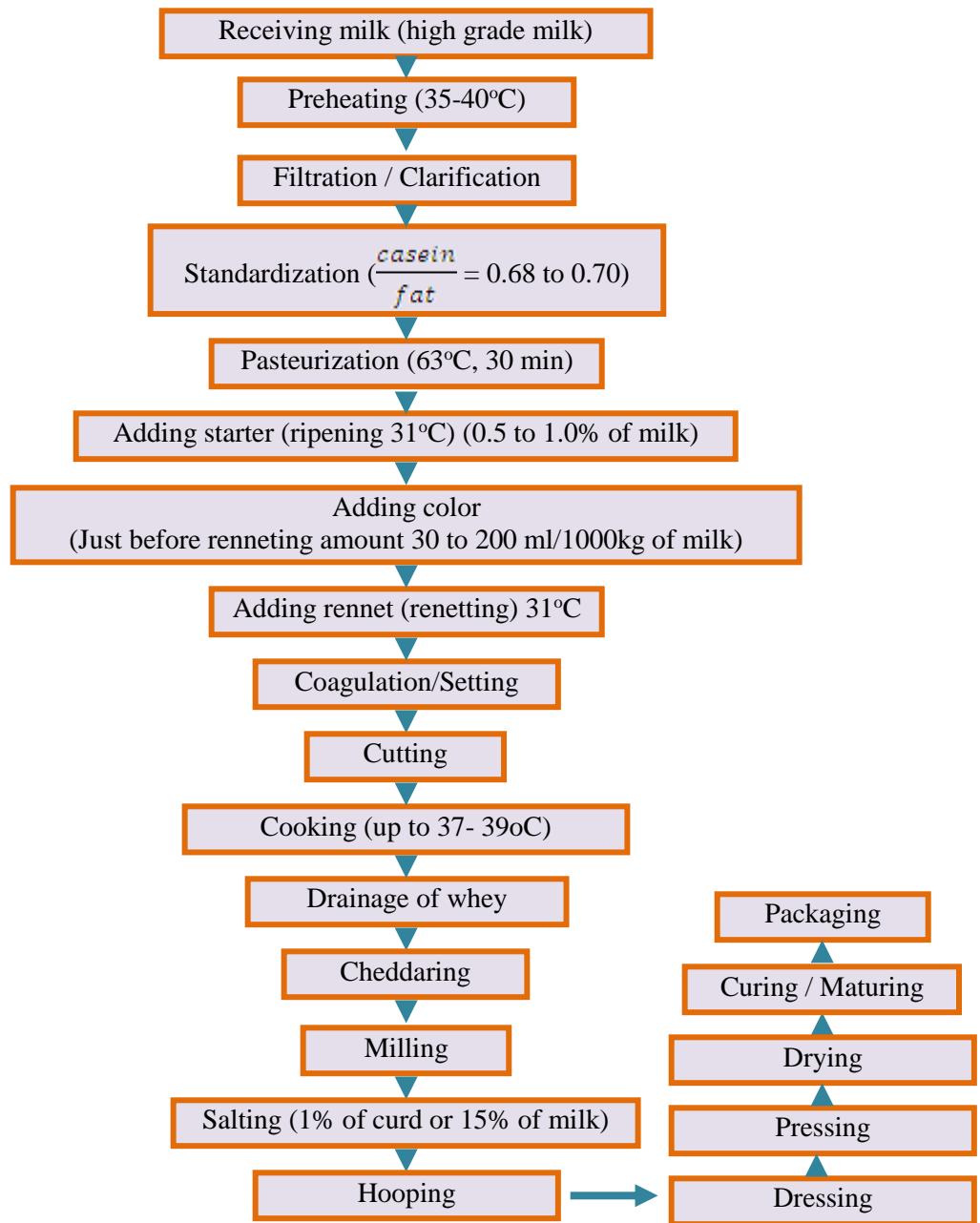
References

- EIRI BOARD OF CONSULTANTS & ENGINEERS. Hand Book of ICE CREAM. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS INDUSTRIES. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS AND PACKAGING TECHNOLOGY. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- Bangladesh central product classification. (2012).Statistics and Informatics Division. Bangladesh Bureau of Statistics. Ministry of Planning.
- Outline of Dairy Technology. Sukumar De. Oxford University Press.
- <http://www.bsti.gov.bd/list.html>

Product No. 34	Sub-Sector	Code
Cheddar Cheese	Dairy	HS 040610 BDS CAC 263
		
<p>Cheddar is a low moisture hard-pressed cheese. It is a relatively hard, pale-yellow to off-white (unless artificially coloured), sometimes sharp (i.e. acidic) tasting, natural cheese. The manufacturing of cheddar cheese includes the process of cheddaring, which makes this cheese unique. Cheddar cheese is named for the village of Cheddar in Somerset in South West England where it was originally made. The manufacture has since spread around the world and the name has become generic.</p>		
Raw Material <ul style="list-style-type: none"> • Milk • Rennet • Starter • Salt 		
Source of Raw Materials <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (mob no- 01678032038) 		
Packaging Materials BOPP film/ Polyethylene bag		
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/pasteurizer-Tube-pasteurizer-tunnel-pasteurizer_620588307.html
Standardizer		FOB Price: US \$500-2200/Set http://www.alibaba.com/product-detail/milk-separator_830092874.html

VAT		FOB Price: US \$3,000-50,000/Set http://www.alibaba.com/product-detail/Stainless-steel-cheese-vats-for-best_1874394635.html
Milling machine		FOB Price: US \$7,000-12,000/Pack http://www.alibaba.com/product-detail/cheddar-chese-cutting-machine_148002900.html
Mould		FOB Price: US \$0.13-0.32/Piece http://www.alibaba.com/product-detail/Full-Size-BS4662-Electrical-Metal-Box_642586421.html
Pressing machine		FOB Price: US \$1,000-100,000/Unit http://www.alibaba.com/product-detail/cheese-presser_209609640.html
Packing machine		FOB Price: US \$2,000-5,000/Set http://www.alibaba.com/product-detail/DCWB-250B-hard-cheese-packing-machine_464898366.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Tick BD Engineering & Consulting Ltd. (http://bd1015349587.fm.alibaba.com/productlist.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) • IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) 		

Process Flow



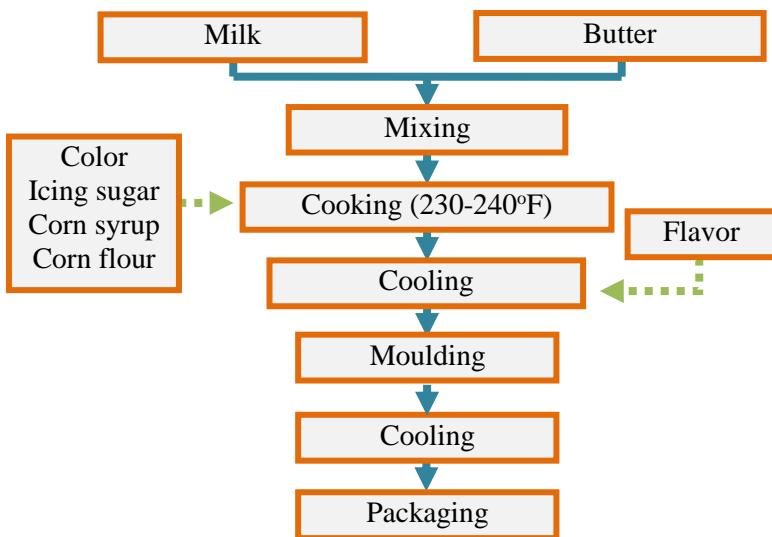
References

- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS INDUSTRIES. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- EIRI BOARD OF CONSULTANTS & ENGINEERS. MILK PROCESSING & DAIRY PRODUCTS AND PACKAGING TECHNOLOGY. New Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- Outline of Dairy Technology. Sukumar De. Oxford University Press.
- <http://www.loletacheese.com/cheesemakingprocess.html>
- <http://www.hscodelist.com>
- <http://www.bsti.gov.bd/list.html>

Product No. 35	Sub-Sector	Code			
Milk Toffee Candy	Dairy	HS 17049030 BDS 1000			
					
<p>Toffee is a popular candy in many regions of the world. It is a confection made by caramelizing sugar or molasses (creating inverted sugar) along with butter, and occasionally flour. Toffee is sometimes mixed with nuts or raisins.</p>					
Raw Material <ul style="list-style-type: none"> • Condensed milk • Sugar • Butter • Corn flour • color • Corn syrup • Invert sugar • Salt • Flavours/Essence 					
Source of Raw Material <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur Pte. Ltd. (http://www.meplbd.com) • Famous Iberchem. (Contact- 01678032038) 					
Packaging Materials BOPP					
Source of Packaging Materials Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com)					
Machineries Required <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 10px; vertical-align: top;"> Automatic toffee candy making plant </td> <td style="padding: 10px; vertical-align: top;">  </td> <td style="padding: 10px; vertical-align: top;"> FOB Price: US \$1,000-100,000/Set http://www.alibaba.com/product-detail/TKY2-AUTOMATIC-TOFFEE-CANDY-MAKING-PLANT_1848263164.html </td> </tr> </table>			Automatic toffee candy making plant		FOB Price: US \$1,000-100,000/Set http://www.alibaba.com/product-detail/TKY2-AUTOMATIC-TOFFEE-CANDY-MAKING-PLANT_1848263164.html
Automatic toffee candy making plant		FOB Price: US \$1,000-100,000/Set http://www.alibaba.com/product-detail/TKY2-AUTOMATIC-TOFFEE-CANDY-MAKING-PLANT_1848263164.html			

Mixer		FOB Price: US \$888-29,999/Set http://www.alibaba.com/product-detail/500L-1T-2T-TOPEST-Quality-food_1746284778.html
Cooking kettle		FOB Price: US \$500-5,000/Piece http://www.alibaba.com/product-detail/Electrical-tilting-jacketed-kettle-with-scaper_1912708621.html
Depositing machine		FOB Price: US \$1,000-100,000/Set http://www.alibaba.com/product-detail/Automatic-multi-functional-chocolate-depositing-machine_1417794362.html
Packaging machine		FOB Price: US \$400-8,000/Set http://www.alibaba.com/product-detail/horizontal-automatic-toffee-packing-machine_1608993532.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) • NAOGAON ENGINEERING WORKSHOP (http://bd112311772.fm.alibaba.com) • PACRITE LIMITED (http://bd1006150155.trustpass.alibaba.com) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • ADEEB FUTURE TECH LTD. (http://bd901569718.fm.alibaba.com) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) • Thermotec Engineers (Pvt.) Limited (http://bd107758692.fm.alibaba.com) 		

Process Flow



References

- EIRI BOARD OF CONSULTANTS & ENGINEERS. Hand Book of Confectionary with Formulations. Delhi. ENGINEERS INDIA RESEARCH INSTITUTE.
- <http://www.bwcliffordcandy.com/CandyManufacturing.aspx>
- <http://www.wisegeek.com/what-is-toffee.htm>
- <http://www bsti.gov.bd/list.html>

Product No. 36	Sub-Sector	Code
Cup Doi	Dairy	HS 040310 BDS CAC-A-11(a)
		
Doi or Yogurt is a fermented milk product with a custard-like consistency which differentiates it from other fermented milk products. Yogurt is more nutritious than many other fermented milk products because it contains a high level of milk solids in addition to nutrients developed during the fermentation process. All yogurts must contain at least 8.25% solids not fat.		
Raw Material		
<ul style="list-style-type: none"> Milk Bacterial culture (<i>Lactobacillus bulgaricus</i> and <i>Streptococcus thermophiles</i>) 		
Source of Raw Material		
<ul style="list-style-type: none"> Local market Remex Corporation Ltd. (http://www.remexcorp.com) Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) Famous Iberchem. (mob no- 01678032038) 		
Packaging Materials		
Plastic cup/Paper cup		
Source of Packaging Materials		
<ul style="list-style-type: none"> Plastoccats limited (Tel: 02-9340228, 02-9358808) ECO Technologies Limited (http://www.ecocupbd.com) KPC Industries Ltd. (http://kpcindustry.com) FM Plastic Industries Ltd. (http://www.fmplasticbd.com) 		
Machineries Required		
Pasteurizer		FOB Price: US \$1,000-50000/Set http://www.alibaba.com/product-detail/fruit-stoning-machine-fruity-stoning-pulping_732748270.html

Homogenizer		FOB Price: US \$2000-5000/Set http://www.alibaba.com/product-detail/High-Pressure-500L-Stainless-Steel-Milk_579089907.html
Vat		FOB Price: US \$300-12,500/Set http://www.alibaba.com/product-detail/Yogurt-fermentation-vat_1688387996.html?spm=a2700.7724838.30.1.ZJRAi0
Cup Filling & Sealing Machine		FOB Price: US \$2,000-30,000/Set http://www.alibaba.com/product-detail/Automatic-yogurt-cup-filling-and-sealing_60040529646.html?spm=a2700.7724838.30.1.IUbW3l&s=p
Incubator		FOB Price: US \$400-500/Set http://www.alibaba.com/product-detail/Big-circulation-fan-Automatic-2112-Egg_60340747977.html?spm=a2700.7724838.8.89.B3wWIY&s=p
Cold storage		FOB Price: US \$1,050-15,000/Set http://www.alibaba.com/product-detail/modular-cold-storage_468212207.html?spm=a2700.7724838.30.17.vWSeHg&s=p

Source of Machineries

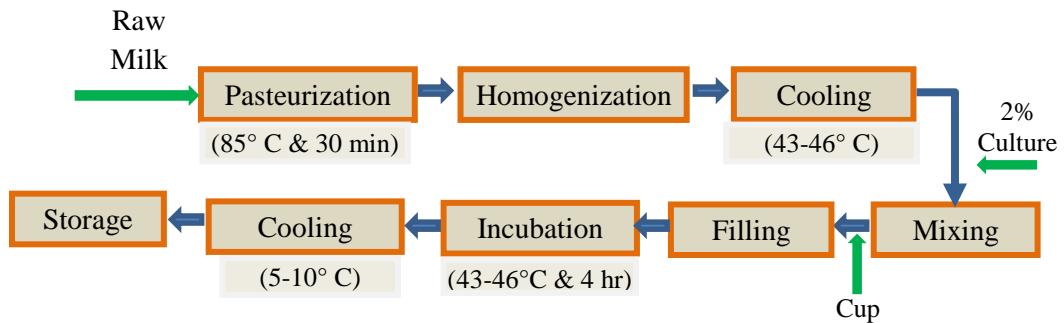
China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX P Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Tick BD Engineering & Consulting Ltd

- (<http://bd1015349587.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
 - China Bangla Engineers & Consultants Ltd. (<http://bd1008074282.fm.alibaba.com/productlist.html>)

Process Flow



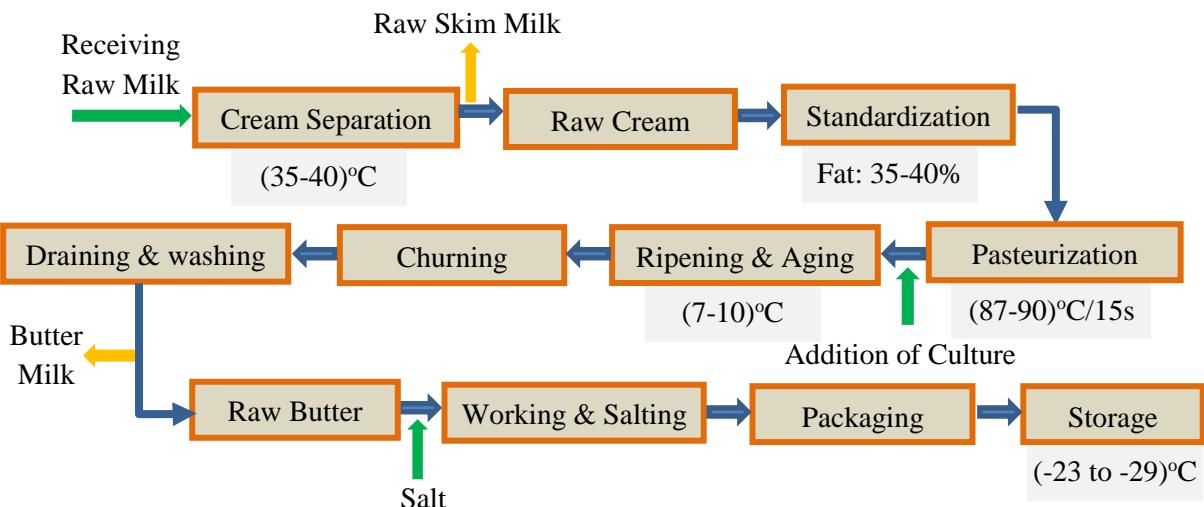
References

- <http://www.milkfacts.info/Milk%20Processing/Yogurt%20Production.htm>
- <http://www.dairyconsultant.co.uk/sites/national/dairy/processing/yoghurt.php>
- https://necfe.foodscience.cals.cornell.edu/sites/necfe.foodscience.cals.cornell.edu/files/shared/documents/FS_YogurtProduction.pdf
- <http://www.madehow.com/Volume-4/Yogurt.html>
- <http://milkfacts.info/Milk%20Processing/Yogurt%20Production.htm>
- https://www.youtube.com/watch?v=j9_m10xHAvA
- http://www.hscode.org/bbs/board.php?vtype=pc&bo_table=ch04&wr_id=9
- http://www.bsti.gov.bd/cert_mark_productList.html

Product No. 37	Sub-Sector	Code			
Butter	Dairy	HS 040500 BDS CAC A-1			
					
<p>Made by churning cream until it reaches a semisolid state, butter must by U.S. law be at least 80 percent milk fat. The remaining 20 percent consists of water and milk solids. The U.S. Department of Agriculture (USDA) grades butter quality based on flavor, body, texture, color and salt. Butter may be artificially colored (with natural annatto); it may also be salted or unsalted. Whipped butter has had air beaten into it, thereby increasing volume and creating a softer, more spreadable consistency when cold. It comes in salted and unsalted forms. Because butter absorbs flavors like a sponge, it should be wrapped airtight for storage. Refrigerate regular butter for up to one month, unsalted butter for up to two weeks. Both can be frozen for up to six months.</p>					
<p>Raw Material</p> <ul style="list-style-type: none"> • Milk • Salt • culture 					
<p>Source of Raw Material</p> <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (https://www.remexcorp.com) • Maritime Entrepreneur Pte. ltd. (https://www.meplbd.com) • Famous Iberchem. (mob no- 01678032038) 					
<p>Packaging Materials</p> <p>Aluminum foil</p>					
<p>Source of Packaging Materials</p> <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (https://www.tanjimgroup.com) 					
<p>Machineries Required</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Cream separator</td> <td style="width: 33%; text-align: center;">  </td> <td style="width: 33%; vertical-align: top;"> FOB Price: US \$1,000-90,000/Unit https://xuxiangjixie.en.alibaba.com/product/60192428688-801151514/centrifugal_milk_cream_separator.html?spm=a2700.7724838.0.0.koIsrB&s=p </td> </tr> </table>			Cream separator		FOB Price: US \$1,000-90,000/Unit https://xuxiangjixie.en.alibaba.com/product/60192428688-801151514/centrifugal_milk_cream_separator.html?spm=a2700.7724838.0.0.koIsrB&s=p
Cream separator		FOB Price: US \$1,000-90,000/Unit https://xuxiangjixie.en.alibaba.com/product/60192428688-801151514/centrifugal_milk_cream_separator.html?spm=a2700.7724838.0.0.koIsrB&s=p			

Pasteurizer		FOB Price: US \$1,500-5,500/Set https://mcjxkj.en.alibaba.com/product/1527557511-212256001/Electric_heating_Batch_ice_cream_Pasteurizer.html?spm=a2700.7724838.0.0.t1AQtJ&s=p
Butter Making Machine		Fob Price: US \$4,500-25,000/Set https://shxinlang.en.alibaba.com/product/60430950674-802815960/High_Quality_Ointment_Homogenizing_Vacuum_Emulsifying_milk_butter_making_machine.html?spm=a2700.7724838.0.0.zr3nuJ&s=p
Packing machine		FOB Price: US \$1,000 - 100,000 / Unit https://roping.en.alibaba.com/product/955635424-802391302/Butter_Packing_Machine.html?spm=a2700.7724838.0.0.XwbevK&s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		

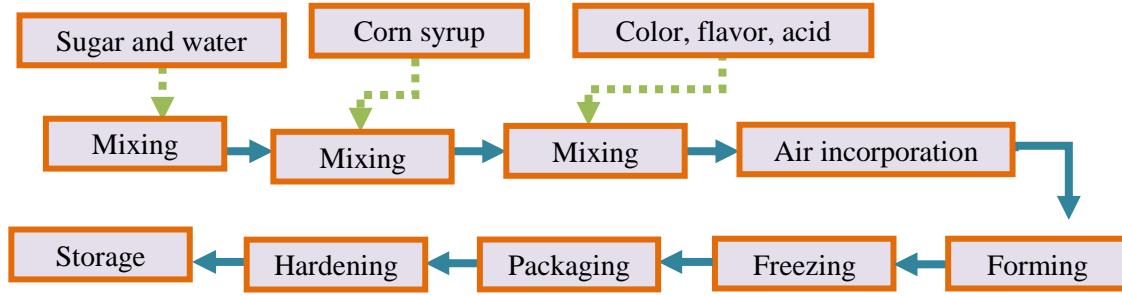
Process Flow



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- <http://www.foreign-trade.com/reference/hscode.cfm?code=0405>

Product No. 38	Sub-Sector	Code
Ice Lolly	Milk and Milk Product	BDS 1847
		
Ice lolly is a water-based frozen snack. It is made by freezing flavored liquid around a stick and colored artificially. Once the liquid freezes solid, the stick can be used as a handle to hold the ice lolly.		
Raw Material		
<ul style="list-style-type: none"> • Water • Sugar • flavorings • Color • corn syrup • malic or citric acid • stick 		
Source of Raw Material		
Local market		
Packaging Materials		
Pouch pack		
Source of Packaging Materials		
Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com)		
Machineries Required		
Mixing machine		FOB Price: US \$500-5,000/Unit http://www.alibaba.com/product-detail/600L-Electric-heating-stainless-steel-agitator_1165017721.html?s=p
Lolly Making machine		FOB Price: US \$800-2,800/Set http://www.alibaba.com/product-detail/ice-pop-machine-ice-lolly-making_946237963.html

Packaging machine		FOB Price: US \$1,000-7,000/Set http://www.alibaba.com/product-detail/XZB350-Horizontal-Ice-Cream-Packaging-Machinery_462841298.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • Star Traders (http://sarwarjahan11.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/contactinfo.html) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) 		
Process Flow		
 <pre> graph TD A[Sugar and water] --> B[Mixing] B --> C[Mixing] C --> D[Mixing] D --> E[Air incorporation] E --> F[Forming] F --> G[Freezing] G --> H[Packaging] H --> I[Hardening] I --> J[Storage] E --> K[Forming] K --> L[Freezing] L --> M[Packaging] M --> N[Hardening] N --> O[Storage] </pre>		
References		
<ul style="list-style-type: none"> • http://www.madehow.com • www.alibaba.com • http://www bsti.gov.bd/list.html 		

Product No. 39	Sub-Sector	Code
Canned Fish (Tuna)	Fish Product	HS 160414 BDS 875
		
<p>The canning process is a sterilization technique that kills microorganisms already present on the fish, prevents further microbial contamination, and inactivates degradative enzymes. In this process fishes are hermetically sealed in containers and then heated to high temperatures for a given amount of time. Canned fish can be stored for a considerable length of time (at least few years) without undergoing food spoilage, while retaining desirable nutritional and sensory qualities. However, sterilization does not kill all microorganisms, and bacterial growth and gas production may occur if the products are stored at very high temperatures.</p>		
Raw Material <ul style="list-style-type: none"> • Tuna fish • Brine solution 		
Source of Raw Material <p>Local market</p>		
Packaging Materials <p>Aluminum Can</p>		
Machineries Required		
Sorting conveyer		FOB Price: US \$5000-8000/Set) http://www.alibaba.com/product-detail/Fruit-Sorting-Machine-FGX-DZ-228-469376520.html?spm
Sterilizer retort		FOB Price: US \$2,000-50,000/Set http://www.alibaba.com/product-detail/small-sterilizer-retort-for-fish-can_310874083.html

Movable rack		FOB Price: US \$10-100/Set http://www.alibaba.com/product-detail/movable-shelf-storage-racks-double-deep_60064338013.html?s=p
Filling, Seaming & labeling machine	  	FOB Price: US \$2,000-10,000/Set http://www.alibaba.com/product-detail/factory-price-fish-can-filling-machine_60061016232.html

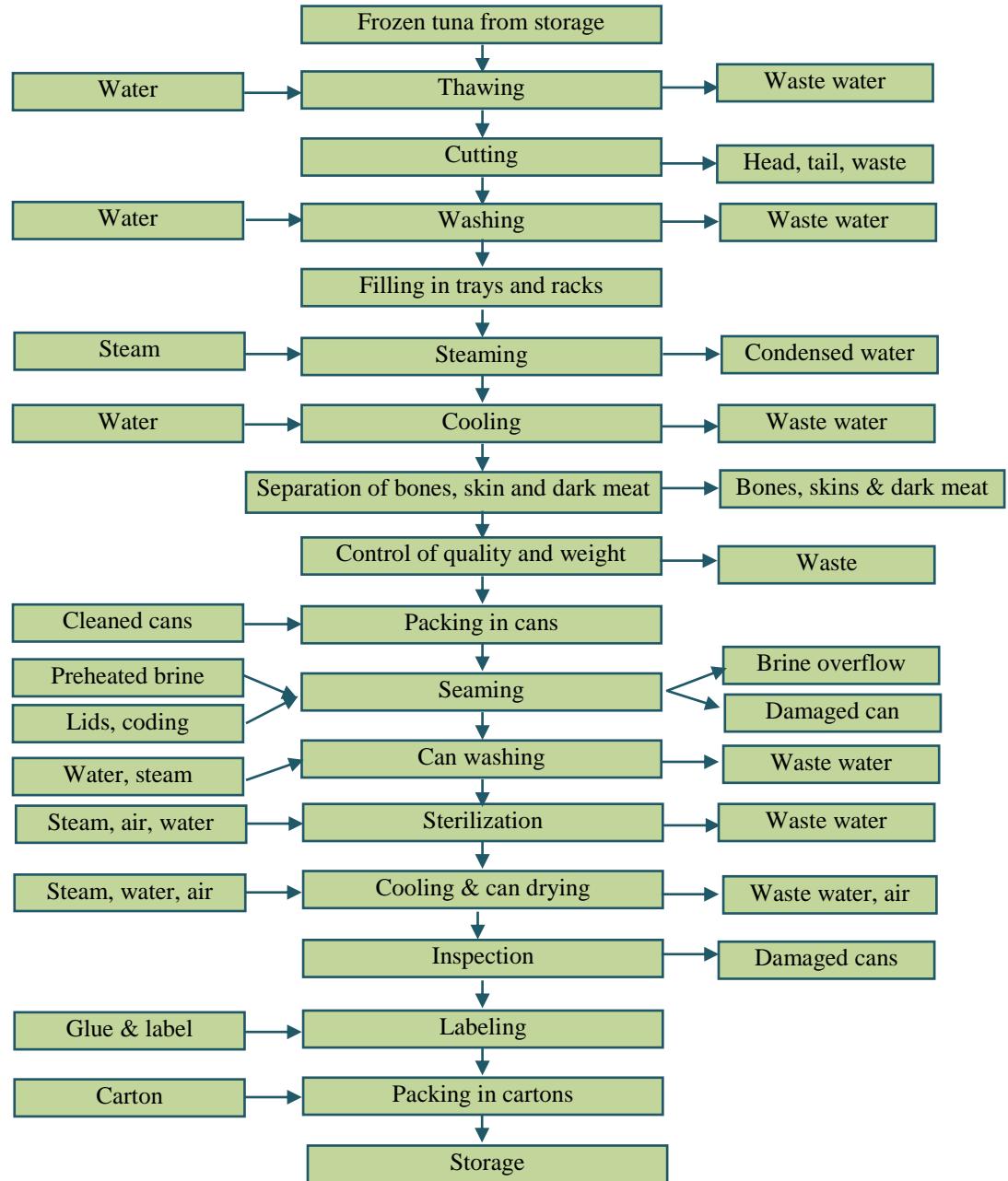
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Tick BD Engineering & Consulting Ltd (<http://bd1015349587.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd. (<http://bd1008074282.fm.alibaba.com/productlist.html>)

Process Flow



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- www.britannica.com/EBchecked/topic/92715/canning
- www.simplycanning.com/canning-fish.html
- <http://hscode.org/>

Product no. 40	Sub-Sector	Code
Dried Salted Hilsha	Fish Product	HS 030559 BDS 155



Drying is the removal of water from fish. Normally the term 'drying' implies the removal of water by evaporation but water can be removed by other methods, for example, the action of salt and the application of pressure will remove water from fish. Since water is essential for the activity of all living organisms, its removal will slow down, or stop, microbiological or autolytic activity and can thus be used as a method of preservation. The dried fish retains all the nutrients from the fresh fish, only concentrated; it is therefore rich in proteins, vitamins, iron, and calcium.

Raw Material

Hilsha fish & Salt

Source of Raw Materials

Local market

Packaging Materials

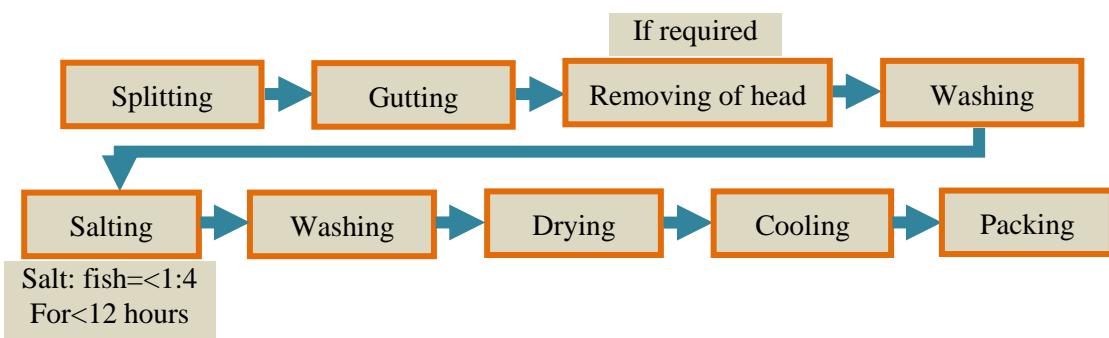
BOPP Films/Polyethylene

Source of Packaging Materials

- Plastoccats limited (Tel: 02-9340228, 02-9358808)
- Tanjim Printing & Packaging Ltd. (<http://www.tanjimgroup.com>)

Machineries Required

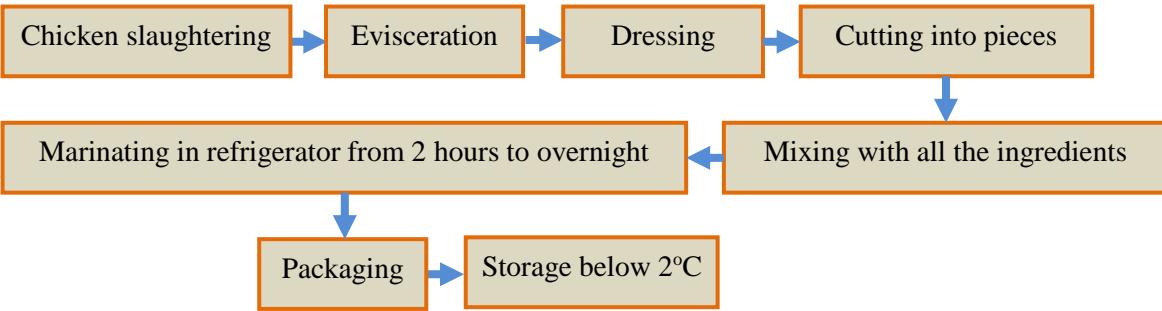
Cutting machine		FOB Price: US \$359-5,699/Set http://www.alibaba.com/product-detail/Professional-Fish-Cutting-Machine-Manufacturer-With_823998019.html
Dryer		FOB Price: US \$3,000-10,000/Set http://www.alibaba.com/product-detail/Good-quality-salt-fish-dried-machine_1959482827.html

Conveyor		FOB Price: US \$100-1000/Set http://www.alibaba.com/product-detail/Food-Grade-PU-Belt-Conveyor-for_60225648960.html
Packing		FOB Price: US \$480-698/Set http://www.alibaba.com/product-detail/Dried-fish-vacuum-packaging-machine_1992873786.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		
Process Flow		
 <p>If required</p> <p>Splitting → Gutting → Removing of head → Washing</p> <p>Salting → Washing → Drying → Cooling → Packing</p> <p>Salt: fish=<1:4 For<12 hours</p>		
References		
<ul style="list-style-type: none"> http://www.traust.is/solutions-and-equipment/fish-drying-processing-plant http://arcticdream.me/2011/10/06/how-to-salt-dry-fish/ http://businessdiary.com.ph/595/how-to-make-dried-fish-daing-na-isda/ http://www.pinoybisnes.com/food-business-ideas/how-to-make-salted-dried-fish-daing/ http://www.nzdl.org/gsdlmod?e=d-00000-00---off-0fnl2.2--00-0----0-10-0---0direct-10---4-----0-11-11-en-50---20-about---00-0-1-00-0--4----0-0-11-10-0utfZz-8-00&c1=CL3.44&d=HASH7ac30d9b35422de1ae5029.5&x=1 http://www.bccdc.ca/NR/rdonlyres/7DF64E3C-AD6F-4080-B58B-229CE3F7AA71/0/SaltingFishNov13.pdf http://www.hscodelist.com/bbs/board.php?bo_table=HScode&wr_id=1408&sca=3 		

Product No. 41	Sub-Sector	Code			
Marinated Chicken	Meat and Poultry Product	HS 210390			
					
<p>A marinade is a savory acidic sauce in which a food is soaked to enrich its flavor or to tenderize it. In modern usage, a marinade consists of a cooking oil, an acid (vinegar, lemon juice, wine), and spices. As the food stands in the mixture, the acid and the oil impart the savory flavors of the spices to the food. The acid also has a tenderizing action. The acid in marinades has a tenderizing effect & causes poultry tissue to break down. The breaking down of the tissue also causes the poultry to hold more liquid, making it juicier. Too much vinegar or hot sauce in a marinade can have the opposite effect, causing the meat to be stringy and tough.</p>					
Raw Material <ul style="list-style-type: none"> • Chicken • Primary ingredients- Yogurt, Salt, Lime juice, Fresh minced ginger, Vegetable oil, Sugar • Secondary ingredients- <ul style="list-style-type: none"> ➢ Aromatic spices- cumin powder, coriander powder ➢ Coloring agents- red chili powder, turmeric powder, rattan jot, maval petals, red food color, yellow food color, saffron ➢ Fresh herbs- onion pest, garlic pest, green chili pest 					
Source of Raw Material <p>Local market</p>					
Packaging Materials <p>BOPP film/ Plastic box</p>					
Source of Packaging Materials <ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) • FM Plastic Industries Ltd. (http://www.fmplasticbd.com) 					
Machineries Required <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; padding: 10px; vertical-align: top;"> Chicken dressing machine </td> <td style="width: 33%; padding: 10px; text-align: center;">  </td> <td style="width: 33%; padding: 10px; vertical-align: top;"> FOB Price- US \$210-250/Piece http://www.alibaba.com/product-detail/Chicken-Dressing-Machine-CHZ-N60_1454144077.html </td> </tr> </table>			Chicken dressing machine		FOB Price- US \$210-250/Piece http://www.alibaba.com/product-detail/Chicken-Dressing-Machine-CHZ-N60_1454144077.html
Chicken dressing machine		FOB Price- US \$210-250/Piece http://www.alibaba.com/product-detail/Chicken-Dressing-Machine-CHZ-N60_1454144077.html			

Chicken cutting machine	 aslanjixie.en.alibaba.com	FOB Price- US \$500-2000/set http://www.alibaba.com/product-detail/FC-RQG500-Chicken-Cutting-Machine-Automatic_528860673.html
Vacuum tumbler		FOB Price- US \$558-688/Piece http://www.alibaba.com/product-detail/Vacuum-Chicken-marinated-machine-high-quality_1929390595.html?s=p
Packing machine		Wholesale price- US \$450.00/set Shipping cost- US \$297.07 http://www.alibaba.com/product-detail/Desktop-vacuum-sealing-machine-for-marinated_60061482963.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • IMTEX packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		

Process Flow

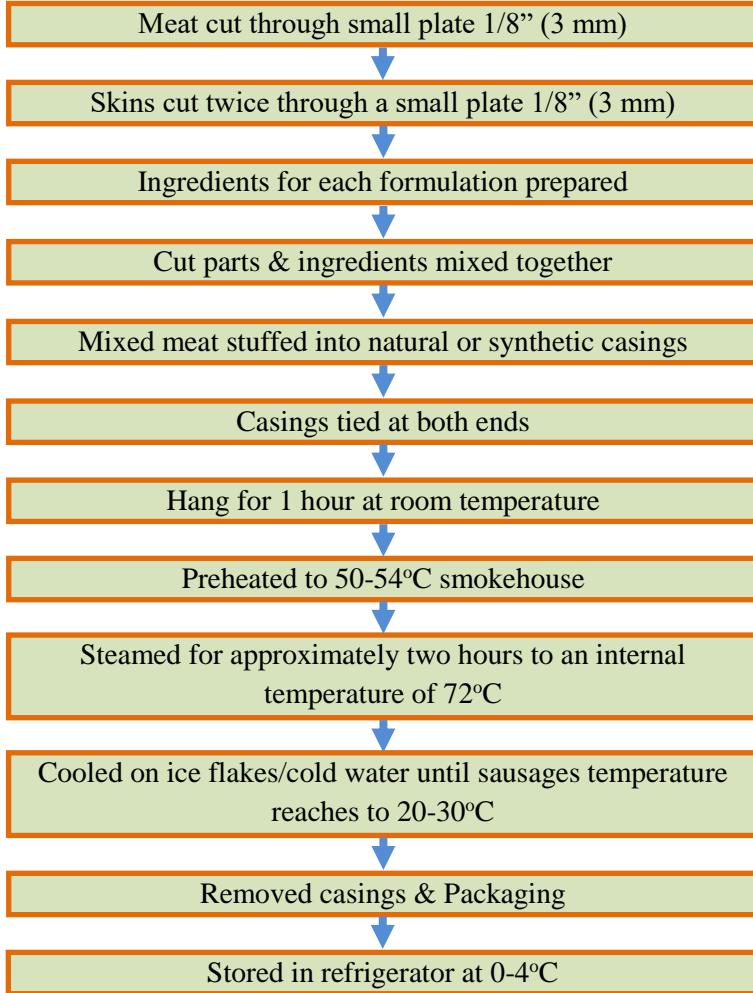


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- http://www.fsis.usda.gov/wps/wcm/connect/13b7e6d5-9b36-4e6d-9312-f3cd27e3125c/Poultry_Basting_Brining_Marinating.pdf?MOD=AIPERES
- <http://www.indiamart.com/rndautomation/chicken-processing-equipment.html>
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- http://www.uaiiasi.ro/revista_zoo/ro/documente/Pdf_Vol_54/S_Saad_Latif.pdf
- <http://hscode.org/>

Product no. 42	Sub-Sector	Code			
Chicken Sausages	Meat and Poultry Product	HS 160100			
					
<p>Use of sausages as a processed meat product and a food component has been identified with different and diverse cultures around the world dating back many centuries. The FAO (1985) views sausages as one of the oldest forms of meat Processing in which meats go through various modification processes to acquire desirable organoleptic and keeping properties. Characteristically, sausages are comminuted processed meat Products made from red meat, poultry or a combination of these with water, binders and seasoning. In a word, Sausages are emulsions of the oil-in-water type with protein as the emulsifier. The uses of sausages as a meal and sandwich component have been well explored by the manufacturers.</p>					
<p>Raw Material</p> <ul style="list-style-type: none"> • Chicken (meat & skin) • Non-fat dry milk • Tasting salt • Rice Flour/wheat flour • Flavorings: Ground spices, Citric Acid, Herb Extract • Breadcrumbs/Yeast Extract • Crushed ice (cold water) • Antioxidant (Ascorbic acid) • 3% Tomato powder • Salt • Sugar • Stabilizer (E451) • Corn Flour • Sodium nitrite/Sodium Sulphite 					
<p>Source of Raw Materials</p> <p>Local market</p>					
<p>Packaging Materials</p> <p>Plastic frame/PE</p>					
<p>Source of Packaging Materials</p> <ul style="list-style-type: none"> • Plastoccats limited (Contact- 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) • FM Plastic Industries Ltd. (http://www.fmplasticbd.com) 					
<p>Machineries Required</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top; padding: 10px;"> Chicken dressing machine </td> <td style="width: 33%; vertical-align: top; padding: 10px;">  </td> <td style="width: 33%; vertical-align: top; padding: 10px;"> FOB Price- US \$210-250/Piece http://www.alibaba.com/product-detail/Chicken-Dressing-Machine-CHZ-N60_1454144077.html </td> </tr> </table>			Chicken dressing machine		FOB Price- US \$210-250/Piece http://www.alibaba.com/product-detail/Chicken-Dressing-Machine-CHZ-N60_1454144077.html
Chicken dressing machine		FOB Price- US \$210-250/Piece http://www.alibaba.com/product-detail/Chicken-Dressing-Machine-CHZ-N60_1454144077.html			

Chicken deboning & grinder machine		FOB Price- US \$100-500/Set http://www.alibaba.com/product-detail/2014-Hot-sale-Poultry-deboning-machine_1835757267.html
Bowel cutter machine		FOB Price- US \$300-500/Set http://www.alibaba.com/product-detail/Meat-bowl-cutter-machine_1947941758.html
Meat stuffing mixer machine		FOB Price- US \$300-2,000/Set http://www.alibaba.com/product-detail/16-Hot-sale-meat-stuffing-mixer_584482748.html
Meat filling machine		FOB Price- US \$500-20,000/Set http://www.alibaba.com/product-detail/High-Capacity-Stainless-Steel-Hydraulic-Meat_1795104425.html
Sausage string machine		FOB Price- US \$100-20,000/Set http://www.alibaba.com/product-detail/Hot-Selling-Sausage-String-Machine-With_1795048036.html
Smoke house machine		FOB Price- US \$1,000-20,000/Set http://www.alibaba.com/product-detail/CE-Industrial-Smoke-Houses-Machine_1864996279.html

Packing machine		FOB Price- US \$530-730/Set http://www.alibaba.com/product-detail/Shanghai-YuO-desktop-sausage-vacuum-packaging_1968002594.html?s=p
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> IMTEX Packaging (Contact- 02-8954583,028953702, mob- 01911230092, 01714166151) Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		
Process Flow		
 <pre> graph TD A[Meat cut through small plate 1/8" (3 mm)] --> B[Skins cut twice through a small plate 1/8" (3 mm)] B --> C[Ingredients for each formulation prepared] C --> D[Cut parts & ingredients mixed together] D --> E[Mixed meat stuffed into natural or synthetic casings] E --> F[Casings tied at both ends] F --> G[Hang for 1 hour at room temperature] G --> H[Preheated to 50-54°C smokehouse] H --> I[Steamed for approximately two hours to an internal temperature of 72°C] I --> J[Cooled on ice flakes/cold water until sausages temperature reaches to 20-30°C] J --> K[Removed casings & Packaging] K --> L[Stored in refrigerator at 0-4°C] </pre>		

References

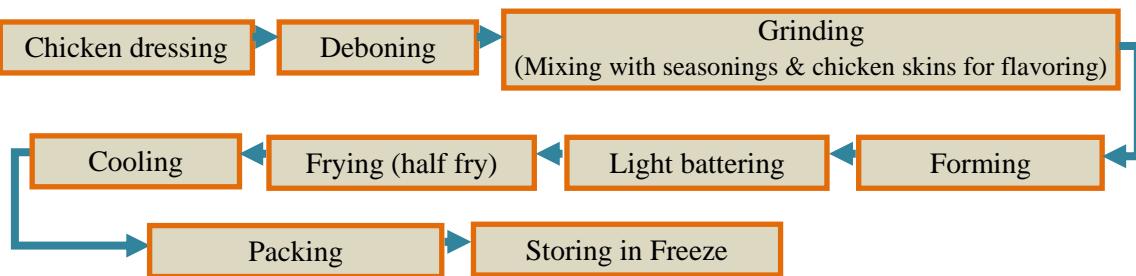
- http://www.ssu.ac.ir/fileadmin/templates/fa/daneshkadaha/daneshkade-behdasht/begh/ebook1/Sausage_manufacture.pdf
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- http://www.nbr.gov.bd/contents/tariff_schedule/20.pdf

Product No. 43	Sub-Sector	Code
Chicken Nugget	Meat and Poultry Product	HS 160232
		
<p>A chicken nugget is a chicken product made from either meat slurry or chicken breasts cut to shape, breaded or battered, then deep-fried or baked. It is in different shape. Fast food restaurants typically fry their nuggets in vegetable oil, such as coconut oil. Chicken nugget is an excellent source of protein, especially for kids who might be picky eaters.</p>		
Raw Material		
<ul style="list-style-type: none"> • Chicken (meat & skin) • Ground spices • Tasting salt • Bread crumbs • Antioxidant (Ascorbic acid) • Soda • Egg • Sugar • Salt 		
Source of Raw Material		
Local market		
Packaging Materials		
Pouch pack		
Source of Packaging Materials		
<ul style="list-style-type: none"> • Plastoccats limited (Tel: 02-9340228, 02-9358808) • Tanjim Printing & Packaging Ltd. (http://www.tanjimgroup.com) 		
Machineries Required		
Chicken dressing machine		FOB Price: US \$210-250/Piece http://www.alibaba.com/product-detail/Chicken-Dressing-Machine-CHZ-N60_1454144077.html

Chicken deboning & grinder machine		FOB Price: US \$100-500/Set http://www.alibaba.com/product-detail/2014-Hot-sale-Poultry-deboning-machine_1835757267.html
Forming machine		FOB Price: US \$2,000-4,000/Set http://www.alibaba.com/product-detail/Commercial-Automatic-Chicken-Nugget-Making-and_60090734661.html
Batter mixing machine		FOB Price: US \$500-1,000/Set http://www.alibaba.com/product-detail/Batter-Mixer-Machine_1991161018.html
Battering & breading machine		FOB Price: US \$1,000-6,000/Set http://www.alibaba.com/product-detail/Automatic-Battering-Machine-with-100kgs-per_485388746.html

Fryer		FOB Price: US \$1,000-1,000,000/Set http://www.alibaba.com/product-detail/Continuous-Nuggets-frying-machine-fryer_385522920.html?s=p
Cooler		FOB Price: US \$500-5,000/Set http://www.alibaba.com/product-detail/high-speed-fried-food-cooling-machine_1982278787.html
Packing machine		FOB Price: US \$1,000-5,000/Piece http://www.alibaba.com/product-detail/MK-398E-automatic-potato-chips-packing_60099793104.html
Source of Machineries		
China, Taiwan, Japan, Pakistan, India etc.		
Local Supplier of Machineries		
<ul style="list-style-type: none"> • IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151) • Tick BD Engineering & Consulting Ltd (http://bd1015349587.fm.alibaba.com/contactinfo.html) • Techgen Engineering Ltd. (http://bd1016572723.fm.alibaba.com/contactinfo.html) • China Bangla Engineers & Consultants Ltd. (http://bd1008074282.fm.alibaba.com/productlist.html) 		

Process Flow



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Product No. 44	Sub-Sector	Code			
Mayonnaise	Oil Seed Product	HS 210390 BDS 1503			
					
<p>Mayonnaise is a water-oil emulsion. Generally, prepared cold and contains at least 65% oil by weight, vinegar, and egg or egg yolks. For salad dressing requirements are 30% vegetable oil, 4% egg yolk, vinegar or lemon juice, and spices. The eggs are subjected to pasteurization by heating them without actually cooking them. Low-fat versions are made with egg whites. To replace the fat from the missing egg yolk, modified food starches are added so that the low-fat mayonnaise retains the creamy texture and thickness of real mayonnaise. These food starches can be made from corn or gums. Salt is added to enhance flavor. The amount equals approximately 1/16 teaspoon of salt per tablespoon serving of mayonnaise.</p>					
Raw Material <ul style="list-style-type: none"> • oil • Egg • Spices • Sugar • Lemon or lime juice/vinegar • Preservative 					
Source of Raw Material <ul style="list-style-type: none"> • Local market • Remex Corporation Ltd. (http://www.remexcorp.com) • Maritime Entrepreneur pte. ltd. (http://www.meplbd.com) • Famous Iberchem. (mob no- 01678032038) 					
Packaging Materials <p>Glass jar</p>					
Source of Packaging Materials <p>Bengal Glass (http://www.bengalglass.com)</p>					
Machineries Required <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; vertical-align: top; padding: 10px;"> Mixing/ emulsifying machine </td> <td style="width: 33%; vertical-align: top; padding: 10px;">  </td> <td style="width: 33%; vertical-align: top; padding: 10px;"> FOB Price: US \$8,000-25,000/Set http://www.alibaba.com/product-detail/Micmachinery-220V-440V-350L-Auto-lifting_60246034525.html?spm=a2700.7724838.0.0.9iQBgC&s=p </td> </tr> </table>			Mixing/ emulsifying machine		FOB Price: US \$8,000-25,000/Set http://www.alibaba.com/product-detail/Micmachinery-220V-440V-350L-Auto-lifting_60246034525.html?spm=a2700.7724838.0.0.9iQBgC&s=p
Mixing/ emulsifying machine		FOB Price: US \$8,000-25,000/Set http://www.alibaba.com/product-detail/Micmachinery-220V-440V-350L-Auto-lifting_60246034525.html?spm=a2700.7724838.0.0.9iQBgC&s=p			

Egg breaking and yolk separating machine		FOB Price: US \$1,000-40,000/Set https://www.alibaba.com/product-detail/Factory-price-Pasteurized-egg-liquid-breaking_60408703587.html?spm=a270.0.7724838.0.0.LUsZ6Z
Egg pasteurizer		FOB Price: US \$1,000-99,999/Piece https://www.alibaba.com/product-detail/Pasteurization-Machine-egg-liquid-pasteurizer_354773933.html
Filling machine		FOB Price: US \$2,000-7,000/Unit http://www.alibaba.com/product-detail/Mic-Machinery-semi-automatic-tube-filling_60038258645.html?spm=a2700.724838.0.0.Gozmdn&s=p

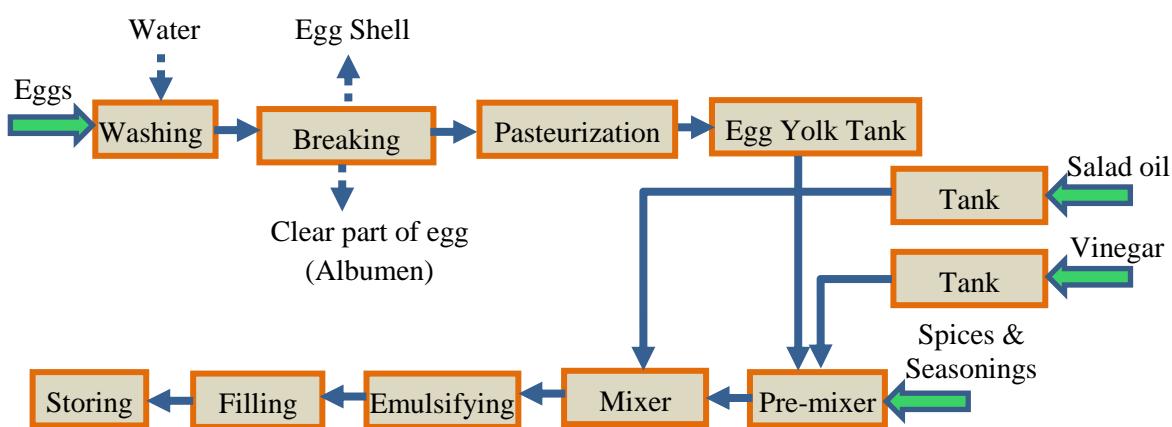
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- IMTEX Packaging (ph no- 02-8954583,028953702, mob- 01911230092, 01714166151)
- Tick BD Engineering & Consulting Ltd (<http://bd1015349587.fm.alibaba.com/contactinfo.html>)
- Techgen Engineering Ltd. (<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- China Bangla Engineers & Consultants Ltd. (<http://bd1008074282.fm.alibaba.com/productlist.html>)

Process Flow



References

- <http://www.inoxpa.com/uploads/document/Fitxes%20t%C3%A8cniques/Processos/Maionesa/FTMY.1.EN-0505.pdf>
- <http://www.silverson.com/images/uploads/documents/FMayonnaise.pdf>
- <http://www.sciencedirect.com/science/article/pii/S0260877411001853>
- http://www.spxflow.com/en/assets/pdf/GS_batch_production_of_mayonnaise_and_ketchup_07_12_GB.pdf
- <https://www.test.foodsci.wisc.edu/courses/fs532/01mayonnaise.html>
- <http://www.madehow.com/Volume-6/Mayonnaise.html>
- <http://www.dutycalculator.com/hs-lookup/964146/hs-tariff-code-for-mayonnaise/>
- https://www.youtube.com/watch?v=8DX_FNN2n6E
- <http://www.actini.com/en/egg-products/equipment/ovocompact/>

Product No. 45	Sub-Sector	Code
Mustard Oil	Oil Seed Product	HS 151490 BDS 25:2000; amend 3:07
		
<p>Mustard Oil is rich with monounsaturated and polyunsaturated fats, which may balance cholesterol levels in the body. When consumed, mustard oil may fight fungal infections. Mustard oil boosts the appetite and aids in digestion by stimulating the secretion of gastric juices and bile as well as stimulating the excretion system.</p>		
Raw Materials		
Mustard seed		
Source of Raw Material		
Local market		
Packaging Materials		
Pet bottle		
Source of Packaging Materials		
Plastoccats limited (Tel: 02-9340228, 02-9358808)		
Machineries Required		
Cleaning sieve		FOB Price: US \$1,000-100,000/Set http://www.alibaba.com/product-detail/CE-ISO-ZYD-mustard-sieving-machine_874946536.html
Flaking roll		FOB Price: US \$1,000-10,000/Set http://www.alibaba.com/product-detail/big-capacity-automatic-hydraulic-flaking-roll_1605351063.html?s=p

Cooker	 A large industrial stainless steel pressure cooker unit with multiple vertical sections and horizontal supports, mounted on a metal frame.	FOB Price: US \$10,000-40,000/Set http://www.alibaba.com/product-detail/YZCL-Industrial-Oil-Steam-Pressure-Cooker_1441262518.html?s=p
Oil press or prepress	 A green industrial oil pressing machine with a control panel featuring several buttons and a small screen. It has two large circular components at the bottom.	FOB Price: US \$1,000-5,000/Set http://www.alibaba.com/product-detail/High-quality-automatic-mustard-oil-pressing_721788269.html
Solvent pumps	 A large industrial pump unit consisting of a grey motor pump assembly connected to a red cylindrical component, all mounted on a sturdy metal base.	FOB Price: US \$10-10,000/Piece http://www.alibaba.com/product-detail/solvent-pump_1883290908.html
Roary extractor	 A blue industrial roary extractor machine with a control panel, a hopper at the top, and a long horizontal extraction arm with a fan-like end.	FOB Price: US \$1,000-14,000/Piece http://www.alibaba.com/product-detail/agricultural-machinery-mustard-oil-extractor-in_1740545408.html
Evaporator	 A complex industrial evaporator system housed in a green metal frame. It features various pipes, tanks, and a large vertical column.	FOB Price: US \$1,000-1,000,000/Set http://www.alibaba.com/product-detail/Single-effect-falling-film-evaporator_1725355633.html

Physical refining deacidification tower		FOB Price: US \$2,000-1,000,000/Set http://www.alibaba.com/product-detail/YTXL-Series-Physical-Refining-Deacidification-Tower_1742815641.html
Deodorizer		FOB Price: US \$1,000-1,000,000/Set http://www.alibaba.com/product-detail/oil-deodorizer-for-oil-refining_510943163.html
De-waxing & defatting machine		FOB Price: US \$1,000-1,000,000/Set http://www.alibaba.com/product-detail/High-Quality-1T-100T-D-Oil_1700160487.html
Filling machine		FOB Price: US \$100-100,000/Set http://www.alibaba.com/product-detail/Oil-Filling-Machine_204912564.html

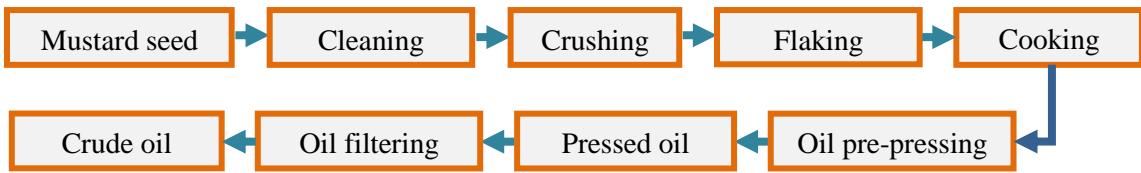
Source of Machineries

China, Taiwan, Japan, Pakistan, India etc.

Local Supplier of Machineries

- Techgen Engineering Ltd.(<http://bd1016572723.fm.alibaba.com/contactinfo.html>)
- NATIONAL WORLD EXPORT & IMPORT (PVT.) CO.LTD (<http://bd114321142.fm.alibaba.com>)
- Texvision (BD) ltd (<http://texvisionbd.fm.alibaba.com>)
- Earth Corporation (<http://www.earth-machinery.com>)
- PACRITE LIMITED (<http://www.pacriteltd.com>)
- ADEEB FUTURE TECH LTD. (<http://bd901569718.fm.alibaba.com>)

Process Flow



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- http://hnyongle.en.alibaba.com/product/1309841902-212244991/manufacturer_of_cold_pressed_mustard_oil_machine_equipment_made_in_China_with_CE_ISO9001_BV_certificated_with_turnkey_service.html
- http://www.alibaba.com/product-detail/1-1000Ton-China-best-automatic-mustard_1025943362.html
- <http://www.foreign-trade.com/reference/hscode.cfm?code=1514>

List of 155 Products Brought Under BSTI Mandatory Certification Marks Scheme

A. Food and Agricultural Products (64 items):

Sl.	Name of the products	Standard No.
1.	Fruit Juice & Nectars	BDS CAC 247:2008
2.	Ice Cream	BDS 1083 :2006
3.	Concentrated Fruit Juice	BDS 527:2007
4.	Chilies, Whole and Ground	BDS 1017:2001
5.	Fruit Squash	BDS 506:2002
6.	Soya bean Oil	BDS 909:2000
7.	Jam, (Fruit Preserves) & Jelly's	BDS CAC 79:2008
8.	Mustard Oil	BDS 25:2000, Amend: 3, 2007
9.	Citrus Marmalade	BDS CAC 80: 2008
10.	Turmeric Powder	BDS 991: 2001
11.	Vinegar	BDS CAC 162:2007
12.	Edible Palm Oil	BDS 999:2000
13.	Fruit Syrup	BDS 528:2006
14.	Sugar	BDS CAC 212:2006
15.	Honey	BDS CAC 12:2007
16.	Suji (Semolina)	BDS 190:1991, Amend 1: 2001
17.	Canned & Bottled Fruit	BDS 503:2006
18.	Pasteurized Milk	BDS 1702:2002
19.	Fruit Cordial	BDS 508:2006
20.	Chips/Crackers	BDS 1556:1997, Amend 1: 2004
21.	Sauce (Fruits or Vegetable)	BDS 512:2007
22.	Chanachur	BDS 1564:1997, Amend 1: 2004
23.	Tomato Paste	BDS 517:2002
24.	Lachha Semai	BDS 1620:2000
25.	Pickles	BDS 520:2001
26.	Soft Drink Powder	BDS 1586:2007
27.	Canned Pineapple	BDS CAC 42:2007
28.	Banaspati	BDS 804:2001
29.	Tomato Ketchup	BDS 530:2002
30.	Instant Noodles	BDS 1552:2007
31.	Infant Formula & Formulas for Special Medical purposes intended for infants	BDS CAC-72-2008
32.	Processed cereal based food for infants & Young Children	BDS CAC 74 :2007
33.	Milk Fat Products	BDS CAC A:2:2008
34.	Edible Sun Flower Oil	BDS CAC 23: 2002
35.	Butter	BDS CAC-A-1:2002
36.	Mosquito Coil	BDS 1089: 2007
37.	Milk Powder and Cream Powders	BDS CAC 207:2008
38.	Malathion 57% (W/V) (Emulsifiable Concentrates)	BDS 1179: 2001
39.	White Bread	BDS 382:2001
40.	Plywood for General Purposes	BDS 799: 2006
41.	Biscuit	BDS 383:2001
42.	Plywood Tea-Chest	BDS 18:2006
43.	Lozenges	BDS 490:2001, Amend 1: 2007
44.	Safety matches in boxes	BDS 1040:2006
45.	Toffees	BDS 1000:2001
46.	Wheat Bran	BDS 997:2006
47.	Black Tea Definition & Basic requirements	BDS ISO:3720:2008

48.	Condensed Milk and Condensed Skim Milk	BDS CAC A-4:2002
49.	Liquid Glucose (Glucose Syrup)	BDS CAC 9:2006
50.	Refined Palm Olein	BDS 1567:2007
51.	Dextrose Monohydrate	BDS CAC 8:2007
52.	Yoghurt and Sweetened Yoghurt	CAC-A-11(a):2002
53.	Maida	BDS 381:2007
54.	Curry Powder	BDS 1205: 2006
55.	Wheat Atta	BDS 380:1980, Amend 1: 2001
56.	Fortified Soybean Oil	BDS 1769:2006, Amend 1: 2008
57.	Carbonated Beverages	BDS 1123:2002, Amend 1: 2007
58.	Fortified Edible Palm Oil	BDS 1770:2006, Amend 1:2008
59.	Noodles	BDS 1106:2001
60.	Refined Sugar	138: 2006
61.	Iodized Salt	BDS 1236:2001, Amend 1: 2007
62.	Cake	BDS 1574: 2006
63.	Drinking Water	BDS 1240:2001
64.	Natural Mineral Water	BDS 1414:2000

B. Chemical Products (40 items):

Sl.	Name of the products	Standards No.
65.	Coconut Oil	BDS 99:2007
66.	Carbolic Soap	BDS 181:02Amend1:02
67.	Stencil Paper	BDS 1030:98 Amend 1: 06
68..	Ink, Duplicating	BDS 146:2002
69.	Writing and Printing Papers	BDS 405:96 Amen1:06
70.	Ferro-gallo tannate Fountain Pen Ink	BDS 88:91Amend 1:06
71.	Pencils	BDS 330:93 Amen 1:06
72.	Ceramic Tableware	BDS 485:2000 Amend 1,2,3 :06
73.	Ready Mixed Paint, brushing, finishing semi gloss for general purpose.	BDS 402:1989 Amend 1 ,2: 2007,
74.	Tableware Made of Melamine Plastics	BDS 1425 :2009
75.	Shoe Polish, Paste	BDS 1006:1981 Amend 1: 06
76.	Skin Cream	BDS 1382:1992Amend 1,2,3: 06
77.	Coal Tar Black Paint (Alquatra)	BDS 69 Part-2):91 Amend 1 : 06
78.	Shaving Cream	BDS 1241:1989 Amend 1,2 : 06
79.	Toilet Soap	BDS 13:06 Amend 1:08
80.	After Shave Lotion	BDS 1524:2006
81.	Laundry Soap Powder	BDS 329: 2006
82.	Lipstick	BDS 1424:1993 Amend 1,2 : 06
83.	Laundry Soap	BDS 12:2006
84.	Hair Oils	BDS BDS 1339:91Amend:1 :06
85.	Ink Stamp Pad	BDS 90:2002
86.	Shampoo, Synthetic Deter-gent based	BDS 1269:02 Amend 1: 03
87.	News Print	BDS 845:94 Amend 1:06
88.	Ammonium Sulfate (Fertilizer)	BDS 36:93 Amend 1:08
89.	Urea (Fertilizer)	BDS 217:1993
90.	Ball Point Pens	BDS 1384:2002
91.	Aluminium Sulphate, Non Ferric	BDS 149:1990
92.	High Speed Diesel	BDS 344:1991 Amendment 1:2000,2:03
93.	Triple Super Phosphate (T.S.P.)	BDS 216:1991 Amend 1 ,2 : 07,

94.	Unleaded Motor Gasoline-Premium	BDS 346:99Amend1:03
95.	Ribbons, Type writer	BDS 236: 2006
96.	Unleaded Motor Gasoline-Regular	BDS 347:1999 Amend 1 : 06
97.	Water Resistant Vegetable Tanned Sole Leather	BDS 340:1991
98.	Tooth Powder	BDS 1370:1992 Amend 1 : 06
99.	Carbon Paper for type writer	BDS 411:89Amend1:06
100.	Skin Powder	BDS 1337:1991Amend 1 :06
101.	Tooth Paste	BDS 1216:2001 Amend 1,2,3 : 06
102.	Cement Paints	BDS 1706:2002
103.	Synthetic Detergent Powder	BDS 1445:2003
104.	Tableware urea molding compound	BDS 1825:2011

C. Jute and Textile Products (11 items):

Sl.	Name of the products	Standards No.
105.	Rubber conveyor and elevator belting of ply construction.	BDS 1200(Part 1:2005
106.	Polyester Cotton Shirting	BDS 1148:2003
107	Cotton Sewing Thread	BDS 33:1989
108.	Polyester blend Suiting	BDS 1175:2002
109.	Industrial Sewing Thread made wholly or partly from synthetic fibre	BDS 1221:2001
110.	Rubber Flat Transmission Belting of Textile	BDS 1199:2006
111.	Umbrella cloth	BDS 1125:2005
112.	Poplin Fabric	BDS 32:2001
113.	Textiles Color Fastness Ratings Specification	BDS 1758:2006
114.	Cotton Canvas	BDS 319:2005
115.	Fastness of Dyes on Textile to Steaming	BDS ISO 105-E 11:2004

D. Electronics and Electrical Products (25 items):

Sl.	Name of the products	Standards No.
116.	Two-Pin Plugs & Socket-Outlets	BDS 102:1990 Reaffirmed 2005
117.	Three-Pin Plugs & Socket-Outlets	BDS 115:1989 Reaffirmed 2005
118.	Aluminium Conductors steel Re-inforced for Overhead Power Transmission	BDS 1037 : 2003
119.	Bare Aluminium and Aluminium alloy Conductors for overhead power transmission	BDS 1036:2006
120.	Winding Wires: a) Part 1 Enameled round copper winding wires b) Part-2 Enameled rectangular copper winding wires c) Part 3 Enameled round Aluminium winding wires d) Part-4 Enameled rectangular Aluminium winding wires e) Part-5 Test Method	BDS 1034 (Part-1):2006 BDS 1034 (Part-2):2006 BDS 1034 (Part-3):2006 BDS 1034 (Part-4):2006 BDS 1034 (Part-5):2006
121.	(a) Insulated Flexible Cords (Part-1) General requirements (b) Insulated Flexible Cords (Part-2) Requirements for rubber insulated flexible cords (C) Insulated Flexible Cords (Part-3) Requirements for PVC Insulated Flexible cords (d) Insulated Flexible Cords (Part-4) Flexible cords Insulated	BDS 899 (part-1) :2000 BDS 899 (part-2) :2001 BDS 899 (part-3) :2001 BDS 899 (part-4) :2001

	with varnished glass fiber. (e) Insulated Flexible Cords (Part-5) Methods of test. (f) Insulated Flexible Cords (Part-6) Methods of test.	BDS 899 (part-5) :2001 BDS 899 (part-6):2001
122.	Three phase Induction Motors	BDS 1139:1986 Amendment 1:2006
123.	Power Cables with extruded insulation and their accessories for rated voltage from 1kv up to 30kv 1. Part 1 Cables for rated voltage of 1 kv and 3 kv 2. Part-2 Cables for rated voltage from 6kv up to 30 kv 3. Part-4 Test requirement of accessories for 6kv up to 30 kv	BDS IEC 60502-1:2005 BDS IEC 60502-2:2005 BDS IEC 60502-4:2005
124.	(a) Lead acid starter batteries (Part-1) General requirements and methods of test. (b) Lead acid starter batteries (Part-2) Dimensions of batteries and dimension and marking of terminals. (c) Lead acid starter batteries (Part-3) Dimension of batteries for heavy commercial vehicles.	BDS 206 (Part-1) :2002 BDS 206 (Part-2) :2002 BDS 206 (Part-3) :2002
125.	Porcelain Insulator for overhead power lines with a nominal voltage Up to and including 1000 V	BDS 1543:2006
126.	Electricity Metering Equipment (AC) –Particular Requirements (Part-11), Electromechanical Meters for Active Energy (Class 0.5.1 and 2)	BDS IEC 62053-11 :2004
127.	Switches for household and similar fixed electrical installation Part-1 General requirement	BDS IEC60669-1:07
128.	Self-Ballasted Lamps for General Lighting Services- Performance Requirements	BDS 1734:2003
129.	Electronic Ballasts for Tubular Fluorescent Lamps- Performance Requirements	BDS IEC 60929:05
130.	Cut-Out Switches (Main Switches)	BDS 1395:1993 Reaffirmed 2005
131.	Ceiling Roses	BDS 116:2006
132.	Electronic Type Fan Regulators	BDS 1323:1991 Amendment 1:2006
133.	Ballast for Tubular Fluorescent Lamps performance requirements	BDS IEC 60921:2005
134.	Electric Irons for household or similar use methods for measuring performance	BDS IEC 60311:05
135.	PVC Insulated Cables (non armoured for electric power and lighting)	BDS 900 : 2000
136.	Tungsten Filament Lamps for domestic and similar general lighting purposes performance requirements	BDS 17:2006
137.	Electric circulating Fans & Regulators (ceiling and deck head fans, pedestal fans & table/cabin fans within built regulators)	BDS 818:1998 Amendment 1: 2006
138.	Primary Batteries: 1. Part-1 General 2. Part-2 Physical and Electrical Specification 3. Part-3 Watch Battery 4. Part 4 Safety and lithium Batteries 5. Part-5 Safety of Batteries with Aquas Electrolyte	BDS IEC 60086-1:2005 BDS IEC 60086-2:2005 BDS IEC 60086-3:2005 BDS IEC 60086-4:2005 BDS IEC 60086-5:2005
139.	Insulators for overhead lines with a nominal voltage over 1000 V 1. Part-1 Ceramic or glass Insulator units for ac systems- definitions, test methods and acceptance criteria 2. Part-2 Insulator strings and insulator sets for ac systems- definition, test methods and acceptance criteria	BDS IEC 600383-1:2006 BDS IEC 600383-2:2006
140.	Double capped Fluorescent Lamps performance requirements	BDS IEC 60081:06

E. Engineering Products (15 items):

Sl.	Name of the products	Standards No.
141.	Mild Steel Pipe and G.I. Pipe	BDS 1031:2006
142.	Protective Helmets for Scooter & Motor Cycle Riders	BDS 1136:1986 Reaffirmed 07
143.	Safety Razor Blades	BDS 219:2002
144.	Sanitary ware appliances	BDS 1162:2006
145.	Pipes and fittings made of un-plasticized polyvinyl chloride (PVC-U) for water supply - Part 1: General - Part 2: Pipes (with or without) integral sockets - Part 3: Fittings and Joints	BDS ISO 4422-1 :2008 BDS ISO 4422-2 :2008 BDS ISO 4422-3:2008
146.	Steel for the Re-enforcement of Concrete (Part-1 & Part-2)	BDS ISO 6935-1:2006 BDS ISO 6935-2:2006
147.	G P Sheet (with Corrugation)	BDS 1122:1987 Reaffirmed 2007
148.	Portable Fire Extinguisher	BDS 825:1991 Reaffirmed 2007
149.	Gas Mantles	BDS 1197:1988 Reaffirmed 2007
150.	Bi-cycle Rim	BDS 986:2006
151.	Bitumen and Bituminous Binders Paving Grade Bitumen Bitumen and Bituminous Binders Cationic Bituminous Emulsions	BDS EN 12591:2009 BDS EN 13808:2009
152.	Cement part 1 Composition. Specifications and Conformity criteria for common Cement	BDS EN 197-1:2003
153.	Common Building Clay Bricks	BDS 208:1980
154.	Ceramic Tiles	BDS ISO 13006:2006
155.	Aluminium and Aluminium alloys-Extruded rod/bar tube and profiles-Profiles, tolerances on dimensions and form.	BDS 1825: 2011

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