

**COMPILATION OF FEASIBILITY STUDIES ABSTRACTS
 BS in MECHANICAL ENGINEERING
 2006-2015**

This compilation will serve as a guide to support the faculty and students in their search for recorded researches. The printed copies are available in the Reference Section of the LPU-Batangas S.H.L. Learning Resource Center - LIMA Campus.

SUBJECT	THESES NO.	AUTHOR/S	TITLE	ABSTRACT
ICE MANUFACTURING; ICE PLANT	BSME / 3 / 2007	Mercado, Pablito E.	A Technical Feasibility Study on a Tube Ice Plant Mercado Ice Plant (Tube Ice Manufacturing Plant)	The modern age produces several problems. One of these is the uncontrollable increase in population leading to shortage of food supply and other basic necessity of human. Ice supply in San Pascual and neighboring cities are one of the areas having this shortage. This condition obviously shows that there is a need for establishing a new ice producing plant in the area, which will offer a new quality of product satisfying the consumer's need. Establishing a new ice producing plant would definitely suitable and appropriate in the vicinity due to increasing demand for ice. Putting up a 2000kg ice plant would supply the need in the area.

ICE MACHINE	BSME / 9 / 2015	Abante, Mark Enrick R. ; Banaag, Maria Stella M. ; Bautista, John Cleo M.	Ice Cube Machine	Ice maker is an easy and cost effective alternative for individuals tired of hassling with ice trays, miniscule ice storage bins or trips to the store to buy bags of ice. The main objective of this study is to construct a machine that can produce ice cubes using the principle of Simple Vapor-Compression Refrigeration System. This study will seek to answer problems which involves the evaporator coil material to be used effective length of the evaporator coil, effective way to mount the detachable evaporator coil at the back of the ice cube molder, time it will take the ice cubes to form completely and drop to the ice bin and appropriate thermostat setting. The researchers conducted a study about Ice Cube Maker to make appropriate modifications of the existing machine that will be beneficial to the community in terms of repair / maintenance and household use.
ICE MANUFACTURING; ICE PLANT	BSME / 4 / 2007	Barro, Christian Demetrio I.	Technical Feasibility Study Cuta Ice Plant	In the modern sense, not only a good idea but also a good relation between the consumer and producer is needed for a business to succeed. It does not only focus on profit maximization. But also on how it can boost the economy and help the society. Customer welfare serves as one of the basis in establishing a business. Cuta Ice Plant named after its location. Cuta Batangas City is believed that its idealism serves as insight to be recognized in the business world with its improved product. Unlike other plants, this has so called secondary evaporator. A room where temperature is maintained to keep the volumes if ice constant. This study helps us realize that it will reduce the rate of unemployment of Batangas City and it will also help for skills development under the uplifting of today's economic condition.

ICE MANUFACTURING; ICE PLANT	BSME / 5 / 2007	Delgado, Filiph D.	Technical Feasibility Study Delgado Ice Plant	<p>The continous increase of consumer population over the years increases the demand for ice in Batangas City. Since the outburst for the demand of ice is now being foreseen, the condition gives the researcher a great idea and opportunity to penetrate the ice industry. Aside from focusing on profit maximization, establishing an ice plant near the vicinity will help satisfy the consumers need and demand. With enough confidence, Delgado ice plant shall be taking the lead in promoting a quality product with new technology accommodating it. Having the capacity of 2068.6078 kg of ice per operation, consumer's demand will be satisfied. Based on the gathered data and analysis of the facts presented in the study, the ice plant will surely play the role in providing supply for the consumer, generate greater income on the part of the government and would give a favorable income. It would make the investor recover their capital sooner. After a wise study and thorough analysis of the fact provided in the study,it has proven that establishment of Delgado Ice plant in Batangas City is feasible.</p>
------------------------------------	-----------------	--------------------	---	---

ICE MANUFACTURING; ICE PLANT	BSME /6 / 2007	Bay, Vinson B.	Technical Feasibility Study Alangilan Ice Plant	<p>Because of industrialization and development of technology, the competition became stiff and the demand for food and supplies also increases. Along this demand is the increase for the supply of ice. Records show that ice supply is not sufficient to meet the continuous increase in demand. These are the reasons as to why the existence of new ice plant is needed. The main objective of this research is to establish a medium scale enterprise that will manufacture and provide the consumer's needed ice. It will also supply the important refreshment input to various industries and for food preservation in bars, restaurants and in public markets. The industry will increase local earnings of the province and will employ people. This will support many lives of Batangueños. And so, Alangilan Ice Plant emerges.</p>
------------------------------------	----------------	----------------	---	--

MACHINE	BSME / 8 / 2014	Gonda, Kure C. ; Millave, Edjen D.	Fine Ice Crushing Machine	<p>The proponent aimed to design a prototype Fine Ice Crushing Machine, producing fine crushed ice from a home-made ice. The object of the present invention is to crush a home made ice provide a particularly efficient and safe ice-crusher which due to the achieved advantages through conducted studies, is extremely fundamental to the community and involves considerably reduced production costs relative to conventional ice crushers. It is capable of crushing only 10 consecutive home-made ice of consistent quality. The machine comprises a feeding collar to which a shaped handle with circular plate is hinged to push ice into the crushing area. The design of the prototype can be adopted for larger production. The machine can be sold in the market and attracts buyer such as flavored slush drinks and Sno-kone vendors because of its advantages on other existing ice crusher. It has lower maintenance cost and the crush ice produced is of consistent quality.</p>
---------	-----------------	---------------------------------------	---------------------------	---

MACHINE	BSME / 10 / 2015	Atienza, Karl Louis M. ; Almendral, Benjie C. ; Buesa, Guillian Chistine D.	Ice Flakes Machine	Ice flakes is designed to produce ice in flakes of 1-2 mm thick and was invented for industrial purposes. Mainly used in the process industries including bakeries, fish and meat packing and in laboratories. The main objective of this study is to create a prototype machine that will produce ice flakes using the principle of simple vapor - compression refrigeration system. There are many variations on simple ice flake machine design but they all work around the same basic principle. A refrigeration system builds up a layer of ice before a harvesting systems moves the ice from the ice flake machine into a collection bin. The researchers conducted a study about the ice flakes machine that uses simple vapor - compression refrigeration cycle to make appropriate modifications of the existing machine to convert it to household use particularly for human consumption.
MACHINE TOOLS	BSME / 7 / 2014	Cabello, Jonathan C. ; Manalo, Baby Rosette M. ; Manibo, Quenie Danica M. ; Roxas, Rowell R.	Power Hacksaw	Cutting tools have always been part of people's lives. Most frequently used are knives, lawnmowers even more industrial tools in plumbing, woodworking and metalwork. In the context of metal working a cutting tool or tool bit is used to remove metal from the work piece by shear deformation. A power hacksaw is a machine used to cut across materials like metal and bone. It can also be used to cut aluminum, brass and mild steels. A power hacksaw is essential in every machine shop operations. It provides a better importance especially in machining operation. It can do work much more rapidly and accurately compared to hand saw.

SUGAR INDUSTRY; IBAAN SACCHAROSE CORPORATION	BSME / 1 / 2006 ; BSME / 2 / 2006	De Castro, Emerson ; Dela Cruz, Maydel	Project Feasibility Study Ibaan Saccharose Corporation (Sugar Manufacturing Company)	The uncontrollable increase in population, which leads the shortage of sugar is one of the major problems that Batangas City and Lipa City is facing. The researchers discovered that these are made almost 50% of the total demand for sugar that Lipa City and Batangas City cannot accommodate. This condition obviously shows that there is a need for establishing a new sugar plant near the vicinity which will satisfy the customer's need. Establishing a new sugar manufacturing plant would definitely be suitable and appropriate in the country due to the increasing local and foreign demand. Based on the gathered data and the analysis of the facts presented in the study, sugar-manufacturing plant would give favorable income because the mark up is 106.03% of the total production cost L kg(50kg). It would make the investors recover their capital sooner. New sugar manufacturing plant will surely play the role in providing supply for the consumers and it will generate greater income on the part of the government.
--	--------------------------------------	---	---	--