

Project Report

On

Soya Milk Production

By:

Powerdeal Energy Systems (I)
Pvt. Ltd.

Reg. Off: F-29 A & B, MIDC Satpur, Nashik (M.H.)
Works: Survey no. 4/1,4/2,5/1+2+3, Villholi,
Mumbai – Agra Road, Nashik (M.H.) 422010



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About Powerdeal:

Powerdeal Energy Systems (I) Pvt. Ltd. is led by a first generation entrepreneur, Mr. Mahesh B. Khairnar, who in the year 1996 pioneered to set up his own industry, immediately after graduating as a Mechanical Engineer. Commencing with a set-up, "Perfect Auto-Products", supplying Automobile Components to the Auto Giant "Mahindra & Mahindra Ltd", later merged Perfect Auto with the Powerdeal group.

Keeping pace with the changes & armed with unrelenting attitude for excellence & achievement; the group ventured into the electrical sector and started the manufacture of "Distribution Boards" and within a very short time achieved the status of registered vendor for distribution boards for the companies "Schneider", "Novar India Limited" and "Anchor". Not content, the group proceeded with a tie up with the electrical giant ABB Limited for the manufacture of "Compact Sub Stations".

The group also undertook manufacture of high-end custom made electrical systems for monitoring power factor in industries (APFC & RTPFC). PDES since then has come a long way with the addition of products like AB Switch, DO Fuse, LT and MV panels and has a one point agenda - Bring world class products and services relating to Power Distribution, Protection, Energy Saving and the concept of Green Energy in India.

The vision is to provide new dimensions to corporate excellence. The company has been consistently exploring new avenues of value chain by switchgear & control relay manufacturing electrical panels (LV, MV, APFC & RTPFC & DB's etc.), transmission towers heavy structures and also products for rural electrification and feeder separation programs.

The company introduces the application of fly ash based technologies by starting state of the art manufacturing of, "**Autoclaved Aerated Concrete Blocks & FlyAsh Sandwich Panels**" in the year 2010, and the products are widely used in the mass scale affordable construction program and besides being used by construction industries as the group intends to emerge as a total solution provider for affordable construction of housing and schooling programme.

Utilization of 80 % fly ash and 20 % cement has made these products very cost effective and will protect the environment by utilization of fly ash (waste generated from thermal power plants which is the big issue for its disposal). The effective use of these products have

created environment friendly substitutes for fertile soil and rivers and thus protecting nature, and also reducing consumption of steel by 20 to 22 % used in the construction program.

Powerdeal Energy Systems (I) Pvt. Ltd. is in constant Endeavour to strengthen India's infrastructural development program through implementation of mass scale housing, schooling and construction program, which will uplift 15 million people, by giving the solution of affordable construction for various application.

Powerdeal is proud to be closely associated with the activities of "International Knowledge Foundation" which disseminates knowledge to bridge the knowledge gap between human being and science of technology in order to carry out nation building program and contributes towards upliftment of rural & tribal communities and other deprived parts of the society. Mr. Khairnar & his team of intelligent, ambitious & dedicated professionals are in constant endeavor to achieve the growth, quality & customer satisfaction thereby setting benchmarks for others to follow in times to come.

Vision

To emerge as a major business enterprise in the field of

1. Transmission & Distribution and Infrastructure
2. Contribute to the cause of providing eco-friendly and safe products/technologies for National prosperity.
3. At Powerdeal, we are committed to improving the quality of life of the communities we Serve, by striving for leadership and global competitiveness in the business sectors in which we operate.
4. Our practice of returning to society what we earn evokes trust among consumers, Employees, shareholders and the community.

Mission

1. Provide cost effective solutions to fulfil the energy & Infrastructure needs of the nation by adhering to the best manufacturing practices.
2. Powerdeal is focusing on new technologies and innovation to drive its business in India and internationally.

Core values

Powerdeal Group has always been value driven. These values continue to direct the growth and business of Powerdeal Group of companies. The five core values that imply our actions and activities:

□ Integrity:

We must conduct our business fairly, with honesty and transparency. Everything activity must stand the test of time.

Understanding:

We work for the benefit of the community of which we are a part.

Excellence:

We must constantly strive to achieve the highest possible standards in our day-to-day work and in the quality of the goods and services we provide.

Unity:

We work cohesively with our associates; building strong relationships based on tolerance, understanding and mutual cooperation.

Responsibility:

We continue to be responsible, sensitive to the nation its communities and the environment always ensuring that what comes from the people goes back to the people many times over.

Management & Technical Assistance

Management team

<u>Name of Management Member</u>	<u>Designation</u>	<u>Experience</u>
MR. MAHESH KHAIRNAR	C M D	18 Years
MR. YOGESH KHAIRNAR	DIRECTOR	12 YEARS
MRS. SHUBHADA KHAIRNAR	DIRECTOR	10 YEARS
MR. KRISHAN DUTT TIWARI	PRESIDENT	14 YEARS
Mr. Popat Patole	Head Commercial	25 Years
Mr. Narendra Kuldharan	Head Operations	12 Years

Management & Think Tank Members

A distinguished team of experienced members, selecting & retrieving the best opportunity, drive the organization towards the goals and business objectives.

Execution Team Members

A strong team of intelligent, ambitious, technically competent, and dedicated engineers of PDES are in constant endeavor to achieve growth, quality & customer satisfaction thereby setting benchmarks for others to follow, in times to come.

Knowledge Workers

Powerdeal always believes in empowering people; this philosophy led us to create knowledge workers rather than just workers. Now we have a strong team of more than 600 knowledge workers; performing an untiring effort, converting instructions into products.

Abstract about health awareness:

As per the National Health Survey 2005-06, malnutrition and anemia rates are high among Children. Almost 38% of children under age three are stunted (India - 38.4%) and almost 40% are underweight (India 45.9%).

Compared with urban areas, under nutrition is higher in rural and tribal areas. Similar to the national picture, there is a strong correlation between child malnutrition and the level of maternal education showing a two-fold difference between non-educated and well educated mothers. The stunting and underweight prevalence for children with illiterate mothers is 52.9% and 53.1% respectively contrasted with 22.9% and 25.9% for children with well educated mothers. The stark difference may be linked to access to nutritious diet and complementary feeding at 6-9 months. One of the very important nutrition required for human body is Protein. It is a nutrient needed by the human body for growth and maintenance. Aside from water, protein is the most abundant molecule in the body.

Protein is found in all cells of the body and is the major structural component of all cells in the body, especially muscle. Protein is needed to form blood cells. The deficiency of protein could lead to many harmful effects on human body like, reduced intelligence or mental retardation.

Description: Soya Milk as source of Protein:

Soya bean is one of the best sources of Protein. Mahatma Gandhi introduced soya bean in India in 1935 in the form of cooked whole or split beans. Soybean, with over 40 percent protein and 20 percent oil, has now been recognized all over the world as a potential supplementary source of edible oil and nutritious food. The protein of soybean is called a complete protein, because it supplies sufficient amounts of the kinds of amino acids required by the body for building and repair of tissues and supports to overcome malnutrition.

Soybean is a rich source of edible oil containing no cholesterol and almost none of the saturated fats. One of the nutritious products of soya bean is "Soya milk". Its nutritional benefits are attracting many the masses at large.

This is the best alternative for cow's milk. Soy milk (also called soya milk, soymilk, soybean milk, or soy juice) and sometimes referred to as soy drink/beverage is a beverage made from soybeans.

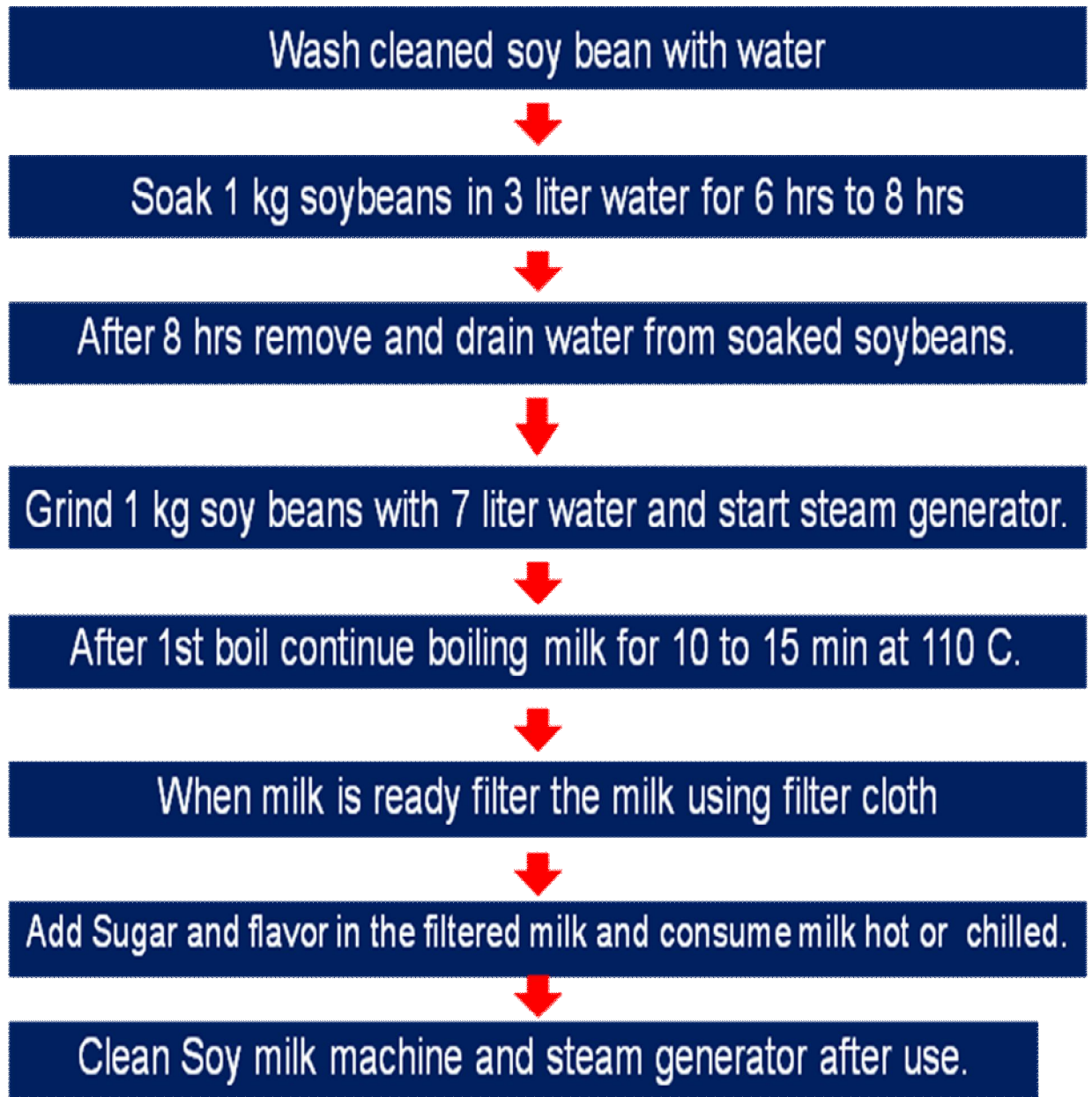
A stable emulsion of oil, water, and protein, it is produced by soaking dry soybeans and grinding them with water. Soy milk contains about the same proportion of protein as cow's milk:

Soya Milk Production Machine:



Figure 1- Soya Milk Manufacturing Machine

Soya Milk Manufacturing Process:-





(1) Soak 1 Kg soy beans in water for 6 – 8 hrs and drain it.



(2) Grind soaked soy beans with water and start steam generator.



(3) Close the Door of Cooker and Boil milk at 110 Deg C for 10 to 15 min



(4) Filtered boiled Milk with help of Sieve Add Sugar and flavour as required.

Soya Milk Nutritional value Test Report



envirocare labs pvt. ltd.
Analysis and Beyond...

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TEST REPORT

Sample /Report No.	TH/F/07/11/038		
Name of Customer Address of Customer	M/s International Knowledge Foundation. Villoli, Opp. Jain Mandir, Mumbai-Agra road, Nashik – 422010		
Order / Reference	Letter Dated : 03.07.2011		
Nature of Sample	Soya Milk		
Sample drawn by	Customer	Sample received on	04.07.2011
Start of Analysis	05.07.2011	End of Analysis	08.07.2011
Sample container	Plastic Bottle	Sample Quantity	500 ml Approx.

Parameter	Results per 100 ml	Units	Method
Energy	67.0	Kcal	Pearson's composition and analysis of food
Fat	1.6	gm	IS 1479 (Part II):1961 (RA 2009)
Protein	2.1	gm	IS:7219:1973 RA 2010
Carbohydrate	11.1	gm	IS 1656: 2007
Sugar	9.4	gm	IS 6287-1985 RA 2010
Calcium	7.85	mg	AOAC 985.35


Sujata Chivate
Manager-Food


Dr. N. S. Amritkar
Director

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Recognised by Ministry of
Environment & Forests, Govt. of India.

ISO
17025 : 2005

ISO
9001 : 2008

BIS
Recognised

Soya Milk Distribution to Children's



At Rajwada Anganwadi



At Sangharsh Nagar Anganwadi



At Koliwada Anganwadi



At Bajarangwadi Anganwadi

POWERDEAL ENERGY SYSTEMS (I) PVT. LTD.
SOYA MILK EXTRACTION
BROAD FINANCIAL

PRODUCTS

Main Product	Soya Milk
By Product	Soya Dros

PLANT LOCATION

Soya Milk Extraction Unit	Across the Districts of Madhya Pradesh
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PLANT CAPACITY

Soya Bean Crushing capacity	10.00	Kg/ Day
Soya Milk Recovery (@ 6.5 Ltr. / Kg.)	65.00	Ltr. / Day
Working Days	300	Days / Year
PLANT CAPACITY	19500.00	Ltr. / Year
Soya Dros(25% of Soya Bean processed)	2.50	KG/ DAY
Soya Dros per annum	750	Kg/ Year

RAW MATERIALS

Particular		
Soya Bean	10.00	Kg
Water	70.00	Ltr
Suger	1.00	Kg

INPUTS OF RAW MATERIALS

Soya Bean	10.00	Kg/ Day
Soya Bean Rate	15.00	Rs. / Kg
Cost of Soyabean	150.00	Rs. / Day

Water	70.00	Ltr. / Day
Rate Per/Ltr	0.10	Rs. / Ltr
Cost of Water	7.00	Rs. / Day

Suger	1.00	Kg / Day
Sugar Rate	22.00	Rs. / Kg
Cost of Sugar	22.00	Rs. / Day
Material Cost Per Day	179.00	Rs./ Day
Operating Overheads 10 % on material cost	17.90	Rs./Day
Total Cost per day	196.90	Rs./Day
Total Cost per annum (Considering 300 days Working) (A)	59070.00	Rs./ Year
Amount in Lacs	0.59	Lacs/Year

REVENUE

SOYA Milk PRODUCTION	250	Ltr/ Day
Revenue From Soya Milk @ 9/- per Ltr	585.00	Rs.Per / Day
Revenue from Soya Dros @ 2.25/- Per Kg	5.63	Rs.Per / Day
TOTAL Revenue Per Day	590.63	Rs./ Day
Annual revenue (Considering 300 days Working) (B)	177187.50	Rs. / Year
Amount in Lacs	1.77	Lacs/ Year
Approx Surplus (B) - (A)	118117.50	Year
Amount in Lacs	1.18	Lacs/ Year

PAYBACK PERIOD

Cost of 1 Soya Milk Unit	100000	Rs./ Each
Surplus Revenue Per Day	393.73	Rs./ Day
Payback Period in Days	253.98	Days
Payback Period in Month	8	Month
Payback in Rs.	150009.52	Rs.