

# Resin Epoxy Adhesive and Hardener Manufacturing Industry.

## Two-Part Epoxy Adhesives.

### Adhesive Based on Epoxy Resin (Two Part)



# Introduction

**Epoxy adhesives are high strength adhesives used extensively across various industries. They are made of epoxy resins, which are in turn made up of the chemical Bisphenol A. Epoxy adhesives can be used for adhesion of numerous substrates such as wood, metals, plastics, glass and stones. After application, epoxy adhesives require time for curing or setting. This can be done with the help of heat or by exposure to ultra violet light or at room temperature.**



**The epoxy adhesives cured by exposure to ultra violet light are used to manufacture fiber optics and opto electronics. Epoxy adhesives have strong adhesion which makes them the most commonly used structural adhesives.**

**Epoxy resin adhesives have many uses in industrial applications. They generally consist of resin and hardening agents. Curing epoxy adhesives can take place either at room or elevated temperature, or through photoinitiators and UV light. Modern photoinitiators also react to the special UV spectrum of LED light sources, so that newly developed epoxide resin adhesives can be cured with both UV and UV LED light.**



## **Benefits of Epoxy Adhesives:**

- **Good resilience against environmental and media influences**
- **Epoxies can be used at higher temperatures**
- **Epoxy adhesives feature high glass transition temperatures**
- **Cured epoxy adhesives usually have dry, non-tacky surfaces, making them suitable also as one-sided protective coatings**
- **Some epoxies exhibit very good optical properties and diffraction indexes, making them useful for applications in precision optics, lens bonding and information technology**
- **The epoxide ring created in the cross-linking reaction significantly reduces shrinkage**
- **Epoxy adhesives have an extremely low ionic content and low alkaline and halogen content, down to less than 10 ppm**

- **Epoxy adhesives have an extremely low ionic content and low alkaline and halogen content, down to less than 10 ppm**
- **Epoxy adhesives offer a wide range of different material characteristics: from flexible and soft with high elongation at break to hard and scratch-resistant with extremely high bond strength**

**When considering the effectiveness of an epoxy adhesive, it is useful to analyze the general formulation of the compounds that constitute it.**

**Epoxies are created by polymerizing a mixture of two starting compounds, the resin and the hardener. When resin is mixed with a specified catalyst, curing is initiated. Curing is the process by which molecular chains react at chemically active sites, resulting in an exothermic reaction.**

**Covalent bonds between the epoxide groups of the resin and the amine groups of the hardener (catalyst) that arise from this combination afford for the cross-linkage of the polymer, and thereby dictate the rigidity and strength of the epoxy.**

**Epoxy adhesives adhere to a wide variety of materials, and their properties are dependent upon the specific chemistry of the system and the nature of the cross-linking available. Some of the most important performance requirements include exceptional chemical and heat resistance, excellent adhesion and water resistance as well as satisfactory mechanical and electrical insulating properties.**



## **Market Outlook**

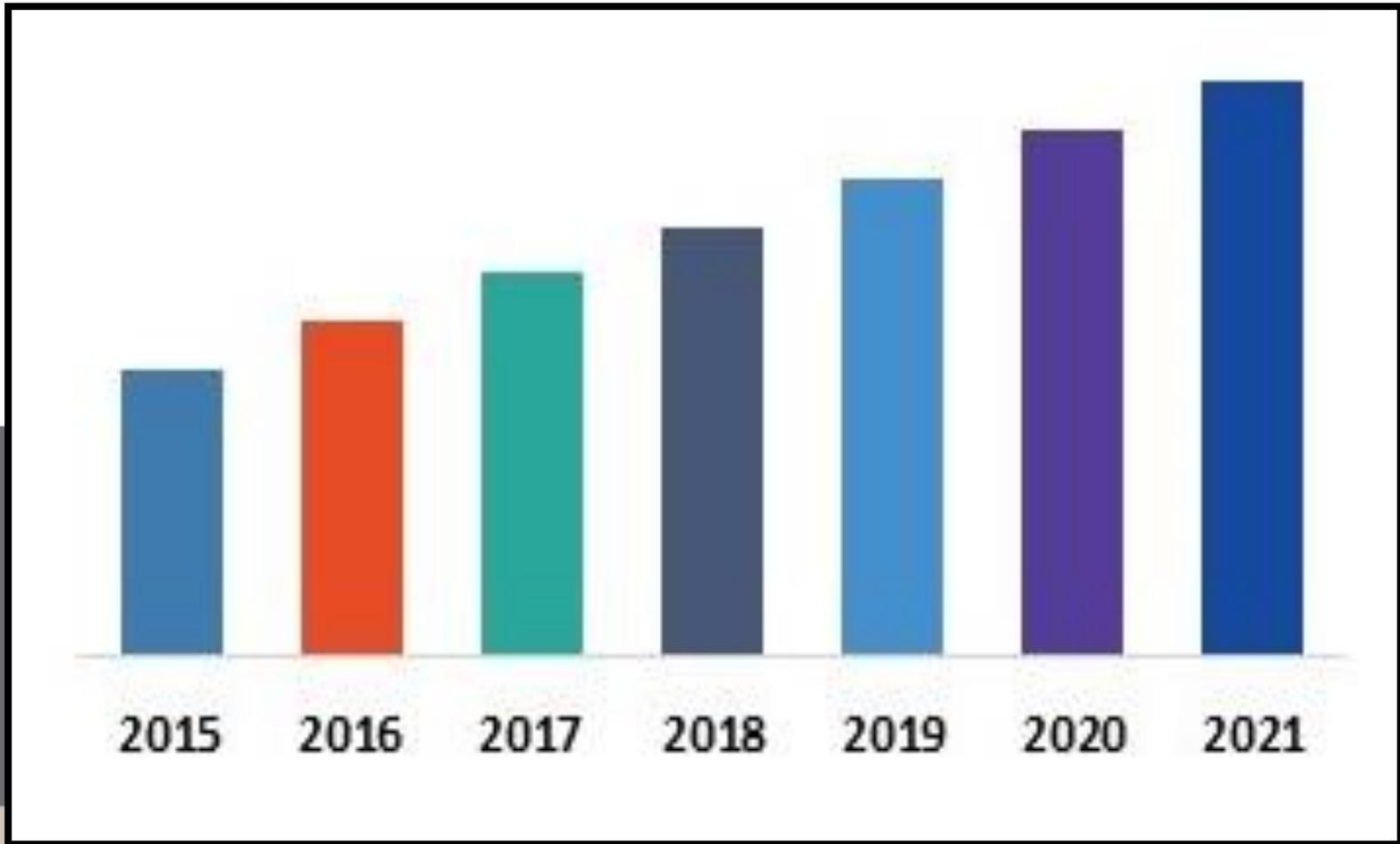
**The global epoxy adhesives market is estimated to grow from USD 5.33 Billion in 2015 to USD 10.13 Billion by 2026, at a CAGR of 6.63% from 2016 to 2026. The market is driven by the increasing trend towards the manufacture of light weight & low carbon emitting vehicles.**

**Epoxy adhesives are broadly used in automotive, semiconductor, building & construction and aerospace industry. Aerospace and semiconductor industries are highly consuming epoxy adhesives thus driving the market growth. In the aerospace industry, the blades of the aircraft are connected by using epoxy adhesives. The epoxy adhesives possess properties such as temperature and pressure variations and resistance to creep under sustained load hence it is widely used in aerospace industry.**

**In the semiconductor industry, epoxy adhesives are used for manufacturing of integrated circuits and transistors and printed circuit boards. The increase in the industries that consume epoxy adhesives has grown considerably thus fueling the market growth. In addition, advanced technology is used to make adhesives safer for humans which in turn opens up new growth opportunities. Conversely, toxic fumes are emitted during the application of epoxy adhesives which restrains the global epoxy adhesives market growth to some extent.**



## Epoxy Adhesive Market Revenue, 2015-2021 (\$Bns)



**Epoxy adhesives find extensive use in aerospace, automotive, building & construction and semiconductor industry. Of these industries, aerospace and semiconductor industries are the two major consumers of epoxy adhesives. The growth of the aerospace industry is a key driver for the growth of epoxy adhesives market. The blades of aircrafts are joined using epoxy adhesives. Due to the superior mechanical properties of epoxy adhesives, such as resistance to creep under sustained load, temperature and pressure variations, they are the adhesives of choice for the aerospace industry. The semiconductor industry makes use of epoxy adhesives to manufacture printed circuit boards, integrated circuits and transistors. The semiconductor industry is growing exponentially due to the increase in usage of electronic gadgets. This is driving the market of epoxy adhesives.**

**However, the application of epoxy adhesives must be carried out with protective gear owing to the toxic fumes which are emitted during its application. Technological advances to make the adhesives safer for humans during application are expected to open new areas of opportunity for the market of epoxy adhesives.**

**On the basis of application, the global epoxy adhesives market has been segmented into building and construction, transportation, wind energy, electrical and electronics, automotive, marine and others. The increasing construction of buildings, malls, airports, and railway stations are the major drivers of the global epoxy adhesives market. Additionally, growing urbanization is driving the building and construction market in the ASEAN countries, which in turn is expected to further enhance the consumption of epoxy adhesives, during the forecast period (2016-2022).**

**The epoxy adhesive exhibit better chemical, mechanical and electrical also satisfactory mechanical insulating properties over the conventional adhesives technologies. Owing to these properties epoxy adhesives have found usage into various end user industries that include aviation & aerospace, automotive, construction industry, marine, wind power industry, electrical & electronics, and others. Furthermore many metals are attached using epoxy adhesives because of their high strength and water proof properties.**

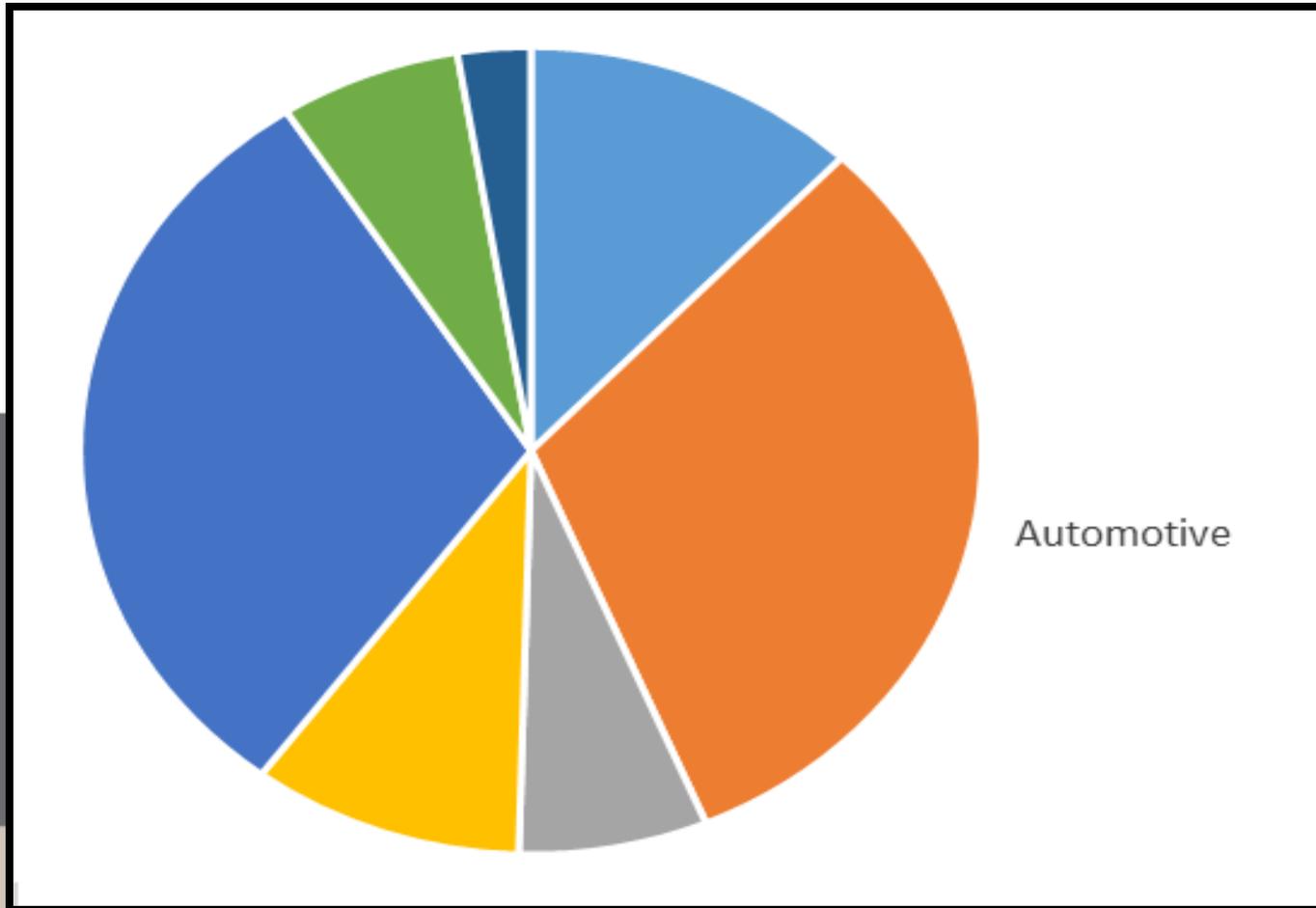
**Epoxy adhesives possess exceptional chemical and heat resistance, excellent adhesion and water resistance as well as satisfactory mechanical and electrical insulating properties. Epoxy adhesives provide high strength and temperature resistance which enhance the rigidity and reduce noise of automotive components such as turbines and blades.**

**Epoxy adhesives used in automotive applications can provide better adhesion between distinct substrates such as steel and plastics. These composites are used in doors, window glass attachments, brakes and clutch plates and so on.**

**Growing demand for passenger cars in developing countries such as China and India, is expected to impact the epoxy adhesives market growth.**



# Global Epoxy Adhesive Market: Revenue (%), By End-user Industry, 2017



Automotive

**The key players operating in the global epoxy adhesives market include Henkel AG & Co. KGaA, 3M Company, Sika A.G., Ashland Inc., The Dow Chemical Company, Lord Corporation, Huntsman Corporation, Illinois Tool Works Inc., and Permabond LLC.**



# Machinery Photographs



**Reactor**



**Boiler**



**Packing Machine**



**Ultra Filter**

# Project at a Glance

COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existin g	Propose d	Total	Particulars	Existin g	Propose d	Total
Land & Site							
Development Exp.	0.00	110.00	110.00	Capital	0.00	174.52	174.52
Buildings	0.00	70.20	70.20	Share Premium	0.00	0.00	0.00
				Other Type Share			
Plant & Machineries	0.00	161.50	161.50	Capital	0.00	0.00	0.00
Motor Vehicles	0.00	8.00	8.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation							
Equipments	0.00	27.00	27.00	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow				Internal Cash			
Fees & Exp.	0.00	15.00	15.00	Accruals	0.00	0.00	0.00
Franchise & Other				Long/Medium Term			
Deposits	0.00	0.00	0.00	Borrowings	0.00	523.56	523.56
Preliminary& Pre- operative Exp	0.00	5.00	5.00	Debentures / Bonds	0.00	0.00	0.00
Provision for				Unsecured			
Contingencies	0.00	16.00	16.00	Loans/Deposits	0.00	0.00	0.00
Margin Money - Working Capital	0.00	285.38	285.38				
<b>TOTAL</b>	<b>0.00</b>	<b>698.08</b>	<b>698.08</b>	<b>TOTAL</b>	<b>0.00</b>	<b>698.08</b>	<b>698.08</b>

# Project at a Glance

Year	Annualised		Book Value	Debt	Dividend	Retained Earnings		Payout	Probable Market Price	P/E Ratio	Yield Price/Book Value
	EPS	CEPS				Per Share	Per Share				
1-2	7.25	9.46	17.25	24.00	0.00	100.00	7.25	0.00	7.25	1.00	0.00
2-3	9.95	11.87	27.19	18.00	0.00	100.00	9.95	0.00	9.95	1.00	0.00
3-4	12.84	14.51	40.03	12.00	0.00	100.00	12.84	0.00	12.84	1.00	0.00
4-5	15.65	17.10	55.67	6.00	0.00	100.00	15.65	0.00	15.65	1.00	0.00
5-6	18.34	19.61	74.02	0.00	0.00	100.00	18.34	0.00	18.34	1.00	0.00

# Project at a Glance

Year	D. S. C. R.			Debt / - Deposits Debt	Equity as- Equity	Total Net Worth	Return on Net Worth	Profitability Ratio					Assets Turnover Ratio	Current Ratio
	Individual	Cumulative	Overall					GPM	PBT	PAT	Net Contribution	P/V Ratio		
Initial	(Number of times)			(Number of times)		%	%	%	%	%		%		
1-2	1.37	1.37		3.00	3.00						837.00	5.96%	5.09	1.11
2-3	1.68	1.52		0.66	0.66	5.65					903.24	5.51%	5.21	1.14
3-4	2.08	1.69	2.08	0.30	0.30	4.18					1030.52	5.50%	5.19	1.17
4-5	2.55	1.88		0.11	0.11	3.24					1157.81	5.50%	5.12	1.22
5-6	3.11	2.08		0.00	0.00	2.62					1285.10	5.49%	5.01	1.30



# Project at a Glance

## BEP

BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	57.95%
Total BEP (% of Installed Capacity)	59.68%
IRR, PAYBACK and FACR	
Internal Rate of Return .. ( In %age )	32.27%
Payback Period of the Project is ( In Years )	2 Years 3 Months
Fixed Assets Coverage Ratio ( No. of times )	87.857

# Major Queries/Questions Answered in the Report?

- 1. What is Epoxy Adhesive Manufacturing industry ?**
- 2. How has the Epoxy Adhesive Manufacturing industry performed so far and how will it perform in the coming years ?**
- 3. What is the Project Feasibility of Epoxy Adhesive Manufacturing Plant ?**
- 4. What are the requirements of Working Capital for setting up Epoxy Adhesive Manufacturing plant ?**

- 5. What is the structure of the Epoxy Adhesive Manufacturing Business and who are the key/major players ?**
- 6. What is the total project cost for setting up Epoxy Adhesive Manufacturing Business?**
- 7. What are the operating costs for setting up Epoxy Adhesive Manufacturing plant ?**
- 8. What are the machinery and equipment requirements for setting up Epoxy Adhesive Manufacturing plant ?**

**9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up Epoxy Adhesive Manufacturing plant ?**

**10. What are the requirements of raw material for setting up Epoxy Adhesive Manufacturing plant ?**

**11. Who are the Suppliers and Manufacturers of Raw materials for setting up Epoxy Adhesive Manufacturing Business?**

**12. What is the Manufacturing Process of Epoxy Adhesive?**

- 13. What is the total size of land required for setting up Epoxy Adhesive Manufacturing plant ?**
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# Reasons for Buying our Report:

- **This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product**
- **This report provides vital information on the product like it's characteristics and segmentation**
- **This report helps you market and place the product correctly by identifying the target customer group of the product**

- **This report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials**
- **The report provides a glimpse of government regulations applicable on the industry**
- **The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions**

# Our Approach:

- **Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.**
- **The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players**
- **We use reliable sources of information and databases. And information from such sources is processed by us and included in the report**

## ***Scope of the Report***

The report titled “Market Survey cum Detailed Techno Economic Feasibility Report on Adhesive Based on Epoxy Resin.” provides an insight into Epoxy Adhesive market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of Epoxy Adhesive project. The report assesses the market sizing and growth of the Indian Epoxy Adhesive Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- **Good Present/Future Demand**
- **Export-Import Market Potential**
- **Raw Material & Manpower Availability**
- **Project Costs and Payback Period**

**We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in the Epoxy Adhesive sector in India along with its business prospects. Through this report we have identified Epoxy Adhesive project as a lucrative investment avenue.**

# Tags

#Epoxy\_Adhesive\_Formulations, #Epoxy\_Adhesive, Epoxy Adhesive Formulations Business, #Epoxy\_Adhesive\_Formulations\_for\_Manufacturing, #Epoxy\_Adhesive\_and\_Epoxy\_Glue, Manufacture of Adhesives, Industrial Adhesive Manufacturing, #Epoxy\_Adhesives\_Production, Preparation of Epoxy Adhesive, Epoxy Adhesive Manufacturing, Epoxy Resin Adhesives, Epoxy Resin Adhesives, Manufacture of Adhesives, Epoxy Adhesives Manufacture, #Epoxy\_Adhesive\_Manufacture\_in\_India, Epoxy Adhesive Uses, #Epoxy\_Adhesive\_Industry, Epoxy Resin-Based Adhesives, Adhesive Based on Epoxy Resin, Epoxy Adhesive Composition, Epoxy Resin-Based Adhesives, Epoxy Resin Adhesive, Epoxy Based Adhesive, #Project\_Report\_on\_Epoxy\_Adhesive\_Manufacturing\_Industry, Detailed Project Report on Epoxy Adhesive Manufacturing, Project Report on Epoxy Adhesives Production, Pre-Investment Feasibility Study on Epoxy Adhesives Production, Techno-Economic feasibility study on Epoxy Adhesives Production, #Feasibility\_report\_on\_Epoxy\_Adhesives\_Production, Free Project Profile on Epoxy Adhesive Industry, #Project\_profile\_on\_Epoxy\_Adhesive\_Industry, Download free project profile on Epoxy Adhesive Formulations, Two-Part Epoxy Adhesives Araldite type, Araldite type Standard Resin Epoxy Adhesive & Hardener, Araldite type Standard Epoxy Adhesive, Acratite type Epoxy Resin-Hardener - Strong Adhesive, Epoxy & Accessories - Glues & Epoxy, Epoxy Resin and Hardener Araldite Type

**Niir Project Consultancy Services (NPCS)**  
**can provide Detailed Project Report on**  
**Resin Epoxy Adhesive and Hardener**  
**Manufacturing Industry.**  
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**NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.**

**Our Market Survey cum Detailed Techno Economic Feasibility Report provides an insight of market in India. The report assesses the market sizing and growth of the Industry. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.**



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- **Export-Import Market Potential**
- **Raw Material & Manpower Availability**
- **Project Costs and Payback Period**

**The detailed project report covers all aspect of business, from analyzing the market, confirming availability of various necessities such as Manufacturing Plant, Detailed Project Report, Profile, Business Plan, Industry Trends, Market Research, Survey, Manufacturing Process, Machinery, Raw Materials, Feasibility Study, Investment Opportunities, Cost and Revenue, Plant Economics, Production Schedule,**



**Working Capital Requirement, uses and applications, Plant Layout, Project Financials, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis. The DPR (Detailed Project Report) is formulated by highly accomplished and experienced consultants and the market research and analysis are supported by a panel of experts and digitalized data bank.**

**We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in India along with its business prospects.....[Read more](#)**



# Contact us

## **NIIR PROJECT CONSULTANCY SERVICES**

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# **Niir PROJECT CONSULTANCY SERVICES**

**An ISO 9001:2015 Company**



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## Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*



*We at NPCS want to grow with you by providing solutions scale to suit your new operations and help you reduce risk and give a high return on application investments. We have successfully achieved top-notch quality standards with a high level of customer appreciation resulting in long lasting relation and large amount of referral work through technological breakthrough and innovative concepts. A large number of our Indian, Overseas and NRI Clients have appreciated our expertise for excellence which speaks volumes about our commitment and dedication to every client's success.*



*We bring deep, functional expertise, but are known for our holistic perspective: we capture value across boundaries and between the silos of any organization. We have proven a multiplier effect from optimizing the sum of the parts, not just the individual pieces. We actively encourage a culture of innovation, which facilitates the development of new technologies and ensures a high quality product.*



## What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Market Research Reports*
- *Business Plan*
- *Technology Books and Directory*
- *Industry Trend*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
- *Entrepreneur India (An Industrial Monthly Journal)*

## How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*



# Our Approach

**Requirement collection**

**Thorough analysis of the project**

**Economic feasibility study of the Project**

**Market potential survey/research**

**Report Compilation**

# Contact us

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