

Power Cables

Electrical Power and Industrial Cable, Electrical Wire, PVC Wire and Cables

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, Plant Layout, Process Flow Sheet, Cost of Project, Projected Balance Sheets, Profitability Ratios, Break Even Analysis

Introduction

Electrical power cables used for transmission and distribution purposes consist of conductors stranded from plain high conductivity annealed copper wires insulated with oil impregnated paper tapes. Under ground construction is necessitated in the more density built up portions of cities by the heavy transformers and lines required and by the multiplication of service connections to buildings.

The cable may include uninsulated conductors used for the circuit neutral or for ground (earth) connection.

Power cables are primarily used for overhead lines and underground cabling applications and can be broadly classified into three categories based on their operating voltage applications. The prospects for growth in this market will be impelled by the rising demand for high-temperature, superconducting cables from the power utility sector. A superconducting high-power transmission and distribution cable is capable of transmitting and distributing about 5-10 times the electrical current carried by a conventional copper or aluminum cable.

The overall assembly may be round or flat. Non-conducting filler strands may be added to the assembly to maintain its shape. Special purpose power cables for overhead or vertical use may have additional elements such as steel or Kevlar structural supports.

Some power cables for outdoor overhead use may have no overall sheath. Other cables may have a plastic or metal sheath enclosing all the conductors. The materials for the sheath will be selected for resistance to water, oil, sunlight, underground conditions, chemical vapors, impact, or high temperatures.

In nuclear industry applications the cable may have special requirements for ionizing radiation resistance. Cable materials may be specified not to produce large amounts of smoke if burned. Cables intended for underground use or direct burial in earth will have heavy plastic or metal, most often lead sheaths, or may require special direct-buried construction.

Wires and cables sector basically consists of two areas: (i) power; and (ii) telecommunication. Power cables are PVC or PE clad, while the cables for telecommunication sector are based on PE (Polyethylene).

Power cables are of 3 types depending on the intensity of power. Low-tension sector requires cables upto 1.1 KV and predominantly uses PVC insulation and jacketing. The medium tension power cables between 1.1 KV and 11 KV are based on PE as well as PVC. The high tension sector beyond 11 KV uses PE only. The low tension cables are used for tertiary distribution of power mainly from substations to buildings. Housing Sector requires many other products for myriad applications. The medium tension cables generally use crosslinkable PE compounds while the high-tension cables use continuous vulcanisation cables made from PE (LDPE).

The cable market is segmented by the combination of material used to form the conductor, the insulator, sheathing and armouring. Basically, the following types are produced and used:

- 1. Paper insulated lead cables (PILC) upto 33 KV.**
- 2. Polyvinyl chloride (PVC) insulated power and control cables upto 11 KV.**
- 3. Cross-linked polyethylene (XLPE) power cables upto 33 KV.**
- 4. XLPE insulated extra high voltage (EHV) cables from 66 KV to 230 KV.**

The Indian power cable industry has about a dozen producers in the organized sector, claiming more than two-thirds share of the market. The unorganized sector is constituted of a few small units. The divergence in the two segments goes beyond their unit sizes. The two sectors exhibit significant differences in quality and the capacities. While the organized sector has been manufacturing high voltage and specialty cables, the unorganized sector limits itself to the relatively low voltage market. The organized segment caters also to the industrial market. The State Electricity Boards remain the major buyers. Small buyers of power cables also include companies having their own power distribution within plant limits.

PVC coated cables and wires are extensively used in all electrical linings, domestic lightings and all other purposes.

According to the present policy of the India Government, this time, PVC coating on electric cables and wire is exclusively reserved for development in small scale sector or in the cottage industries. The demand for PVC coating electrical wires is increasing at a rapid rate. There is a bright scope for starting new units in this field.

Reasons for buying the 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 Power Cable” provides an insight into the Power Cable market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of Power Cable project. The report assesses the market sizing and growth of the Indian Power Cable 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 Power Cable sector in India along with its business prospects. Through this report we have identified Power Cable project as a lucrative investment avenue.

Project at a Glance

Plant Capacity	:	2050 MT Aluminium Power Cable/Annum : 350 MT Copper Power Cable/Annum
Plant & Machinery	:	Rs. 80 Lakh
Cost of Project	:	Rs. 305 Lakh
Rate of Return	:	45%
Break Even Point	:	60%

Major Queries/Questions Answered in the Report?

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

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

- 9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up a Power Cable plant ?**
- 10. What are the requirements of raw material for setting up a Power Cable plant ?**
- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up a Power Cable plant ?**
- 12. What is the Manufacturing Process and Formulations of a Power Cable plant ?**

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- 17. What is the Built up Area Requirement and cost for setting up a Power Cable Business?**

18. What are the Personnel (Manpower) Requirements for setting up a Power Cable Business?

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can provide Detailed Project Report on
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Niir PROJECT CONSULTANCY SERVICES

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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*

What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Market Research Reports*
- *Technology Books and Directory*
- *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

Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

Sectors We Cover *Cont...*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

Sectors We Cover *Cont...*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

Sectors We Cover *Cont...*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitality Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

Sectors We Cover *Cont...*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover *Cont...*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

Sectors We Cover *Cont...*

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

Sectors We Cover *Cont...*

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- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
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- *Wire & Cable*

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