Optical Fiber Cable (OFC) Manufacturing Industry.

Production of Fiber Optic Cables.

How to Start Your Own Cable Manufacturing Business

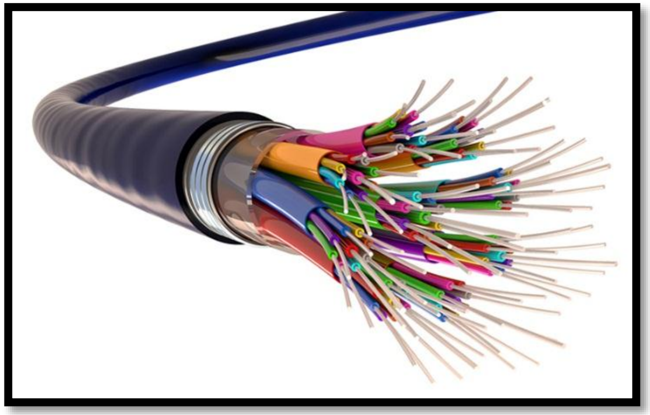



[NPCS/2117/23382]

www.entrepreneurindia.co

Introduction

An optical fiber cable is a type of cable that has a number of optical fibers bundled together, which are normally covered in their individual protective plastic covers. Optical cables are used to transfer digital data signals in the form of light up to distances of hundreds of miles with higher throughput rates than those achievable via electrical communication cables. All optical fibers use a core of hair-like transparent silicon covered with less refractive indexed cladding to avoid light leakage to the surroundings.



Uses of Fiber Optic Cables:

Fiber optic cables find many uses in a wide variety of industries and applications. Some uses of fiber optic cables are described below:

- **Medical**

It is used as light guides, imaging tools and also as lasers for surgeries.

- **Defense/Government**

It is used as hydrophones for seismic and sonar purposes, as wiring in aircraft, submarines and other vehicles and as well as for field networking.

- **Data Storage**

It can be used for data transmission.

- **Telecommunications**

Fiber is laid and used for transmitting and receiving purposes.

- **Networking**

It can be used to connect users and servers in different network settings and can also help increase the speed and accuracy of data transmission.

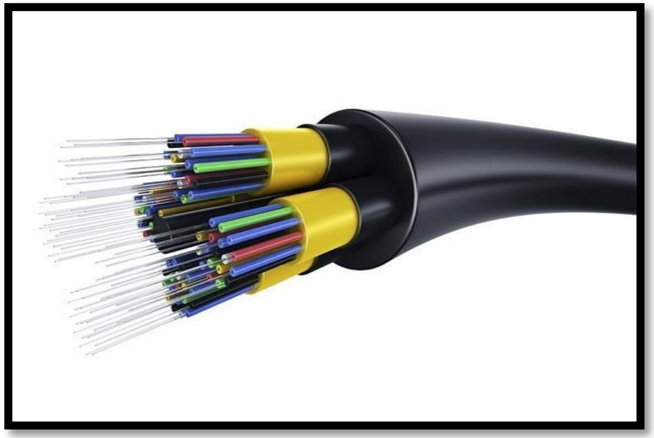
- **Industrial/Commercial**

It is also used for imaging in difficult to reach areas viz a viz as wiring where EMI is an issue, or as a sensory device used to make temperature, pressure and other measurements, as wiring in automobiles and in industrial settings.

- **Broadcast/CATV**

It is no news that broadcast and cable companies are making use of fiber optic cables for wiring CATV, HDTV, internet, video on-demand and other applications.

Fiber optic cables can be used for lighting as well as imaging and sensors to measure and monitor a vast array of variables. They can also be used in research and development as well as testing across all the above-mentioned industries.



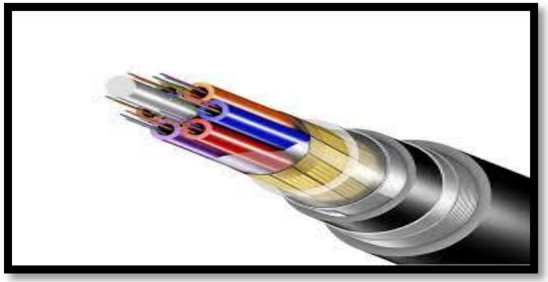
Advantages of Optical Fiber Cable:

- **Bandwidth**

Fiber optic cables have a much greater bandwidth than metal cables. The amount of information that can be transmitted per unit time of fiber over other transmission media is its most significant advantage.

- **Low Power Loss**

An optical fiber offers low power loss, which allows for longer transmission distances. In comparison to copper, in a network, the longest recommended copper distance is 100m while with fiber, it is 2km.



- **Interference**

Fiber optic cables are immune to electromagnetic interference. It can also be run in electrically noisy environments without concern as electrical noise will not affect fiber.

- **Size**

In comparison to copper, a fiber optic cable has nearly 4.5 times as much capacity as the wire cable has and a cross sectional area that is 30 times less.

- **Weight**

Fiber optic cables are much thinner and lighter than metal wires. They also occupy less space with cables of the same information capacity. Lighter weight makes fiber easier to install.

- **Security**

Optical fibers are difficult to tap. As they do not radiate electromagnetic energy, emissions cannot be intercepted. As physically tapping the fiber takes great skill to do undetected, fiber is the most secure medium available for carrying sensitive data.

- **Flexibility**

An optical fiber has greater tensile strength than copper or steel fibers of the same diameter. It is flexible, bends easily and resists most corrosive elements that attack copper cable.

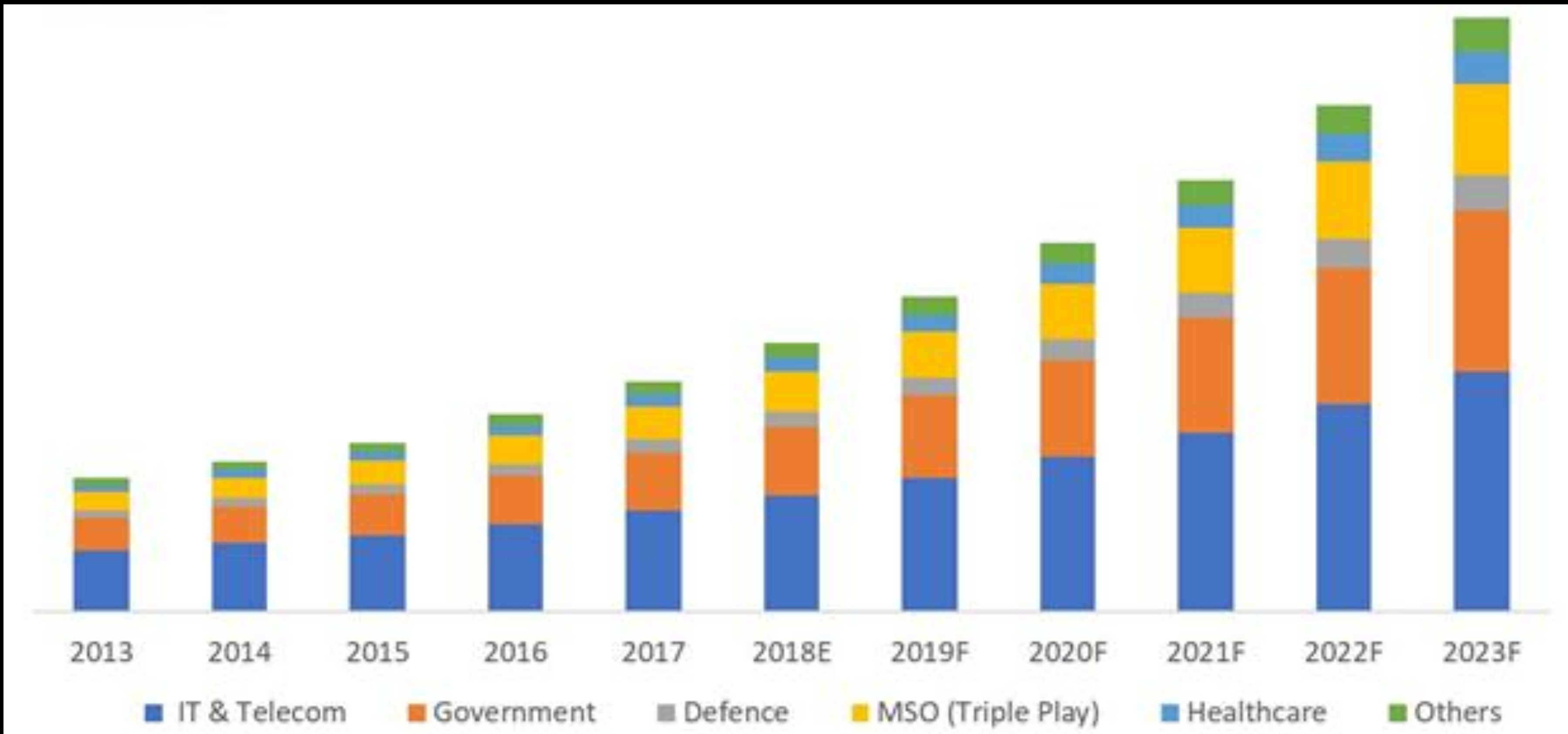
- **Cost**

The raw materials for glass are plentiful, unlike copper. This means glass can be made more cheaply than copper.

Market Outlook

India optical fiber cables (OFC) market is projected to grow at a CAGR of 17% through 2023. Growth in the market is majorly expected to be backed by rising investments in OFC network infrastructure by the Indian government to increase internet penetration across the country, which is in line with the government's initiatives such as Smart Cities Vision and Digital India. Moreover, growing demand for OFC from IT & telecom sector, rising number of mobile devices, increasing adoption of FTTH (Fiber to the Home) connectivity and surging number of data centers is anticipated to fuel optical fiber cables market in India over the coming years.

India Optical Fiber Cable Market Size, By End User, By Value, 2013-2023F



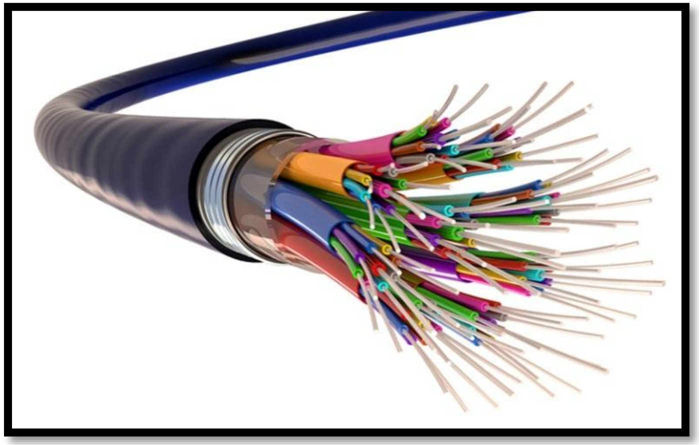
A huge number of working class population in India own high-end smartphones supporting various technologies such as Wi-Fi, 3G, etc. This class of consumers, in particular, is boosting the demand for on-the-go high speed data services. As a result, the government of India has announced various projects to build and strengthen OFC network for addressing the country's increasing data transmission requirements. In addition, digitization of cable TV network has been mandated in the country, which is further propelling the demand for OFC network. Currently, the major users of OFCs include telecom service providers, internet service providers, multiple system operators, Cable TV operators, defense agencies and PSUs among others.

The market is projected to grow at a CAGR of 17% through 2023 in India. Growth in the market is majorly expected to be backed by rising investments in OFC network infrastructure by the Indian government to increase internet penetration across the country, which is in line with the government's initiatives such as Smart Cities Vision and Digital India.

Consumers are increasingly shifting towards internet driven applications like HDTV, video on demand and high-speed file sharing. To address the soaring demand for high speed data transmission, the government of India along with telecom giants is investing substantial capital in upgrading the country's telecom infrastructure.

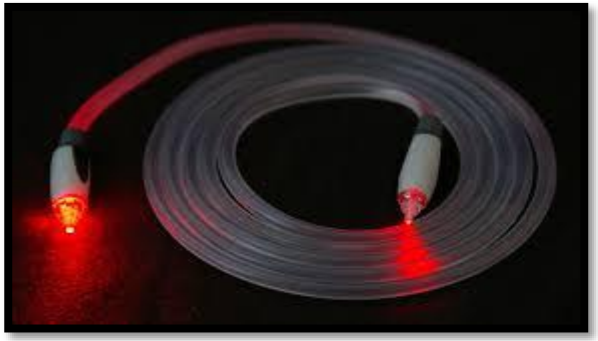
The existing network of copper cables is being over hauled by using advanced fiber optic technology. All these factors are consequently providing a considerable thrust to the OFC market in India.

The global fiber optics market size was valued at USD 5.41 billion in 2015 and is expected to gain traction over the forecast period. The global fiber optics market is majorly driven by the pursuit of high bandwidth communication and growing opportunities in the healthcare sector along with increasing government funding in the development of network infrastructure.

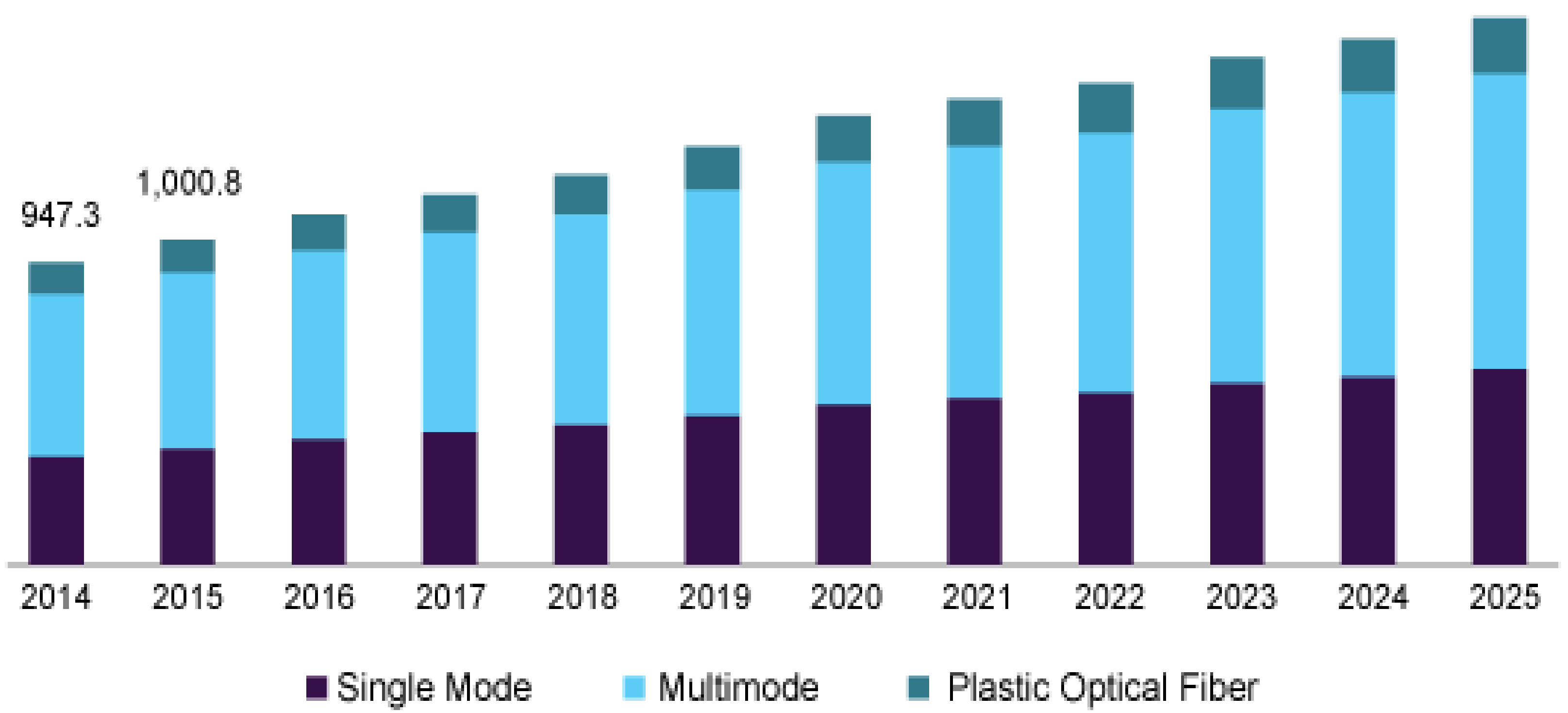


Global Fiber Optic Cables Market

The global fiber optics market is anticipated to witness a substantial growth over the forecast period. The high demand for optical communication and sensing applications for diverse purposes provides avenues for industry growth. Furthermore, the growing demand for cost-effective, power-efficient, and high-level integration of IT infrastructure is expected to impel market demand in the next few years. However, factors such as capital investment, used in the development of the new fabrication technologies, may pose a challenge to the market demand over the forecast period.



U.S. Fiber Optics Market Size by Type, 2014-2025 (USD Million)



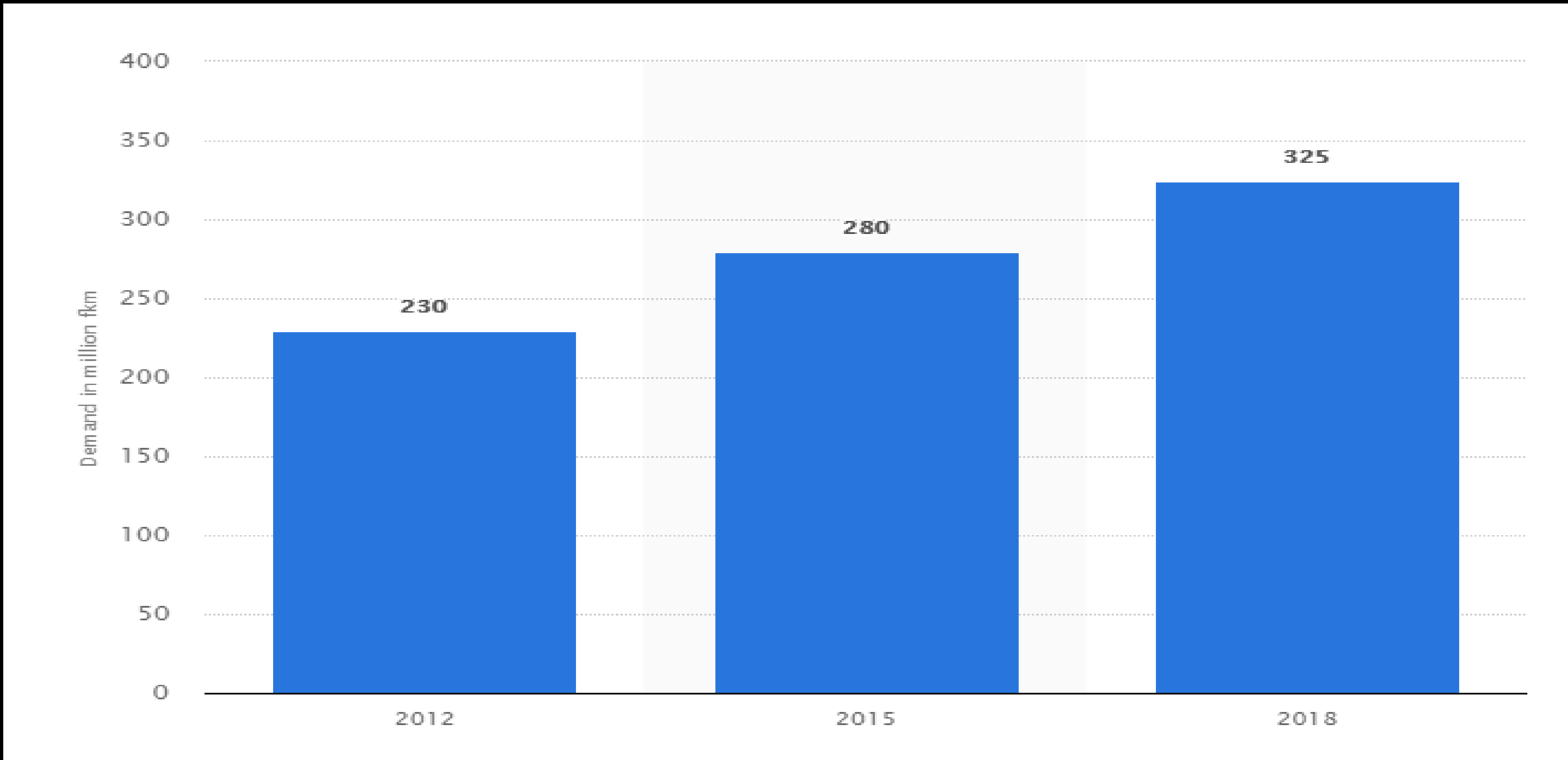
The most prominent factor driving the fiber optic cables market growth is rapidly growing internet traffic worldwide. With increasing proliferation of mobile devices, number of internet users is on rapid rise since the past few years. As of March 2017, there were nearly 3.74 Bn internet users across the globe, resulting into higher requirement of internet bandwidth. The demand for unceasing bandwidth is yielding significant growth in the global fiber optic cables market. Fiber optic cable provides a constant, stable and fast internet connection that allows high speed data transfer with minimal interference. In recent past, it has become noticeable that fiber optic cables are rapidly replacing copper cables and other metal wires due to their wide range of advantages over electrical transmission.

The fiber optics industry presents promising growth prospects throughout the forecast period in view of a combination of factors namely increasing investments and research undertaken by prominent fiber optic cable manufacturers in the industry to develop and upgrade the fiber optics technology application arena. In addition, the growing awareness of the benefits of adopting the technology is further propelling market growth.

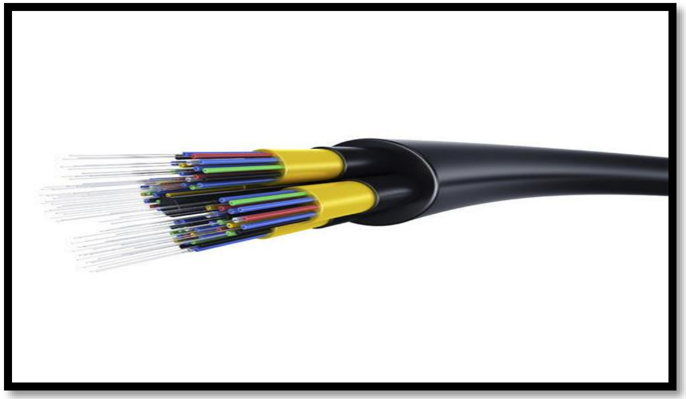
Based on applications, the market has been segmented into telecom, oil & gas, military & aerospace, BFSI, medical, railway, and other applications. The telecom application would be the largest segment in terms of revenue and is anticipated to dominate the fiber optic application arena in terms of size by 2025.

The global optical fiber market is segmented by mode, type, industry vertical, and region. Based on mode, the market is bifurcated into single mode and multi-mode. By type, it comprises glass optical fiber and plastic optical fiber. Based on industry vertical, it is categorized into telecom & IT, public sector, healthcare, energy & utilities, aerospace & defense, manufacturing, and others. Based on region, it is studied across North America, Europe, Asia-Pacific, and LAMEA.

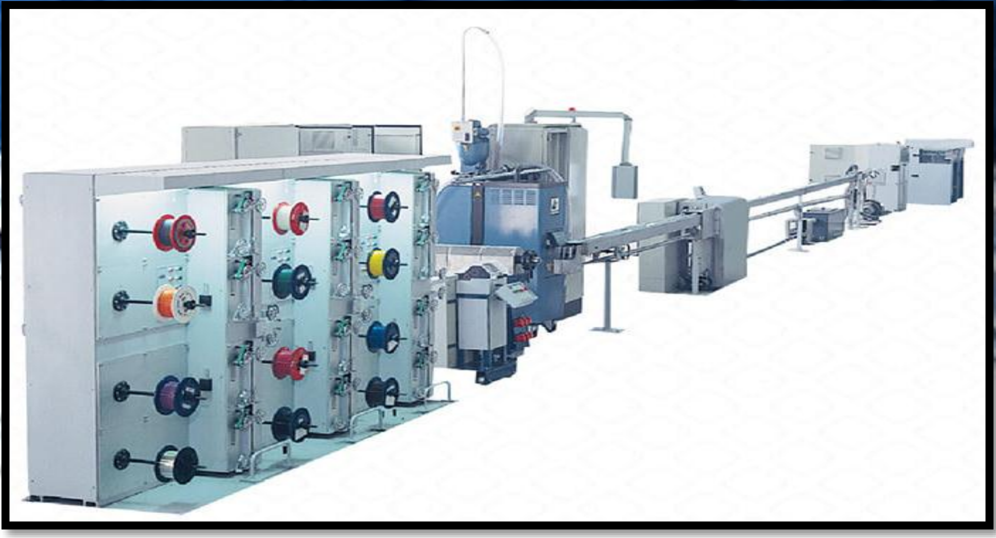
Global Optical Fiber Cable Demand from 2012 to 2018



The optical fiber cable market can be segregated on the basis of product type, application, and region. Based on product type, the market can be bifurcated into single mode fiber and multi-mode fiber. Single mode fiber is likely to allow one type of light mode to be propagated at a time. However, multi-mode fiber cable can propagate multiple modes. Multi-mode optical fiber can be used for short distance runs and single mode fiber cable can be used for long distance applications. Hence, single mode fiber segment can grow well during the forecast period attributed to long distance applications and low installation cost as compared to multi-mode fiber.



Machinery Photographs



Complete Line

Secondary Coating Line

Stranding Line

Sheathing Line

Project at a Glance

PROJECT AT A GLANCE							(` in lacs)
COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	518.47	518.47	Capital	0.00	34248.15	34248.15
Buildings	0.00	1999.80	1999.80	Share Premium	0.00	0.00	0.00
Plant & Machineries	0.00	3886.40	3886.40	Other Type Share Capital	0.00	0.00	0.00
Motor Vehicles	0.00	25.00	25.00	Reserves & Surplus	0.00	0.00	0.00
Office Automation Equipments	0.00	785.00	785.00	Cash Subsidy	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	100.00	100.00	Internal Cash Accruals	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Long/Medium Term Borrowings	0.00	102744.46	102744.46
Preliminary& Pre-operative Exp	0.00	25.00	25.00	Debentures / Bonds	0.00	0.00	0.00
Provision for Contingencies	0.00	378.50	378.50	Unsecured Loans/Deposits	0.00	0.00	0.00
Margin Money - Working Capital	0.00	129274.44	129274.44				
TOTAL	0.00	136992.62	136992.62	TOTAL	0.00	136992.62	136992.62

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	Per Share				No.of Times	
	`	`	`	`	`	%	`	%	`		%
1-2	2.98	3.25	12.98	24.00	0.00	100.00	2.98	0.00	2.98	1.00	0.00
2-3	11.75	11.99	24.73	18.00	0.00	100.00	11.75	0.00	11.75	1.00	0.00
3-4	20.12	20.33	44.85	12.00	0.00	100.00	20.12	0.00	20.12	1.00	0.00
4-5	22.38	22.56	67.23	6.00	0.00	100.00	22.38	0.00	22.38	1.00	0.00
5-6	25.33	25.48	92.56	0.00	0.00	100.00	25.33	0.00	25.33	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		
	(Number of times)			(Number of times)		%	%	%	%	%		%		
Initial				3.00	3.00									
1-2	0.70	0.70		1.85	1.85	20.65		1.58 %	0.30%	0.19%	189602.49	3.60 %	5.47	1.12
2-3	1.70	1.18		0.73	0.73	25.26		1.63 %	0.48%	0.31%	372511.48	2.83 %	5.92	1.06
3-4	2.82	1.68	2.36	0.27	0.27	21.86		1.65 %	0.52%	0.33%	504673.09	2.40 %	6.00	1.05
4-5	3.31	2.03		0.09	0.09	16.25		1.65 %	0.51%	0.32%	447232.21	1.89 %	5.96	1.06
5-6	4.02	2.36		0.00	0.00	13.05		1.65 %	0.52%	0.33%	491286.08	1.87 %	5.91	1.08

Project at a Glance

BEP	
BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	61.65%
Total BEP (% of Installed Capacity)	61.76%
IRR, PAYBACK and FACR	
Internal Rate of Return .. (In %age)	38.15%
Payback Period of the Project is (In Years)	2 Years 5 Months
Fixed Assets Coverage Ratio (No. of times)	6023.898

Major Queries/Questions Answered in the Report?

1. What is Optical Fiber Cable Manufacturing industry ?

2. How has the Optical Fiber Cable Manufacturing industry performed so far and how will it perform in the coming years ?

3. What is the Project Feasibility of Optical Fiber Cable Manufacturing Plant ?

4. What are the requirements of Working Capital for setting up Optical Fiber Cable Manufacturing plant ?

5. What is the structure of the Optical Fiber Cable Manufacturing Business and who are the key/major players ?

6. What is the total project cost for setting up Optical Fiber Cable Manufacturing Business?

7. What are the operating costs for setting up Optical Fiber Cable Manufacturing plant ?

8. What are the machinery and equipment requirements for setting up Optical Fiber Cable Manufacturing plant ?

9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up Optical Fiber Cable Manufacturing plant ?

10. What are the requirements of raw material for setting up Optical Fiber Cable Manufacturing plant ?

11. Who are the Suppliers and Manufacturers of Raw materials for setting up Optical Fiber Cable Manufacturing Business?

12. What is the Manufacturing Process of Optical Fiber Cable?

13. **What is the total size of land required for setting up Optical Fiber Cable Manufacturing plant ?**

14. **What will be the income and expenditures for Optical Fiber Cable Manufacturing Business?**

15. **What are the Projected Balance Sheets of Optical Fiber Cable Manufacturing plant ?**

16. **What are the requirement of utilities and overheads for setting up Optical Fiber Cable Manufacturing plant?**

17. **What is the Built up Area Requirement and cost for setting up Optical Fiber Cable Manufacturing Business?**

18. What are the Personnel (Manpower) Requirements for setting up Optical Fiber Cable Manufacturing Business?

19. What are Statistics of Import & Export for Optical Fiber Cable?

20. What is the time required to break-even of Optical Fiber Cable Manufacturing Business?

21. What is the Break-Even Analysis of Optical Fiber Cable Manufacturing plant?

22. What are the Project financials of Optical Fiber Cable Manufacturing Business?

23. What are the Profitability Ratios of Optical Fiber Cable Manufacturing Project?

24. What is the Sensitivity Analysis-Price/Volume of Optical Fiber Cable Manufacturing plant?

25. What are the Projected Pay-Back Period and IRR of Optical Fiber Cable Manufacturing plant?

26. What is the Process Flow Sheet Diagram of Optical Fiber Cable Manufacturing project?

27. What are the Market Opportunities for setting up Optical Fiber Cable Manufacturing plant?

28. What is the Market Study and Assessment for setting up Optical Fiber Cable Manufacturing Business?

29. What is the Plant Layout for setting up Optical Fiber Cable Manufacturing Business?

Table of Contents of the Project Report

1. INTRODUCTION
1.1. FIBER OPTIC CABLE

2. PHYSICS OF OPTICAL FIBERS
2.1. MAJOR BENEFITS OF FIBER OPTIC CABLE
2.2. FIBER OPTIC CABLE BASED ON FIBER TYPES
2.3. TYPES OF MULTI-MODE FIBERS
2.4. ELEMENTS IN A FIBER OPTIC CABLES
2.5. CABLE JACKET MATERIALS
2.6. APPLICATION REQUIREMENTS
2.7. FIBRE CABLE CHOICE
2.8. TWO BASIC FIBER STRUCTURES

3. B.I.S. SPECIFICATIONS
3.1. IS 13882-1-1 (2001): OPTICAL FIBRE CABLES, PART 1: GENERAL SPECIFICATION, SECTION 1: GENERAL
3.2. IS/QC 210700 (1998): CONNECTORS FOR OPTICAL FIBRES AND CABLES, PART 7: SECTIONAL FIBRE OPTIC CONNECTOR - TYPE FC
3.3. IS/IEC 60794-1-1 (2001): OPTICAL FIBRES CABLES, PART 1:GENERAL SPECIFICATION, SECTION 1: GENERAL

4. MARKET SURVEY
4.1. NEWLY EMERGING INDICATORS
4.2. OPTICAL FIBRE CABLES
4.3. MARKET STRUCTURE

5. EXPORT & IMPORT: ALL COUNTRIES
5.1. EXPORT: ALL COUNTRIES

5.2. IMPORT: ALL COUNTRIES

6. FINANCIALS & COMPARISON OF MAJOR INDIAN PLAYERS/COMPANIES
6.1. ABOUT FINANCIAL STATEMENTS OF CMIE DATABASE
6.2. PROFITS & APPROPRIATIONS
6.3. TOTAL LIABILITIES
6.4. TOTAL ASSETS
6.5. NET CASH FLOW FROM OPERATING ACTIVITIES
6.6. SECTION –I
6.6.1. Name of Company with Contact Details
6.6.2. Name of Director(S)
6.6.3. Credit Ratings
6.6.4. Plant Capacity
6.6.5. Location of Plant
6.6.6. Name of Raw Material(S) Consumed With Quantity &Cost
6.7. SECTION–II
6.7.1. Assets
6.7.2. Cash Flow
6.7.3. Cost as % Ge of Sales
6.7.4. Forex Transaction
6.7.5. Growth in Assets & Liabilities
6.7.6. Growth in Income & Expenditure
6.7.7. Income & Expenditure
6.7.8. Liabilities
6.7.9. Liquidity Ratios
6.7.10. Profitability Ratio
6.7.11. Profits

6.7.12. Return Ratios
6.7.13. Structure of Assets & Liabilities(%)
6.7.14. Working Capital & Turnover Ratios

7. COMPANY PROFILE OF MAJOR PLAYERS

8. OPTICAL FIBER CABLE CONSTRUCTION

9. OPTICAL FIBER CABLE DESIGN

10. GENERALIZED FIBER CABLE DESIGN FLOW CHART

11. CATEGORIES OF CABLING

11.1. VARIETY OF INDOOR CABLES
11.2. COLOR CODING
11.3. GENERAL REQUIREMENTS
11.4. INDOOR/OUTDOOR BREAKOUT CABLE

12. SOURCES OF MECHANICAL STRESS ON A FIBER

13. MECHANICAL DESIGN CONSIDERATIONS

14. RAW MATERIAL DETAILS

15. PROCESS OF MANUFACTURING
15.1. PREFORM PREPARATION

15.2. FIBER FABRICATION
15.3. FIBER DRAWING AND COATING

16.DRAWING THE FIBER

17.OPTICAL FIBRE AND CABLE TESTING

18.POLLUTION CONTROL OF GASEOUS EFFLUENTS

18.1. GASEOUS POLLUTANTS
18.2. AIR POLLUTANTS
18.3. PARTICULATE POLLUTANTS

19. BUYER'S LIST
19.1. CONTACT DETAILS OF BUYER'S
19.2. NAME OF DIRECTOR(S)
19.3. CREDIT RATINGS
19.4. PLANT CAPACITY
19.5. LOCATION OF PLANT
19.6. COMPANY WISE CONSUMPTION DETAIL OF THE RAW MATERIALS

20.SUPPLIER OF PLANT & MACHINERY

21.SUPPLIERS OF RAW MATERIALS

22.PHOTOGRAPHS/IMAGES FOR AS REFERENCES

22.1. PRODUCT PHOTOGRAPHS
22.2. MACHINERY PHOTOGRAPHS
22.3. RAW MATERIAL PHOTOGRAPHS

23.PLANT LAYOUT

24.QUOTATION OF PLANT, MACHINERY AND EQUIPMENTS FROM SUPPLIER

Project Financials

- **Project at a Glance** **Annexure**

- **Assumptions for Profitability workings ……………………………1**
- **Plant Economics……………………………………………2**
- **Production Schedule…………………………………………3**
- **Land & Building……………………………………………4**

  Factory Land & Building
  Site Development Expenses

- Plant & Machinery………………………………………………………..……..5

  Indigenous Machineries

  Other Machineries (Miscellaneous, Laboratory etc.)

- Other Fixed Assets……………………………………………..........……..6

  Furniture & Fixtures

  Pre-operative and Preliminary Expenses

  Technical Knowhow

  Provision of Contingencies

- Working Capital Requirement Per Month………………………….…7

  Raw Material

  Packing Material

  Lab & ETP Chemical Cost

  Consumable Store

- **Overheads Required Per Month and Per Annum……………………..8**
  - **Utilities & Overheads (Power, Water and Fuel Expenses etc.)**
  - **Royalty and Other Charges**
  - **Selling and Distribution Expenses**
- **Salary and Wages ……………………………………….……….9**
- **Turnover Per Annum ………………………………………..…..10**
- **Share Capital…………………………………………………......11**
  - **Equity Capital**
  - **Preference Share Capital**

- Annexure 1 :: Cost of Project and Means of Finance
- Annexure 2 :: Profitability and Net Cash Accruals

- Revenue/Income/Realisation
- Expenses/Cost of Products/Services/Items
- Gross Profit
- Financial Charges
- Total Cost of Sales
- Net Profit After Taxes
- Net Cash Accruals

- Annexure 3 :: Assessment of Working Capital requirements

  - Current Assets
  - Gross Working Capital
  - Current Liabilities
  - Net Working Capital
  - Working Note for Calculation of Work-in-process

- Annexure 4 :: Sources and Disposition of Funds

- Annexure 5 :: Projected Balance Sheets

- ROI (Average of Fixed Assets)
- RONW (Average of Share Capital)
- ROI (Average of Total Assets)

- Annexure 6 :: Profitability Ratios

- D.S.C.R
- Earnings Per Share (EPS)
- Debt Equity Ratio

- **Annexure 7 :: Break-Even Analysis**

- Variable Cost & Expenses
- Semi-Variable/Semi-Fixed Expenses
- Profit Volume Ratio (PVR)
- Fixed Expenses / Cost
- B.E.P

- **Annexure 8 to 11 :: Sensitivity Analysis-Price/Volume**

- **Resultant N.P.B.T**
- **Resultant D.S.C.R**
- **Resultant PV Ratio**
- **Resultant DER**
- **Resultant ROI**
- **Resultant BEP**

- Annexure 12 :: Shareholding Pattern and Stake Status
  - Equity Capital
  - Preference Share Capital
- Annexure 13 :: Quantitative Details-Output/Sales/Stocks
  - Determined Capacity P.A of Products/Services
  - Achievable Efficiency/Yield % of Products/Services/Items
  - Net Usable Load/Capacity of Products/Services/Items
  - Expected Sales/ Revenue/ Income of Products/ Services/ Items

- Annexure 14 :: Product wise Domestic Sales Realisation
- Annexure 15 :: Total Raw Material Cost
- Annexure 16 :: Raw Material Cost per unit
- Annexure 17 :: Total Lab & ETP Chemical Cost
- Annexure 18 :: Consumables, Store etc.
- Annexure 19 :: Packing Material Cost
- Annexure 20 :: Packing Material Cost Per Unit

- Annexure 21 :: Employees Expenses
- Annexure 22 :: Fuel Expenses
- Annexure 23 :: Power/Electricity Expenses
- Annexure 24 :: Royalty & Other Charges
- Annexure 25 :: Repairs & Maintenance Expenses
- Annexure 26 :: Other Manufacturing Expenses
- Annexure 27 :: Administration Expenses
- Annexure 28 :: Selling Expenses

- Annexure 29 :: Depreciation Charges – as per Books (Total)
- Annexure 30 :: Depreciation Charges – as per Books (P & M)
- Annexure 31 :: Depreciation Charges - as per IT Act WDV (Total)
- Annexure 32 :: Depreciation Charges - as per IT Act WDV (P & M)
- Annexure 33 :: Interest and Repayment - Term Loans
- Annexure 34 :: Tax on Profits
- Annexure 35 :: Projected Pay-Back Period and IRR

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

Tags

Manufacturing of Optical Fiber, Optical Fibre Manufacturing Process, Optical Fiber Cable, Making of Optical Fiber Cables, How are Optical Fibers Made? Manufacture of Optical Fibers, Optical Fiber Cable Manufacturing Process Pdf, Optical Fibre Cable Manufacturing Process PPT, Optical Fiber Cable Manufacturing, Optical Fiber Manufacturing Process, Optical Fiber Cable Manufacturing Cost, Fiber Optic Cable, Fiber Optic Cable Manufacturing Plant, Optical Fiber Cable Manufacture, OFC Manufacture, Fiber Optic Cable Manufacturing, Fiber Optic Cable Production, Fiber Optic Cables Business, Project Report on Optical Fiber Cable Manufacturing Industry, Detailed Project Report on Optical Fiber Cable Manufacturing, Project Report on Fiber Optic Cable Manufacturing, Pre-Investment Feasibility Study on Fiber Optic Cable Manufacturing, Techno-Economic feasibility study on Optical Fiber Cable Manufacturing, Feasibility report on Fiber Optic Cable Manufacturing, Free Project Profile on Fiber Optic Cable Manufacturing, Project profile on Optical Fiber Cable Manufacturing, Download free project profile on Optical Fiber Cable Manufacturing, Fiber Cable Manufacture, Fiber-Optic Cable Manufacturing Industry, Fibre Optic Cable Business, Fibre Optic Cable Factory, Optical Fiber Cables Manufacturing Business, Fiber Optic & Cable, Fiber Optic Cables Manufacturing Unit, Fiber and Optical Cable Production Unit, Fiber Optic Cables Production Process, Industrial Fiber Optic Cables, Fiber Optic Cable Marking Process, Optical Fiber Cable Manufacturing Factory, Fiber Optic Cables Uses, Manufacturing Process of Fiber Optic Cable, Optical Fiber Cable Manufacture

Niir Project Consultancy Services (NPCS)
can provide Detailed Project Report on

Optical Fiber Cable (OFC) Manufacturing Industry.

Production of Fiber Optic Cables.

How to Start Your Own Cable Manufacturing Business

See more

https://goo.gl/KyGytu

https://goo.gl/Rb57LA

https://goo.gl/3Szvxy

Visit us at

www.entrepreneurindia.co

Take a look at Niir Project Consultancy Services on #Street View

https://goo.gl/VstWkd

Locate us on

Google Maps

https://goo.gl/maps/BKkUtq9gevT2

OUR CLIENTS

Our inexhaustible Client list includes public-sector companies, Corporate Houses, Government undertaking, individual entrepreneurs, NRI, Foreign investors, non-profit organizations and educational institutions from all parts of the World. The list is just a glimpse of our esteemed & satisfied Clients.

Click here to take a look

https://goo.gl/G3lCjV

Free Instant Online Project Identification and Selection Service

Our Team has simplified the process for you by providing a "Free Instant Online Project Identification & Selection" search facility to identify projects based on multiple search parameters related to project costs namely: Plant & Machinery Cost, Total Capital Investment, Cost of the project, Rate of Return% (ROR) and Break Even Point % (BEP). You can sort the projects on the basis of mentioned pointers and identify a suitable project matching your investment requisites......Read more

npcs

Download Complete List of Project Reports:

- **Detailed Project Reports**

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.

npcs

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**

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

106-E, Kamla Nagar, Opp. Spark Mall,

New Delhi-110007, India.

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886, 8800733955

Mobile: +91-9811043595

Fax: +91-11-23845886

Website : www.entrepreneurindia.co , www.niir.org

Take a look at NIIR PROJECT CONSULTANCY SERVICES on #StreetView

https://goo.gl/VstWkd

NIIR PROJECT CONSULTANCY SERVICES

An ISO 9001:2015 Company

npcs

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

npcs

Contact us

NIIR PROJECT CONSULTANCY SERVICES

106-E, Kamla Nagar, Opp. Spark Mall,

New Delhi-110007, India.

Email: npcs.ei@gmail.com , info@entrepreneurindia.co

Tel: +91-11-23843955, 23845654, 23845886, 8800733955

Mobile: +91-9811043595

Fax: +91-11-23845886

Website : www.entrepreneurindia.co , www.niir.org

Take a look at NIIR PROJECT CONSULTANCY SERVICES on #StreetView

https://goo.gl/VstWkd

npcs

Follow us

- https://www.linkedin.com/company/niir-project-consultancy-services
- https://www.facebook.com/NIIR.ORG
- https://www.youtube.com/user/NIIRproject
- https://plus.google.com/+EntrepreneurIndiaNewDelhi
- https://twitter.com/npcs_in
- https://www.pinterest.com/npcsindia/

For more information, visit us at:

www.niir.org

www.entrepreneurindia.co