

# Production of Surgical Disposables Gowns and Drapes (Medical Textiles)



# Introduction

*A **surgical drape** is a covering made of a disposable non-woven material and is used to cover the area of a patient. A drape usually has a fenestration (an opening) to allow the surgeon to perform the operation. It comes in various sizes depending on the type of operation for which it is used. Drapes also vary from hospital to hospital. For example, for an eye operation, a drape measuring 15 sq. in. with a fenestration measuring 3 sq. in. might be sufficient, while for open heart surgery, the largest drape manufactured, a laparotomy drape which covers the entire body is required.*

***Surgical drapes are used to prevent contamination of suture material and to maintain a sterile field at the surgical site. Drapes are placed on the animal once it is prepared and positioned on the surgical platform. The use of disposable drapes allows for the surgeon to cut an opening or fenestration in the drape to any size or shape.***



***Surgical drapes are used in operative room during surgery to cover patient's body to eliminate the risk of surgical site contamination by separating the surgical site from the remaining part of the patient's body, as well as from non-sterile areas of the surgical table. Surgical drapes are offered in different shapes sizes as well as therapy wise. Surgical drapes are the indispensable part of operating room and used for several applications from protecting the patient body to covering utilities. Demand for surgical drapes is increasing due to rising number of surgeries worldwide, increasing focus on infection control and rising awareness about hygiene.***

**The *surgical gown*** is a principal barrier against disease transmission. High-risk procedures, as previously noted, should probably mandate the addition of a sterile sleeve over the gown's arms to prevent strike-through (i.e., penetration of moisture through protection, resulting in possible microbial transmission).

Surgical gowns must repel diseases and infections yet provide adequate freedom to move. They must allow necessary mobility without rubbing and chafing, and must resist tearing and linting. They must fit closely but not restrict movement. Since there is generally excess fabric, the gowns must withstand constant pulls on the fabric during routine movements.

*These gowns must be designed to fit a diversity of body shapes and sizes with a limited range of sizes, as hospitals will only stock limited quantities. The gowns must control the bacteria released into the theater and aid in maintaining the sterile zone required for patient safety. They must provide for easy donning and doffing without contamination, yet not have openings where the barrier might be breached. Gowns must be durable enough to last the intended useful life of the garment, be that single or multi-use. They should repel fluids but ventilate the surgeon's extreme body heat.*

*The purpose of a surgical gown is to reduce the transfer of bacteria from the surgical team to the patient as well as to protect the surgical team from blood and other fluids. It is therefore important that the gowns provide a protective barrier as well as being comfortable to wear.*



## **Market Outlook**

*The surgical drapes and gowns market is expected to reach USD 3.14 billion by 2023 from USD 2.47 billion in 2018, at a CAGR of 4.9 percent. Factors such as the increasing number of surgeries and the growing incidence of hospital-acquired infections is driving the growth of this market. The surgical drapes segment is expected to lead the global market in 2017. Factors driving the growth of this segment include increasing adoption of surgical drapes in hospitals and ambulatory surgical centers, rising number of surgeries owing to the increasing incidences of chronic diseases, and increasing demand for prevention from surgical site infection.*



***The disposable surgical drapes and gowns segment is estimated to grow at the highest rate. The advantages of disposable drapes over reusable drapes such as optimum barrier protection, consistent quality, and dependability are the key factors driving the growth of this segment. The hospitals segment accounted for the largest share of the global surgical drapes and gowns market in 2017. With a large number of surgeries performed in hospitals, there is a constant and high demand for surgical drapes and gowns in this end-user segment.***

# Global Surgical Drapes Market Revenue, By Region, 2016 (US\$ Mn)



***The global surgical drapes market is segmented by types, usability, material, end user and geography. Among the end users, the hospitals is the largest contributors in terms revenue in the global surgical drapes market. Majority of surgeries globally are performed in hospitals, even ambulatory surgery procedures are carried out in hospitals which makes hospitals the largest consumer of surgical drapes. Ambulatory surgical centers is the second biggest segment in the global surgical drapes market.***



***By material, market is dominated by nonwoven surgical drapes as nonwoven material is generally used in manufacturing of disposable surgical drapes. Nonwoven surgical drapes offers better comfort, breathability and barrier against micro-organisms which makes them more preferred surgical drapes. Woven surgical drapes are becoming less of choice in operating room because of their disadvantages over nonwoven, moreover they still possess potential of use in surgeries with no or less risk of surgical site infections.***

***The disposable surgical drapes highly contributes in terms of revenue for the growth of the global surgical drapes market. Inclusive use of disposable drapes in U.S. and increasing awareness of disposable surgical drapes in other regions is driving the market for disposable surgical drapes. Reusable surgical drapes are widely used more of low and middle income countries and therefore possess significant market share in the global market.***



# Global Surgical Gowns Market Value, By Product Type, 2017 (US\$ Mn)



***Increasing number of surgeries is a major factor contributing to the revenue growth of the surgical gowns market across the globe. A rapidly growing aging population in the world is also responsible for the increased number of surgeries, not only in developed regions but also in the Asia Pacific and the Middle East and Africa region due to the rise in per capita income.***



*Continuous innovation by surgical gown manufacturers and lucrative marketing is also expected to boost revenue growth of the global surgical gowns market. The market for surgical gowns has been an established market for a long time but there are a number of innovations in technology for increasing the efficiency of surgical gowns so that the gowns can provide better protection to patients as well as surgeons. Various options of surgical gowns are available in the market to cater to specific choices.*





***By product type, the disposable surgical gowns segment dominated the global surgical gowns market in revenue terms in 2016 and is projected to continue to do so throughout the forecast period. Disposable surgical gowns segment is the most attractive segment, with an attractiveness index of 5.0 over the forecast period. This segment is expected to grab about 68% market value share in 2017 and is likely to cross 70% market share by the end of 2025. Owing to the higher protection levels provided by disposable surgical gowns, these type of surgical gowns are expected to have significant adoption over reusable surgical gowns and thus exhibit comparatively higher growth over the forecast period.***

*The reusable surgical gowns segment is expected to be the second most lucrative segment in the global surgical gowns market, with an attractiveness index of 1.4 over the forecast period.*



# Project at a Glance

PROJECT AT A GLANCE				(USD in Thousands)			
COST OF PROJECT				MEANS OF FINANCE			
Particulars	Existing	Proposed	Total	Particulars	Existing	Proposed	Total
Land & Site Development Exp.	0.00	50.00	50.00	Capital	0.00	189.38	189.38
Buildings	0.00	281.25	281.25	Share Premium	0.00	0.00	0.00
Plant & Machineries	0.00	315.20	315.20	Other Type Share			
Motor Vehicles	0.00	8.00	8.00	Capital	0.00	0.00	0.00
Office Automation Equipments	0.00	31.50	31.50	Reserves & Surplus	0.00	0.00	0.00
Technical Knowhow Fees & Exp.	0.00	15.00	15.00	Cash Subsidy	0.00	0.00	0.00
Franchise & Other Deposits	0.00	0.00	0.00	Internal Cash Accruals	0.00	0.00	0.00
Preliminary & Pre-operative Exp	0.00	2.00	2.00	Long/Medium Term Borrowings	0.00	568.14	568.14
Provision for Contingencies	0.00	30.00	30.00	Debentures / Bonds	0.00	0.00	0.00
Margin Money - Working Capital	0.00	24.58	24.58	Unsecured Loans/Deposits	0.00	0.00	0.00
<b>TOTAL</b>	<b>0.00</b>	<b>757.53</b>	<b>757.53</b>	<b>TOTAL</b>	<b>0.00</b>	<b>757.53</b>	<b>757.53</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					
	USD	USD	USD	USD	USD	%	USD	%	USD	No. of Times	%
1-2	538.78	990.32	548.78	2400.00	0.00	100.00	538.78	0.00	538.78	1.00	0.00
2-3	817.30	1210.23	1366.08	1800.00	0.00	100.00	817.30	0.00	817.30	1.00	0.00
3-4	1090.61	1433.03	2456.69	1200.00	0.00	100.00	1090.61	0.00	1090.61	1.00	0.00
4-5	1355.77	1654.60	3812.46	600.00	0.00	100.00	1355.77	0.00	1355.77	1.00	0.00
5-6	1610.77	1871.97	5423.23	0.00	0.00	100.00	1610.77	0.00	1610.77	1.00	0.00

# Project at a Glance

Year	D. S. C. R.			Debt / - Depo sits Debt	Equit y as- Equit y	Total Net Worth	Retur n on Net Wort h	Profitability Ratio					Asset Turno ver Ratio	Curre nt Ratio	
	Individ ual	Cumula tive	Over all					GPM	PBT	PAT	Net Contri bution	P/V Ratio			
	(Number of times)			(Number of times)		%	%	%	%	%		%			
Initial				3.00	3.00										
1-2	1.42	1.42		1.56	1.56	1.73		35.78 %	21.46%	15.42 %	618.2 4	93.46 %	0.85	0.91	
2-3	1.71	1.56		0.76	0.76	0.89		41.16 %	30.20%	20.06 %	705.5 3	91.42 %	0.93	1.59	
3-4	2.06	1.71	2.05	0.35	0.35	0.45		44.75 %	36.31%	23.42 %	805.9 4	91.38 %	0.94	2.45	
4-5	2.47	1.88		0.12	0.12	0.20		47.16 %	40.65%	25.88 %	906.3 5	91.34 %	0.91	3.46	
5-6	2.97	2.05		0.00	0.00	0.07		48.72 %	43.73%	27.67 %	1006. 77	91.32 %	0.86	11.19	

# Project at a Glance

## BEP

BEP - Maximum Utilisation Year	5
Cash BEP (% of Installed Capacity)	46.94%
Total BEP (% of Installed Capacity)	51.85%
IRR, PAYBACK and FACR	
Internal Rate of Return .. ( In %age )	27.54%
Payback Period of the Project is ( In Years )	2 Years 3 Months
Fixed Assets Coverage Ratio ( No. of times )	2.634

# Major Queries/Questions Answered in the Report?

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

- 5. What is the structure of the Medical Disposables (Gowns, Drapes) Manufacturing Business and who are the key/major players ?**
- 6. What is the total project cost for setting up Medical Disposables (Gowns, Drapes) Manufacturing Business?**
- 7. What are the operating costs for setting up Medical Disposables (Gowns, Drapes) Manufacturing plant?**
- 8. What are the machinery and equipment requirements for setting up Medical Disposables (Gowns, Drapes) Manufacturing plant ?**



- 9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up Medical Disposables (Gowns, Drapes) Manufacturing plant ?**
- 10. What are the requirements of raw material for setting up Medical Disposables (Gowns, Drapes) Manufacturing Business ?**
- 11. Who are the Suppliers and Manufacturers of Raw materials for setting up Medical Disposables (Gowns, Drapes) Manufacturing Business?**
- 12. What is the Manufacturing Process of Medical Disposables (Gowns, Drapes)?**

13. What is the total size of land required for setting up Medical Disposables (Gowns, Drapes) Manufacturing plant ?
14. What will be the income and expenditures for Medical Disposables (Gowns, Drapes) Manufacturing Business?
15. What are the Projected Balance Sheets of Medical Disposables (Gowns, Drapes) Manufacturing plant ?
16. What are the requirement of utilities and overheads for setting up Medical Disposables (Gowns, Drapes) Manufacturing plant?
17. What is the Built up Area Requirement and cost for setting up Medical Disposables (Gowns, Drapes) Manufacturing Business?

- 18. What are the Personnel (Manpower) Requirements for setting up Medical Disposables (Gowns, Drapes) Manufacturing Business?**
- 19. What are Statistics of Import & Export for Medical Disposables (Gowns, Drapes) ?**
- 20. What is the time required to break-even of Medical Disposables (Gowns, Drapes) Manufacturing Business?**
- 21. What is the Break-Even Analysis of Medical Disposables (Gowns, Drapes) Manufacturing plant?**
- 22. What are the Project financials of Medical Disposables (Gowns, Drapes) Manufacturing Business?**

- 23. What are the Profitability Ratios of Medical Disposables (Gowns, Drapes) Manufacturing Project?**
- 24. What is the Sensitivity Analysis-Price/Volume of Medical Disposables (Gowns, Drapes) Manufacturing plant?**
- 25. What are the Projected Pay-Back Period and IRR of Medical Disposables (Gowns, Drapes) Manufacturing plant?**
- 26. What is the Process Flow Sheet Diagram of Medical Disposables (Gowns, Drapes) Manufacturing project?**

**27. What are the Market Opportunities for setting up Medical Disposables (Gowns, Drapes) Manufacturing plant?**

**28. What is the Market Study and Assessment for setting up Medical Disposables (Gowns, Drapes) Manufacturing Business?**

**29. What is the Plant Layout for setting up Medical Disposables (Gowns, Drapes) Manufacturing Business?**

# Table of Contents of the Project Report

# 1. PROJECT LOCATION

## 1.1. COUNTRY PROFILE & GEOTECHNICAL SITE CHARACTERIZATION

- 1.1.1. General
- 1.1.2. Geography
- 1.1.3. Map
- 1.1.4. Climate
- 1.1.5. Economy
- 1.1.6. Infrastructure
- 1.1.7. Exports
- 1.1.8. Transportation
- 1.1.9. Demographics
- 1.1.10. Education
- 1.1.11. Investment
- 1.1.12. Areas of Investment Opportunities and Incentives
- 1.1.13. Capital Requirement
- 1.1.14. Legal and Institutional Framework

## 2. INTRODUCTION

- 2.1. SURGICAL GOWNS
- 2.2. SURGICAL DRAPE
- 2.3. REUSABLE DRAPES
- 2.4. GENERAL CONSTRUCTION
- 2.5. CLOSURES

## 3. TYPES OF GOWN

- 3.1. PATIENT GOWN
- 3.2. SURGICAL REINFORCED GOWN
- 3.3. SURGICAL WRAPAROUND GOWN
- 3.4. SCRUB SUITS
- 3.5. DISPOSABLE SURGEON GOWN
- 3.6. SURGICAL WRAPAROUND REINFORCED GOWN (SMS)
- 3.7. PROTO GOWN
- 3.8. HIGH PERFORMANCE DISPOSABLE SURGICAL GOWNS
- 3.9. DISPOSABLE SURGICAL GOWNS

## 4. TYPES OF DRAPES



4.3. OBSTETRICS AND GYNAECOLOGY

4.4. HEAD AND NECK DRAPES

## **5. TEST METHODS USED FOR GOWN & DRAPE**

5.1. PHYSICAL TESTS

5.2. PERFORMANCE AND REQUIREMENTS

## **6. CHARACTERISTICS & USE REQUIREMENTS TO BE ASSESSED WITH SURGICAL GOWNS**

## **7. SAFETY OF HIGH-TECH SURGICAL GOWNS AND DRAPES**

7.1. PERFORMANCE REQUIREMENTS FOR SURGICAL GOWNS

7.2. PERFORMANCE REQUIREMENTS FOR SURGICAL DRAPES

## **8. SIZING ANALYSIS OF DISPOSABLE GOWNS**

## **9. STANDARDS**

9.1. THE GENERAL REQUIREMENTS FOR MANUFACTURERS, PROCESSORS AND PRODUCTS – EN 13795-1

## 10. PRODUCTS DESCRIPTION

- 10.1. MEDICAL & SANITARY ARTICLES
- 10.2. NONWOVEN MEDICAL GOWN
- 10.3. SURGEON GOWN
- 10.4. VISIT GOWN (LAB COAT)
- 10.5. APRON
- 10.6. LDPE SLEEVE COVERS
- 10.7. CPE SHOE COVERS
- 10.8. FACE MASKS
- 10.9. DUST MASK

## 11. AST STANDARDS OF PRACTICE FOR SURGICAL DRAPES

- 11.1. STANDARD OF PRACTICE I
- 11.2. STANDARD OF PRACTICE II
- 11.3. STANDARD OF PRACTICE III
- 11.4. STANDARD OF PRACTICE IV
- 11.5. STANDARD OF PRACTICE V
- 11.6. STANDARD OF PRACTICE VI
- 11.7. STANDARD OF PRACTICE VII
- 11.8. STANDARD OF PRACTICE VIII
- 11.9. STANDARD OF PRACTICE IX

## **12. EXPORT & IMPORT: ALL COUNTRIES**

- 12.1. EXPORT: ALL COUNTRIES
- 12.2. IMPORT: ALL COUNTRIES

## **13. DESCRIPTION OF DISPOSABLE PRODUCTS**

- 13.1. DESCRIPTION OF SURGEON GOWNS
- 13.2. DESCRIPTION OF PATIENT GOWN
- 13.3. DESCRIPTION OF SURGEON SUITS
- 13.4. DISPOSABLE BED SHEETS
- 13.5. DISPOSABLE PILLOW COVER

## **14. RAW MATERIAL DETAILS**

- 14.1. NON-WOVEN FABRIC
- 14.2. PROTECTIVE MATERIALS
  - 14.2.1. Spun Bond Polypropylene
  - 14.2.2. Coated Polypropylene
  - 14.2.3. Breathable Laminate

## **15. MANUFACTURING PROCESS**

## **16. PROCESS FLOW DIAGRAM**

## **17. DETAILS OF PLANT AND MACHINERY**

- 17.1. ULTRASONIC FABRIC SEALING SYSTEM
  - 17.1.1. Applications and Process Advantages
  - 17.1.2. Key Features
  - 17.1.3. Mechanical Specifications

## **18. SUPPLIERS OF PLANT & MACHINERY**

## **19. SUPPLIERS OF RAW MATERIAL**

## **20. PHOTOGRAPHS/IMAGES FOR REFERENCE**

- 20.1. PRODUCT PHOTOGRAPHS
- 20.2. MACHINERY PHOTOGRAPHS
- 20.3. RAW MATERIAL PHOTOGRAPHS

**21. PLANT LAYOUT**

**22. QUOTATION OF PLANT, MACHINERY AND EQUIPMENTS FROM SUPPLIER**



# *Project Financials*

<b>Project at a Glance</b>	<b>Annexure</b>
• 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 Medical Disposables (Gowns, Drapes)” provides an insight into Medical Disposables (Gowns, Drapes) market in India with focus on uses and applications, Manufacturing Process, Process Flow Sheets, Plant Layout and Project Financials of Medical Disposables (Gowns, Drapes) project. The report assesses the market sizing and growth of the Indian Medical Disposables (Gowns, Drapes) 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 Medical Disposables (Gowns, Drapes) sector in India along with its business prospects. Through this report we have identified Medical Disposables (Gowns, Drapes) project as a lucrative investment avenue.**

# Tags

Surgical Gown Production, Production of Surgical Drapes and Gowns, How to Manufacture Disposable Medical Gowns, Surgical Gown Manufacture, Medical Gowns Manufacturing Industry, Production of Surgical Gowns, Medical Products Manufacturing Company, Medical Gowns Making Business, Surgical Clothes Making Unit, Surgical Gowns and Drapes Production, Disposable Wear Manufacture, Manufacturing of Medical Disposable Gowns, Surgical Disposable Gown and Surgical Gowns, Medical Disposables, Disposable Gowns Production, Medical Wear Production Plant, Production of Disposable Medical Products and Surgical Drapes, Surgical Drapes Manufacture, Medical Surgical Drapes Production, Surgical Drapes and Gowns Manufacture, Surgical Drape Manufacturing, Surgical Drape Making Plant, Medical Products Manufacturing Industry, Surgical Disposable Manufacturing Unit, Medical Clothes Production, Production of Medical & Surgical Products, Disposable Drapes, Disposable Surgical Drapes, Medical Disposables Manufacturing Industry,

Surgical Gown Production Project Ideas, Projects on Small Scale Industries, Small Scale Industries Projects Ideas, Surgical Disposable Manufacturing Based Small Scale Industries Projects, Project Profile on Small Scale Industries, How to Start Surgical Disposable Manufacturing Industry in India, Medical Clothes Production Projects, New Project Profile on Surgical Disposable Manufacturing Industries, Project Report on Surgical Gowns and Drapes Production Industry, Detailed Project Report on Surgical Drape Making Plant, Project Report on Surgical Gown Production, Pre-Investment Feasibility Study on Surgical Gown Production, Techno-Economic Feasibility Study on Surgical Disposable Manufacturing, Feasibility Report on Surgical Gown Production, Free Project Profile on Medical Clothes Production, Project Profile on Surgical Drape Making Plant, Download Free Project Profile on Surgical Gowns and Drapes Production, Startup Project for Surgical Gown Production, Project Report for Bank Loan, Project Report for Bank Finance, Project Report Format for Bank Loan in Excel, Excel Format of Project Report and CMA Data, Project Report Bank Loan Excel





**Niir Project Consultancy Services (NPCS)  
can provide Detailed Project Report on  
Production of Surgical Disposables  
Gowns and Drapes  
(Medical Textiles)**

**See more**

<https://goo.gl/k3Sg8w>

<https://goo.gl/EsBonj>

<https://goo.gl/SiVNVL>



*Visit us at*

[www.entrepreneurindia.co](http://www.entrepreneurindia.co)



[www.entrepreneurindia.co](http://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/G3ICjV>**



# **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](#)**



# 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.**



**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](mailto:npcs.ei@gmail.com) , [info@entrepreneurindia.co](mailto:info@entrepreneurindia.co)

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

Mobile: +91-9811043595

Fax: +91-11-23845886

Website : [www.entrepreneurindia.co](http://www.entrepreneurindia.co) , [www.niir.org](http://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**



[www.entrepreneurindia.co](http://www.entrepreneurindia.co)

# 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

## NIIR PROJECT CONSULTANCY SERVICES

106-E, Kamla Nagar, Opp. Spark Mall,  
New Delhi-110007, India.

Email: [npcs.ei@gmail.com](mailto:npcs.ei@gmail.com) , [info@entrepreneurindia.co](mailto:info@entrepreneurindia.co)

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

Mobile: +91-9811043595

Fax: +91-11-23845886

Website : [www.entrepreneurindia.co](http://www.entrepreneurindia.co) , [www.niir.org](http://www.niir.org)

Take a look at NIIR PROJECT CONSULTANCY SERVICES on #StreetView

<https://goo.gl/VstWkd>



# 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://twitter.com/npcs_in)



➤ <https://www.pinterest.com/npcsindia/>





**For more information, visit us at:**

[www.niir.org](http://www.niir.org)

[www.entrepreneurindia.co](http://www.entrepreneurindia.co)



[www.entrepreneurindia.co](http://www.entrepreneurindia.co)