Expanded Polystyrene Manufacturing Industry.

Production of EPS

Expanded Polystyrene (EPS) Market to Reach USD 23.70 Billion by 2026
Expanded Polystyrene (EPS) is the generic industry name used for white rigid material made from the expanded polystyrene beads. It is a lightweight, rigid, plastic foam insulating material produced from solid beads of polystyrene.
The EPS beads are expanded and finally molded into larger EPS blocks which are further used for walls, roofs, floors, crawl spaces and architectural shapes. EPS is a low-density polymer arranged in individual cells, capable of providing excellent moisture resistance, good chemical barrier protection along with light weight characteristics. The addition of graphite results in improving the insulating properties of finished products imparting paving the way for use in construction industry.
EPS is also used for helmets and life jackets, beverage cups, packaging, casting molds, and numerous other products – however, construction products currently account for almost 59% of the EPS market. All around the world EPS-based products are used in the construction of new residential buildings and in the refurbishment of old buildings.

Besides fire safety, questions arise regarding the use of possibly unhealthy additives and the environmentally friendly disposal of the practical material after use. For example, glass and stone wool but also insulation material based on renewable resources compete with EPS.
EPS is commonly used in form of a foam. The word “styrofoam” is often used for the description of EPS foam. It is kind of trademark used of this foam material. Most common foam products used in daily lives include coolers, wine shippers, molded end caps and comers, packaging of boxes and even for the cups used at different places for water coolers.

EPS is used in many applications, such as thermal insulation board in buildings, packaging, cushioning of valuable goods, and food packaging.
EPS is used to make numerous car parts, such as door panels, sound dampening foam, instrument panels, etc. It is also widely used in child protective seats. Packaging made out of EPS has shown to keep food fresher, for longer.

As it is inert, durable, and resistant to water damage, the lightweight foam is used to provide thermal insulation in cold storage, refrigerators, walls, and roofing. Its compression resistance makes it ideal for stacking packaged goods. The construction industry has seen a surge in the usage of Expanded Polystyrene for inroad foundations, flotation, cellular bricks, bridges, railway lines, public buildings, drainage, etc.
Market Outlook

The EPS market is expected to grow from USD 15.5 billion in 2018 to USD 20.1 billion by 2023, at a CAGR of 5.3% during the forecast period.
U.S. EPS market, by Product, 2014 - 2025
(Kilo Tons)
Expanded Polystyrene (EPS) is the commonly used industry name for rigid material produced from the expanded polystyrene beads. EPS is a rigid, lightweight, plastic foam insulating material made from solid beads of polystyrene.

The increasing prominence of insulation property in the building & construction sector of developed economies comprising China and India is anticipated to support the usage of high-quality polymers. Moreover, an increase in spending for enhancing the longevity of residential buildings and commercial complexes in extreme, external environmental conditions is projected to stimulate the market demand for expanded polystyrene.
Growing construction and infrastructure industry in developing countries, is a key factor expected to drive growth of the global expanded polystyrene market over the forecast period. Rising demand for convenience food and protective food packaging in developing economies, is another factor anticipated to propel growth of the target market over the forecast period. In addition, growing demand for thermal insulation to reduce energy consumption, is a dynamic factor expected to fuel growth of the target market over the forecast period.
Global EPS Market Volume, By Application, 2016 (%)
Grey EPS is the fastest-growing segment in the EPS market. Grey EPS is gradually penetrating the global market for the past 10 years. The less thermal conductivity and better insulation of grey EPS than white EPS are making it a preferable choice in the building & construction industry. Grey EPS has an additional elasticity, which improves sound insulation and also provides better thermal efficiency in comparison to the normal white EPS insulation.

In automobile industry, the trend to replace metal by plastics has been prevailing, due to their higher impact strength, easy moldability, improved aesthetics, scratch resistance, cabin insulation, and lightweight. Transportation segment is expected to be a notable driver for the global Polystyrene Market & EPS Industry during the forecast period.
EPS consumption in packaging applications is used primarily as a cushioning protectant in fragile items as well as in disposable trays, cups, plates, bowls, etc. The growth in this market is driven primarily by the electronics and appliance industries.
Global Expanded Polystyrene Market, By Region, By Value, 2013-2023F
Increasing demand for the product in applications such as egg trays, fast foods, cold drinks, and others signifies the growth of packaging industries. Moreover, growing consumption of product due to unique features offered by the product such as enhanced mechanical properties, ease of transport coupled with installations provide a boost to the expanded polystyrene market growth.

Globally, the market for expanded polystyrene is driven by the region Asia Pacific, owing to growing consumption of the product in various end-use industries such as construction & buildings, packaging, automotive, and others. These materials are used to impart lightweight, durable, moisture resistance, versatile, and ease of application to the final product. Additionally, the cost effective nature of the product has led a surge in demand for the product in major sectors.
The Top Players Including:

- ACH Foam Technologies
- Alpek SAB De Cv
- BASF SE
- Kaneka Corporation
- PJSC Sibur Holding
- SABIC
- Sunpor Kunststoff GmbH
- Synbra Holding BV
- Synthos SA
- Total SA
1. What is Expanded Polystyrene (EPS) Manufacturing industry?

2. How has the Expanded Polystyrene (EPS) Manufacturing industry performed so far and how will it perform in the coming years?

3. What is the Project Feasibility of Expanded Polystyrene (EPS) Manufacturing Plant?

4. What are the requirements of Working Capital for setting up Expanded Polystyrene (EPS) Manufacturing plant?
5. What is the structure of the Expanded Polystyrene (EPS) Manufacturing Business and who are the key/major players?

6. What is the total project cost for setting up Expanded Polystyrene (EPS) Manufacturing Business?

7. What are the operating costs for setting up Expanded Polystyrene (EPS) Manufacturing plant?

8. What are the machinery and equipment requirements for setting up Expanded Polystyrene (EPS) Manufacturing plant?
9. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up Expanded Polystyrene (EPS) Manufacturing plant?

10. What are the requirements of raw material for setting up Expanded Polystyrene (EPS) Manufacturing plant?

11. Who are the Suppliers and Manufacturers of Raw materials for setting up Expanded Polystyrene (EPS) Manufacturing Business?

12. What is the Manufacturing Process of Expanded Polystyrene (EPS)?
13. What is the total size of land required for setting up Expanded Polystyrene (EPS) Manufacturing plant?

14. What will be the income and expenditures for Expanded Polystyrene (EPS) Manufacturing Business?

15. What are the Projected Balance Sheets of Expanded Polystyrene (EPS) Manufacturing plant?

16. What are the requirement of utilities and overheads for setting up Expanded Polystyrene (EPS) Manufacturing plant?

17. What is the Built up Area Requirement and cost for setting up Expanded Polystyrene (EPS) Manufacturing Business?
18. What are the Personnel (Manpower) Requirements for setting up Expanded Polystyrene (EPS) Manufacturing Business?

19. What are Statistics of Import & Export for Expanded Polystyrene (EPS)?

20. What is the time required to break-even of Expanded Polystyrene (EPS) Manufacturing Business?

21. What is the Break-Even Analysis of Expanded Polystyrene (EPS) Manufacturing plant?

22. What are the Project financials of Expanded Polystyrene (EPS) Manufacturing Business?
23. What are the Profitability Ratios of Expanded Polystyrene (EPS) Manufacturing Project?

24. What is the Sensitivity Analysis-Price/Volume of Expanded Polystyrene (EPS) Manufacturing plant?

25. What are the Projected Pay-Back Period and IRR of Expanded Polystyrene (EPS) Manufacturing plant?

26. What is the Process Flow Sheet Diagram of Expanded Polystyrene (EPS) Manufacturing project?
27. What are the Market Opportunities for setting up Expanded Polystyrene (EPS) Manufacturing plant?

28. What is the Market Study and Assessment for setting up Expanded Polystyrene (EPS) Manufacturing Business?

29. What is the Plant Layout for setting up Expanded Polystyrene (EPS) Manufacturing Business?
Table of Contents of the Project Report
Our Detailed Project Report contains

- Introduction
- Properties
- Uses & Applications
- List of Plant & Machineries
- Miscellaneous Items and Accessories
- Instruments, Laboratory Equipments and Accessories
- Electrification, Electric Load and Water
- Maintenance, Suppliers/Manufacturers of Plant and Machineries
- Process of Manufacture
- Flow Sheet Diagram
- List of Raw Materials
- Availability of Raw Materials
- Requirement of Staff & Labour
- Skilled & Unskilled Labour
- Requirement of Land Area
- Built up Area
- Plant Layout
Project Financials

• Project at a Glance

Annexure

• Assumptions for Profitability workings

• Plant Economics

• Production Schedule

• Land & Building

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
<table>
<thead>
<tr>
<th>Annexure</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Employees Expenses</td>
</tr>
<tr>
<td>22</td>
<td>Fuel Expenses</td>
</tr>
<tr>
<td>23</td>
<td>Power/Electricity Expenses</td>
</tr>
<tr>
<td>24</td>
<td>Royalty &amp; Other Charges</td>
</tr>
<tr>
<td>25</td>
<td>Repairs &amp; Maintenance Expenses</td>
</tr>
<tr>
<td>26</td>
<td>Other Manufacturing Expenses</td>
</tr>
<tr>
<td>27</td>
<td>Administration Expenses</td>
</tr>
<tr>
<td>28</td>
<td>Selling Expenses</td>
</tr>
</tbody>
</table>
• 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
#Expanded_Polystyrene,
#Expandable_Polystyrene_(EPS)_Production_and_Manufacturing,
Niir Project Consultancy Services (NPCS) can provide Detailed Project Report on Expanded Polystyrene Manufacturing Industry.

Production of EPS

Expanded Polystyrene (EPS) Market to Reach USD 23.70 Billion by 2026

See 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
Thank You

For more information, visit us at:
www.niir.org
www.entrepreneurindia.co