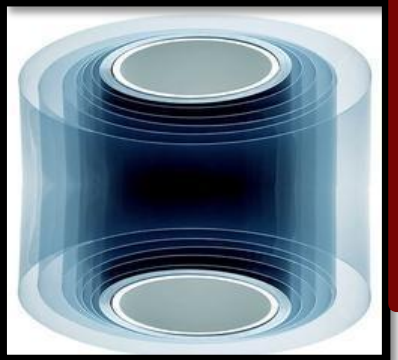

Production of PET Film and Sheets, Urethane Foams, Flexible Foams, Rigid Foams, Speciality Plastics.

Stretch Blow Moulding, Injection Blow Moulding, Injection and Co-Injection Preform Technologies.

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Introduction

Polyethylene Terephthalate (PET) is Thermoplastic polyester widely used for production of beverage bottles. It is also used for flexible packaging film due to its high clarity, low permeability and excellent printability. Biaxially oriented PET film (often known by one of its trade names, "Mylar") can be aluminized by evaporating a thin film of metal onto it to reduce its permeability and to make it reflective and opaque (MPET). These properties are useful in many applications, including flexible food packaging and thermal insulation such as "space blankets". Because of its high mechanical strength, PET film is often used in tape applications, such as the carrier for magnetic tape or backing for pressure sensitive adhesive tapes. PET is also used as substrate in thin film and solar cell.

India's PET market continues to be dominated by PET bottles, followed by PET films, sheets and chips, and the trend is expected to continue over the next five years. PET bottles are being increasing used for packaging of bottled drinking water, carbonated soft drinks, edible oils, juices, alcoholic beverages, etc.

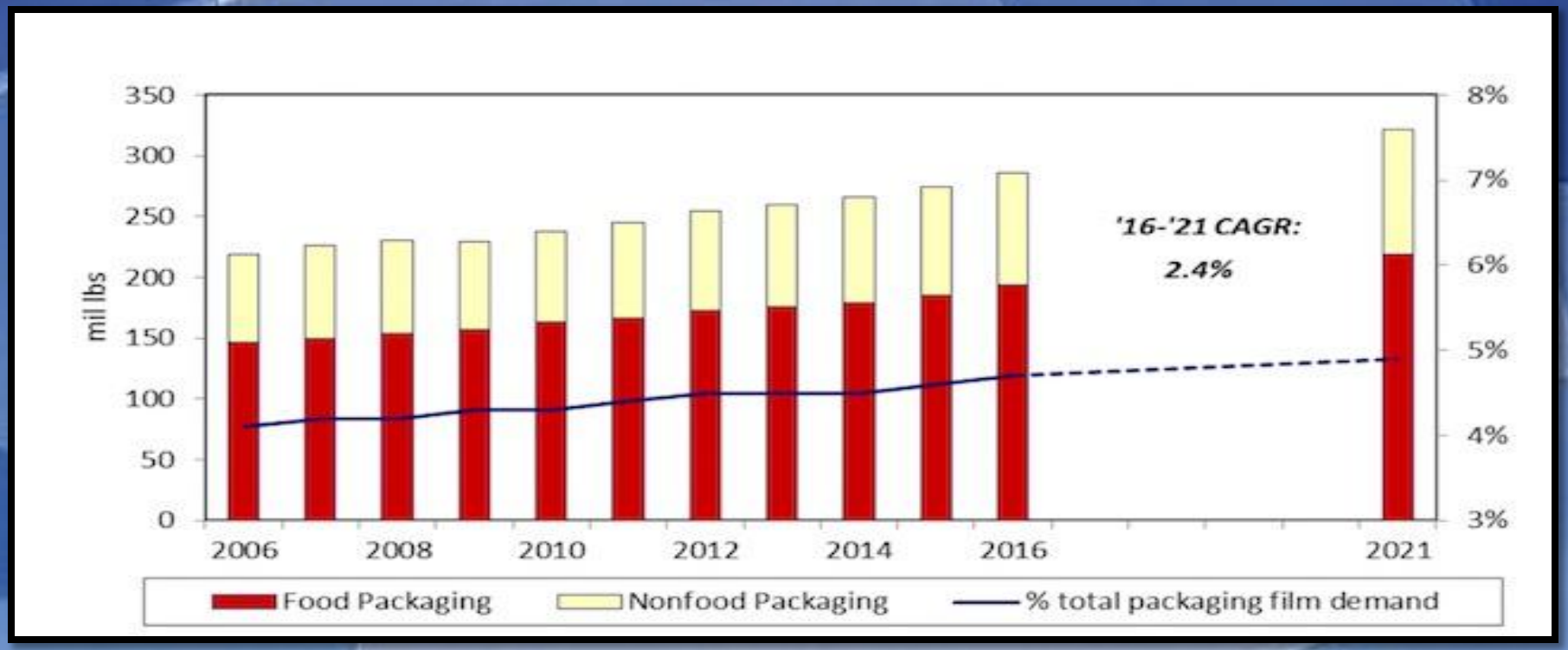
Approx. 60,000T/annum PET film consumed a/c for 50% of total consumption. The increasing demand for packaged food and pharmaceutical products in growing economies such as China, India, Turkey, Poland, Brazil, and Mexico is driving the global market for packaging film.

Packaging film has been commercialized and used in packaging of food products, pharmaceutical and medical products, consumer products, industrial products, and others. Food packaging is the largest consumer of packaging film followed by pharmaceutical and medical packaging. However, pharmaceutical and medical packaging applications are expected to offer the highest growth during the next five years.

The global Packaging Film market is fragmented and regions such as North America and Europe are in matured stage. However, Asia-Pacific market shows huge potential to grow in this market. The rising disposable income of the middle-class in India and China is expected to drive the packaging film market in the coming decade.

Demand for PET film in the packaging market is forecast to expand 2.4% annually to 322 million pounds in 2021, outpacing demand for any of the major packaging film resins. Growth will be driven by rising barrier requirements, particularly in food packaging.

PET film to Post Fastest Growth of Major Resin Type Through 2021



Rising demand for packaged food and pharmaceutical products in growing economies such as China, India, Turkey, Poland, Brazil and Mexico is driving the global market for Plastic Films and Sheets. Food industry is the largest consumer of plastic films and sheets in packaging sector, followed by pharmaceutical and medical packaging. Demand is on the rise from non-packaging applications such as the agriculture industry. Asia-Pacific market shows huge potential, driven by the rising middle class in China and India. However, developed regions such as North America and Europe are experiencing slow growth. Read more in Plastic films & sheets market to reach 70.9 mln tons by 2018 led by demand from food & pharma packaging, agricultural films.

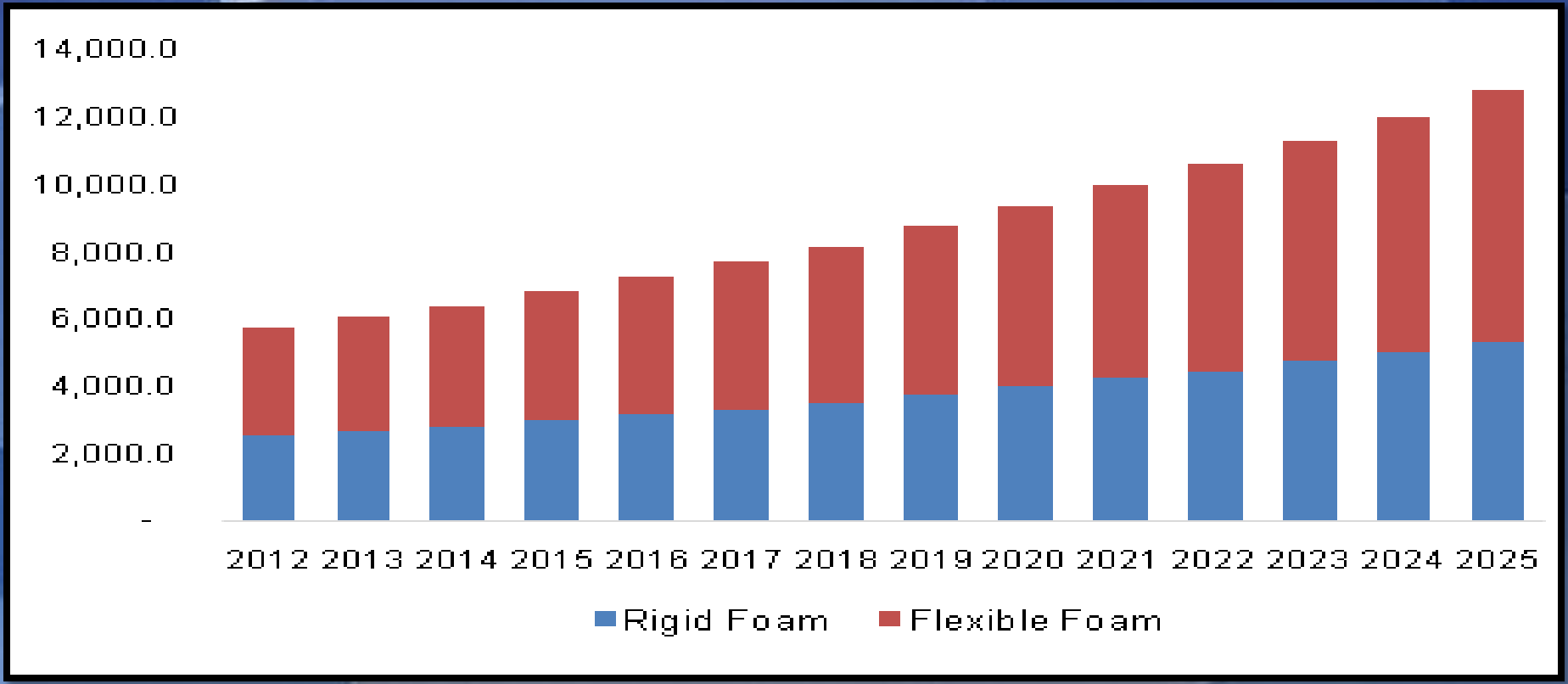
Polyurethane foam

Polyurethane foam is an extensively used polymer and plastic. They are available in two forms i.e. rigid and flexible foams. Rigid foams are used for various insulation applications pertaining to refrigeration and construction. It is energy efficient and helps in cutting energy costs. Flexible foams are used mainly as a cushioning substance in end-use industries such as packaging, furniture, bedding and transportation.

Polyurethane foams consumption is anticipated to increase significantly owing to reduced wastage, elevated recyclability, greater sustainability, and reduce energy consumption throughout their life cycle. Growing requirement in end-use industries such as packaging and footwear is anticipated to further compliment growth.

Global Polyurethane Foam Market size was valued at USD 48.55 billion in 2015. Increasing demand from bedding & furniture industry owing to rising urban population in emerging economies of Asia Pacific such as China, India, and Indonesia is anticipated to drive growth over the forecast period.

U.S. Polyurethane Foam Market revenue by product, 2014 - 2024 (USD Million)

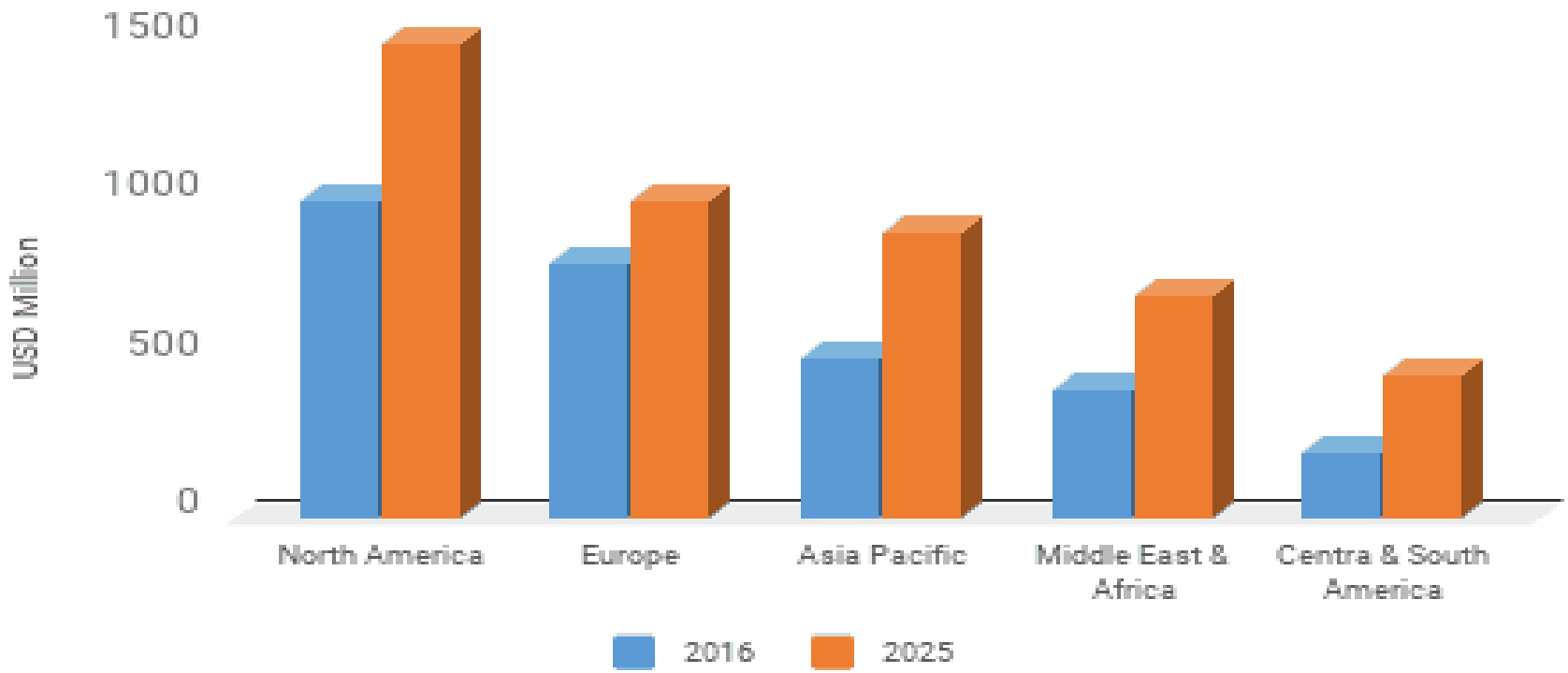


Many packaging vendors are switching to flexible packaging materials because of increased consumer demand for flexible packaging. These products are generally resealable, recyclable, and durable, which increases the demand for them among consumers.

On the basis of application, the blow moulding market is segmented into packaging, consumables & electronics, automotive & transport, building & construction, and medical among others. The use of blow molding in the packaging industry is expected to hold the largest market share by 2025. The need for appropriate packaging for several applications is anticipated to increase demand for plastic blow molding.

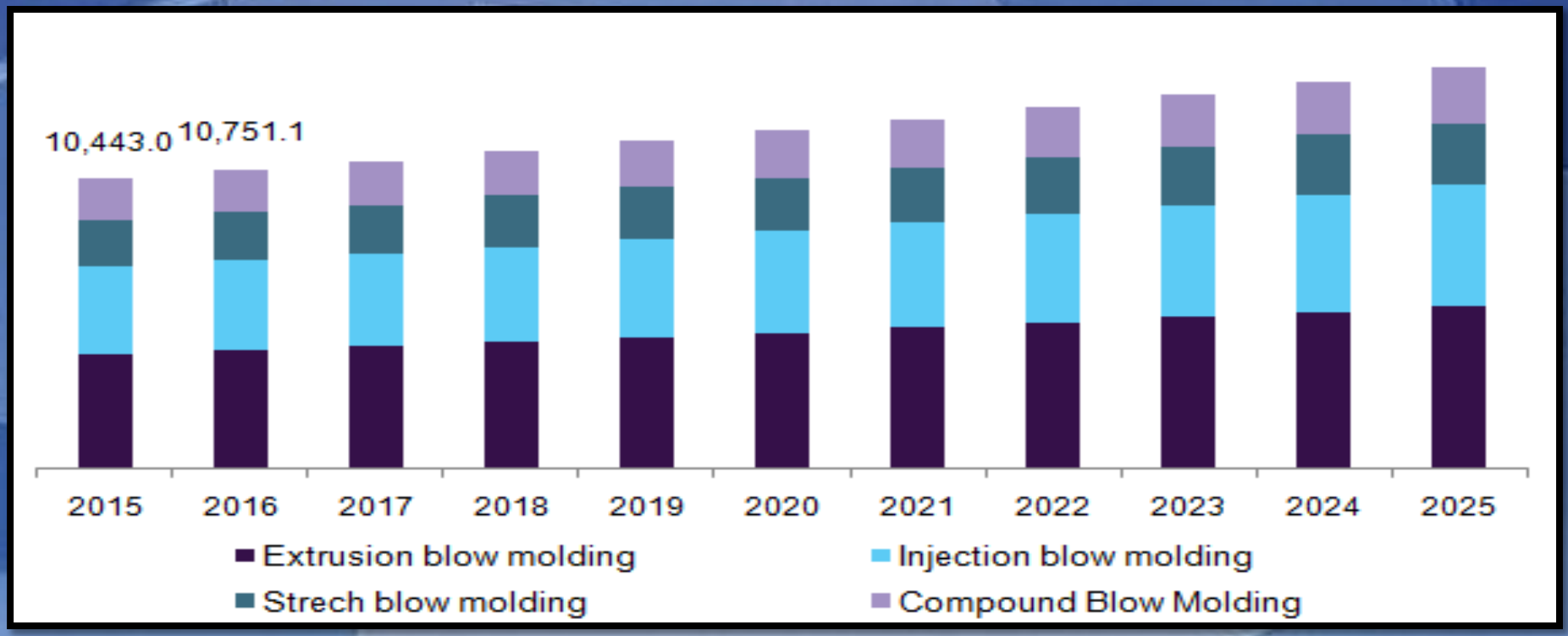
The extensive use of plastics in the manufacture of consumer durables, containers, and other parts & components are anticipated to positively influence market growth. The automotive industry has experienced an increased preference towards blow molded plastic components in order to reduce the weight of the vehicle. The automotive segment is anticipated to grow at the highest CAGR from 2017 to 2025.

Regional Analysis (2016 vs 2025)

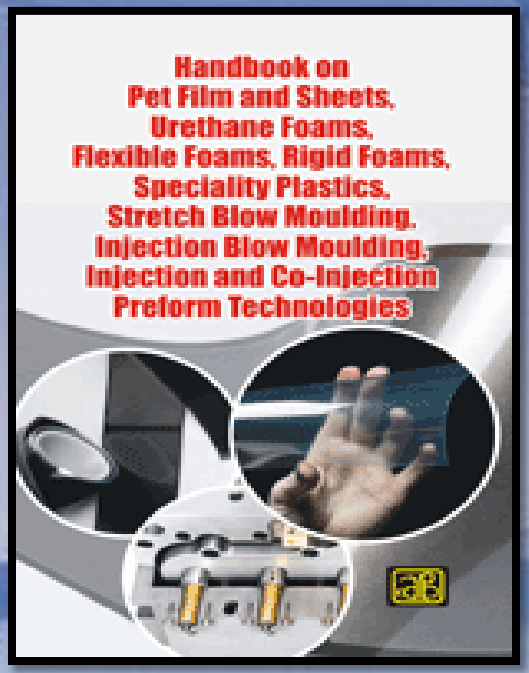


The global blow molded plastics market is expected to reach USD 191.6 billion by 2025, the global blow molded plastics industry is expected to witness significant growth over the forecast period owing to increasing product demand from end-use industries. In the past few years, there has been a significant growth in technologies and equipment for manufacturing blow molded plastics, which has enabled manufacturers to cater to specific requirements for several application sectors.

U.S. blow molded plastics market volume, by technology, 2014 - 2025 (Kilo Tons)



Handbook on PET Film and Sheets, Urethane Foams, Flexible Foams, Rigid Foams, Speciality Plastics, Stretch Blow Moulding, Injection Blow Moulding, Injection and Co-Injection Preform Technologies



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Polyester or polyethylene terephthalate (PET) is an unreinforced, semi-crystalline thermo-plastic polyester derived from polyethylene terephthalate. Its excellent wear resistance, low coefficient of friction, high flexural modulus, and superior dimensional stability make it a versatile material for designing mechanical and electro-mechanical parts. PET is fully recyclable and can be easily reprocessed into many other products for many different applications. However, unlike paper and other cellulose products, PET does not readily decompose. However, biodegradable additives are available that enhance the biodegradation of this plastic without affecting the physical properties.

Formation of a flexible polyurethane foam is an intricate process employing unique hardware, multiple ingredients and at least two simultaneous reactions. The urethane forming reaction occurs between the isocyanate and the polyol. Polyurethanes, also known as polycarbamates, belong to a larger class of compounds called polymers. Polyurethanes can be produced in four different forms including elastomers, coatings, flexible foams, and cross-linked foams. Elastomers are materials that can be stretched but will eventually return to their original shape. They are useful in applications that require strength, flexibility, abrasion resistance, and shock absorbing qualities.

Thermoplastic polyurethane elastomers can be molded and shaped into different parts. This makes them useful as base materials for automobile parts, ski boots, roller skate wheels, cable jackets, and other mechanical goods. When these elastomers are spun into fibers they produce a flexible material called spandex. Spandex is used to make sock tops, bras, support hose, swimsuits, and other athletic apparel. Co-injection is the process of injecting two resins simultaneously through a single gate to form a multi-layer structure. Recently, there has been a re-emergence of interest in co-injection technology spurred on by the development of new resins, barrier systems, controls, and hardware technologies.

Increasing demand of polyethylene terephthalate (PET) from food and beverage sector like in carbonated soft drinks packaging, increase demand for packaged food due to rise in consumption of frozen and processed food, rise in demand for electronics and automotive applications/industries and ecofriendly substitution are the most important driving factors in the polyethylene terephthalate market. Also, rapid urbanization, innovative packaging and high economic growth is contribution in increasing the demand for polyethylene terephthalate regardless of the geographical location.

This book will be a mile stone for its readers who are new to this sector, will also find useful for professionals, entrepreneurs, those studying and researching in this important area.

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Tags

Production Process for Polyethylene Terephthalate (PET), Polyethylene Terephthalate (PET) Production and Manufacturing, PET Sheet Making, PET Packaging Film Production, Packaging Films Manufacture, Production of PET Film, Polyester Film Production, PET Film Manufacturing, PET Film Making Plant, PET Film Production, PET Sheet Production, Production of PET Sheet, Film/Sheet Production, PET Sheet Manufacturing Business, PET Sheet Manufacture, PET Sheet Making Unit, How Polyurethane is Made? Manufacturing of Urethane Foams, Manufacturing of Polyurethane Foams, Urethane Foam Manufacturing, Urethane Foam Production, Manufacturing of PU Foam, How to Make Polyurethane Flexible Foam, Making of Polyurethane Foams, Production of Polyurethane Foam, Polyurethane Foam Making Plant, Polyurethane Flexible Foam Production, PU Foam Manufacturing Process, Process for Making Polyurethane Foam, Production Plant of Polyurethane Foam, Flexible Polyurethane Foam Manufacturing Business, Polyurethane Foam Production Process, Flexible Polyurethane Foam Production, Flexible Polyurethane Foam Manufacture, Polyurethane Rigid Foam Manufacturing Process, Production of Rigid Polyurethane Foam, Rigid Polyurethane Foaming Process, Specialty Plastic Manufacturing,

Speciality Plastics, Foams Manufacturing Plant, Specialty Packaging, Stretch Blow Molding, Stretch Blow Molding Machine, Stretch Blow Moulding Process, Stretch Blow Moulding for Plastic, Injection Blow Moulding, Extrusion Blow Moulding, Injection And Extrusion Blow Molding, Co-Injection Technology, PET Film Manufacturing Project Ideas, Projects on Small Scale Industries, Small Scale Industries Projects Ideas, PET Film Manufacturing Based Small Scale Industries Projects, Project Profile on Small Scale Industries, How to Start PET Sheet Manufacturing Industry in India, PET Film Manufacturing Projects, New Project Profile on PET Film Manufacturing Industries, Project Report on PET Film Manufacturing Industry, Detailed Project Report on PET Film Manufacturing, Project Report on PET Sheet Manufacturing, Pre-Investment Feasibility Study on PET Sheet Manufacturing, Techno-Economic Feasibility Study on PET Sheet Manufacturing, Feasibility Report on Polyurethane Rigid Foam Manufacturing, Free Project Profile on PET Sheet Manufacturing, Project Profile on Polyurethane Rigid Foam Manufacturing, Download Free Project Profile on Polyurethane Foam Production, Industrial Project Report on Polyurethane Foam Production

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