Global and China High Performance Fiber Industry Report, 2013-2016

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STUDY GOAL AND OBJECTIVES

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

REPORT OBJECTIVES

- To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

METHODOLOGY

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Abstract

High-performance fibers boast important strategic materials. Notably, aramid fiber, carbon fiber and high-strength PE fiber are the most widely applied high-performance fibers with the most impressive comprehensive performance. At present, China is still in the fledging stage when it comes to the application of high-performance fibers which witness a severe short supply. Spurred by government policies, China high-performance fiber industry is expected to keep a growth rate of 10%-20% in the forthcoming decade.

Aramid fiber falls into meta-aramid and para-aramid, of which the former finds application in high-temperature filter material, firefighter uniform and insulted wear fields, while the latter gets used in safety protection, bullet-proof and material reinforcement fields, etc.

The worldwide aramid fiber capacities concentrate in a minority of businesses in the US, Japan and China. In particular, meta-aramid market is in a large part dominated by the US-based Dupont with the capacity accounting for 62.5%, while in the para-aramid market, Dupont and Japan-based TeiJin take a lion's share in the world, with the proportion exceeding 80%.

Chinese aramid fiber industry develops later and demonstrates laggard production technology with products dominated by low- and medium-end series. In 2012, China's meta-aramid output met the domestic market and some of the products were exported to other countries. Major meta-aramid producers in China include Yantai Tayho Advanced Materials, SRO Group, and Guangdong Charming, of which, the meta-aramid capacity of Yantai Tayho Advanced Materials reached 5,600 tons/a, taking up the first place in China and the second place in the world. However, due to the technological restriction, China's actual output of para-aramid is small, with the import dependence rate as high as around 70%.

2. Carbon Fiber

Carbon fiber characterizes outstanding mechanical property and chemical stability but weak toughness, being widely applied in industry, sports goods, aviation and aerospace, etc. In particular, the demand for carbon fiber in industrial fields shows the most rapid growth, with the application proportion rising to 62.1% in 2012.

The global carbon fiber market features high market concentration, with capacities chiefly held by Japanese and American businesses. For example, small-tow PAN-based carbon fiber producers include Toray Industries, Toho Tenax and Mitsubishi Rayon, while large-tow PAN-based carbon fiber producers include Zoltek, and pitch-based carbon fiber producer mainly refers to KUREHA.

Recent years have seen rapid development of China carbon fiber industry, with the capacity in 2012 soaring to 14,500 tons. But carbon fiber products made in China are largely low-end products, thus, it sees a short supply of high-end carbon fiber products. In addition, carbon fiber production equipments of a great many of businesses are unstable, leading to a relatively low output in reality with the import dependence rate of carbon fiber as high as around 70%.

3. High-Strength PE Fiber

High-strength PE fiber features remarkable mechanical and anti-corrosion properties but poor heat resistance, being widely applied in rope mesh, safety protection, sports and leisure fields, etc.

As a kind of scarce materials in the world, high-strength PE fibers reached the annual demand approximating 50,000 tons, as opposed to its output of 10,000 tons at most. Thus, it is a big gap. Worldwide, high-strength PE fiber market is dominated by Holland-based DSM, Japan-based TOYOBO and America-based Honeywell, with the collective capacity making up 70% of the world’s total.

In 2012, the high-strength PE fiber capacity of China hit 12,200 tons, with major producers including Shandong TREVO, Surrey Hi-Tech and Ningbo Dacheng Advanced Material. However, China lags far behind when it comes to both the equipments and technologies for the production of high-strength PE fibers, with the actual annual output no more than 2,000 tons.

The report highlights:

※Development plans and demand forecast on China’s three major high-performance fibers during the 12th Five-Year Plan period;
※Supply & demand and competition pattern of world and China aramid fiber industry;
※Supply & demand, competition pattern, import & export, and development forecast of world and China carbon fiber industry;
※Supply & demand, and competition pattern of world and China high-strength PE fiber industry;
※Operation, high-performance fiber business, and development forecast of world and China’s 15 high-performance fiber production businesses.

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