Global and China Needle Coke Industry Report, 2015-2018

Oct. 2015
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.
Needle coke with low electrical resistance, strong shock resistance and good anti-oxidation ability has been widely used in ultra high power graphite electrode, nuclear reactor deceleration materials and LIB anode materials. There are coal-based needle coke and oil-based needle coke.

From 2006 to 2014, the global needle coke capacity was expanded slowly at 3.6%, mainly because of the capacity expansion control by the industry’s giants to maintain high profit margins. By contrast, the global demand for needle coke is growing rapidly, making the demand-supply gap increase year by year. In 2014, the demand rose 62.9% from a year earlier, to 290 kilotons.

The Chinese needle coke industry began in the 1970s and '80s, however, the capacity has surged in recent years along with the technical breakthrough. In 2006-2014, China’s needle coke capacity increased from 60 kilotons to 260 kilotons, at a compound annual growth rate of 20.1%. In 2015, as the Huahang Energy’s needle coke project went into operation, China’s needle coke capacity has reached 280 kilotons.

Needle coke capacity can’t meet the domestic market demand despite the increase year by year e.g. the demand-supply gap was 72 kilotons in 2014, China needs to import needle coke from the United States, Japan, Britain and other countries every year. In 2014, China recorded an import volume of 47 kilotons.

Global needle coke production enterprises are mainly concentrated in the United States, Japan and China. The US-based ConocoPhillips as the world’s largest oil-based needle coke producer registers capacity of about 370 kt/a in 2015; the Japan-based C-Chem as the world’s largest coal-based needle coke producer registers capacity of 170 kt/a in 2015. Chinese companies started relatively late, but in order to enhance the international competitiveness, they all have been increasing investment in needle coke projects over the years.

The total capacity of Sinosteel Anshan Research Institute of Thermo-Energy Co., Ltd. tops China by surpassing Shanxi Hongte Coal Chemical Industry Co., Ltd. after it adjusted the 80 kt/a needle coke project phase II capacity from 40 kt/a to 120 kt/a in 2012. In January 2015, the company’s coal-based needle coke industrialization project passed the MOST (Ministry of Science and Technology) review and was officially included in the National Torch Program projects.

Qitaihe Baotailong Coal & Coal Chemicals Public Co., Ltd. signed a cooperation agreement with Huaibei Huachun Chemical Co., Ltd. in September 2015. The two sides invested RMB930 million in the 180 kt/a coal tar hydrogenation and 50 kt/a cogeneration project in Anhui (Huaibei) new coal chemical synthetic material base.
**Jinzhou Coal and Coke Group** started the construction of 100 kt/a coal-based needle coke project in 2010, divided into two phases. The first phase (50 kt/a) was completed in 2013, and the second phase began bidding in April 2015.

This report mainly highlights the following:

- Supply and demand, technical status, competition pattern, etc. of global needle coke industry;
- Development environment, supply and demand, competition pattern, import and export, etc. of China’s needle coke industry;
- Production, demand, market pattern of major downstream industries (graphite electrode) of needle coke;
- Operation, revenue structure, needle coke business, etc. of 7 global and 9 Chinese needle coke producers.
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