



# **Global and China Superhard Material and Product Industry Report, 2013-2016**

**May 2014**

## 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

Superhard material industry chain mainly involves the following three aspects: monocrystalline superhard materials (including diamond, cubic boron nitride, etc.), composite superhard materials (including clad sheet for cutting tools, clad sheet for oil/gas, clad sheet and wire drawing die blanks used for coal/mining) and super-hard materials and tools (including diamond saw blades, polycrystalline diamond drawing dies and drills, etc.).

In regard of monocrystalline superhard materials, China has become the No.1 producer of man-made diamonds, generating about 90% of global output. However, due to the sluggish global economy, China's economic slowdown, scant market demand and other factors, in 2013, China's diamond output increased by only 7.9% to 15.1 billion karat.

In point of composite superhard materials, the market size in China in 2013 reached about RMB12 billion, accounting for 21.8% of global total. But influenced by technology and backward process, currently, superhard materials produced by domestic Chinese enterprises are mainly low-end products, while the high-end market is almost monopolized by Element Six, Diamond Innovations, US Synthetic and other foreign manufacturers.

With respect to superhard material tools, China mainly produces diamond saw blades, diamond drill bits, diamond discs and diamond cutting tools, mostly diamond saw blades. In 2013, the market size of diamond saw blades was about RMB 30.5 billion, sharing about 34% of China's total superhard material tool market.

"Global and China Superhard Material and Product Industry Report, 2013-2016" by ResearchInChina dwells upon the following aspects:

- Market supply and demand, import and export, market prices of monocrystalline superhard material in China, etc.;
- Scale and competition pattern of markets of clad sheet used for cutting tools, clad sheet for oil industry, clad sheet and wire drawing die blanks for mining industry, and other composite superhard materials;
- Scale, competition pattern and import and export of China superhard material tool market;
- Operation and development of 8 global superhard material and product companies in China;
- Operation and development strategy of 19 superhard material and product companies in China.

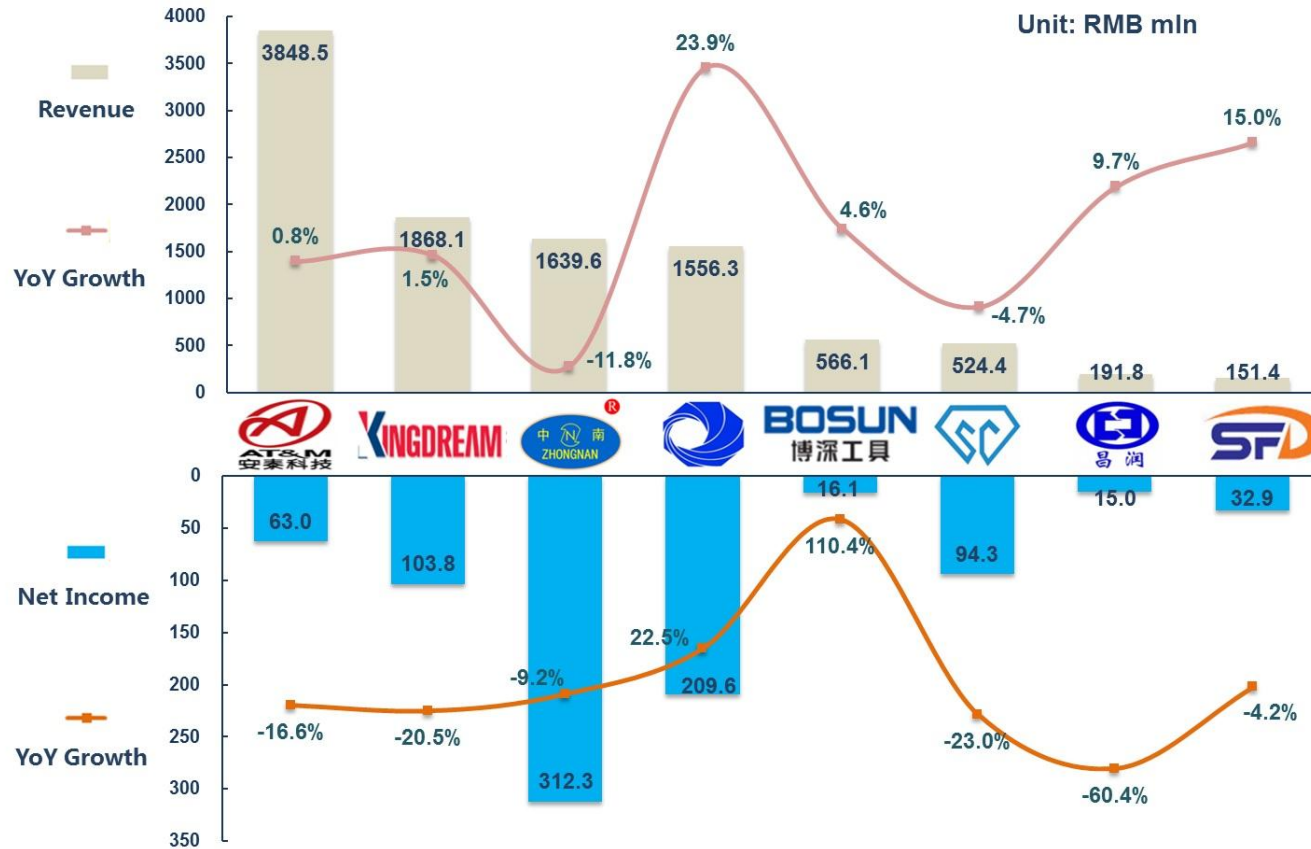
In 2013, affected by the sluggish economy, insufficient demand from downstream petroleum, construction and metal-cutting machine tool industries, superhard material and products industry growth was slowing down; and companies were facing high operating costs. In view of this, Henan Huanghe Whirlwind Co., Ltd, SF Diamond Co., Ltd, BOSUN Tools Co., Ltd and other enterprises all adopted a number of measures to expand their existing production capacity and extend their industrial chain, so as to enhance their operational capabilities.

Huanghe Whirlwind is China's second largest producer of monocrystal synthetic diamond. As of the end of 2013, its production capacity of synthetic diamond superhard materials was 2.2 billion karat, and that of polycrystalline composite sheet was 12 million pcs. In March 2014, Huanghe Whirlwind again raised RMB 917 million for the construction of the project producing surface metallization monocrystal of superhard material and high-quality micro-powder and crushed diamond (the planned capacity being 2.077 billion karat/a), and the production line of superhard material cutting tools (the planned capacity is 1 million pcs/a).

SF Diamond Co., Ltd is China's largest polycrystalline diamond enterprise, with its products including various clad sheets used for cutting tool and the oil industry. In 2013, SF Diamond acquired 80% equities of Zhengzhou Huayuan Diamond Tooling Systems Co., Ltd which is one of two biggest Chinese manufacturers of woodworking PCD cutting tools, holding a 20% share of the woodworking PCD cutting tool market in China. The acquisition will help SF Diamond to expand into market segments of superhard material products, which is in line with its strategic planning of extending industrial chain to the downstream.

BOSUN Tools Co., Ltd is a leading enterprise of diamond tools in China, with an annual capacity of 18.69 mln pieces. After it commissioned the diamond saw blade production base in Thailand in 2012, BOSUN Tools started a new diamond tool project at home with a total investment of RMB728 million in 2013, which can produce diamond tools 6.79 million pieces per year.

Revenue, Net Income and YoY Growth Rates of Major Chinese Superhard Material and Product Manufacturers, 2013



Source: Global and China Superhard Material and Product Industry Report, 2013-2016; ResearchInChina

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