



**Global and China Isostatic Graphite  
Industry Report, 2018-2022**

**September 2018**

## 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

Isostatic graphite, a kind of high-end specialty graphite with multiple excellent properties, is widely used in semiconductor, electric discharge & mold machining, nuclear power, metallurgy and aviation, particularly in PV field, the largest applied market.

Global photovoltaic (PV) industry has been developing apace over recent years, with new installed capacity hitting 98GW in 2017, a year-on-year increase of 40%, bringing total global installations to 402.5GW. China added 53GW in the year, an upsurge of 53.4% from a year earlier, with cumulative installed capacity reporting 130GW.

Spurred by the booming PV sector, global output of isostatic graphite reached 142kt in 2016, about 71.5% of which was consumed in PV field. China demanded 74kt of isostatic graphite, 73.7% of which came from the PV industry. However, as China-made products are still inferior to foreign high-end ones, the isostatic graphite for high-end applications like nuclear power is largely imported, with a self-sufficiency rate of about 70.8%.

Japan, the United States and Europe are home to major isostatic graphite producers in the world. Enterprises with capacity of over 10kt include TOYO TANSO, IBIDEN and Tokai (Japan), SGL (Germany), and Mersen (France). Among them, SGL, Mersen and TOYO TANSO have production bases in China.

Famous Chinese isostatic graphite producers include Baofeng Five-star Graphite, Chengdu Carbon (Fangda Carbon New Material), Datong Xincheng New Material, Jilin Carbon and Sinosteel Advanced Material (Zhejiang). Among them, Baofeng Five-star Graphite boasts larger capacity (10kt/a), and Chengdu Carbon has the most product specifications and varieties. Several firms including Chengdu Carbon are still ramping up production with a combined capacity of about 114kt/a under construction.

As the demand from downstream sectors like PV is growing steadily, China's output of isostatic graphite and self-sufficiency rate will rise along with operation of isostatic graphite projects under construction and improvement in performance of the products, to an estimated 103.7kt and 87.9% in 2022, respectively.

**Projects under Construction of Major Isostatic Graphite Enterprises in China, as of end 2017**

<b>Company</b>	<b>Capacity under construction (ton)</b>	<b>Isostatic Graphite Projects under Construction</b>
<b>Baofeng Five-star Graphite Co., Ltd.</b>	28,000	On October 20, 2017, the company signed with the People's Government of Huaping County an investment agreement about the 28 kt/a isotropic high-purity graphite production line project (with total investment of RMB1 billion and construction in three phases).
<b>Chengdu Carbon Co., Ltd.</b>	30,000	An investment of RMB2.101 billion in the 30kt/a specialty graphite project which is expected to go into production at the end of 2018
<b>Henan Provincial Special Thermal Engineering Furnace Material Co., Ltd.</b>	20,000	In 2012, the company planned to invest RMB2 billion in building the 20 kt/a isostatic graphite expansion project, and it was estimated to be completed in 2016, and it still remains disclosed whether it has been put into production or not.
<b>Jiangxi Shen Tian Carbon Co., Ltd.</b>	6,000	A total of RMB34.2572 million had been invested in 6kt/a specialty graphite (isostatic) production line project (a planned investment of RMB146.3 million) by the end of 2017. The project is predicted to reach designed capacity on January 31, 2019.
<b>Inner Mongolia Rising New Energy Co., Ltd.</b>	20,000	The 20kt/a isotropic graphite project under construction
<b>Henan Kaitan New Materials Co., Ltd.</b>	10,000	The company invested RMB1.13 billion in 10kt/a high-strength/high-density isostatic graphite green body production project in 2017. The construction of the project will last from July 2017 to August 2018. Whether the project is in operation has not been disclosed.

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Global and China Isostatic Graphite Industry Report, 2018-2022 highlights the followings:

- ◆ Global isostatic graphite industry (status quo, market size, competitive landscape, development in major countries, etc.);
- ◆ The isostatic graphite industry in China (development environment, supply & demand, competitive landscape, import & export, price comparison, development trends, etc.);
- ◆ Downstream sectors (PV, electrical discharge machining (EDM), nuclear power, etc.);
- ◆ Eight foreign and twenty Chinese enterprises (profile, operation, R&D investment, isostatic graphite business, etc.)

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