



# Global and China Lithium Battery Separator Industry Report, 2017-2022

Sep. 2017

## **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

Separator, as the one with highest technical barrier among four major raw materials of lithium battery, is the only remainder that still has not been completely made in China yet, particularly the wet-process separator which has been much sought after over the recent years. However, the gap between demand and supply is narrowing amid the technological advancement and capacity expansion of Chinese separator enterprises. In 2016, China's output of separators posted 929 million m<sup>2</sup>, an upsurge of 33.03% on an annualized basis, and seeing a rising share of 56% in global total. The localization rate of separators was lifted to 79% in China in 2016, but the high-end separators still relied upon imports.

In the past five year, the average price of home-made 16 $\mu$ m wet-process separator fell from 9.5 yuan/m<sup>2</sup> in 2010 to 5 yuan/m<sup>2</sup> in 2016; and that of 16 $\mu$ m dry-process separator dived from 7.5 yuan/m<sup>2</sup> in 2010 to 3-4 yuan/m<sup>2</sup> in 2016. The slump in price is mainly caused by rapid capacity expansion of low- and medium-end separators as well as the price war staged by players to seize more market share. Furthermore, there are low- and medium-end overcapacity and disorderly competition in the downstream battery cell industry, which brings room for low-end low-priced separators.

Although the huge low-end capacity (mainly dry-process separator) of Chinese separator manufacturers lowered the average selling price of separators worldwide in the past five years, the demand for high-end wet-process separators will see explosive growth along with the continuously growing demand for power battery in the world, and the separator firms with low technical level and small production scale will be ultimately eliminated. Since 2017, separators of all kinds, without exception, have experienced fall in price, while high-end wet-process and dry-process separators saw a narrow decrease in price. Nevertheless, the high-end dry-process separator has small production capacity and finds limited application. Being with a descending trend, global separator price drop will be substantially narrowed compared with the fall during 2014-2016, mainly because the wet-process sees a rising proportion as wet-process separators accelerate to be used instead of dry-process ones in power battery.

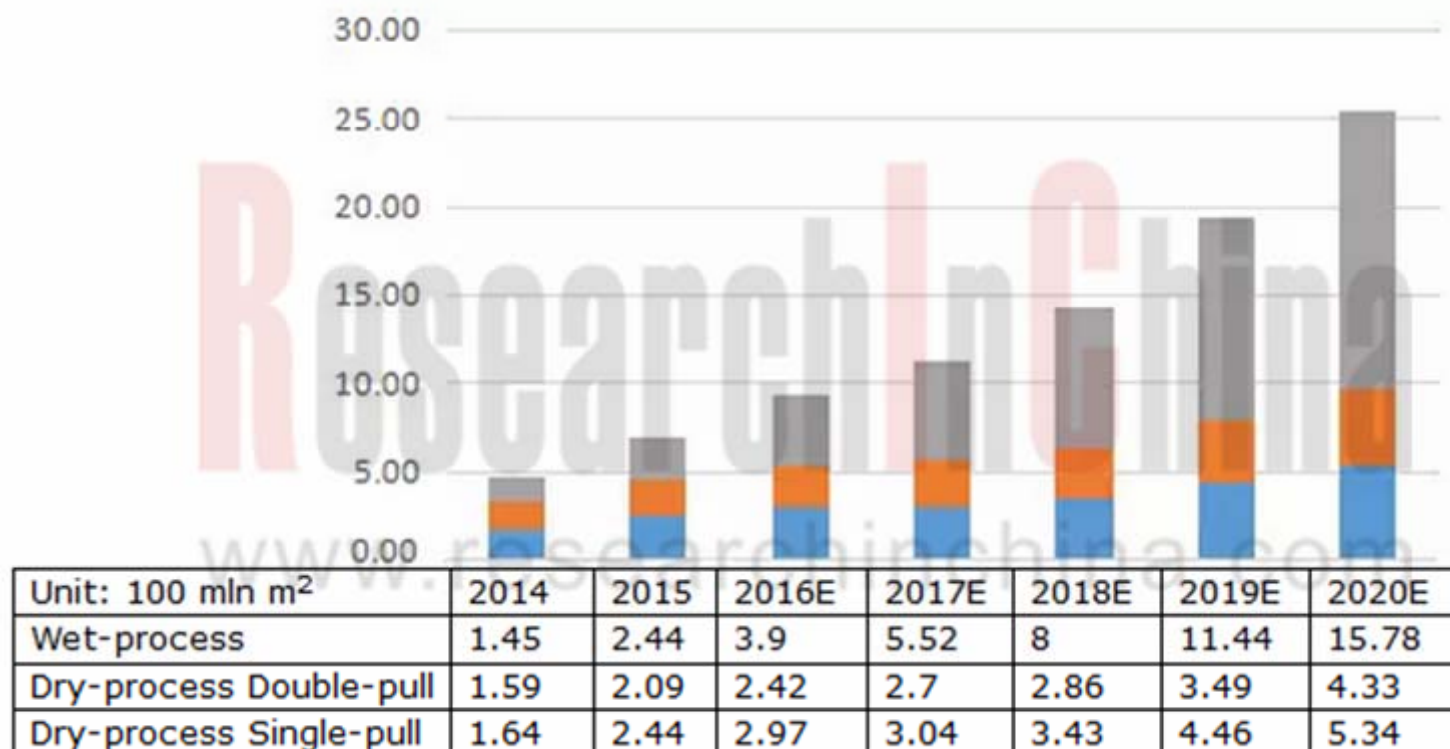
In 2016, Shenzhen Senior Technology Material sold 120 million m<sup>2</sup> of dry-process separators, ranking first in China, followed by Cangzhou Mingzhu Plastic Co., Ltd and Xinxiang Zhongke Science and Technology (GREEN) Co., Ltd. In 2016, the sales leader of wet-process separator came to Shanghai Energy New Materials Technology Co., Ltd, and it sold 100 million m<sup>2</sup>, with customers covering Samsung, LG, BYD, CATL, etc. In 2016, the top three by wet-process separator sales in China were Shanghai Energy New Materials Technology Co., Ltd, Suzhou GreenPower New Energy Materials Co., Ltd, and Foshan Jinhui Hi-tech Optoelectronic Material Co., Ltd.

Against the growing demand for wet-process separator in recent years, Chinese wet-process separator manufacturers are expanding production capacity aggressively and the originally dry-process separator producers also have made investments in wet-process separator production lines. At the end of 2016, Suzhou GreenPower New Energy Materials Co., Ltd is the Chinese producer with the biggest wet-process separator capacity up to 204 million m<sup>2</sup>. Besides, the dry-process leaders Xinxiang Zhongke Science and Technology (GREEN) Co., Ltd and Shenzhen Senior Technology Material Co., Ltd built some wet-process separator capacity, adding their separator capacity to total 170 million m<sup>2</sup> and 156 million m<sup>2</sup> respectively at the end of 2016.

Global and China Lithium Battery Separator Industry Report, 2017-2022 by ResearchInChina highlights the following:

- ◆Lithium battery separator production process, key technologies, and technology orientations;
- ◆Shipments, import volume, market size, prices, etc. of global and Chinese lithium battery separator industries;
- ◆Market shares, production process, capacity, supply relation, etc. of global and Chinese lithium battery separator companies;
- ◆Shipments of ordinary lithium battery and power battery, market size and analysis of battery cell manufacturers in China and the world;
- ◆Top 20 Chinese lithium battery separator manufacturers (operation, technologies, markets, production and marketing trends);
- ◆Top 9 Global lithium battery separator manufacturers (operation, technologies, markets, production and marketing trends).

## Separator Output by Technical Route in China, 2014-2020



Source: SPIR, ResearchInChina

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