



# China Automotive Lightweight Material (Metal) Industry Report, 2014-2018

Aug.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.

## Abstract

Lightweight materials are one of key means to achieve lightweight vehicles. Currently, lightweight materials used in automobiles include high-strength steel, aluminum alloy, magnesium alloy, plastic and composites, carbon fiber and so forth. Among them, iron and steel (including high-strength steel) account for about 70%, aluminum alloy and plastic 8%-10% each, and magnesium alloy only 0.5%-1.0%.

By weight, body, powertrain and chassis system occupy about 60% of a vehicle, especially body shares more than 20%, so it is a target in terms of weight loss and an important part for the application of automotive lightweight materials.

**Automotive Steel Sheet:** Automotive steel sheet is a main raw material in automobile production. In 2014, China's automobile production consumed at least 15 million tons of steel. However, China has limited varieties of automotive steel sheet, and ultra-high strength steel sheet only makes up 2%-5%, while some lightweight automotive sheets with higher strength need to be imported due to the impossible commercialized mass production.

As a high-end product in the steel industry, automotive steel sheet is only supplied domestically by players such as Baosteel, Wuhan Iron and Steel, Anshan Iron and Steel, Shougang, Benxi Steel, and Valin Steel owing to high technical requirements, marking a high market concentration rate.

Baosteel is a giant in China's automotive steel sheet industry, holding 50% market share. Baosteel is the only Chinese enterprise that achieves large-scale production of ultra-high strength steel sheet. In 2014, its output reached 175,000 tons, accounting for 43.5% market share.

Following Baosteel, Wuhan Iron and Steel produced 3 million tons of automotive sheet in 2014, seizing about 20% market share. Meanwhile, Anshan Iron and Steel manufactured 1.9 million tons with 13% market share.

Although with the large capacity of automotive steel sheet up to 1.5 million tons/a, Valin Steel did not release the capacity fully in 2014. However, Valin Steel's high-strength automotive sheet is in line with the automotive lightweight trend. In 2015, it is expected to show market competitiveness and seize about 10% market share.

**Automotive Aluminum Alloy Materials:** Aluminum and aluminum alloy are the current priority materials for the global automotive lightweight. Currently, they find wide application in auto parts like wheels, engines, heat exchangers, turbochargers and gearboxes. However, there are rather high technical thresholds in the field of aluminum alloy automotive sheet. Chinese aluminum alloy processing enterprises are weak at technologies, and they mainly target popular economical cars and has limited demand for aluminum alloy cars. Therefore, in the past few years, China's automobile industry has developed rapidly, while China's aluminum alloy automotive sheet industry has evolved slowly with the capacity growing sluggishly.






































In 2014, China's consumption of automotive aluminum alloy hit 300,000 tons. However, the supply and demand of aluminum alloy automotive sheet in the country still stayed at a low level. The high-end mainstream market was dominated by Novelis, KOBELCO, Aleris and other foreign brands.

In October 2014, Novelis (Changzhou) put its 120,000 t / a automotive aluminum sheet/strip project into operation, making China's automotive aluminum alloy sheet capacity reach 185,000 tons. In addition, KOBELCO, Aleris, Zhongwang Group and other companies will put automotive aluminum sheet projects involving over 400,000 tons into operation in China in 2015-2016, then China's automotive aluminum sheet capacity will attain up to 550,000 tons / a. In the next few years, China's automotive aluminum alloy market size is expected to grow at a rate of about 20% in the wake of the enhanced trend of automotive lightweight.

The report includes the following aspects:

- Status quo, market supply and demand, competition pattern and development forecast of China's automotive steel industry;
- Market supply and demand, competition pattern and development forecast of China's automotive aluminum alloy industry;
- Market supply and demand, competition pattern and development forecast of China's automotive magnesium alloy industry;
- Operation, automotive materials-related business and development forecast of four global and 11 Chinese automotive steel/aluminum alloy/magnesium alloy companies.

## Output and Customers of Major Automotive Steel Sheet Manufacturers in China , 2014

Company	Output(Unit: Kt/a)	Major Customers
 <b>BAOSTEEL 宝钢股份</b>	7360	 上汽集团  长安汽车  东风汽车公司  上汽集团  上汽集团  上汽集团  上汽集团  CHERY  上汽集团  JAC
 <b>武汉钢铁股份有限公司</b>	3000	 DFM  CHERY  上汽集团  上汽集团  上汽集团  上汽集团  JAGUAR  LAND ROVER
 <b>ANSTEEL 鞍钢股份有限公司</b>	1900	 TOYOTA  上汽集团  CHERY  SUZUKI  上汽集团
 <b>北京首钢股份有限公司</b>	1100	 上汽集团  FOTON  北京现代
 <b>本钢集团有限公司</b>	780	 上汽集团  CHERY  上汽集团
 <b>华菱钢铁</b>	100	 上汽集团  上汽集团  Ford

Source: China Automotive Lightweight Material Industry Report , 2014-2018 ; ResearchInChina

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