

The Vertical Portal for China Business Intelligence

#### 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 costeffective 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.

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### **Abstract**

Catalyst is the core of the SCR flue gas denitration technology, occupying about 40% of total cost of investments into SCR flue gas denitration system. During 2012-2014, the continuous denitration transformation of thermal power plants stimulated China's demand growth for SCR denitration catalyst, with the demand exceeding 250,000 cubic meters in 2014. However, the demand declined in 2015 as renovation work drew a close, then picked up in 2016, and is expected to see steady growth in the next few years, because:

First, China has put forward new standards for nitrogen oxide emissions of cement, glass, coke, diesel vehicle and other industries since 2015, which will give a new impetus to the growth of SCR denitration catalyst. Second, SCR denitration catalyst has a service life of 3-5 years in general, which means that the denitration catalyst installed since 2011 has to be updated. It is estimated that 270,000 cubic meters of SCR denitration catalyst require replacing by 2020, which will further boost the demand for denitration catalyst.

SCR denitration catalyst is divided into cellular, plate and corrugated types, of which the former two ones prevail in the current Chinese market, while the latter is rare. Based on demand, cellular SCR denitration catalyst held a market share of 64.4% in 2015, marking a dominant position. However, most companies prefer plate-type denitration catalyst which is more suitable for China's common medium and high-ash-content coal-fired conditions when the existing cellular SCR denitration catalyst expires. Therefore, the plate-type denitration catalyst will see a conspicuously growing market share in the next few years and stand at 43.9% or so by 2020.

With the people's more attention to the atmospheric environment in recent years, China has proposed more stringent requirements on management and use of denitration catalyst, and in August 2014included waste gas denitration catalyst (vanadium and titanium-based) into hazardous waste, which opens up the potential market for disposal of waste gas denitration catalyst and provides more market opportunities for the promotion and application of new-type efficient non-toxic denitration catalyst. At present, Gemsky has developed non-toxic rare earth denitration catalyst.

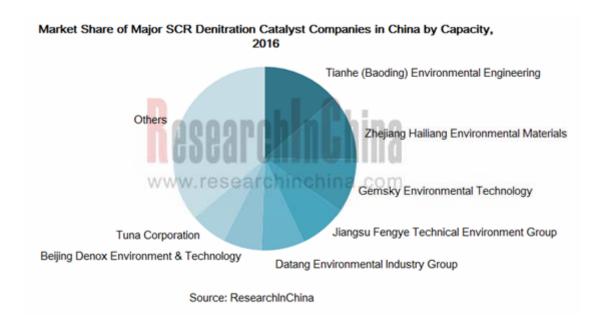
With the increasing demand for flue gas denitration in China, SCR denitration catalyst enterprises have been expanding in scale. In 2016, there were more than 10 SCR denitration catalyst producers each with annual capacity of over 20,000 cubic meters in China; 3 enterprises had the annual capacity of over 50,000 cubic meters apiece, occupying one-third of the total capacity cumulatively.

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The report highlights the following:

- ◆China's current atmospheric governance, denitration catalyst policy and technology environment;
- ◆China's SCR denitration catalyst capacity, output, demand and structure, price trend, corporate competition, denitration catalyst regeneration market and potentials, etc.;
- ◆China's titanium dioxide (an upstream raw material of SCR denitration catalyst) supply, demand and price trend; status quo of downstream thermal power denitration installation, cement, glass, coke, diesel vehicles and the like;
- ◆Operation and SCR denitration catalyst business of 6 global and 15 Chinese key SCR denitration catalyst manufacturers.



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