Global and China Automotive Transmission Industry Report, 2016-2020

Sep. 2016
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.

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

INFORMATION SOURCES

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.
Abstract

Global automotive transmission size has been more than 90 million sets in 2015, up 1.1% year on year, of which, the Chinese market increased by 3.3% to exceed 24 million sets. The permeability of automatic transmission in both global and Chinese markets has been further improved from previous years; China's automatic transmission market grows faster.

The proportion of automotive automatic transmission market in China has been close to 50% in 2015, dividing the market equally with manual transmission (MT). Concerning the passenger vehicle market, automatic transmission has accounted for 56%, of which, dual clutch transmission (DCT) and continuously variable transmission (CVT) are showing the fastest growth, reaching above 20% and 30% respectively; AT is in a state of slow growth; the market size of automated manual transmission (AMT) has been slightly declining.

With respect to the distribution of enterprises, DCT and CVT will still be the focus of future market:

◆ In April 2016, the world's first low-torque 6DCT50 dual-clutch automatic transmission of Dongfeng GETRAG Transmission Co., Ltd. went off the line, bringing annual production capacity of 30,000 units to the factory;
◆ In July 2016, Chongqing Tsingshan Industrial Co., Ltd. formally entered the mass production of DCT;
◆ In August 2016, Honda submitted to the Japan Patent Office an application for “11-speed three-clutch automatic transmission” patent. According to the design of Honda, more gears and clutches can get higher gear-shifting response efficiency and smoother trip-over stop, but also can effectively reduce torque losses;
◆ In 2016, SAIC GM plans to invest RMB2.5 billion in the construction of the CVT transmission project, which upon the completion can add 450,000 units/a transmission capacity.
◆ The traditional CVT producer Nanjing Punch Powertrain Co., Ltd. is presently carrying on DCT customized research. It plans to meet the needs of small car market by launching ideal DCTs with high fuel economy and comfort.
At the same time, with the development of new energy automobile market, hybrid power transmission has become the development priority for global enterprises, e.g. Schaeffler, Aisin, ZF Friedrichshafen have launched related products. In China, the dual-clutch transmission that can be applied to conventional power as well as match plug-in hybrid system is the hot topic in current research and development of domestic automakers.

The report covers the followings:

- Global automotive transmission market size & structure, development characteristics of AT, DCT, CVT and AMT segments, main manufacturers, and supporting relationship;
- China automotive transmission market size & structure, development characteristics, production capacity, and analysis on AT, DCT, CVT and AMT segments;
- Global and China new energy automobile transmission development status and enterprise layout;
- Development of global and Chinese transmission producers (autonomous ones and joint ventures), mainly including product type, product sales and capacity.
## Hybrid Power Transmission Layout of Some Global and Chinese Enterprises

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<th>Hybrid Power Transmission Layout</th>
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<tr>
<td>Schaeffler</td>
<td>Schaeffler has designed the CVT-based plug-in hybrid concept suitable for B- and C-Class cars.</td>
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<td>Eaton</td>
<td>Eaton’s hybrid power system adopts parallel (oil-electricity/gas electricly) hybrid structure, with an electromotor/generator formed between automatic clutch and transmission. The system is mainly used in the field of city bus and inter-city bus. By the end of 2015, more than 6,500 vehicles were assembled.</td>
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<tr>
<td>Aisin</td>
<td>Its developed, the world’s first FK dual-motor hybrid transmission (FK-1U) has been carried on Lexus GS450h and Toyota Crown.</td>
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<tr>
<td>ZF Friedrichshafen</td>
<td>The new-generation 8-speed automatic transmission developed by ZF for plug-in hybrid electric vehicles has been put into mass production and firstly carried on BMW X5 xDrive40e PHEV.</td>
</tr>
<tr>
<td>BYD</td>
<td>BYD Tang, Song and other HEVs have realized the matching between dual-clutch transmission and hybrid system.</td>
</tr>
<tr>
<td>SAIC</td>
<td>SAIC Roewe eRX5 to be marketed within 2016 will carry a plug-in hybrid system consisting of a 1.5T engine, electromotor and 7-speed dual-clutch transmission; In 2016, SAIC invested RMB1.2 billion in the hybrid EU4 Gen2 project construction.</td>
</tr>
<tr>
<td>Geely</td>
<td>The 1.5TD+7DCTH plug-in hybrid power platform developed by Geely’s European R&amp;D Center will be carried on Geely’s full range of models and marketed in succession from 2017 to 2020.</td>
</tr>
<tr>
<td>Chery</td>
<td>Chery A5i/E5, marketed in July 2016, adopts ESS technology hybrid system, carries 1.6L naturally aspirated engine and CVT, in parallel connection with P2 single motor, with simple structure and higher efficiency.</td>
</tr>
<tr>
<td>FAW</td>
<td>FAW Car’s HEV and BEV platform development will be completed in 2016, of which, H platform hybrid power assembly will take the lead in production. H platform hybrid power assembly engine and transmission have hybrid design based on 2.0T engine (code CA4GC20TD) and 7-speed dual-clutch transmission (code DCT350) separately, with most of the parts shared, and expected to be firstly carried on Hongqi H7. FAW has conducted adaptive matching on the transmission.</td>
</tr>
<tr>
<td>Great Wall</td>
<td>Great Wall plans to spend RMB3.369 billion building a dual-clutch transmission line. Its developed dual-clutch transmission can also support the matching between plug-in hybrid and hybrid all-wheel-drive systems, which will be popularized into Great Wall’s RUV range or SUV modes in the future.</td>
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(Compiled from Global and China Automotive Transmission Industry Report, 2016-2020 by ResearchInChina)
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