

## Analysis on reasons of China Hi-Tech Group Corporation

# cross-border M&A to Oerlikon's Carding Business Department

Yue LIU, Gang FANG, Tianyi LI

Business School, Beijing Institute of Fashion Technology

Corresponding author: Gang FANG E-mail address: 20130018@bift.edu.cn

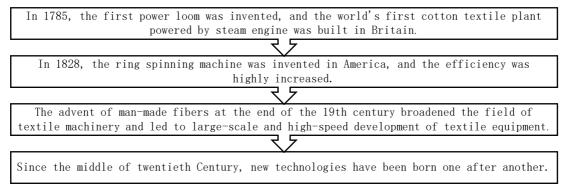
Abstract Because of the decline of domestic demographic dividend, textile and garment enterprises are shifting to Southeast Asia and other emerging economies, domestic textile and equipment enterprises are facing the situation of competition between their products and international enterprises. If one company wants to stand out here, it must have the core competitiveness and expand the market. China Hi-Tech Group Corporation. has mastered the advanced technology of nonwovens technology through the merger and acquisition of the carding division of Switzerland's Oerlikon Company, and has expanded the market by combining European technology with Chinese marketing. This paper analyzes the macro situation of the non-woven equipment industry and market before the merger and acquisition, as well as the internal situation of Hi-Tech Heavy Industry Co., Ltd. At the same time this paper analyzes the motivation of the merger and acquisition of enterprises, in order to promote the relevant textile machinery enterprises to think about their own development.

**Key words** Cross-border mergers and acquisitions; Textile machinery; Nonwovens; Motivation of mergers and acquisitions

## 1 Introduction

In the late eighteenth century. The emergence of power textile machinery in Europe made the textile industry change from handicraft industry to machinery industry. With the outbreak of the second and third industrial revolutions, the development of textile machinery technology has been continuously upgraded, and gradually to large-scale, high-speed and automation direction, as shown in figure 1.

Fig. 1 Development Process of Textile Machinery Technology



At present, the export of global textile machinery is mainly concentrated in Europe and Asia. European textile machinery enterprises represented by Germany, Switzerland, Italy and other countries have advanced technology. In Asia, the main enterprises are concentrated in Japan, China, India and South Korea. China has maintained a certain competitive advantage in the global textile machinery industry by virtue of its complete industrial chain and large-scale production. It can be said that China



has become a big textile country. However, there is still a certain gap between the competitiveness of textile machinery industry in china and those in western countries. The reason for the gap is that China's textile machinery industry is dominated by small and medium-sized enterprises whose product performance is far from the leading company, as shown in figure 2. This makes China's high-end, textile

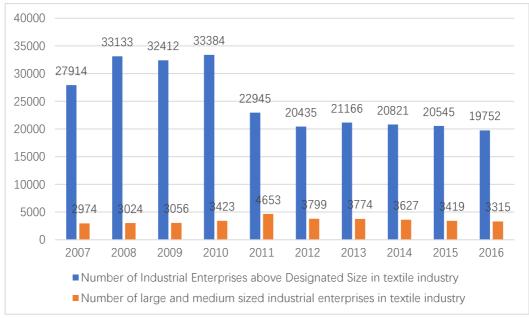


Figure 2 2007-2016 quantity of textile enterprises

#### Source: Official Website of National Bureau of Statistics

equipment dependent on imports, as shown in figure 3. In contrast, as the birthplace of power textile equipment, the developed countries in the West have obvious advantages, such as equipment and human resource. In Germany, for example, the export value of German textile machinery in 2011 was 3.767 billion euros, accounting for 23% of the global textile equipment export share. Although the market share



Figure 3 2007-2011 China Textile Machinery Import and export volume changes (unit: 100 million US dollars)



#### Source: China Industrial Information Network

of domestic textile machinery products in China has exceeded 78% in 2010, high-end textile machinery still needs to be imported. In September 2011, China Hi-Tech Group Corporation acquired Swiss Oerlikon Co., Ltd., which not only solves its technical short board but also upgrades its technical level of non-woven fabrics all-round. This mergers and acquisitions (M&A) action has important strategic significance for improving the competitiveness of China's non-woven fabrics in the international arena. So, what is the motivation of this action? This article will analyze the action and make recommendations to other related companies.

### 2 Introduction of the M&A

Oerlikon is a leading global technology Group providing market leading technologies and services and representing the top technology of textile production. Oerlikon's carding unit which acquired by China Hi-Tech Group Corporation includes the assets and liabilities of Autefa Automation Co., Ltd. in Germany and equities of Oerlikon Neumag GmbH in Italy and Oerlikon Newmag GmbH in Austria.

Hi-Tech Heavy Industry Co., Ltd., a subsidiary of China Hi-Tech Group Corporation, established a wholly-owned subsidiary Zhengzhou Hi-Tech Nonwoven Engineering Technology Co., Ltd. in April 2011 as the acquired Chinese holding company. This new company established Hi-Tech Textile Holdings Co., Ltd. in Austria to acquire the above enterprises.

## 3 Motivation of mergers and acquisitions

## 3.1 External motivations

Non-woven fabric refers to a fabric formed without spinning a woven fabric. It is oriented or randomly stretched by woven short fibers or filaments to form a web structure, and then reinforced by needle punching, hydroentanglement, hot bonding or chemical bonding, and finally finished forming. From an industry perspective, non-woven is the fastest growing sub-sector in the global textile industry, with growth rates of production and consumption exceeding 7% (G. Kellie, 2017). It is estimated that by the end of 2020, the value of the global nonwoven market will reach 50 billion US dollars, and the total use will reach 12 million tons (Ding Min, 2018). It can be said that the nonwovens equipment industry is a "sunrise industry" in the textile machinery industry. At present, China has become the world's largest producer and consumer of non-woven fabrics. In 2016, the annual output of various types of non-woven fabrics in China reached 5,534,400 tons, an increase of 167.43% compared with 2008, and the average annual compound growth rate reached 13.08% (Sohu industry research Report, 2018).

From the market point of view, due to the advantages of demographic dividends have gradually declined, China's position in outsourcing services in the textile and apparel industry is gradually replaced by emerging economies such as India, Bangladesh, the Philippines, and Mexico. This crisis requires Chinese companies not only to abandon low-cost strategies but also to upgrade technology to gain ownership advantage. Cross-border M&A is a fast means of obtaining advanced technology. Therefore, it is necessary for Hi-Tech Heavy Industry Co., Ltd. to carry out this acquisition activity from the perspective of both industry and market.



#### 3.2 Internal motivations

## 3.2.1 Development strategy

In 2002, China's strategy of "Going Global" greatly improved the level of China's open economy. In 2017, Chinese domestic investors added non-financial direct investment to 6,236 overseas enterprises in 174 countries and regions, with an accumulated investment of US\$120.08 billion (Ministry of Commerce of the People's Republic of China website, 2018). In 2011, before the acquisition, China Hi-Tech Group Corporation failed to enter the "China Top 100 Multinational Corporations" announced by the China Enterprise Confederation and the China Entrepreneur Association. Therefore, China Hi-Tech Group Corporation's cross-border M&A activities are aimed at strategically improving the international management capabilities.

According to China Hi-Tech Group Corporation 's business development strategy and plan, manufacture and sale of textile machinery as the company's core business needs to effectively upgrade the technology and manufacturing level of textile machinery through international mergers and acquisitions and cooperation, and strengthen the industry's leading position in the domestic textile machinery field. Through the integration of technology and manufacturing resources, the pace of internationalization of enterprises will be accelerated. And the company will quickly enter the international market and become the leader in the field of non-woven.

#### 3.2.2 Technology acquisition

This motivation was derived from the FDI strategic asset seeking motivation proposed by J. H. Dunning in 1993. This kind of theory advocates that enterprises acquire and learn the Ownership advantages of target enterprise in overseas investment. Differing from the point that firms should regard their Ownership advantages as the important advantages in mergers and acquisitions in The Eclectic Theory of International Production, this theory regards Ownership as the goal that is constantly pursued.

Hi-Tech Heavy Industry Co., Ltd. has the production line engineering technology such as spunlace, acupuncture and hot-rolling before the merger and acquisition. However, although the company's spunlace production line has reached the international advanced level, there is still a certain gap between other technologies and the international level. The Oerlikon Carding Division has a number of international advanced technologies, as shown in table 1. If this acquisition succeeds, it not only fills the blank of many non-woven technology in China, but also enhances the competitiveness of enterprises in the international market.

Table 1 main technology of Oerlikon nonwovens equipment

Equipment	Technology	Company
Needling machine	High rate of acupuncture and	Oerlikon Newmag GmbH in
	double track operation	Austria
Cross-laying Machine	Increase width and speed	Autefa Automation Co., Ltd. in
		Germany
Carding machine	Increase speed	Oerlikon Neumag GmbH in Italy



#### 3.2.3 Market share

This M&A not only provides access to advanced technology, but also increases international market share. According to the horizontal merger and acquisition theory, both parties can concentrate their respective advantages and learn from each other to make the business advantage more obvious after the merger, thus improving the competitiveness and market share of the enterprise. Taking spunlace and acupuncture equipment as an example, the acupuncture equipment is mainly based on the advanced technology of Austria Oerlikon Neumag, and Hi-Tech Heavy Industry Co., Ltd. cooperates with its equipment to form a high-grade acupuncture production line to compete with domestic manufacturers in the high-end international market. In 2010, before the merger, China's acupuncture equipment market had a total investment of 1 billion yuan. Hi-Tech Heavy Industry Co., Ltd. only got about 1% of the total investment, and the international market total investment of 1 billion yuan was divided by other companies. Therefore, the M&A activity aims to expand the market share of acupuncture equipment via technical learning and re-integration of production lines. Hi-Tech Heavy Industry Co., Ltd. has a market share of about 50% in the domestic market before the merger. After the merger, Hi-Tech Heavy Industry Co., Ltd. can compete with TUETCSCHLER Group and NSC+PERFOJET in the international market by adopting superior equipment such as Italian Oerlikon Newmag Carding Machine and German Autefa Cross-Table Paving Machine.

## 3.2.4 Synergy

Synergetic effect is a theory put forward by German physicist Herman Hawking in 1971 and systematically discussed in 1976. Synergistics theory holds that there is interaction and cooperation among systems in the whole environment, which is suitable for M&A. Collaboration among enterprises can be achieved by sharing skills, tangible resources, coordinated strategies, vertical integration, negotiation with suppliers, and coalition of forces (Tim Hindel, 2004). China Hi-Tech Group Corporation 's acquisition will produce synergies in three aspects: operation, management and finance, which is one of the motivations for the acquisition. Operationally, Oerlikon Carding Division has a strong R&D strength and advanced equipment, but very weak marketing has led to losses in recent years; while Hi-Tech Heavy Industry Co., Ltd., on the contrary, is very weak in R&D but has a strong domestic and international market. Hi-Tech Heavy Industry Co., Ltd. will have a "1 + 1 > 2" effect in operation after the acquisition, so that European technology will have a strong connection with China and Southeast Asia market. At the same time, it will improve product competitiveness, market share and product profitability of the company. In terms of management, after the merger and acquisition, China Hi-Tech Group Corporation can further cultivate international talent team and speed up the implementation of China Hi-Tech Group Corporation 's " Going Global " strategy. Financially, the company will inject capital into the three companies after the merger and acquisition, so that capital flows to more efficient places. Thus the financial and management costs of enterprises have been greatly reduced, according to the Internalization Advantage Theory (P.J. Buckley & M. Casson, 1976),. Meanwhile, mergers and acquisitions will expand the amount of their own capital, the greater the amount of their own capital, the smaller the risk of loss to creditors due to the bankruptcy of the enterprise. Therefore, synergy is also one of the motivations for the merger.

## **4 Conclusion**



Since 2002, more and more Chinese enterprises have begun to implement overseas mergers and acquisitions. China Hi-Tech Group Corporation, as the world's largest textile equipment enterprise, provides a useful reference for other domestic textile equipment enterprises and even other machinery companies to achieve international operations.

Firstly, China Hi-Tech Group Corporation has its own strategic plan, which considers that it is necessary to upgrade the technology and manufacturing level of textile machinery and strengthen the dominant position of enterprises in the domestic textile machinery industry through international M&A and reorganization and cooperation; Secondly, China Hi-Tech Group Corporation has clear motive for M&A which is to learn advanced technology and management experience of target enterprises; Finally, China Hi-Tech Group Corporation chooses the right time: the outbreak of the financial crisis in 2008 accelerated the decline of textile and garment enterprises in developed countries, which objectively provided opportunities for cross-border mergers and acquisitions for those enterprises that need to obtain overseas superior resources.

**Supported by:** The project in the fund of National Social Science of China (No.12BGL011); The project in the fund of Beijing Social Science of China (No.14JGB028); The project of the education & teaching reform on master programs at Beijing Institute of Fashion Technology (No.120301990115); The project on the innovation by postgraduate students at Beijing Institute of Fashion Technology (X2018-073)

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