

China Cold Chain Industry Development Report, 2010



Cold chain refers to a systematic project which makes the temperature of products at the required level to ensure quality from production, processing, storage to marketing. Chinese cold chain industry is currently in its infancy, with the rate of refrigerated transport being only 15%, the rate of pre-cooling preservation less than 30%, and the loss rate 20-30%. In European and American developed countries, the rate of refrigerated transport is up to 80-90%, the rate of pre-cooling preservation 80-100%, and the loss rate below 5%.

In the whole industry chain, refrigerated transport and cold storage are the key to ensuring the quality of cold chain. Refrigerated transport includes railway refrigerated transport, highway refrigerated transport, shipping refrigerated transport and aviation refrigerated transport.

In China, railway refrigerated transport enterprises mainly include China Railway Special Cargo Services Co., Ltd. and China Railway Tielong Container Logistics Co., Ltd., of which the former mainly exerts railway refrigerated carriages, while the latter resorts to refrigerated containers. In 2010, China Railway Tielong Container Logistics Co., Ltd. set up railway refrigerator stations to provide cold chain transport services in Zhengzhou, Chengdu and other 9 cities.

The refrigerated truck is the main means for highway refrigerated transport. As of June 30, 2010, there had been 35 companies producing refrigerated trucks in China. In H1 2010, the refrigerated trucks produced by BeiQi Foton Motor Co., Ltd and Zhenjiang Speed Automobile Group Co., Ltd (each with larger market shares) accounted for 18.1% and 16.7% of the total output respectively.

The main tools for shipping refrigerated transport and aviation refrigerated transport are refrigerated containers and storage boxes; wherein, refrigerated containers gets suitably used for maritime transport of bulk cargo, while storage boxes serve pharmaceuticals as well as high-value-added flowers and food.

The main equipment for cold storage is refrigeratory. The cold storage capacity in China was 61,373,900 cubic meters in 2009, chiefly covering the capacity of freezing refrigeratory and cooling refrigeratory. According to China Warehousing Association, in 2010, among Chinese cold storage enterprises, Henan Zhongpin Fresh Logistics Co., Ltd. (770,000 cubic meters), Wuhan Wandun Cold Storage Logistics Co., Ltd. (760,000 cubic meters), Shandong Gaishi Farming Co., Ltd. (750,000 cubic meters), Shanghai Jin Jiang International Low Temperature Logistics Development Co., Ltd. (510,000 cubic meters) and Shenyang Nonstaple Food Group (450,000 cubic meters) rank top five by capacity.

Cold Storage Capacity in China, 2009

	Capacity (10,000 m3)	Proportion
Freezing Refrigeratory (including icehouse)	3217.43	52.4%
Cooling Refrigeratory (including Air-conditioning Warehouse)	2909.71	47.4%
Ultra-low Temperature Refrigeratory	10.25	0.2%
Total	6137.39	100.0%

Source: China Warehousing Association

In June 2010, National Development and Reform Commission issued Cold Chain Logistics Planning For Agricultural Products to facilitate the development of cold chain logistics industry, and make the cold chain flow rate of fruit & vegetable, meat and aquatic products in China reach 20%, 30% and 36% respectively by 2015; the refrigerated transport rate be 30%, 50% and 65% respectively; and the loss rate be less than 15%, 8% and 10% respectively. With the implementation of the Planning and the increasing concern of Chinese consumers about food safety, the demand for cold chain will see rapid growth in China in the future, which will urge enterprises to speed up the purchase of refrigerated trucks and refrigerated containers as well as the construction of refrigeratory, thus spurring investments in related industries.

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