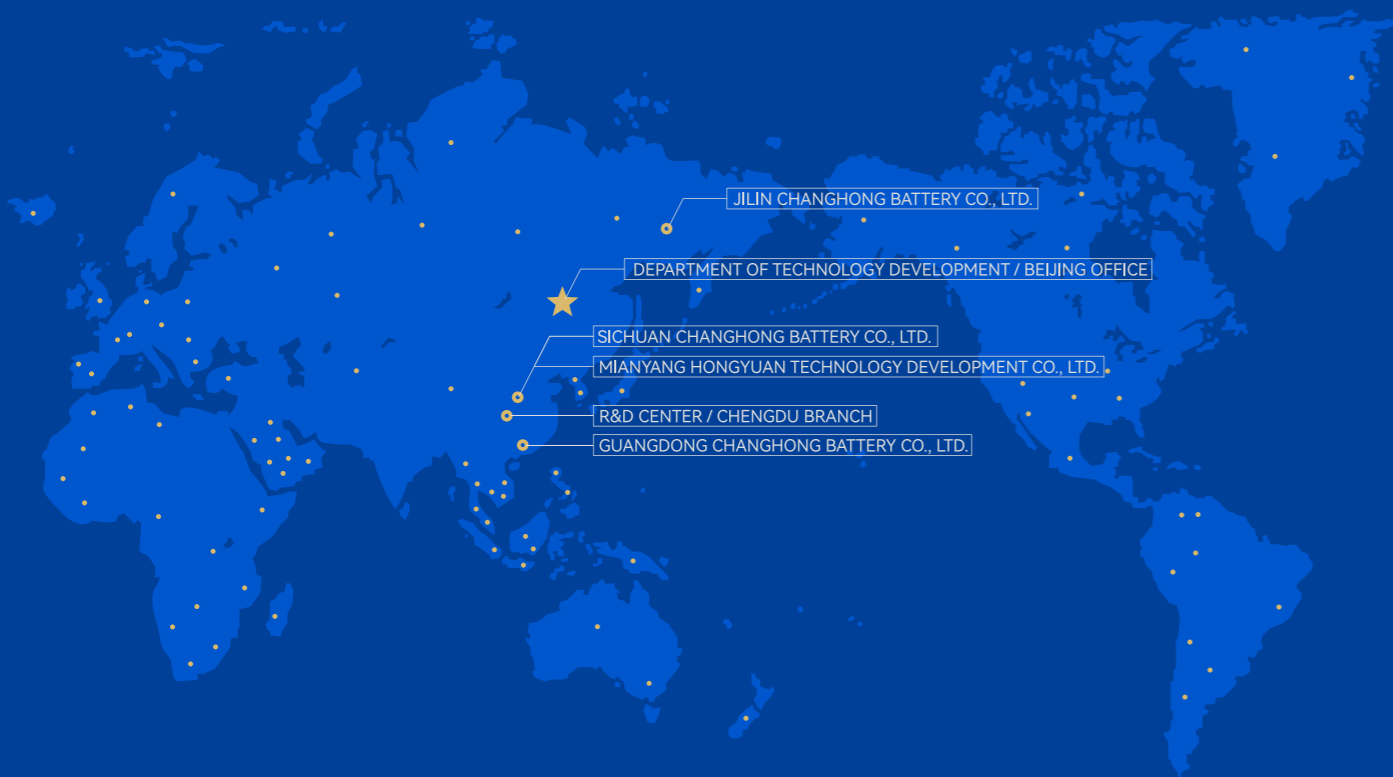


TO BE SINCERE TO BE OUTSTANDING

APPLICATION SOLUTIONS FOR RAIL TRANSIT



SICHUAN CHANGHONG BATTERY CO., LTD.

Address: No.519 Sanjiang Avenue, Economic Development Zone of Mianyang City, Sichuan Province
Website: www.changhongbatteries.com Tel.: 0816-2439077/2439079 Fax: 0816-2439100
Email: yxb@changhongbatteries.com / info@changhongbatteries.com

SICHUAN CHANGHONG BATTERY CO., LTD.



Company Profile

1970

The Company was established in 1970

60%

Occupying about 60% of the domestic market share

Pursuing Progress While Ensuring Stability Empowering Trains of the Times

Established in 1970, Sichuan Changhong Battery Holding Co., Ltd. (State-owned No.756 Factory) is located in Mianyang, the Silicon Valley Science & Technology City in Western China. The battery company has traditional cadmium-nickel battery production workshops, emerging lithium batteries (wholly-owned subsidiary), and electrical production workshops. It has also introduced world-class battery R&D and manufacturing technology and equipment from Germany and Japan, and is equipped with a complete set of facilities and complete testing methods for product performance testing, physical and chemical analysis, climate and environmental tests. The company's railway and urban rail batteries occupy about 60% of the domestic market, with domestic-leading technologies.

Development layout

Nationwide Layout Looking at the world

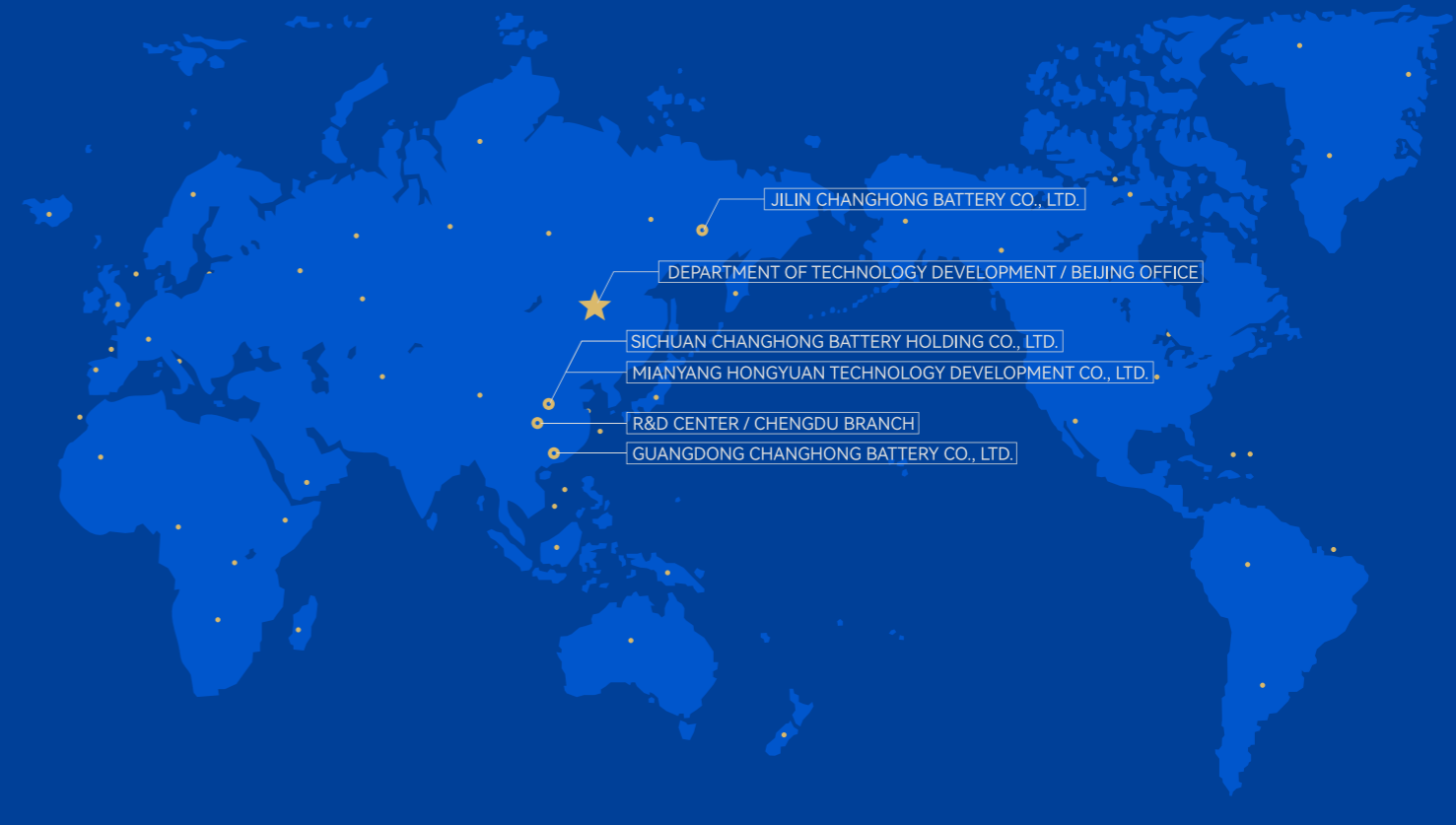
The lithium-ion batteries and management systems and cadmium-nickel alkaline batteries of the company have been widely used in the field of rail transit both domestically and internationally, covering various application areas such as railways, high-speed trains, Maglev, subways, and light rail across the country, and received unanimous praise from users for their reliable quality, excellent performance, and low price.

Our products are equipped on over 170 foreign urban rail projects, which are mainly distributed in countries and regions such as Asia, the Middle East, Eastern Europe, Africa, North America, and South America.



170

Urban Rail Projects for Domestic & Overseas Markets



Application Project

Advance Side by Side Excellent Development

Rail Transit Field

The company's products are equipped on the Fuxing high-speed train and the company has obtained repair qualifications for models such as Hexie CRH5 and CRH380; The company's products are included in the high-speed train maintenance catalog and can replace original imported batteries.

Urban Rail Market

The company has signed strategic agreements with subway companies in Beijing, Shanghai, Guangzhou, Chengdu, Changchun and other regions, marking its full entrance into the field of subway and light rail vehicle maintenance.

Lithium Battery Market

The company have completed the R&D and development and delivery of lithium-ion battery systems for over ten projects, including 600km/h high-speed maglev from major automakers such as Sifang Group, CRRC Changke, and CRRC Zhuzhou Locomotive, Guiyang's inter-city train, Qujiang tram, Huangshi tram, and Fuxing high-speed train.



600 km high-speed maglev



New intelligent multiple-unit trains



Fuxing high-speed train



Hexie high-speed train



160 km centralized power EMU, etc.

Partial Application Cases in the Field of Rail Transit

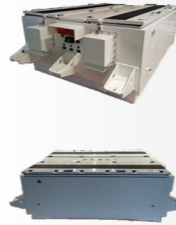


High-temperature superconducting maglev project



Model: 2-4-24IHP14LTO-3 Lithium Battery System
 Normal voltage: 440V
 Rated capacity: 42Ah
 Overall dimension: 1083mm×900mm×270mm
 Weight: 2×270kg
 Function: Power source

Huangshi Tram Project



Model: 2-168IHP14LTO-4 Lithium Battery System
 Normal voltage: 386.4V
 Rated capacity: 112Ah
 Overall dimension: 2464mm×1478mm×755mm
 Weight: 1180kg
 Function: Power source

Qujiang Straddle Monorail Project



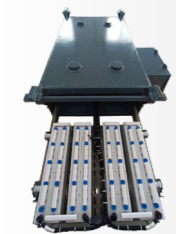
Model: 204IFP230-2 Lithium Battery System
 Normal voltage: 652.8V
 Rated capacity: 460Ah
 Overall dimension: 1707mm×1335mm×803mm
 Weight: 1480kg
 Function: Power source

Guiyang Urban EMU Project



Model: 2-45IHP20LTO-5 Lithium Battery System
 Normal voltage: 103.5V
 Rated capacity: 200Ah
 Overall dimension: 2280mm×813mm×332.5mm
 Weight: 480kg
 Function: Power source

Chengdu Metro Line 19



Model: 80GMH220 Cadmium-Nickel Battery Pack (including box)
 Normal voltage: 96V
 Rated capacity: 220Ah
 Overall dimension: 2774mm×1666mm×698mm
 Weight: 1130kg
 Function: Traction power supply and emergency power supply

Chengdu Metro Line 17 and 18



Model: 78GMH180D Cadmium-Nickel Battery Pack (including box)
 Normal voltage: 93.6V
 Rated capacity: 180Ah
 Overall dimension: 2774mm×1666mm×698mm
 Weight: 1100kg
 Function: Emergency power supply

Guangzhou Metro Line 10



Model: 80KMZ260P-(2)B Cadmium-Nickel Battery Pack (including box and BMS)
 Normal voltage: 96V
 Rated capacity: 260Ah
 Overall dimension: 2573mm×1413mm×730mm
 Weight: 1520kg
 Function: Emergency power supply

CR300AF and CR400AF Fuxing high-speed EMU



Model: 80DMH190-(2) Cadmium-Nickel Battery Pack (including box)
 Normal voltage: 96V
 Rated capacity: 190Ah
 Overall dimension: 2335mm×632mm×329mm
 Weight: 960kg
 Function: Emergency power supply

Performance Table of Partial Rail Transit Sector in the Past Three Years

Item Name	Name of Users	Product Name	Quantity of Train	Signing Date
Qingdao Metro Line 4	CRRC Qingdao Sifang Co., Ltd.	78GMH180C	37	2021
Beijing Metro Line 3	Hebei Jingche Rail Transit Vehicle Equipment Co., Ltd.	GMH260-(2)	20	2021
Gear rail vehicle project	CRRC Zhuzhou Locomotive Co., Ltd.	KMZ120P	1	2021
Changsha Zhuzhou Xiangtan West Ring Line	CRRC Zhuzhou Locomotive Co., Ltd.	KMZ160P-(8) battery system	16	2021
P16 Qujiang Tourist Monorail	China Railway Rail Transit Equipment Co., Ltd.	652V/460Ah power lithium battery system, 115,2V/54Ah lithium battery system	3	2021
Dalian Metro Line 5	CRRC Dalian Co., Ltd.	KMZ200P	29	2021
Phase 2 of Changchun Metro Line 4	CRRC Changchun Railway Vehicles Co., Ltd.	KMZ180P-(8)	36	2021
Changchun Metro Line 4	CRRC Changchun Railway Vehicles Co., Ltd.	GNC100-(5)	12	2021
Xi'an Metro Line 16	CRRC Changchun Railway Vehicles Co., Ltd.	KMZ200P battery system	13	2021
Dalian Metro Lines 1 and 2 (extra trains)	CRRC Dalian Co., Ltd.	KMZ180P-(4)	35	2021
Xi'an Airport Line	CRRC Changchun Railway Vehicles Co., Ltd.	KMZ180P-(8)	4	2021
Guangzhou Metro Line 3	CRRC Changchun Railway Vehicles Co., Ltd.	KMZ200P	17	2022
Chengdu Metro Line 19 Phase II	CRRC Qingdao Sifang Co., Ltd.	GMH220	63	2022
Chengdu Metro Line 17 Phase II and Line 18 Phase II	CRRC Qingdao Sifang Co., Ltd.	GMH180	48	2022
Shenyang Metro Line 2 South Extension Line	CRRC Dalian Co., Ltd.	KMZ180P-(7)	43	2022
Dalian Metro Line 12 (add-on purchase)	CRRC Dalian Co., Ltd.	KMZ180P-(3)	6	2022
Nigerian Lagos Tram	CRRC Dalian Co., Ltd.	KMZ160P-(8)	2	2022
Changchun Metro Line 6	CRRC Changchun Railway Vehicles Co., Ltd.	KMZ180P-(7) battery system	31	2022
Chengdu Metro Line 13	CRRC Changchun Railway Vehicles Co., Ltd.	KMZ180P-(7)	36	2022
Chengdu Metro Line 30	CRRC Changchun Railway Vehicles Co., Ltd.	GMH230-(2)	36	2022
Chongqing Metro Line 18	Chongqing Changke Railway Vehicle Co., Ltd.	KMZ180P-(8)	37	2022
Beijing Yizhuang Line (add-on purchase)	Beijing CRRC Changke Erqi Rail Equipment Co., Ltd.	GMH240	4	2022
Inter-city C	CRRC Zhuzhou Locomotive Co., Ltd.	KMZ180P-8 battery system	1	2022
Intelligent trains on Beijing Metro Line 19	Beijing Metro Vehicle Equipment Co., Ltd.	GMH300	2	2022
Overhaul of Chengdu Metro Line 2	Chengdu CRRC Changchun Railway Vehicles Co., Ltd.	KMZ160P-(9)	32	2022
Changsha Metro Line 1/2	CRRC Zhuzhou Locomotive Co., Ltd.	KMZ160P-8 battery system	36	2022
Chengdu Subway Ziyang Line	CRRC Qingdao Sifang Co., Ltd.	GMH220	11	2023
Guangzhou Metro Line 7 Phase II	CRRC Zhuzhou Locomotive Co., Ltd.	KMZ260P-2 battery system	19	2023
Guangzhou Metro Line 11	CRRC Zhuzhou Locomotive Co., Ltd.	80KMZ260P-(2) battery system	55	2023
Guangzhou Metro Line 10	CRRC Zhuzhou Locomotive Co., Ltd.	80KMZ260P-(2) battery system	43	2023
Guangzhou Metro Line 12	CRRC Zhuzhou Locomotive Co., Ltd.	KMZ260P-2	47	2023
Xi'an Metro Line 8	CRRC Dalian Co., Ltd.	KMZ230P	79	2023
Xi'an Metro Line 9	CRRC Dalian Co., Ltd.	KMZ160P-(8)	29	2023
Xi'an Metro Line 10	Changchun Changke Co., Ltd.	KMZ230P	31	2023
Xi'an Metro Line 15	Xi'an CRRC Changke Railway Vehicles Co., Ltd.	KMZ230P	18	2023
Qujiang Tourist Monorail	China Railway Hefei New Transportation Industry Investment Co., Ltd.	204IFP230831IF50 power lithium battery system	3	2023
Dongguan Metro Line 1	CRRC Logistics Co., Ltd.	GMH230-2	36	2023
Foshan Lishui Line	CRRC Logistics Co., Ltd.	20GNC90	12	2023
Guiyang S1 Line	CRRC Nanjing Puzhen Co., Ltd.	KMZ160P-2	40	2023
Suzhou Metro Line 4	Suzhou CRRC Rail Transit Vehicle Co., Ltd.	KMZ160P-2 (with centralized water adding device)	10	2023
Overhaul of Chongqing Line 3 and 6-to-8 Project	Chongqing CRRC Changke Railway Vehicles Co., Ltd.	GNG50	38	2023
Chongqing Metro Airport Line	Chongqing Changke Railway Vehicle Co., Ltd.	GNG50	8	2023
East Extension Line of Shenyang Metro Line 1	CRRC Dalian Co., Ltd.	KMZ180P-7	27	2023