



专注于一件事的独立第三方
认证检测机构

An Independent Third-Party Testing and Certification
Organization Concentrating on One Mission.



广州邦禾检测技术有限公司
Guangzhou MCM Certification&Testing Co., Ltd.



愿景 Our Vision

让世界更加安全
Make the World Safer

使命 Our Mission

让认证检测变得简单、快乐
Make Certification and Testing Simple & Pleasant

核心价值观 Core Value

给客户惊喜 / 尊重事实 / 坚持创新 /
帮助每一位员工成长 / 长期坚持艰苦奋斗的精神

Give Surprise to Clients / Factualism/ Insist on Innovation /
Support Each Employee's Development / Adhere to The Spirit of Hard Struggle

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简介

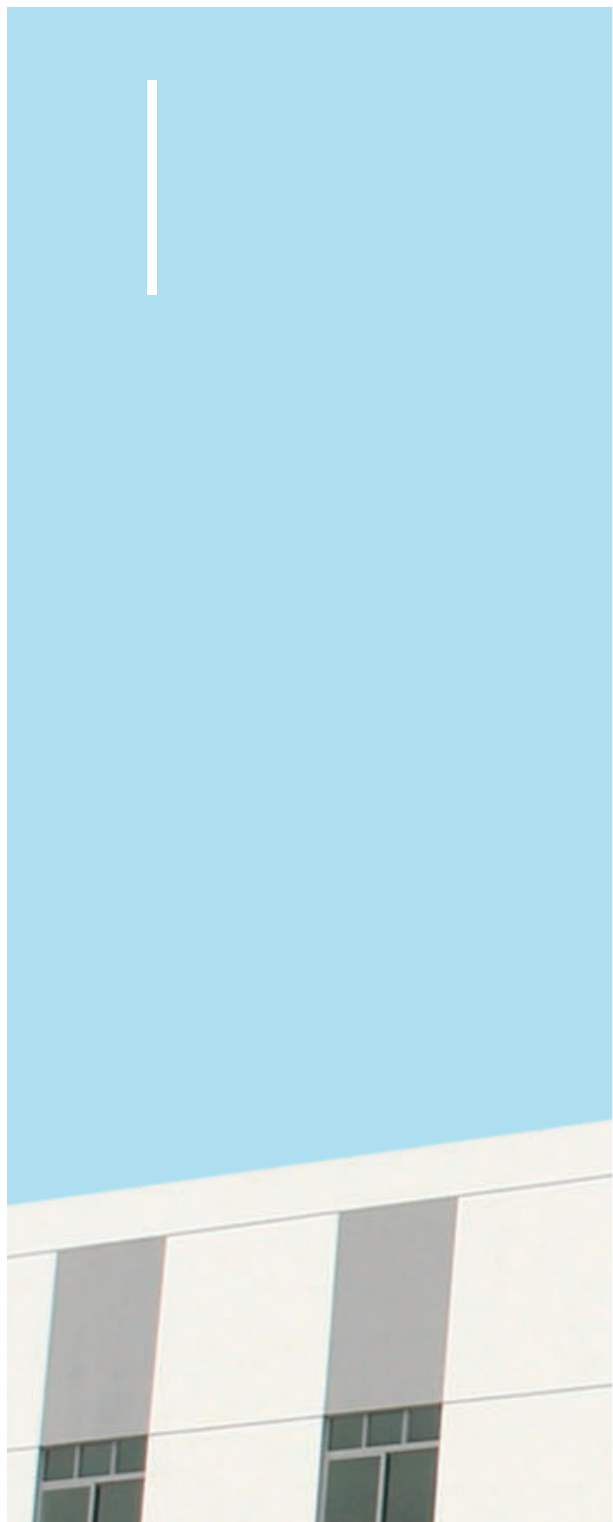
COMPANY PROFILE

MCM是全球性的电池产品认证检测解决方案机构, 专注于前置提供世界各个地区的认证检测服务, 是一家依据ISO/IEC 17025 & 17020、RB/T 214质量管理体系建立, 获得CNAS、CMA、CBTL、CTIA等认可资质的独立第三方机构, 并通过ISO/IEC 27001信息安全管理体系认证。

作为一家专注于一件事的第三方认证检测机构, MCM和TUV RH、QUACERT、ICAT、CQC、CCS、CGC、中国民航局第二研究所、国家新能源检测中心等全球合作伙伴, 在动力电池、储能电池、移动通讯数码类电池等产品, 在全球各地区及航空运输领域, 构建了安全、高效、方便的电池产品认证检测集合体, 帮助世界超过5,000,000个型号的电池及其终端产品在全球各个角落流通销售。

MCM is the world's leading company that provides testing and certification solutions for battery products, focusing on providing front-end certification and testing services in various regions of the world. MCM is an independent third-party organization established in accordance with ISO/IEC 17025 & 17020 and RB/T 214 quality management system, accredited by CNAS, CMA, CBTL, and CTIA, and certified according to ISO/IEC 27001 information security management system .

As a third-party certification and testing company that focuses on one mission only, MCM works with global partners such as TUV RH, QUACERT, ICAT, CQC, CCS, CGC, the Second Research Institute of the Civil Aviation Administration of China, and the National New Energy Testing Center in traction batteries, ESS batteries, portable batteries and other battery products. We have built a safe, efficient and convenient battery product certification and testing collection in various regions around the world and in the field of air transportation, helping more than 5,000,000 models of batteries and their end products in the world to be sold.



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The logo for MCM Technology & Service is mounted on the side of a light-colored building. The letters 'MCM' are large, bold, and black, with a small red triangle integrated into the bottom right of the final 'M'. Below 'MCM', the words 'Technology & Service' are written in a smaller, black, sans-serif font.

MCM
Technology & Service

发展历程

DEVELOPMENT HISTORY

2003 - 2004

- 一个电池检测领域的引领者开始孕育。
A leader of battery testing began to rise.
- 开始承接UL 1642和UL 2054标准的目击测试。
Began to provide witness testing of UL 1642 and UL 2054.

2006-2007

- 成为中国民航局关于UN38.3标准测试的技术专家组成员。
Became the technical expert regarding UN38.3 Testing of CAAC.
- MCM在大陆正式成立,定位为专注于电池产品认证检测服务的全球性专业试验室。
Officially registered in China Mainland and abbreviated as MCM.

2008 - 2010

- 成为上海化工研究院检测中心华南分中心。
Became a southern branch center of SRICI for UN38.3 test in the world.
- 首批为客户提供韩国KC认证的中国试验室,并成为KTL、KTR的合作伙伴以及KTC的合作试验室。
The first batch of Chinese laboratories providing Korean KC certification services and became partner of KTL and KTR, and cooperation lab of KTC.
- 开始为客户提供锂电池PSE全套测试及认证。
Start providing full set of PSE testing and certification services of lithium battery.

2013 - 2014

- 成为中国国际货物航空运输有限公司“锂电池航空运输鉴定机构”。
Nominated as the “Lithium Battery Air Transport Identification Agency” by Air China Cargo Co., Ltd.
- 成为IECEE-CB认可试验室CBTL;成为第一家与台湾BSMI认可机构合作的试验室;开始为客户提供WERCSmart注册服务。
Became a CBTL under International Electrotechnical Commission CB Scheme IECEE-CB. Became the first cooperative agency with Taiwan laboratory recognized by BSMI. Start offering WERCSmart registration service.

2011 - 2012

- 成为德国TUV RH中国地区第一个电池目击试验室。
Became the first witness laboratory for battery testing in China of TUV Rhineland Germany.
- 成为美国MET在中国唯一一家电池UL 1642和UL 2054的目击试验室。
Signed agreement with American MET and became its unique exclusive witness laboratory of UL 1642 and UL 2054 in China.

2015 - 2016

- 成功取得全球第一张印度锂电池注册 (CRS注册) 证书;
与ITS展开战略合作;
成为赛西认证认可的唯一一家民营试验室。

Successfully obtained the first Indian Lithium battery Registration Certification (CRS Registration).
Started the strategic cooperation with Intertek.
Become the only private laboratory recognized by CESI.

- 通过ISO/IEC17020认可;
成为CQC的委托检测实验室;
开始为客户提供越南MIC认证。
Accredited by ISO/IEC 17020.
Became the commission Test Laboratory of CQC.
Began to provide Vietnam MIC certification service.

2017 - 2018

- 成为民航局第二研究所危险品安全运输鉴定中心委托检验实验室;
与越南政府合作开发成立越南电池检测试验室, 并成为该试验室在中国唯一的电池认证检测合作机构。

Became the commission test laboratory of the second institute of CAAC Dangerous Goods Transportation Certification Center.
Cooperated with Vietnam government to set up Vietnam battery testing laboratory, and became the sole partner of this Vietnam laboratory in China.

- 7月新规后, 为客户成功取得全球第一张越南DoC证书;
与马来西亚SIRIM QAS达成协议, 可优先为客户安排审厂。

Successfully obtained the first Vietnam DoC certificate after local testing (July, 2018) was mandatorily required.
Reached an agreement with Malaysia SIRIM QAS to provide preferential inspection service to our clients.

2019 - 2020

- 开始为客户提供印度动力电池测试认证服务;
与马来西亚SIRIM QAS以及马来西亚KPDNHEP开展技术交流与培训, 深化了双方战略合作, 能为客户提供不可撼动的优势服务。

We started to provide customers with Indian standard testing and certification services for traction batteries
SIRIM QAS and KPDNHEP Malaysia visited MCM laboratory, and received training from MCM regarding battery testing. Which deepened the strategic cooperation between us and enabled MCM to provide customers with the superior service.

- 通过ISO/IEC 27001信息安全管理体系认证。
Successfully certified according to with ISO/IEC 27001 information security management system.


2021 - 2023


- 成为北京鉴衡认证中心签约实验室。
成为中国船级社认可试验室。
Became the recognized laboratory of CGC.
Became the recognized laboratory of CCS.


- 场地、设备全面升级, 场地总面积约10,000m², 为动力储能项目构建坚实的基础。
The site and equipment were comprehensively upgraded, and the total site reaches 10,000m², building a solid foundation for testing ESS batteries and traction batteries.


- 正式成立越南试验室, 持续构建更具价值的全球认证服务渠道。
We have officially established our Vietnam laboratory, continuously expanding channels for more valuable global certification services.


资质实力
QUALIFICATIONS


- 


CBTL资质 (NCB为TUV RH)
CB Testing Laboratory (NCB:TUV Rhineland)
- 

CQC委托检测实验室
CQC Authorized Testing Laboratory
- 




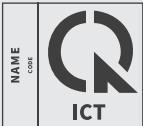



CTIA授权测试实验室
CTIA Authorized Testing Laboratory
- 

DGM认可试验室
DGM Recognized Laboratory
- 

中国民航局第二研究所委托检测实验室
Authorized Testing Laboratory of The Second Research Institute of CAAC
- 

越南QUACERT 合作试验室
Cooperative Laboratory of Quacert Vietnam
- 

马来西亚SIRIM QAS认可目击试验室
Witness Testing Laboratory of SIRIM QAS Malaysia

UN38.3	CB	
	 WERCSmart®	
		



TUV莱茵北美地区认证测试实验室
Accredited PTL Laboratory of TUV Rhineland in North American



赛西认证认可实验室
Accredited Laboratory by CESI



印度ARAI数据交换认可试验室
ARAI Recognized Data-interchange Laboratory



印度ICAT目击实验室
Witness testing Laboratory of ICAT



中国船级社 (CCS) 认可实验室
Recognized Laboratory by CCS



北京鉴衡认证中心 (CGC) 认可实验室
Recognized Laboratory by CGC



同时是MIC、EEI、KTR等政府和机构的战略合作伙伴。
Also MCM strategic cooperation partner of MIC, EEI, KTR, and other governments and institutes.



服务项目 SERVICE

An Independent Third-Party Testing and Certification
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专注于一件事的独立第三方
认证检测机构



17+

拥有17年认证检测项目经验,可提供全面的技术支持和量身定制的认证解决方案;

With 17 years of experience in battery certification and testing, MCM can provide comprehensive technical support and customized certification solutions.

200+

在全球200多个国家/地区构建了安全、高效、方便的认证检测集合体;

MCM has woven a sound, efficient and convenient network for testing and certifying batteries in more than 200 countries/regions around the world.

5,000,000+

帮助世界超过5,000,000个型号的电池及其终端产品在全球各个角落流通销售。

MCM has successfully made more than 5,000,000 models of batteries and their end products available in global market.

锂电池运输鉴定

LITHIUM BATTERY TRANSPORTATION CERTIFICATION

运输文件要求 Documents required for transportation

UN38.3测试报告/测试概要、1.2m跌落测试报告 (适用时)、运输鉴定书、MSDS (适用时)、3M堆码试验检测报告 (适用时)

UN38.3 Test Report/ Test Summary, 1.2m Drop Test Report (If applicable), Certificate of Transportation, MSDS (If applicable), 3m Stacking Test Report (If applicable)

UN38.3测试 Test of UN38.3

测试标准:联合国《试验和标准手册》(橘皮书) 第3部分第38.3章节的条款 (UN38.3)

Test standard: Section 38.3 of part 3 of Manual of Tests and Criteria.

测试项目:

Test items:

38.3.4.1 试验T1:高度模拟	38.3.4.2 试验T2:温度试验	38.3.4.3 试验T3:振动	38.3.4.4 试验T4:冲击
38.3.4.1 Test 1: Altitude Simulation	38.3.4.2 Test 2: Thermal Test	38.3.4.3 Test 3: Vibration	38.3.4.4 Test 4: Shock
38.3.4.5 试验T5:外部短路	38.3.4.6 试验T6:撞击/挤压	38.3.4.7 试验T7:过度充电	38.3.4.8 试验T8:强制放电
38.3.4.5 Test 5: External Short Circuit	38.3.4.6 Test 6: Impact/Crush	38.3.4.7 Test 7: Overcharge	38.3.4.8 Test 8: Forced Discharge

1.2m跌落测试 (适用时) 1.2m Drop Test (If applicable)

测试标准:联合国《关于危险货物运输的建议书 规章范本》 特殊规定188

Test standard: Special provision 188 of Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations issued by United Nations .

适用范围:除安装在设备中的电池或电池组外

Range of application: Cell and battery except for those assembled in the products.

3m堆码测试 (适用时) 3m Stacking Test Report (If applicable)

测试标准:联合国《关于危险货物运输的建议书 规章范本》 6.1.5.6

Test standard: Clause 6.1.5.6 of Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations issued by United Nations .

适用范围:单独运输的电池或电池组 (仅通过航空运输)

Range of application: Cells and batteries shipped solely through AIR.

解决方案 Solutions

序号 S/N	方案 Solutions	UN38.3+1.2m跌落测试报告+3m堆码测试报告 UN38.3 test report + 1.2m drop test report + 3m Stacking Test Report	鉴定书 Certificate
1	空运 Air transport	MCM	民航局 CAAC
2		MCM	DGM
3	海运 Sea transport	MCM	MCM
4		MCM	DGM
5	陆运 Land transport	MCM	MCM
6	铁路运输 Railway transport	MCM	MCM

MCM——锂电池运输鉴定优势 MCM' s Strengths

A / 可提供包含航司（东航、美联航等）、船司、上海货站、华南机场、北方机场等在内认可的、全球通行的UN38.3报告及运输鉴定书。

MCM is a platform that provides UN38.3 test reports and certificates, which are domestically and internationally recognized by airline companies such as, China Eastern Airlines, United Airlines, shipping companies, Shanghai cargo stations, South China Airports, northern airports and more.

B / MCM创始人苗春茂先生,是首批参与拟定中国民航局关于锂电池运输方案的技术专家,拥有丰富且独到的经验。

Mr. Mark Miao, the founder of MCM, was one of the first technical experts to participate in the formulation of the lithium battery transportation plan of the Civil Aviation Administration of China. He has rich and unique experience.

C / 拥有17年项目经验,已累计帮助全球客户提供超过80,000份UN38.3报告和运输鉴定书。

With 17 years experience, MCM has helped customers worldwide obtain more than 80,000 UN38.3 reports and transportation certificates.

国际CB认证

CB CERTIFICATION

CB认证是一项国际认证,由国际电工委员会(简称IECEE)创建,其目标是“一次测试,多处适用”,旨在实现全球参与该认证的实验室和认证机构的产品安全测试结果可以互认,从而促进国际贸易。

The international certification-CB certification was issued by IECEE, CB certification scheme ,created by IECEE,is a international certification scheme aiming to promote the international trade by acheiving “one test,multiple recognition” within its global members.

CB认证的作用 Benefit of CB certification

获得CB证书和CB测试报告后,您的产品将得到其他国家的认可或批准,从而可以直接出口至其他成员国;
With the CB test report and certificate, your products can be exported directly to other member states.

可以用于国际转证(如转韩国KC证书)。
Can be converted to other certificates (for example, Korean KC certificate)

CB认证电池测试标准 Battery testing standards in CB scheme

序号 S/N	产品分类 Product	标准代号 Standard	标准名称 Description of Standard
1	原电池 Primary batteries	IEC 60086-1	原电池-第一部分:通用 Primary batteries - Part 1: General
2		IEC 60086-2	原电池-第二部分:结构和电性能规范 Primary batteries - Part 2: Physical and electrical specifications
3		IEC 60086-3	原电池-第三部分:手表电池 Primary batteries - Part 3: Watch batteries
4		IEC 60086-4	原电池-第四部分:锂电池的安全 Primary batteries - Part 4: Safety of lithium batteries
5		IEC 60086-5	原电池-第五部分:水性电解液电池的安全 Primary batteries - Part 5: Safety of batteries with aqueous electrolyte
6	锂离子电池 Lithium Batteries	IEC 62133-2	含碱性或其它非酸性电解液二次电芯和电池--对使用在便携式设备中的便携式密封二次电芯,和由它们组成的电池的安全要求-第二部分:锂体系 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary lithium cells, and for batteries made from them, for use in portable applications - Part 2: Lithium systems
7		IEC 61960-3	含碱性或其它非酸性电解质二次电芯和电池-便携式应用二次锂电芯和电池-第3部分:棱形和圆柱形锂二次电芯和由他们制成的电池 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for portable applications - Part 3: Prismatic and cylindrical lithium secondary cells and batteries made from them
8		IEC 61960-4	含碱性或其它非酸性电解质二次电芯和电池-便携式应用二次锂电芯和电池-第4部分:纽扣电池 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for portable applications - Part 4: Coin secondary lithium cells, and batteries made from them
9		IEC 63057	含碱性或其他非酸性电解质的二次电芯和电池-道路车辆中非推进用二次锂电池的安全要求 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium batteries for use in road vehicles not for the propulsion

序号 S/N	产品分类 Product	标准代号 Standard	标准名称 Description of Standard
10	锂离子电池 Lithium Batteries	IEC 62619	含碱性或其它非酸性电解液二次电芯和电池 - 工业用的二次锂电芯和电池的安全要求 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications
11		IEC 62620	含碱性或其它非酸性电解液二次电芯和电池 - 工业用二次锂电芯和电池 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for use in industrial applications
12		IEC 63056	含碱性或其它非酸性电解液的二次电芯和电池 - 用于电能存储系统的二次锂电芯和电池的安全要求 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries for use in electrical energy storage systems
13		IEC 62660-1	电动道路车辆驱动用二次锂离子电芯 - 第1部分:性能测试 Secondary lithium-ion cells for the propulsion of electric road vehicles - Part 1: Performance testing
14		IEC 62660-2	电动道路车辆驱动用二次锂离子电芯 - 第2部分:可靠性和滥用测试 Secondary lithium-ion cells for the propulsion of electric road vehicles - Part 2: Reliability and abuse testing
15		IEC 62660-3	电动道路车辆驱动用二次锂离子电芯 - 第3部分:安全要求 Secondary lithium-ion cells for the propulsion of electric road vehicles - Part 3: Safety requirements
16	镍氢/镍镉电池 NiCd/NiMH Batteries	IEC 62133-1	含碱性或其它非酸性电解液二次电芯和电池--对使用在便携式设备中的便携式密封二次电芯,和由它们组成的电池的安全要求-第1部分:镍体系 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications - Part 1: Nickel systems
17	镍镉电池 NiCd Batteries	IEC 61951-1	含碱性或其他非酸性电解质的蓄电池和蓄电池组—便携式密封单体蓄电池 第1部分:镍镉电池 Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary sealed cells and batteries for portable applications - Part 1: Nickel-Cadmium
18	镍氢电池 NiMH Batteries	IEC 61951-2	含碱性或其他非酸性电解质的蓄电池和蓄电池组—便携式密封单体蓄电池 第2部分:金属氢化物镍电池 Secondary cells and batteries containing alkaline or other non acid electrolytes - Secondary sealed cells and batteries for portable applications - Part 2: Nickel-metal hydride
19	电池及终端 Batteries and its end product	IEC 62368-1	音频/视频,信息和通信技术设备 - 第1部分:安全要求 Audio/video, information and communication technology equipment - Part 1: Safety requirements
20		IEC 60950-1	信息技术设备安全第1部分:通用要求 Information technology equipment - safety - Part 1: General requirements

MCM-CB认证优势 MCM's Strengths

A / MCM作为IECEE CB体系认可的CBTL, 可直接在MCM进行CB认证的申请和测试。

As a CBTL approved by the IECEE CB system, the test of CB certification can be conducted directly in MCM.

B / MCM是最早进行标准IEC62133认证测试的第三方机构之一, 具有丰富的经验和解决认证测试问题的能力。

MCM is one of the first third-party organizations to conduct certification and testing for IEC62133, and capable to solve certification and testing problems with rich experience.

C / MCM拥有强大的电池检测认证平台, 能为客户提供全面的技术支持和前沿的行业资讯。

MCM itself is a powerful battery testing and certification platform, and can provide you with the most comprehensive technical support and cutting-edge information.

中国CCC认证

CHINA CCC CERTIFICATION

锂离子电池和电池组 Lithium ion cells and batteries

测试标准: GB 31241-2022:《便携式电子产品用锂离子电池和电池组 安全技术规范》

Test standard: GB 31241-2022: "Lithium ion cells and batteries used in portable electronic equipments—Safety technical specification"

认证文件: CQC-C0901-2023:《强制性产品认证实施细则电子产品及安全附件》

Certification documents: CQC-C0901-2023: "Implementation Specifications for Compulsory Product Certification of Electronic Products and Safety Accessories"

适用范围: 主要是针对不超过18kg的预定可由使用人员经常携带的便携式电子产品使用的锂离子电池和电池组。

Scope of application: Mainly for the lithium-ion cells and batteries, not more than 18kg and used for portable electronic equipment regularly carried by the users.

移动电源 Mobile power

测试标准: GB 4943.1 — 2022:《音视频、信息技术和通信技术设备 第1部分: 安全要求》

Test standard: GB 4943.1 — 2022: "Audio/video, information and communication technology equipment—Part 1: Safety requirements"

认证文件: CQC-C0901-2023:《强制性产品认证实施细则电子产品及安全附件》

Certification documents: CQC-C0901-2023: "Implementation Specifications for Compulsory Product Certification of Electronic Products and Safety Accessories"

适用范围: 主要是针对不超过18kg的预定使用人员经常携带的便携式电子产品。

Scope of application: Mainly for the portable electronic equipment, not more than 18kg and regularly carried by the users.

MCM-CCC认证优势 MCM's Strengths

A / MCM在CCC认证项目上与CQC紧密合作, 可及时提供前沿、精准的认证资讯。

MCM cooperates closely with CQC on CCC certification projects, and can provide timely the cutting-edge and accurate certificate news.

B / 可为客户提供审厂咨询、审厂辅导等管家式服务。

To provide customers with butler service such as audit consulting, factory audit assistance, etc.

中国CQC认证

CHINA CQC CERTIFICATION

电力储能用电池 Battery for electrical energy storage

测试标准:GB/T 36276-2023:《电力储能用锂离子电池》
Test standard: GB/T 36276-2023: "Lithium ion battery for electrical energy storage"

认证文件:CQC13-464225-2018:《电力储能用锂离子电池安全与性能认证规则》
Certification documents: CQC13-464225-2018: "Safety and performance certification rules for Lithium-ion battery of energy storage system"

测试标准:GB/T 36280-2023:《电力储能用铅炭电池》
Test standard: GB/T 36280-2023: "Lead-carbon battery for electrical energy storage"

认证文件:CQC13-464291-2018:《电力储能用铅炭电池安全与性能认证规则》
Certification documents: CQC13-464291-2018: "Safety and performance certification rules for lead-carbon battery of energy storage system"

适用范围:适用于电力储能用铅炭、锂离子电池单体、电池簇及电池系统的安全和性能认证。
Scope of application: Applicable to the safety and performance certification of lead-carbon battery, Lithium-ion battery, battery cluster and battery system of energy storage system.

电动自行车电池 Battery for electric bicycle

测试标准:GB/T 36972 - 2018 :《电动自行车用锂离子蓄电池》
Test standard: GB/T 36972-2018: "Lithium-ion battery for electric bicycle"

测试标准:QB/T 2947.3 - 2008:《电动自行车用蓄电池及充电器 第3部分:锂离子蓄电池及充电器》
Test standard: QB/T 2947.3 - 2008: "Electric bicycles-cell or battery and charges Part3: Li-ion batteries and chargers"

认证文件:CQC11-464223-2020:《电动自行车用锂离子蓄电池(组)及充电设备安全与性能认证规则》
Certification documents: CQC11-464223-2020: "Safety and performance certification rules for electric bicycle Li-ion batteries and chargers"

适用范围:适用于电动自行车用锂离子蓄电池(组)及充电器,包含电动自行车集中充电控制器及电动自行车充换电柜产品的安全和性能认证。
Scope of application: Applicable to the safety and performance of electric bicycle Li-ion batteries and chargers which includes electric bicycle centralized charging controller and electric bicycle charging /battery swap equipment.

电动平衡车电池 Battery for electric balancing scooter

测试标准:GB/T 40559-2021 :《平衡车用锂离子电池和电池组 安全要求》
Test standard: GB/T 40559-2021: "Lithium ion cells and batteries used in self-balancing vehicle-Safety requirements"

认证文件:CQC11-464227-2023:《电动平衡车用锂离子电池和电池组认证规则》
Certification documents: CQC11-464227-2023: "Certification Rules for Lithium ion Cells and Batteries used in Electric Balancing Scooters"

适用范围:适用于电动平衡车用锂离子电池和电池组,也适用于无自平衡功能的电动滑板车等类似产品用的锂离子电池和电池组的安全认证。
Scope of application: Applicable to the safety certification of lithium-ion cells and batteries for electric balancing scooter and similar products such as electric scooters without self-balancing function.

MCM-CQC认证优势 MCM's Strengths

- A / MCM在2016年成为CQC委托检测实验室(V-165),以上标准均已在CQC签约试验室的资质范围内。
MCM has become the commissione test laboratory (V-165) of CQC from 2016. The above standards are all within the qualification scope of CQC contracted laboratories.
- B / MCM拥有先进、精密、大容量的电芯、电池模组、电池簇的检测设备,能为客户提供全面、专业的检测服务。
MCM has the advanced and sophisticated testing equipment for batteries and mobile power supply, and able to provide with comprehensive and professional testing services.
- C / 可为客户提供审厂咨询、审厂辅导等管家式服务。
MCM can provide customers with butler service such as audit consulting, factory audit assistance, etc.

印度BIS强制性产品注册(CRS)

INDIAN BIS MANDATORY REGISTRATION (CRS)

产品在进口至印度,或在印度发行或出售前必须符合适用的印度安全标准和强制性注册要求,所有在强制性注册产品目录内的电子产品进口到印度或在印度市场销售都必须在印度标准局(Bureau of Indian Standards) BIS进行注册。2014年11月新增15种强制性注册产品。新增类别包括: 手提电话、电池、移动电源、电源供应器、LED 电灯及销售终端机等等。

Products must meet the applicable Indian safety Standards and mandatory registration requirements before they are imported into, or released or sold in India. All electronic products in the mandatory registration product catalogue must be registered in the Bureau of Indian Standards (BIS) before they are imported into India or sold in the Indian market. In November 2014, 15 mandatory registered products were added. New categories include mobile phones, batteries, mobile power supplies, power supplies, LED lights, pos terminal, etc.

测试标准 Test standard

镍系电芯/电池测试标准: IS 16046 (Part 1): 2018 (参考IEC62133-1:2017)

Nickel cell/battery test standard: IS 16046 (Part 1): 2018 (refer to IEC 62133-1:2017)

锂系电芯/电池测试标准: IS 16046 (Part 2): 2018 (参考IEC62133-2:2017)

Lithium cell/battery test standard: IS 16046 (Part 2): 2018 (refer to IEC 62133-2:2017)

纽扣电池也在强制范围

Coin Cells / Batteries are also in the scope of Mandatory Registration.

MCM-BIS认证优势 MCM's strengths

A / MCM在2015年取得全球第一张BIS证书, 在BIS认证领域有着深厚的资源积累和实战经验。

MCM has obtained the first BIS certificate of battery in the world for customer in 2015, and acquired abundant resources and practical experience in the field of BIS certification.

B / 聘请印度BIS前高层官员担任认证顾问, 为认证项目保驾护航, 去除取消注册号风险;

MCM has hired a former senior BIS official in India as a certification consultant, removing the risk of cancellation of registration number, to help to secure the projects.

C / MCM印度分公司由印度认证业内专业人员组成, 与BIS办公室保持良好沟通, 能为客户提供全面综合的认证解决方案。

MCM is well-skilled in solving all kinds of problem in certification and testing. By integrating local resources, MCM has established the Indian branch, composed of professionals in the industry of India. It keeps good communication with BIS and provides customers with comprehensive certification solutions.

D / 服务于行业龙头企业, 能为客户提供前沿、专业、权威的印度认证资讯和服务。

MCM serves leading enterprises in the industry, providing the most cutting-edge, professional and authoritative Indian certification information and service.

印度电动车牵引电池安全要求-CMVR认证

SAFETY REQUIREMENTS OF INDIAN ELECTRIC VEHICLE TRACTION BATTERY -CMVR APPROVAL

1989年印度政府颁布了《中央机动车法案》(Central Motor Vehicles Rules, 简称CMVR)。该法案规定,所有适用于CMVR的道路机动车辆,工程机械车辆、农林机械车辆等都必须向印度交通部认可的认证机构申请强制性认证。该法案的颁布标志着印度机动车认证的开始。1997年9月15日印度政府成立汽车行业标准委员会 (Automotive Industry Standard Committee, 简称AISC),并由书记单位ARAI起草相关标准并发行。

The Indian Government enacted Central Motor Vehicles Rules (CMVR) in 1989. The Rules stipulates that all road motor vehicles, construction machinery vehicles, agricultural and forestry machinery vehicles that are applicable to CMVR must apply for compulsory certification from certification bodies accredited by the Ministry of Transport of India. The Rules marks the beginning of vehicle certification in India. On September 15, 1997, the Indian government established the Automotive Industry Standard Committee (AISC), and the secretary ARAI drafted the relevant standards and issued them.

车辆用牵引电池作为车辆的关键安全性零部件,针对其安全性测试要求由ARAI主导先后发行了与之相关的AIS-048、AIS 156和 AIS 038 Rev.2法规标准。作为最早批准实施的AIS 048标准已于2022年10月1日废止,取而代之的是新版标准AIS 038 Rev.2和 AIS 156。

Traction battery is the key safety component of vehicles. ARAI successively drafted and issued the standards AIS-048, AIS 156 and AIS 038 Rev.2 specifically for its safety test requirements. As the earliest approved standard, AIS 048 has been abolished on April 1st, 2023, and is be replaced by newest version of AIS 038 Rev. 2 and AIS 156.

测试标准及适用范围 Test standard and scope of application

测试标准:AIS 156, 适用范围:L类车辆牵引电池

Test standard: AIS 156, scope of application: Traction Battery of L category vehicle

测试标准:AIS 038 Rev.2, 适用范围:M, N类车辆牵引电池

Test standard: AIS 038 Rev.2, scope of application: Traction Battery of M, N category vehicle

MCM-印度电动车牵引电池安全要求CMVR认证优势 MCM' s strengths

A / MCM在电池检测认证行业具有极高的市场权威性和齐全的测试资质,拥有17年的电池认证经验。

MCM has been dedicated to battery certification over 17 years, acquired high market reputation and completed testing qualifications.

B / 与印度实验室达成测试数据互认,无需送样到印度,在MCM实验室进行目击测试即可,为客户节省认证周期。

MCM has reached mutual recognition of test data with Indian laboratories, witness test can be conducted in MCM lab without sending samples to India.

越南MIC认证

VIETNAM MIC CERTIFICATION

越南信息与通信局MIC规定2017年10月1日起,所有使用在手机、平板电脑及笔记本电脑上的电池必须要有DoC认可(符合性声明)才能进口;后规定2018年7月1日起需要进行越南本地测试。2018年8月10日,越南MIC规定其管控下的产品(包括电池)若要进口至越南均须申请PQIR用以清关,申请PQIR时需要提交SDoC。

Ministry of Information and Communications (MIC) of Vietnam stipulated that from October 1st, 2017, all batteries used in mobile phones, tablets and laptops must get DoC (Declaration of Conformity) approval before imported into Vietnam. Then from July 1st, 2018, it requires local testing in Vietnam. MIC stipulated that all regulated products (including batteries) shall get PQIR for clearance when imported into Vietnam. And SDoC is required for submission when applying for PQIR.

申请流程 Application flow

1. 进行越南本地测试取得QCVN101:2020/BTTTT测试报告
Conducted local test in Vietnam to obtain QCVN 101:2020 /BTTTT test report
2. 申请ICT MARK和签发SDoC
Apply for ICT MARK and issue SDoC (the applicant must be a Vietnamese company)
3. 申请PQIR
Apply for PQIR
4. 提交PQIR, 完成整个清关手续。
Submit PQIR and complete the whole customs clearance.

MCM-越南MIC认证优势 MCM's strengths

- A / MCM与越南政府紧密合作, 能为客户提供越南认证的第一手资讯。
MCM works closely with the Vietnamese government to obtain the first-hand information of Vietnam certification.
- B / MCM与当地政府机构共建越南实验室, 成为该越南实验室官方在中国(含港澳台地区)指定唯一战略合作伙伴。
MCM co-built a Vietnam laboratory with local government agency, and is the only strategic partner in China (including Hong Kong, Macao and Taiwan) designated by the Vietnam governmental laboratory.
- C / MCM可参与越南针对电池产品、终端产品等其他产品强制性认证和技术要求的讨论及建议提供。
MCM can participate in discussions and provide suggestions on mandatory certification and technical requirements for battery, end products and other products in Vietnam.
- D / MCM已成立越南试验室, 可提供一站式服务, 从测试、认证到当地代表的全程服务让客户省心、放心。
MCM has established a Vietnam laboratory, providing one-stop service including testing, certification and local representative to make clients worriless

越南电动自行车,电动摩托车用电池安全要求—VR认证

VR CERTIFICATION: SAFETY REQUIREMENTS FOR ELECTRIC BICYCLE AND ELECTRIC MOTORCYCLE BATTERIES IN VIETNAM

2005年7月21日,越南交通部(The Ministry of Transport, 简称MOT)颁发第34/2005/QS-BGTVT号关于在越南制造组装的机动车辆型式认证规范的决定和第35/2005/QS-BGTVT号关于进口机动车辆检验规范的决定。2007年11月21日,越南交通部继而颁发第57/2007/QS-BGTVT号关于进口摩托车和发动机检验规范的决定,和第58/2007/QS-BGTVT号关于在越南制造组装的摩托车和轻便摩托车型式认证规范的决定。

从2018年4月开始越南国家登记局强制性针对售后市场汽车零部件要求进行越南VR认证,目前强制性认证的产品范围包括头盔、安全玻璃、轮毂、后视镜、轮胎、前照灯、油箱、蓄电池、内饰材料、压力容器、动力电池等。

2019年11月11日,越南部颁发第45/2019/TT-BGTVT号关于电动自行车用铅酸电池、镍氢电池和锂电池列管为强制清单的决定。

On July 21, 2005, the Ministry of Transport of Vietnam (MOT) issued Decision No. 34/2005/QS-BGTVT on the regulations for type approval of motor vehicles manufactured and assembled in Vietnam, and Decision No. 35/2005/QS-BGTVT on the regulations for inspection of imported motor vehicles. Subsequently, on November 21, 2007, MOT issued Decision No. 57/2007/QS-BGTVT on the inspection regulations for imported motorcycles and engines, and Decision No. 58/2007/QS-BGTVT on the type approval regulations for motorcycles and mopeds manufactured and assembled in Vietnam.

Starting from April 2018, Vietnam Register has mandated the VR certification for aftermarket auto parts. The products currently under mandatory certification include helmets, safety glass, hubs, rearview mirrors, tires, headlights, fuel tanks, batteries, interior materials, pressure vessels, power batteries, etc.

On November 11, 2019, MOT issued Decision No. 45/2019/TT-BGTVT, listing lead-acid batteries, nickel-metal hydride batteries, and lithium batteries for electric bicycles as mandatory items.

测试标准及适用范围 Testing Standards and Applicable Scope

测试标准: QCVN 91: 2019/BGTVT, **适用范围:** 电动摩托车/轻型摩托车用锂电池

Test standard: QCVN 91:2019/BGTVT: applicable to lithium batteries for electric motorcycles/mopeds

测试标准: QCVN 47: 2012/BGTVT, **适用范围:** 摩托车/轻型摩托车用铅酸电池及锂电池

Test standard: QCVN 47:2012/BGTVT: applicable to lead-acid batteries and Li-ion batteries for motorcycles/mopeds

测试标准: QCVN 76: 2019/BGTVT, **适用范围:** 电动自行车用铅酸电池、镍氢电池、锂电池

Test standard: QCVN 76:2019/BGTVT: applicable to lead-acid batteries, nickel-metal hydride batteries, and lithium batteries for electric bicycles

MCM-越南电动自行车、电动摩托车用电池安全要求VR认证优势 MCM's strengths

- A /** 越南测试单位VMTC合作关系紧密,可提供最佳周期及项目报价;
MCM works closely with the Vietnam Motor Vehicle Testing Center (VMTC), providing the best lead time and project quotations;
- B /** 能快速提供咨询服务,制定最优方案解决项目问题;
MCM is able to quickly provide consulting services and develop optimal solutions to project issues;
- C /** 可第一时间分享越南锂电池有关的前沿认证信息动态和技术要求解析。
MCM shares timely updates on advanced certification information and technical requirements related to lithium batteries in Vietnam.

马来西亚SIRIM认证

MALAYSIA SIRIM CERTIFICATION

SIRIM, 前身为马来西亚标准和工业研究所, 是马来西亚政府全资拥有的公司组织, 隶属于财政部长公司。它是马来西亚政府委托为标准和质量的组织, 并成为马来西亚工业技术卓越的推动者。SIRIM QAS是SIRIM集团的全资子公司, 是马来西亚所有测试、检验和认证的唯一窗口。目前二次锂电池属于自愿性认证, 但很快将被划入强制产品范围, 由马来西亚国内贸易及消费者事务部KPDNHEP (原 KPDNKK) 监管。

SIRIM, formerly known as the Standard and Industrial Research Institute of Malaysia (SIRIM), is a corporate organization owned wholly by the Malaysian Government, under the Minister of Finance Incorporated. It has been entrusted by the Malaysian Government to be the national organization for standards and quality, and as a promoter of technological excellence in the Malaysian industry. SIRIM QAS, a wholly-owned subsidiary of SIRIM Group, becomes the only window for all testing, inspection and certification in Malaysia. Currently, secondary lithium battery is certified on a voluntary basis, but soon it will be mandated under the supervision of the Ministry of Domestic Trade and Consumer Affairs (KPDNHEP, formerly known as KPDNKK).

测试标准 Testing Standards

MS IEC 62133:2017, 相当于IEC 62133:2012标准。

MS IEC 62133:2017, equivalent to IEC 62133:2012.

MCM-SIRIM认证优势 MCM's strengths

- A / MCM与SIRIM、马来西亚国内贸易及消费者事务部KPDNHEP联系紧密, 能为客户及时提供最准确真实的信息。
MCM is in close contact with SIRIM and KPDNHEP (Malaysia's Ministry of Domestic Trade and Consumer Affairs). A person in SIRIM QAS is specially assigned to handle MCM's projects and share the most accurate and authentic information with MCM in a timely manner.
- B / SIRIM QAS 认可MCM测试数据, 可在MCM进行目击测试, 样品无需寄送马来西亚, 有效缩短项目周期。
SIRIM QAS accepts MCM's testing data and can conduct witness testing at MCM without sending samples to Malaysia, significantly shortening the project lead time.
- C / MCM能为电池、适配器和整机的马来西亚认证制定整体解决方案, 提供一站式服务。
MCM can provide clients with one-stop service by making integrated solutions for the certification of batteries, adapters and host products in Malaysia.

日本PSE认证

JAPAN PSE CERTIFICATION

电器设备和物料的产品安全认证, 是日本强制性认证制度。在日本称之为“适合性检查”, 是日本地区电器用品的强制性市场准入制度, PSE认证包括两部份: EMC和-product safety, 是日本电气用品安全法中一项重要规定。

The Product Safety Electrical Appliance and Material (PSE) certification is a mandatory certification scheme in Japan. PSE, known as "suitability check" in Japan, is a mandatory market access system for electrical appliances in Japan. PSE certification includes two parts: EMC and product safety, which constitutes an important provision in Japan's Electrical Appliance and Material Safety Law.

电气用品技术标准 Technical Standards for Electrical Appliances

JIS C 62133-2 2020: 便携式设备用可充电电池的安全性-第 2 部分: 锂系

JIS C 62133-2 2020: Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications-part2: Lithium systems

JIS C 8712 2015: 在便携式设备中使用的便携式密封二次电芯和电池的安全要求

JIS C 8712 2015: Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications

MCM-PSE认证优势 MCM's strengths

A / 拥有齐全PSE标准测试设备, 能为客户提供包括JET、TUV RH、MCM等不同定制化的测试报告。

MCM has full set of testing equipment as per PSE standard and can provide customers with JET, TUV RH, MCM and other customized test reports.

B / 专业技术团队专注于研究PSE测试标准及法规要求, 能为客户及时地宣贯PSE认证政策及资讯。

MCM's team of technical professionals focuses on PSE standards and regulatory requirements, to provide updates to customers in a timely and accurate manner.

C / MCM与日本本土机构紧密合作, 能根据客户要求提供日语、英语的检测报告。目前MCM已累计为客户完成超过5,000个PSE项目的检测服务。

MCM works closely with local institutions in Japan, MCM can provide test reports in Japanese and English according to customer requirements. So far, MCM has completed more than 5,000 PSE projects for customers.

北美WERCSmart认证

NORTH AMERICA WERCSMART CERTIFICATION

WERCSmart是美国The WerCS 开发的一个产品登记数据库公司,为美国和加拿大的超市提供产品监管,为采购产品提供便利。零售商和WERCSmart程序中的其他参与者在售卖、运输、储存或处置您的产品时,正面临日益复杂的联邦、州和当地法规的合规挑战。随产品提供的安全数据表(SDS)所包含的数据通常未能涵盖符合这些法规的信息,通过WERCSmart可将产品数据信息规范化以符合各项法规。

WERCSmart is a product registration database company developed by The WerCS, providing product regulation services for supermarkets in the United States and Canada to facilitate the procurement of products. Retailers and other participants in the WERCSmart program face increasingly complex compliance challenges with federal, state, and local regulations when selling, transporting, storing, or disposing of their products. Safety Data Sheets (SDS) accompanying products often fail to cover the information required to comply with these regulations. WERCSmart helps standardize product data to comply with various regulations.

MCM-北美WERCSmart认证优势 MCM's strengths

- A / 拥有专业的人员在长期研究SDS的法规要求,对法规的变化进行深入解读,已为客户提供了近十年的SDS编制服务。
MCM has a group of professionals who have been studying the regulatory requirements of SDS for a long time, and have a deep understanding of the changes of regulations. We have provided SDS services for customers for nearly ten years
- B / MCM与WERCSmart审核人员联系紧密,及时沟通以确保注册、审核的高效完成。
MCM maintains close communication with WERCSmart staff to ensure efficient registration.

北美CTIA认证

NORTH AMERICA CTIA CERTIFICATION

CTIA是无线电信和互联网协会,是美国一个非营利的民间组织。CTIA为无线工业领域提供一个无偏见的独立集中的产品评估认证系统,通过该认证系统,所有消费级的无线产品都必须经过相应的符合性测试,满足相关标准要求,才可以在北美通信市场销售。

CTIA represents the Cellular Telecommunications and Internet Association, a non-profit private organization in the United States. CTIA provides an unbiased, independent and centralized product evaluation and certification for the wireless industry. Under this certification system, all consumer wireless products must pass the corresponding conformity test and meet the requirements of relevant standards before they can be sold in the North American communications market.

测试标准及适用范围 Testing Standard and Scope

Certification Requirement for Battery system Compliance to IEEE1725, 适用于单电芯电池和电芯并联的多电芯电池。

The Certification Requirement for Battery system Compliance to IEEE1725 is applicable to single-cell and multi-cell batteries in parallel.

Certification Requirement for Battery system Compliance to IEEE1625, 适用于电芯串联或串并联的多电芯电池。

Certification Requirement for Battery system Compliance to IEEE1625 is applicable to multi-cell batteries with core connection in series or parallel.

温馨提示:不管移动电话电池还是计算机电池都按上述选择认证标准,而不是移动电话用IEEE1725,计算机用IEEE1625。

Notice: both mobile phone battery and computer battery should choose the certification standard according to the above, do not simply conclude IEEE1725 for mobile phone and IEEE1625 for computer.

MCM-北美CTIA认证优势 MCM's Strength

A / MCM是CTIA认可实验室(CATL)。
MCM is a CTIA-accredited laboratory.

B / MCM可为客户提供申请、检测、审厂、上传等全套贴心服务。
MCM can provide a full set of steward type service including submitting application, testing, auditing and uploading data, etc.

北美cTUVus & ETL认证

NORTH AMERICAN cTUVus & ETL CERTIFICATION

美国劳工部下属的职业安全与健康管理局 (OSHA) 要求在工作场合所使用的产品必须经过国家认可实验室测试并发证才能在市场上销售。使用的测试标准包括美国国家标准 (ANSI) ;美国试验与材料协会标准 (ASTM) ;美国保险商试验室标准 (UL) ;工厂互认研究组织标准。

The Occupational Safety and Health Administration (OSHA) under the U.S. Department of Labor requires products used in the workplace to be tested and certified by a nationally recognized laboratory before they can be sold in the market. The testing standards used include American National Standards Institute (ANSI); American Society for Testing and Materials (ASTM); Underwriters Laboratory (UL); and research organization standard for mutual recognition of factories.

NRTL、cTUVus、ETL简介 Overview of NRTL, cTUVus, and ETL

NRTL:国家认可试验,是英文Nationally Recognized Testing Laboratory 的缩写,负责实验室的认可。截止至目前共有18家第三方认证检测机构被NRTL认可,包括TUV、ITS、MET等。

NRTL is short for Nationally Recognized Testing Laboratory. A total of 18 third-party certification and testing institutions have been recognized by NRTL, including TUV, ITS and MET so far.

cETLus标志:美国电器测试实验室(Electrical Testing Labs) 的北美认证标志。
cETLus Mark: North America Certification Mark of Electrical Testing Labs of United States.

cTUVus标志:德国TUV RH的北美认证标志。
cTUVus Mark:North America Certification Mark of TUV Rheinland.

电池常用北美认证标准 Common Battery Certification Standards in North America

序号 S/N	标准代号 Standard	标准名称 Description of Standard
1	UL 1642	锂电池安全标准 Safety for Lithium Batteries
2	UL 2054	家用和商用电池安全标准 Safety for Household and Commercial Batteries
3	UL 2271	轻型电动车 (LEV) 辆中使用的电池 Safety for Batteries for Use in Light Electric Vehicle (LEV) Applications
4	UL 2056	移动电源的安全评估概要 Outline of Investigation for Safety of Lithium-ion Power Banks
5	UL 1973	在轻型轨电动道设备和固定设备使用的电池标准 Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications
6	UL 9540	储能系统和设备安全标准 Safety for Energy Storage Systems and Equipment

序号 S/N	标准代号 Standard	标准名称 Description of Standard
7	UL 9540A	评估电池储能系统中热失控火蔓延的测试方法的标准 Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems
8	UL 2743	便携式电源安全标准 Safety for Portable Power Packs
9	UL 62133-1/-2	含碱性或非酸性电解质的蓄电池和蓄电池组 便携式密封蓄电池和蓄电池组的安全性要求-第1/2部分:镍系/锂系 Standard for Safety for Secondary Cells and Batteries Containing Alkaline or Other Non-Acid Electrolytes - Safety Requirements for Portable Sealed Secondary Cells, and for Batteries Made from Them, for Use in Portable Applications - Part 1/2: Nickel Systems/ Lithium Systems
10	UL 62368-1	音频/视频,信息和通信技术设备 - 第1部分:安全要求 Audio/video, information and communication technology equipment - Part 1: Safety requirements
11	UL 2580	电动车用电池安全标准 Safety for Batteries for Use In Electric Vehicles

MCM-北美cTUVus & ETL认证优势 MCM's strength

- A /** MCM在北美认证项目上同时作为TUV RH和ITS的目击试验室,所有测试均在MCM试验室完成,提供给客户更好的面对面技术交流服务。
MCM serves as a witness laboratory for TUV RH and ITS on the North American certification program. All tests can be conducted in the MCM laboratory, providing customers with better face-to-face technical communication services.
- B /** MCM是UL标准委员会的成员,可参与UL标准的制定、修改,为客户提供前沿精准动态信息。
MCM is a member of the UL Standards Committee, participating in the development and revision of UL standards, and keeping abreast of up-to-date standards information.

欧盟CE认证与新电池法

EU CE CERTIFICATION AND NEW BATTERY LAW

CE标志是产品进入欧盟国家及欧盟自由贸易协会国家市场的“通行证”。任何规定的(新方法指令所涉及的)产品,无论是欧盟以外还是欧盟成员国生产的产品,想在欧盟市场上自由流通,在投放欧盟市场前,都必须符合指令及相关协调标准的要求,并且加贴CE标志。这是欧盟法律对相关产品提出的一种强制性要求,为各国产品在欧洲市场进行贸易提供了统一的最低技术标准,简化了贸易程序。

CE mark is the "passport" for products to enter the market of EU countries and EU free trade association countries. Any regulated products (covered by the new directive), whether produced outside the EU or in EU member states, must meet the requirements of the directive and relevant coordination standards and be affixed with CE mark before being put into the EU market for free circulation. This is a mandatory requirement of relevant products put forward by EU law, which provides a uniform minimum technical standard for products of each country to trade in the European market and simplifies trade procedures.

CE指令 CE Directives

CE指令是欧洲共同体理事会和欧洲共同体委员会依据《欧洲共同体条约》的授权所制定的立法性文件, 电池适用的指令有:
The directive is a legislative document prepared by the council of the European Community and the commission of the European Community pursuant to the mandate of the European Community Treaty. Battery is applicable to the following directives:

2006/66/EC&2013/56/EU: 电池指令, 贴垃圾桶标志须符合此指令; 2006/66/EC&2013/56/EU: battery directive; The Posting of garbage can sign must comply with this directive;	2014/30/EU: 电磁兼容指令 (EMC指令), CE标志指令; 2014/30/EU: electromagnetic compatibility directive (EMC directive), CE mark directive;	2011/65/EU: ROHS指令, CE标志指令。 2011/65/EU: ROHS directive, CE mark directive.
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温馨提示: 当一个产品需要满足多个CE指令(需粘贴CE标志)要求时, 只有在满足所有指令要求时才能粘贴CE标志。

Tips: when a product needs to meet the requirements of multiple CE directives (CE mark is needed), the CE mark can only be pasted when all the directives are met.

新电池法 (2023/1542) EU New Battery Law (2023/1542)

《欧盟电池与废电池法规》由欧盟在2020年12月提出, 旨在逐步废除指令2006/66/EC, 修订法规 (EU) No2019/1020, 更新欧盟电池立法, 又称欧盟《新电池法》, 并于2023年8月17日正式生效。

The EU Battery and Waste Battery Regulation was proposed by the European Union in December 2020 to gradually repeal Directive 2006/66/EC, amend Regulation (EU) No 2019/1020, and update EU battery legislation, also known as the EU New Battery Law, and will officially enter into force on August 17, 2023.

MCM-欧盟CE认证与新电池法项目优势 MCM's Strength

- A / 拥有专业的技术团队从事电池CE领域工作, 能为客户提供更快、更新、更准确的CE认证资讯。
MCM has a professional technical team engaged in the field of battery CE, which can provide customers with faster, newer and more accurate CE certification information.
- B / 能为客户提供包括LVD、EMC、电池指令等在内的多种CE解决方案。
MCM can provide customers with a variety of CE solutions, including LVD, EMC, battery directives, etc.
- C / 提供专业的新电池法培训讲解服务, 以及碳足迹、尽职调查和符合性证书全套的解决方案。
We provide professional training and explanation services on the new battery law, as well as a full range of solutions for carbon footprint, due diligence and certificate of conformity.

欧盟E MARK认证

EUROPEAN UNION E MARK CERTIFICATION

根据欧洲经济委员会法规(ECE Regulation)以及欧盟指令(EC Directive)的规定,进入欧洲国家的汽车、摩托车及多种零部件和系统必须通过认证,以符合行车安全和环境保护方面的基本要求。

E-Mark是欧洲国家交通部门颁发的合格标志,表示产品符合相关法规或指令的要求,是欧洲经济委员会(ECE)针对车辆产品实施的一种产品认证制度,主要针对零部件。根据法规规定,车辆零部件产品出口或与整车配套出口至ECE成员国(包括欧洲、亚洲、非洲及大洋洲50多个成员国),必须通过E-mark认证。

同一产品型号不能申请不同交通部的E-Mark证书。

According to the ECE Regulation and the EC Directive, cars, motorcycles and a variety of components and systems entering European countries must be certified to meet the basic requirements of driving safety and environmental protection.

E-Mark is a conformity mark issued by the transportation authorities of European countries, indicating that the product meets the requirements of relevant regulations or directives, and is a product certification system implemented by the Economic Commission for Europe (ECE) for vehicle products, mainly for parts. According to the regulations, vehicle parts and components exported or exported to ECE member countries (including more than 50 member countries in Europe, Asia, Africa and Oceania) must pass E-mark certification. The same product model cannot apply for E-Mark certificates from different Ministry of Communications.

适用范围 Scope of application

ECE R136.01 (主要对象为二、三轮车, 以及部分四轮车)

ECE R136.01 mainly applicable for two- and three-wheeled vehicles, as well as some four-wheeled vehicles

适用于给L类(设计时速大于6km/h)的牵引电机提供电能的可充电的能量储存系统&非永久连接到电网上;

不适用给启动发动机/灯光/其他车辆附属设施供能的可充电的能量储存系统。

备注:L类车型,指二、三轮车,以及部分四轮(例如,包含司机座在内,座位不超过4个的载客车,且不含REESS的车重不超过475kg;包含司机在内,座位不超过2个的载货车,且不含REESS的车重不超过550kg)

It is applied to energy storage system that provides electrical energy to a Class L (design speed greater than 6 km/h) traction motor & is not permanently connected to the grid.

Rechargeable energy storage systems that supply energy to the starting engine/lights/other vehicle ancillary facilities are not applicable.

Remark: Category L vehicles refer to two- and three-wheeled vehicles, as well as some four-wheeled vehicles (e.g., passenger cars with no more than 4 seats, including the driver's seat, weighing no more than 475 kg; trucks with no more than 2 seats, including the driver, weighing no more than 550 kg without REESS)

ECE R100.03 (主要对象为四轮客车、货车)

ECE R100.03 Mainly applicable for four-wheeled buses and trucks

适用于给M和N类的牵引电机提供电能的可充电的能量储存系统 & 非永久连接到电网上;

不适用给启动发动机/灯光/其他车辆附属设施供能的可充电的能量储存系统

备注:M类车型指至少有4个车轮并且用于载客的机动车辆;N类车型指至少有4个车轮并且用于载货的机动车辆。

Rechargeable energy storage systems for supplying electrical energy to traction motors in class M and N & non-permanent connection to the grid.

Rechargeable energy storage systems that supply energy to the starting engine/lights/other vehicle ancillary facilities are not applicable.

Remark: Category M are motor vehicles that have at least 4 wheels and are used to carry passengers. Category N are motor vehicles that have at least 4 wheels and are used to carry cargo

咨询前期需提供的信息 Information to be provided in the early stage of inquiry

电池规格书

Battery Specification

电池所用的终端车型信息

Information about the vehicle type

反馈车上电池包的数量, 如果有多个电池包组合, 还需提供电池包在车上的安装方式

The number of battery packs in the car, the installation method of the battery pack in the car if there are multiple battery pack combinations

意向申请的E MARK交通部(如无指定, 可以由机构推荐)

Ministry of transportation you intend to apply to (if not specified, can be recommended by the agency)

是否为第一次申请E-mark, 生产工厂有无ISO9001或者IATF16949证书

Whether it is the first time to apply for E-mark, whether the production plant has a ISO9001 or IATF16949 certificate

MCM-欧盟E MARK认证优势 MCM's Strength

A / MCM合作的报告出具机构均获得欧洲联邦交通部的授权, 确保最终顺利出具交通部证书和报告。

The report issuing agencies that MCM cooperates with are authorized by the European Federal Ministry of Transport to ensure the smooth issuance of the certificate and report of the Ministry of Transport.

B / MCM能根据客户实际需求, 从认证周期、认证费用、终端认可度等方面为客户提供不同交通部发证的解决方案。

According to the actual needs of customers, MCM can provide customers with solutions of different ministries of transportation in terms of certification cycle, certification cost, recognition, etc.

C / MCM可为客户提供捆绑服务, 同步进行印度市场的准入标准AIS 038 (对标ECE R100.03) 和AIS 156 (对标ECE R136.01)。

MCM can provide customers with a bundle service to comply with the Indian market access standards AIS 038 (ECE R100.03) and AIS 156 (ECE R136.01) in one go.

泰国TISI认证

THAILAND TISI CERTIFICATION

TISI是泰国工业标准学会(Thai Industrial Standards Institute)的简称。TISI是泰国工业部下的一个部门,负责制定满足国内需要的标准和国际标准,及监控产品和合格评估程序,确保产品满足标准要求并取得认证证书。TISI既是泰国的强制认证的政府主管机构,又是标准制定与管理机构、认证机构,同时还是实验室认可、人员培训与注册机构。

泰国实行强制认证和自愿认证相结合的TISI认证制度。对于符合标准的产品,允许使用TISI标志。

TISI is abbreviated form of Thai Industrial Standards Institute. TISI is a division of the Thai Ministry of Industry, responsible for the development of domestic and international standards that meet the needs of the country, as well as monitoring product and qualification assessment procedures to ensure that products meet the standards to obtain certification.

Thailand implements the TISI certification system, which combines compulsory certification with voluntary certification. For products that meet the standard, TISI mark is allowed to be affixed to product.

测试标准及适用范围 Testing Standard and Scope

测试标准:TIS 2217-2548 (2005) 参考IEC 62133:2002版

Standard: TIS 2217-2548 (2005), Refer to IEC 62133: 2002

适用电池为:用于便携式设备的含碱性或其他非酸性电解液的二次电芯和电池

Applicable battery: Secondary cells and batteries containing alkaline or other non-acid electrolytes, for use in portable applications.

发证机构:TISI泰国工业标准学会

Certification Body: TISI- Thai Industrial Standards Institute.

MCM- 泰国TISI认证优势 MCM' s Strength

A / 直接与泰国当地机构和实验室合作,可提供优惠的价格和缩短周期。

Working directly with local institutions and laboratories in Thailand to provide favorable prices and reduced lead time.

B / 提供寄样-审厂-发证的一站式服务,全程有经验丰富的认证工程师协助。

Providing one-stop service of sample sending - factory inspection - certification, with the assistance of experienced certification engineers throughout the process.

C / 可提供更快更准确的咨询服务。

Providing faster and more accurate consulting services.

韩国KC认证

KOREA KC CERTIFICATION

为保护公众健康和安全,韩国政府部门于2009年开始针对所有电子电器产品实施新的KC计划,电子电器产品制造商和进口商必须在销往韩国市场之前从授权检测中心获取韩国认证标识(KC Mark)。在此认证计划下,电子电器产品被分为Type 1, Type 2, Type 3三个类别,锂电池为Type 2类。

In order to protect public health and safety, the Korean government began implementing a new KC program for all electronic and electrical products in 2009. Manufacturers and importers of electronic and electrical products must obtain the Korean Certification Mark (KC Mark) from authorized testing centers before selling to the Korean market. Under this certification program, electronic and electrical products are divided into three categories: Type 1, Type 2 and Type 3. Lithium batteries are Type 2.

锂电池标准及认证范围 Lithium battery standards and scope of application

标准: KC 62133-2: 2020 参考IEC 62133-2: 2017

Standard: KC 62133-2: 2020 with reference to IEC 62133-2: 2017

适用范围:

Scope of application:

1. 便携式设备(可移动设备)中使用的锂二次电池;
2. 时速25km/h以下的个人代步工具用锂电池;
3. 最大充电电压超过4.4V且能量密度700Wh/L以上的手机平板电脑笔记本用锂电芯(Type 1)及其电池(Type 2)。

1. Lithium secondary batteries used in portable devices (mobile devices);
2. Lithium batteries used in personal transportation tools with speed of 25km/h below;
3. Lithium cells (Type 1) and batteries (Type 2) for mobile phone/tablet PC/laptop with maximum charging voltage exceeding 4.4V and energy density above 700Wh/L.

标准: KC 62619:2023 参考 IEC 62619:2022

Standard: KC 62619:2023 with reference to IEC 62619:2022

适用范围:

Scope of application:

1. 固定式储能系统 / 移动式储能系统;
 2. 大容量移动电源(如露营用电源等);
 3. 汽车充电用移动电源容量在500Wh ~ 300kWh以内;
- 不适用: 汽车(动力电池)、飞机、铁路、船舶等电池不在范围内。

1. Fixed energy storage system/mobile energy storage system
2. Large capacity mobile power supply (such as camping power supply)
3. Mobile power for car charging Capacity within 500Wh ~ 300kWh.

Not applicable: batteries used for automobile (traction battery), aircraft, railway, ship and other batteries are not within the scope.

MCM-韩国KC认证优势 MCM's Strength

A / MCM 与发证机构紧密合作,能针对周期与认证成本给予客户高度支持。

Working closely with certification authorities to support customers with lead time and certification costs.

B / 作为CBTL,出具的报告和证书可以直接用于转KC证书,可为客户提供“一套样品、一次测试、两种证书”的便利和优惠。

As a CBTL, the reports and certificates issued can be directly used to transfer KC certificates, which can provide customers with the convenience and benefits of "one set of samples - one test - two certificates".

C / 持续关注、解析电池KC认证最新动态,为客户提供一手资讯和应对方案。

Keeping paying attention to and analyzing the latest developments of battery KC certification to provide customers with first-hand information and solutions.

中国台湾BSMI认证

TAIWAN, CHINA BSMI CERTIFICATION

BSMI即经济部标准检验局 (Bureau of Standards, Metrology and Inspection. M.O.E.A.), 前身为1930年成立的全国度量衡局, 是中华民国最高检验机关, 负责国家标准、度量衡和商品检验等工作。台湾电子电器类产品的产品检验规范由BSMI制定, 产品必须符合安全性和EMC测试及相关检测, 才可被授权使用BSMI标志。

根据2013年11月20日BSMI通告, 从2014年5月1日起, 3C二次锂电芯/电池需按相应的标准进行检验符合要求方可进入台湾市场。

BSMI (Bureau of Standards, Metrology and Inspection. M.O.E.A.), formerly known as the National Bureau of Weights and Measures established in 1930, is the highest inspection authority in the Republic of China, and responsible for national standards, weights and measures and commodity inspection. The product inspection code for electronic and electrical products in Taiwan is formulated by BSMI. Products must meet safety and EMC tests and related tests before they can be authorized to use the BSMI mark.

According to the BSMI notice on November 20, 2013, 3C secondary lithium cells/batteries need to be inspected according to the corresponding standards before entering the Taiwan market from May 1, 2014.

电池标准 Battery Standard

标准: CNS 15364 102年版, 相对应国际标准IEC 62133: 2012

Standard: CNS 15364 (102) with reference to IEC 62133: 2012

MCM-台湾BSMI认证优势 MCM's Strength

- A / MCM是台湾BSMI认可实验室在大陆的首家合作机构, 能为客户提供BSMI的最新资讯和本土化检测服务。
Providing customers with the latest BSMI information and local testing services, as MCM is the first institution cooperated with Taiwan BSMI accredited laboratory.
- B / 已累计帮助客户一次性通过BSMI测试认证项目超过1,000个。
Helping customers pass more than 1,000 BSMI projects at one time.
- C / 可提供的“一次测试, 多张证书”的服务方案, 让目标在全球市场的客户获益良多。
Provide the solution 'get multiple certificates via one test' to benefit the clients whose target is the global market.

巴西ANATEL认证 BRAZIL ANATEL CERTIFICATION

ANATEL(Agencia Nacional de Telecomunicacoes)是巴西国家通讯管理局的简称,它是主要负责通讯产品认可的官方机构。2000年11月30日,ANATEL发布了《RESOLUTION No. 242》,公布了即将要强制的产品类别及认证实施细则;2002年6月2日《RESOLUTION No. 303》的公布,标志着ANATEL强制认证正式开始。

ANATEL(Agencia Nacional de Telecomunicacoes) is the official body of the National Communications Authority of Brazil, which is mainly responsible for the recognition of communication products. On November 30, 2000, ANATEL issued RESOLUTION No. 242, announcing the product categories to be mandatory and the implementation rules for certification. The announcement of RESOLUTION No. 303 on June 2, 2002 marked the official start of ANATEL compulsory certification.

锂电池标准及产品范围 Lithium battery standards and product scopes

法规标准:Act. 3484 参考标准IEC 61960-3:2017 & IEC 62133-2:2017

Standard: Act.3484 with reference to IEC 61960-3:2017 & IEC 62133-2:2017

产品范围:手机电池

Product scope: batteries used in mobile phone

MCM-巴西ANATEL认证优势 MCM's Strength

A / 拥有17年的电池类产品认证检测经验,丰富的资源,优质的服务体系,资深的技术团队,能为客户提供专业的认证测试方案。

With 17 years' experience in battery product certification and testing, rich resources, quality service system and senior technical team, we can provide professional certification and testing solutions for customers.

B / 与巴西多家优质的官方认可机构建立了良好的合作关系,解决方案丰富多样,服务精准迅捷。

We have established a good cooperative relationship with a number of high-quality official accredited institutions in Brazil, providing a wide variety of solutions and accurate and fast services.

澳大利亚CEC储能列名项目

AUSTRALIA CEC ENERGY STORAGE LISTED ITEMS

澳洲清洁能源委员会CEC (Clean Energy Council) 是澳大利亚清洁能源行业的最高机构, 非盈利性, 会员制组织, 代表澳大利亚领先的可再生能源和能源存储企业, 以及屋顶太阳能安装商, 并与他们合作, 以进一步发展澳大利亚的清洁能源。

凡被要求纳入CEC管控目录的产品, 只有在CEC认可清单上列名才能被电力系统监管机构允许安装在终端储能项目上并申请政府相关补贴。未能在CEC认可清单上列名的产品将不被澳洲当地电力监管机构允许安装在储能项目上, 同时也无法申请政府相关补贴。

The Clean Energy Council (CEC) is Australia's top clean energy industry body, a not-for-profit, membership-based organisation that represents and works with Australia's leading renewable energy and energy storage businesses, as well as rooftop solar installers, to further develop Australia's clean energy.

Where the products are required to be included in the CEC control directory, only the products listed on the CEC approved list can be allowed to be installed on the energy storage devices and apply for relevant government subsidies by the power system regulator.

Products that fail to be listed on the CEC approved list will not be allowed to be installed on energy storage devices by the local power regulator in Australia, and will not be able to apply for government subsidies.

CEC列名范围 CEC listed scope

光伏模组 (PV Module)

逆变器和功率转换设备 (inverters and PCE)

不带逆变器的锂电池系统 (BS)

带逆变器的锂电池储能系统 (BESS)

MCM-澳大利亚CEC储能列名项目优势 MCM's Strength

A / 配套测试能力和标准研发团队, 可提供申请CEC最佳方案。

With the capability of testing and a standard R&D team, we can provide the best solution for applying CEC.

B / 与CEC保持良好沟通, 扫清认证障碍。

Maintaining good communication with CEC to clear certification barriers.

澳大利亚和新西兰EESS认证

AUSTRALIA AND NEW ZEALAND EESS CERTIFICATION

为提升消费者使用电气设备的安全水平，澳洲和新西兰针对特定家用、个人或类似用途低压设备制定了EESS (Electrical Equipment Safety System) 管控框架。尽管在澳洲，每个州有独立的决定权选择使用这个框架，但EESS已经被多数州采用，纳入立法要求中。

To improve the safety level of electrical equipment used by consumers, Australia and New Zealand have developed an EESS (Electrical Equipment Safety System) control framework for specific household, personal or similar low-voltage equipment. Although each state in Australia has the discretion to choose to use this framework, EESS has been adopted by most states as part of their legislative requirements.

EESS认证范围 Scope of EESS certification

家用、个人或类似用于的如下低压设备，尤其是归为风险2和风险3类的设备：

1. 电气产品额定电压大于50V交流有效值或120V无纹波直流；
2. 额定电压小于1000V交流有效值或1500V无纹波直流；
3. 设计或销售为适合家庭、个人或类似用途，带逆变器的锂电池储能系统 (BESS)。

Low-voltage equipment for household, personal or similar use, in particular those classified as risk 2 and Risk 3:

1. Electrical products with rated voltage greater than 50V AC RMS or 120V unripple DC.
2. Rated voltage less than 1000V AC RMS or 1500V non-ripple DC.
3. Lithium Battery Energy Storage System with Inverter (BESS) designed or marketed for household, personal or similar use.

MCM-澳大利亚和新西兰EESS认证优势 MCM's Strength

A / MCM作为SAA推荐实验室，可提供包含测试、报告、发证在内的一站式服务。

As a SAA recommended laboratory, MCM provides one-stop services including testing, reporting and certification.

B / 可提供包括RCM和EESS申请在内的配套服务。

MCM can provide a full set of service including RCM and EESS.

定制化解决方案 给客户惊喜

CUSTOMIZED SOLUTIONS
SURPRISE CLIENT

服务方案 SOLUTIONS



01

定制化解决方案

CUSTOMIZED SOLUTIONS

作为全球领先的重度垂直第三方电池认证检测机构，MCM将根据客户实际情况，为客户提供定制化解决方案，助力客户的产品顺利在全球市场流通销售，这是MCM在电池认证检测行业深耕多年结出的丰硕成果。

As the world's leading third-party battery certification and testing organization, MCM will provide customers with customized solutions based on their actual conditions to help customers' products circulate smoothly in the global market. This is the fruitful results of MCM's many years of experience in the battery certification and testing industry.



02

服务承诺

PLEDGE

MCM以最专业的技术提供最用心的服务，专业的服务团队、先进的检测设备、规范的检测流程，为客户的电池安全保驾护航。

MCM provides the most attentive services with the most professional technology. The professional service team, advanced testing equipment, and standardized testing procedures ensure the safety of customers' batteries.



03

全球认证服务

GLOBAL CERTIFICATION SERVICES

MCM聚焦在电池检测领域的关键技术、标准钻研等方向持续投入，与全球各个国家政府机构、国际认证机构的合作，同时与来自制造业、学术界、研究机构的伙伴紧密联系，致力于打造更精准、更便利、更高效的服务通道，把领先技术转化为客户的竞争优势和商业成功，以推动行业向更好的方向发展，带动整个产业和社会的进步。

MCM focuses on continuous investment in key technologies and standard research in the field of battery testing, and cooperates with government agencies and international certification agencies around the world. At the same time, it maintains close contact with partners from manufacturing, academia, and research institutions, and is committed to creating the more Accurate, more convenient and more efficient service channels, and transform leading technology into customers' competitive advantages and business success, so as to promote the development of the industry in a better direction and drive the progress of the entire industry and society.



04

服务宗旨

SERVICE PURPOSES

给客户惊喜是MCM的一贯追求。

以客户为中心，以结果为导向，注重过程，给客户惊喜是MCM服务客户的不变宗旨，为客户提供高效、优质的服务是MCM服务客户的永恒诺言。

Surprising customers is MCM's consistent pursuit.

Customer-centered, result-oriented, process-focused, and surprising customers are MCM's unchanging purpose of serving customers. Providing efficient and high-quality services to customers is MCM's eternal promise.



05

服务追踪

SERVICE TRACKING

MCM深谙客户对认证检测的需求迫切性，针对客户的需求提供多对一专业服务、定期专人回访、持续改进，形成闭环的认证检测服务体系。

MCM is well aware of customers' urgent needs for certification and testing, and provides many-to-one professional services, regular dedicated return visits, and continuous improvement to meet customer needs, forming a closed-loop certification and testing service system.



06

信息服务资讯平台

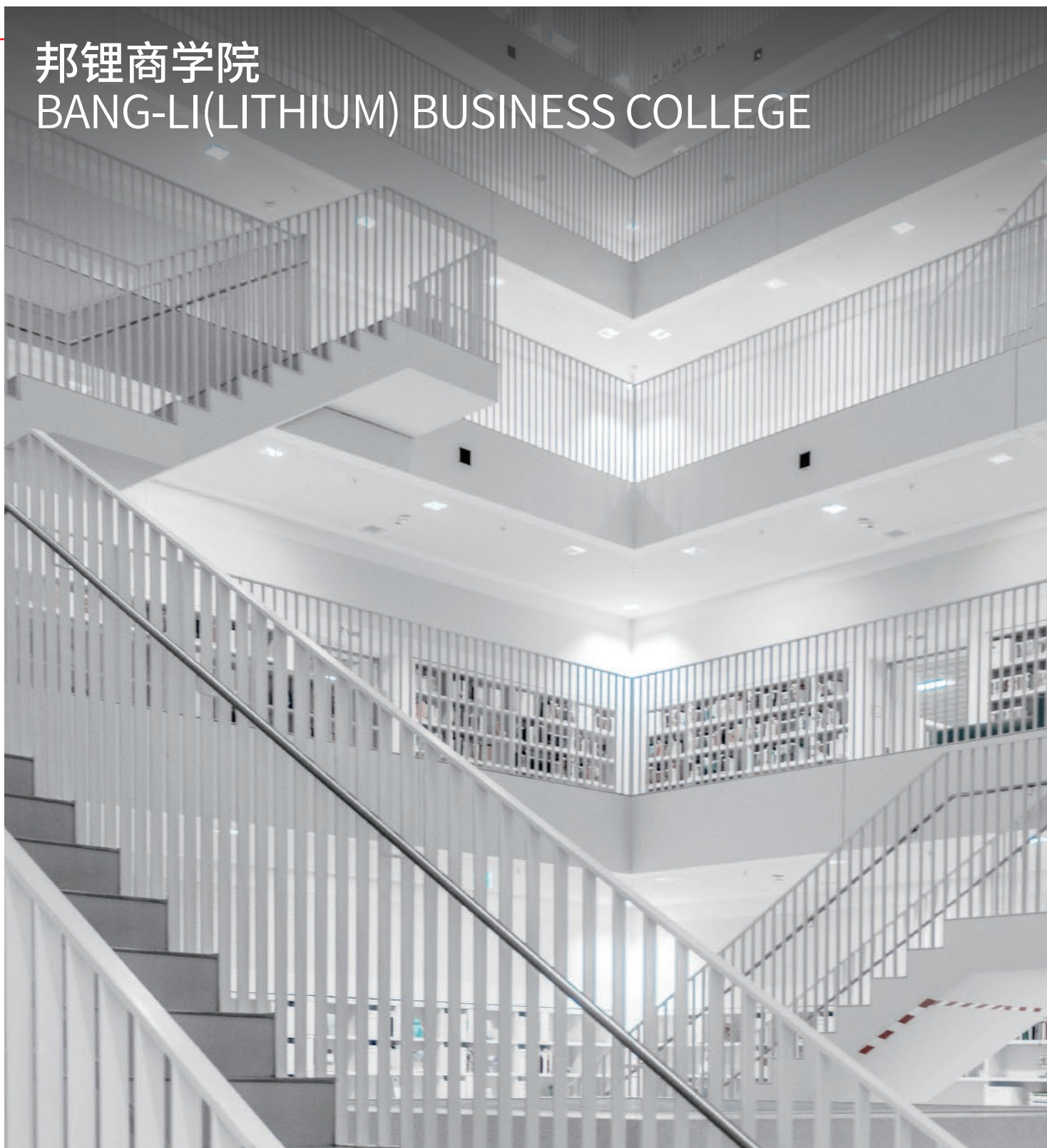
INFORMATION SERVICE PLATFORM

利用PC、移动等互联网信息技术平台，整合多样便捷的线上工具，包括认证服务检索、实时认证信息查询、认证检测产品的完整列表、项目的在线沟通与回馈。实时解决客户在电池认证检测过程中遇到的困难，达成线上、线下优势互补。

Utilize PC, mobile and other Internet information technology platforms to integrate a variety of convenient online tools, including certification service retrieval, real-time certification information query, complete list of certification testing products, and online communication and feedback on projects.

Solve the difficulties encountered by customers in the battery certification and testing process in real time, and achieve complementary advantages between online and offline.

邦锂商学院 BANG-LI(LITHIUM) BUSINESS COLLEGE



邦锂商学院成立 10周年

THE 10TH ANNIVERSARY OF THE ESTABLISHMENT OF BANGLI(LITHIUM) BUSINESS COLLEGE

2014年由中国化学与物理电源行业协会共同发起并成立

In 2014, it was co-sponsored and established by China Chemical and Physical Power Supply Industry Association.

中国首届锂电池认证检测技术高峰论坛暨
“邦锂商学院落成庆典”已圆满落幕

China's first lithium battery certification and testing technology summit forum and
"Bangli(Lithium) Business College Inauguration Celebration" has concluded successfully

感谢社会各界精英伙伴们一直以来关注行业的规范与发展, 真诚邀请您加入到我们的行列
当中来, 为共同铸就推动世界安全贡献一份力量。

We would like to thank our elite partners from all walks of life for always paying attention to
the standards and development of the industry. We sincerely invite you to join our ranks and
jointly contribute to creating a safer world.



持续创新 KEEP INNOVATING

全球领先的第三方电池认证检测机构。
The world's leading third-party battery certification and testing organization.

持续创新是MCM重度垂直电池、细分每一个认证检测领域的源动力。
Continuous innovation is the driving force for MCM to focus on batteries certification and testing field.

MCM有系统培养行业专业工程师的体系,有解读认证和标准的专业培训,有开发检测设备的程序,不仅促进MCM在电池领域的重度垂直,且形成一个良性的上升循环。

MCM has a system for systematically cultivating professional engineers in the industry, professional training interpreting for certifications and standards, and procedures for developing testing equipment. This not only promotes MCM's concentration on the battery field, but also forms a virtuous upward cycle.

高精度、大量程设备 HIGH-PRECISION, LARGE-RANGE EQUIPMENT

- 十七年的发展历程铸就的不只是MCM的品牌, 更成就了MCM今天专业的硬实力——齐全精准的检测设备;

Seventeen years' development has created not only the MCM brand, but also the professional hard power of MCM today - complete and accurate testing equipment

- 精度达到 $\pm 0.025\%$, 电流达到4000A的电芯充放电设备, 100V/400A的模组设备, 以及1500V/500A的电池包设备;

Cell charging and discharging equipment with an accuracy of $\pm 0.025\%$ and a current of 4000A, 100V/400A module equipment, and 1500V/500A battery pack equipment.

- 12m³的步入式恒温恒湿箱、12m³步入式的复合盐雾箱、10m³高低温低压箱(可同时进行充、放电)、12m³的步入式防尘设备、以及IPX9K、IPX6K等级的防水设备;

12m³ walk-in constant temperature and humidity chamber, 12m³ walk-in composite salt spray chamber, 10m³ high and low temperature low pressure chamber (can charge and discharge at the same time), 12m³ walk-in dust-proof equipment, and IPX9K, IPX6K rated waterproof equipment.

- 位移精度达到0.05mm的针刺挤压一体设备, 20吨的电磁振动台, 20000A的电池短路设备;

Integrated needle penetration and extrusion equipment with a displacement accuracy of 0.05mm, a 20-ton electromagnetic vibration table, and a 20,000A battery short-circuit equipment.

- 电芯的热失控测试罐体, 包含气体收集及在线气体分析功能; 安全的电池模组及电池包的热扩散测试环境及设备。

Thermal runaway test tank for cells, including gas collection and online gas analysis functions; safe thermal propagation test environment and equipment for battery modules and battery packs.

MCM的坚持 MCM' S PERSISTENCE

- ▲ MCM已助力客户把超过5, 000, 000个型号的电池及其终端产品安全送达目标市场, 这些产品均被用户安全使用。MCM正在持续为电池产品的安全运输和使用贡献力量。

MCM has helped customers deliver more than 5,000,000 models of battery products to the target market safely, and these products are all used safely by users. MCM is continuing to work hard for the safe transportation and use of battery products.

- ▲ MCM不变宗旨是: 让电池认证检测变得简单、快乐;
MCM' s constant mission is to make battery certification testing simple and pleasant;

- ▲ MCM不变的愿景是: 让世界更加安全。
MCM' s constant vision is to make the world safer.

目标 OUR GOAL

存活200年 SURVIVE FOR 200 YEARS

所有的伟大，源于一个勇敢的开始，每一次的奇迹，都来自不懈的努力。

MCM视每一步为新征程的起点，怀着对伟大事业的真诚向往，MCM自我净化和完善，自我革新和提高。

All greatness comes from a brave beginning, and every miracle comes from unremitting efforts.

MCM regards every step as the starting point of a new journey. With a sincere yearning for a great cause, MCM purifies, innovates and improves itself.



今天，我们审视全新的自我，肩负起“让世界更加安全”的新时代使命，决心扬帆再起航。
MCM人将封存荣耀的历史，为“存活200年”这一宏伟目标而奋斗终身。

Today, we look at our new self, shoulder the mission of "making the world safer" in the new era, and are determined to set sail again.

MCM people will seal up the glorious history and strive for the grand goal of "survival for 200 years" throughout their lives.

全球电池认证项目检索

Global battery certification Retrieval

地区/领域 Region/Area	认证名称 Certification	电池测试标准 Standard	认证标识 Certification Mark	是否强制性 Compulsory	备注 Remark
锂电池运输 Transport of lithium batter	货物运输鉴定书 Certification of Transport	UN38.3	/	是 / Y	运输鉴定书包括：空运、海运、陆运、铁路运输等 Transport certification includes: air, sea, land, railway transport, etc.
越南 Vietnam	MIC	QCVN101		是 / Y	手机, 平板, 笔记本电池 Batteries for mobile phones, tablets, and laptops
	VR	QCVN76 & QCVN91	/	是 / Y	电动自行车和电动摩托车用锂电池 Lithium batteries for electric bicycles and electric motorcycles
印度 India	CRS / BIS	IS 16046 & IS 13252 & IS 616 & IS 302 & IS 16221 & IS 16242 & IS 16270		是 / Y	二次锂电池、二次镍电池、ITAV类产品、家用及类似用途电器、光伏逆变器、UPS、光伏电池 Secondary lithium batteries, secondary nickel batteries, ITAV products, household and similar appliances, photovoltaic inverters, UPS, photovoltaic cells
	CMVR/ICAT/ARAI	AIS 048 & AIS 038 & AIS 156 & AIS 004	/	是 / Y	车辆牵引/动力电池及BMS或其他产品 安全和电磁兼容要求 (二、三、四轮) Vehicle traction/power batteries and BMS or other products' safety and electromagnetic compatibility requirements (two, three, and four wheels)
	IS	IS 16893	/	是 / Y	动力电池 Power cells
		IS 16805	/	是 / Y	工业设备用电池电芯 Batteries and cells for industrial equipment
	WPC/ETA & ETA-SD	/	/	是 / Y	开放免许可频段 Open license-free frequency bands
马来西亚 Malaysia	SIRIM	MS IEC 62133:2017		否 / N	适用于二次电池, 获得证书后须向发证机构购买标签贴在产品上 Applicable to secondary batteries. Labels must be purchased from the issuing agency and affixed to the product after certification
国际 (IEC成员国) IECEE	CB	IEC 62133-1/2 & IEC 62619 & IEC 62620 & IEC 63056 & IEC 62477 & IEC 60086-4 & IEC 62368	/	否 / N	/
中国大陆 China	CCC	GB 31241		是 / Y	适用便携式电子产品用电池、移动电源 Batteries for portable electronic products and power banks
	CQC	GB 40165&GB 4943& GB/T 36276	/	否 / N	适用便携式/固定式电子产品用电池、移动电源、电力储能用锂离子电池 Batteries for portable/fixed electronic products, power banks, lithium-ion batteries for energy storage
	CCS (中国船级社)	GD 22-2019&E06 (201909)		是 / Y	适用于船舶和海上平台用锂电池和铅酸蓄电池 Lithium batteries and lead-acid batteries for ships and offshore platforms
	CGC (鉴衡认证)	GB/T 36276&GB/T 36672 & GB/T 36972		否 / N	储能用电池和电动两轮车电池 Batteries for energy storage and electric two-wheelers
中国台湾 Taiwan, China	BSMI	CNS 15364 (102版) CNS 14857-2		是 / Y	3C锂二次电池和锂二次电芯 3C lithium secondary batteries and lithium secondary cells
		CNS 15387 (104版) CNS 15424-1 or 15424-2 (104版)		是 / Y	电动自行车、电动机车、电动辅助自行车锂电池 Lithium batteries for electric bicycles, electric motorcycles, and electric-assist bicycles
		CNS 62619:2020 CNS 63056:2021 CNS 62620		否 / N	家用储能电芯和储能系统 Household energy storage cells and energy storage systems
泰国 Thailand	TISI	TIS 2217-2548 & TIS 2879-2560		是 / Y	便携式锂电池 & 便携式移动电源 Portable lithium batteries & portable power banks
日本 Japan	PSE	JIS C 62133-2:2020		是 / Y	便携式锂二次电池 Portable lithium secondary batteries
	MCPC	MCPC TR-021/023	/	否 / N	自愿性, 针对智能型手机电池充电器的行业标准 Voluntary, industry standards for smart phone battery chargers

地区/领域 Region/Area	认证名称 Certification	电池测试标准 Standard	认证标识 Certification Mark	是否强制性 Compulsory	备注 Remark
韩国 South Korea	KC	KC 62133 & KC 62619		是 / Y	便携式锂二次电芯&电池、25km/h以下电动自行车/平衡车/滑板锂电池、储能锂电芯&电池系统、500Wh以下移动电源。电芯认证需要2年1次审厂 Portable secondary Li-ion cell & battery, secondary Li-ion battery used for e-bike/e-balance car/e-scooter(≤25km/h), ESS cell and battery system, portable power bank (≤500wh). PS: Cell KC certification requires a biyearly factory inspection
俄罗斯 Russia	Gost-R	GOST R IEC 61960 GOST R IEC 62133		是 / Y	/
巴西 Brazil	ANATEL	ACT 3484		是 / Y	手机和移动电源类电池 Batteries for mobile phones and power banks
欧亚经济联盟 (原海关联盟 / EAEU (CU))	EAC	CU TR 020/2011		是 / Y	带有源元器件的电池 Batteries with active components
欧盟 European Union	CE	REACH		是 / Y	/
		新电池法(EU 2023/1542)		是 / Y	符合此指令的电池须有垃圾桶标识 Batteries complying with this directive must have a trash can symbol
		EMC		是 / Y	EMC、新电池法(EU 2023/1542) 同时满足才能打CE Mark To bear the CE Mark, batteries must comply with both EMC and the new battery regulation (EU 2023/1542)
	环保要求	ROHS		是 / Y	RoHS Directive 2011/65/EU 关于在电子电气设备中限制使用某些有害物质指令 主旨:促进保护人类健康和环境, 包括对废弃EEE进行无害环境的回收和处置。 RoHS Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Purpose: to protect human health and the environment, including the environmentally friendly recycling and disposal of waste EEE.
北美 North America	WERCSmart	SDS	/	是 / Y	适用在大型商超销售的产品 Applies to products sold in large supermarkets
	Call2Recycle (RBRC)	/		否 / N	回收、环保要求 Recycling and environmental requirements
	CTIA	IEEE 1625&1725	/	是 / Y	信息技术类产品 IT products
	ETL	UL 62133 & UL 62368 & UL 1642 & UL 2054 & UL 1973 & UL 2580 & UL 2271 & UL 2056		否 / N	/
	cTUVus			否 / N	/
	UL			否 / N	/
澳大利亚 Australia	ACMA	IEC 62133 & EMC		是 / Y	提供报告转证 Provide report for certification
	CEC	主标准参考(Main Standards refer to) IEC 62619 或 UL 1973	/	是 / Y	辅助标准 IEC 62368、IEC 60950、IEC 62040、IEC 60335等 Auxiliary standards IEC 62368, IEC 60950, IEC 62040, IEC 60335, etc.
	EESS	参考澳新标准或IEC相适应标准 Refer to IEC applicable standard		是 / Y	提供报告审核后发证 Certificate issuance after report review
沙特 Saudi Arabia	SASO	参考IEC相适应标准 Refer to IEC applicable standard	/	是 / Y	/
摩洛哥 Morocco	CoC	参考IEC相适应标准 Refer to IEC applicable standard		是 / Y	强制在起运港检验的产品 Products subject to inspection at the port of departure
墨西哥 Mexico	NOM	NOM-024-SCFI		是 / Y	二次电池产品外包装强制 Mandatory external packaging for secondary battery products
厄瓜多尔 Ecuador	INEN	RTE INEN 105或 115	/	是 / Y	所有类电池提供报告后申请COC For all types of batteries, COC application after providing reports
以色列 Israel	SII	SI 62133	/	是 / Y	便携式电池进入以色列随时查证 Portable batteries are subject to inspection at any time upon entry into Israel

CTIA
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IEC 62619

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GB/T 18287

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UL 1973

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UL 2271

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UL 1642

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