

ZCfamily

ZHONGCE Club 2022

中策家苑

TECHNOLOGICAL
INNOVATION
EVER LASTS

GOVERNANCE

COMPANY'S GREETING

- 3 Technological Innovation Ever Lasts
- 5 Leading Innovation & Win-win Cooperation



TECHNOLOGY & SERVICE

- 44 Hybrid Formula & BPOT: New Technologies for Flagship Series Passenger Car Tires
- 47 PSCT 2.0: Upgraded Pre-strain Contour Theory
- 49 ZC Rubber's Low Rolling Resistance Tire Development in Three Phases
- 50 Tire Test: GOODRIDE Solmax 1 VS Michelin Pilot Sport 4
- 52 How Does ZC Rubber Help to Reduce Your Fleet Costs



COMPANY NEWS

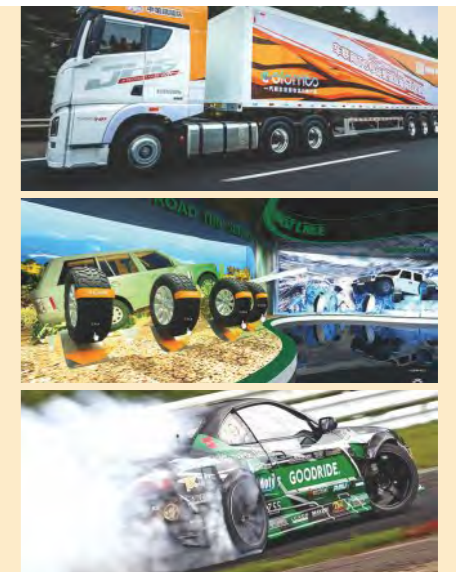
- 14 ZC Rubber Ranks Top 9 Global Tire Company in 2021
- 15 ZC Rubber Ranks 9th Among Top 30 China Auto Parts Companies
- 16 ZC Rubber Establishing Europe Technical Center in Germany
- 17 ZC Rubber Won Second Prize at 2021 Global Internet Competition of "Straight to Wuzhen"
- 19 ZC Rubber Targets Efficiency Improvement with 5G Smart Factory Project
- 21 People's Daily Highlighted ZC Rubber's Technological Innovation and High-quality Development

36th Global Tire Report
2021 Global Tire
 Based on 2020 results. Includes subsidiaries
 (Figures in millions of dollars, translated at average annual currency exchange rate)

2020 Rank	2019 Rank	Company/Headquarters
8	8	Yokohama Rubber Co., Ltd. Tokyo, Japan
9	10	Zhongce Rubber Group Co., Ltd. Hangzhou, China
10	9	Mitsubishi International / Oshino Ship Rubber

MARKETING ACTIVITY

- 55 24.5 Liters per 100 Kilometers: ZC Rubber Achieves Excellent Results in "Run, Truckers" FAW Jiefang TCO Challenge
- 57 David Valero Won the Bronze Medal at Tokyo Olympics with CHAOYANG Phantom Tires
- 59 Online VR Showroom for WESTLAKE, GOODRIDE and ARISUN Websites
- 58 WESTLAKE Tire Launches New Global Website
- 60 ZC Rubber Highlights at SEMA 2021
- 61 WESTLAKE Tire Exhibited at Trucker Trucking Festival in Sweden
- 62 EICMA 2021 in Italy
- 63 Racing & Sponsorship



PRODUCT INTRODUCTION

- 22 ZC Rubber Launches New Flagship Series Passenger Car Tires
- 23 ARISUN Unveils New Passenger Car Tire Lineup for North America
- 24 Premium Truck Tires Based on PSCT
- 25 New Two-wheel Tires: CHAOYANG Phantom Elite and Hot Melt Tires
- 27 OE Portfolio Growth for Electric Vehicle Market
- 29 New Two-wheel Tires 2022
- 31 ZC Rubber Tackles Truck Tire Market Changes: Products, Service & Solutions
- 33 ZC Rubber Expands Hyundai Commercial Vehicle OE Fitments in China
- 35 ARISUN Tires Supplies OE Tires for WAFA VEHICLE in Thailand
- 37 WESTLAKE Tire Expands Retail Business in Thailand with FIT Auto
- 39 ZC Rubber Expanding OTR Footprint Globally
- 43 ZC Rubber Selected by Dingli as Main Supplier for Aerial Work Platform Tires

ZC RUBBER FAMILY

- 77 ZC Rubber Focuses on Innovation and Growth at Global Online Dealer Conference
- 79 ZC Rubber Charity: We Want a Better Shared Future for the Society
- 81 Challenge the Desert: ZC Rubber Dealer Trip



Technological Innovation Ever Lasts



Mr. Shen Jinrong, Chairman of Zhongce Rubber Group

As the COVID-19 pandemic enters a new phase of "normalization", the global tire industry is also undergoing rapid restructuring. ZC Rubber is committed to continuous global market expansion and product & service innovation as the leading tire company in China. With our key competitive advantages in R&D, products, channels, and services, we are moving forward steadily and well-positioned for any challenges.

ZC Rubber continued to grow strongly in 2021, with annual sales revenue topping 30.4 billion yuan (about 4.8 billion USD), an increase of 8% and a new record high!

According to our sales report, the sales volume of truck and bus radial tires reached over 22 million pcs, whereas sales of passenger car tires reaches over 48 million pcs. Furthermore, ZC Rubber delivered over 5 million pcs bias tires, and over 100 million pcs two-wheel tires (bicycle and motorcycle tires) to our customers all over the world. I, on behalf of the whole ZC Rubber family, would like to express my heartfelt thanks to all of our customers, distributors, and stakeholders for your support and collaboration with our business.

Despite the factors influencing international trade such as recurring waves of COVID-19 pandemic, sharp rise in raw

material prices, and the global shipping crisis, ZC Rubber has ramped up its expansion of international business in 2021, and achieved a year-on-year growth of over 20% in overseas sales, which also increased by more than 11% versus 2019.

This is not an easy accomplishment in the post-pandemic era when global economic growth has slowed down considerably. In this year, ZC Rubber has achieved remarkable results in various key international markets: North American and European markets saw substantial sales growth as market demand continued to recover, while Southeast Asia, Latin America, North Africa and other regions, especially countries along the Belt and Road, performed well, with quick sales growth and an improved channel layout for future growth. In addition, ZC Rubber continued to cultivate the niche market, with sales increasing by more than 50% in the fields of two-wheel tires and off-highway tires, accounting for a double-digit share of tires shipped from China.

While achieving outstanding sales performance, ZC Rubber continues to invest in R&D, manufacturing, distribution, and marketing facilities in order to preserve the company's rapid growth trend.

In 2021, ZC Rubber has significantly enhanced its global competitiveness in both distribution network and technological capabilities. Based on our overseas branches in North America, Europe, and Brazil, we added local sales and service personnel in key markets such as Saudi Arabia, Indonesia, Colombia and Russia to gain a deeper understanding of local market demand and customer feedback to fully meet the individual needs of consumers in different markets. In this way, we will be able to fully demonstrate the benefits of our diverse product offerings, strengthen our competitive advantages in the international market while also growing our global sales network.

Meanwhile, ZC Rubber established the European Technical Center (ETC) in Germany, which focuses on original equipment business growth, with a particular focus on European leading OEMs like as Volkswagen and Ford. We hope to accomplish a breakthrough in the original equipment business in Europe in a relatively short period of time, creating a solid foundation for our future global development.

ZC Rubber has increased its product research and development efforts in recent years to respond swiftly to

consumer demand and eventually close the gap with the world's leading tire brands. The Flagship Passenger Car Tire Series, produced at a cost of over 100 million yuan and directed by eight top experts, was officially launched in the Chinese market in 2022. Thanks to an all-around upgrade of tire structure, production process, compound technology, and manufacturing equipment, as well as a number of core technologies such as BPOT and Hybrid Formula, this tire lineup has improved its overall performance in wear resistance, fuel savings, quietness, grip, and safety. In the Chinese market, they have been favorably received. They'll make their international debut in 2022, and we are confident that their high performance and quality will impress customers around the world.

In the future, we will rely on continuous innovation to inject forward thinking into the development of tire technology, and we are committed to providing global customers and end-users with more high-tech and high-performance tires.

In the manufacturing sector, ZC Rubber continues to promote digital transformation and smart production. We've been devoted to building China's first 5G smart factory, paving the way for the tire industry to embrace digital manufacturing, green production, and environmental protection in a practical way. We have used world-leading production technologies and technological equipment to accomplish intelligent production management, including advanced robots, artificial intelligence (AI), automatic logistics, 5G, Internet of Things (IOT), and cloud technology.

Looking ahead to 2022, ZC Rubber will focus on technological innovation and building sustainable competitive edge. We will continue our global expansion and collaborate with every customer and partner to provide global consumers with a safe, dependable, and cost-effective consumer experience. We hope that by working together, we can achieve from China's leading to the global leading and to be among the global top tire companies in the coming future.

沈金荣

创新引领 合作共赢

Leading Innovation & Win-win Cooperation

Greetings from Vice President Ge Guorong

中策橡胶集团副总经理 葛国荣



2021年，在市场环境急剧变化与行业淘汰加速的背景下，中策大家庭每一位成员怀揣“中策创领 美好新程”的信念，以核心技术、高品质产品与创新服务为依托，集企业与上下游生态之力激流勇进，取得了超300亿营业收入的历史最好成绩，其中海外市场销售金额增长近10%，这凸显了中策全球化战略实现稳步推进！

Despite the rapid changes in the market environment and the acceleration of industry iterations in 2021, ZC Rubber has achieved the best record revenue in its history of over 30 billion yuan (about 4.8 billion USD), including a nearly 10% increase in sales in overseas markets, highlighting the steady progress of our globalization strategy, which is based on our core technology, high-quality products, and innovative services, with the belief to innovate into a great future.

在全球疫情肆虐的大背景下能够取得这般夺目的成绩，是中策集团与渠道服务商、资源供应商、车企伙伴、车队用户互信互利、共创共赢的成果，也是属于中策大家庭每一位成员的至高荣誉！在此，诚挚感谢全体经销商、零售商、配套车企及供应商伙伴在2021年的帮助与支持，更对所有喜爱、信赖中策品牌、产品与服务的人们表达我们最衷心的感谢！

Without the trust and support of our customers, distributors, suppliers, and OE partners, we would not have been able to achieve such a remarkable result in the midst of the global pandemic. Every member of the ZC Rubber family deserves this accolade! We would like to express our most heartfelt thanks to all of our dealers, retailers, suppliers, and partners for their assistance and

support in 2021, as well as all of our customers who love and trust our brand, products, and services.

回顾2021年，中策高质量发展的源动力正是始于我们坚持对轮胎全场景与用户全需求的深度探索，坚持以高价值的轮胎产品和TCO（全生命周期）服务方案全方位、全过程满足市场需求。

Looking back on 2021, our in-depth exploration of all tire scenarios and user needs is the driving force for ZC Rubber's high-quality development. We insist on meeting the market demand in an all-around and whole-process manner with high-value tire products and TCO (Total Cost of Ownership) service solutions.

一、全球市场：5大价值创新——树立行业标杆，引领全系升级

Global Market: 5 Major Value Innovations - Establishing Industry Benchmarks and Leading Product Upgrade

1、品牌价值创新：Brand Innovation

中策橡胶作为中国轮胎行业领导者，致力于品牌建设和品牌提升，力求面向全球轮胎市场展现中国轮胎的新形象，为中国轮胎企业树立民族高端轮胎产品的新标杆。

As a leader in China's tire industry, ZC Rubber is dedicated to brand development and enhancement, aiming to provide a new image of Chinese tires to the global tire market and set a new

benchmark for Chinese tire companies in premium tires.

依托多年积累的技术和研发成果，中策橡胶在2021年面对中国市场已经推出乘用车胎高性能旗舰产品，其产品的性能表现业已远远超越现有产品，在第三方独立实验室评测中获得的良好口碑。开创了国产高端乘用车胎市场的新局面。在中国通过与行业主流媒体进行的测试合作与强化宣传，还通过抖音、快手挑战赛创作的海量原创视频引爆全网，在线上线下获得了超10亿次曝光。在此背景下，中策橡胶集团获得了央视新闻、人民日报等权威媒体相继报道，全方位提升了品牌影响力和知名度。

ZC Rubber launched Flagship Passenger Car Tires in the Chinese market in 2021, based on its technology and R&D achievements over the years. The Flagship Series outperformed existing products by a wide margin, earning a positive reputation in third-party independent laboratory testing.

It also burst all over the Internet through the large original videos generated by TikTok and Kuaishou. It has earned over 1 billion exposures online and offline as a result of the test cooperation and increased visibility with the industry's mainstream media. State media such as CCTV News and People's Daily have also reported on Zhongce Rubber Group, enhancing its overall brand influence and popularity in an all-around way.

未来中策橡胶集团将以消费者需求为核心，以实现赶超世界一流品牌与先进产品为己任，以技术创新和品质升级打造民族工业高质量产品！

In the future, ZC Rubber will focus on consumer demand, take it as its mission to catch up with the world's top brands and advanced products, and produce high-quality tires with continuous technological innovation and quality upgrades.

2. 产品价值创新: Product Innovation

中策每年投入数亿元用于研发创新与工艺升级, 坚持以高品质、高性能为要求做好每一条轮胎。

Each year, ZC Rubber invests hundreds of millions of yuan in R&D innovation and process improvement, ensuring that each tire is of the highest quality and performance.

乘用车胎旗舰产品通过轮胎结构、生产工艺、炼胶技术、装备制造等全方位升级, 以BPOT胎冠自适应稳定技术、超级混合动力橡胶配方、“玄青黑”天鹅绒胎侧工艺、静音阵列设计等多项自主研发核心专利技术为支撑, 实现了超节油、超静音、超抓地的乘用车胎性能突破。

Based on an all-around upgrade in tire structure, production technology, rubber technology, manufacturing equipment, and so on, the flagship passenger car tires has achieved great breakthroughs in fuel economy, silence, and grip performance, while incorporating BPOT technology, Hybrid Formula, black velvet sidewall design, noise elimination sound-bolt array design, and many other patented technologies.

商用车胎产品采用“中策天工”PSCT核心技术系统研发, 围绕“长途高速”、“城郊国道”、“矿山公

路”、“市内交通”、“冬季路面”等主流场景, 以终端客户需求为本, 针对全球不同市场的特定需求, 持续推出具备良好性能和卓越性价比的各类产品, 在不同场景下充分实现“更安全、更耐磨、更节油、更防爆”等组合性能, 延长轮胎使用寿命, 创造全新的轮胎使用体验。

Our flagship commercial truck tires are developed with PSCT (Pre-strain Contour Theory) core technological system, focusing on major applications such as long haul, regional transport, mining, urban, winter, etc. Based on the needs of end customers, we continue to launch various products with excellent driving performance and cost performance for the specific needs of different markets around the world, striking the perfect balance between safety, wear resistance, fuel economy and explosion proofing in various scenarios, prolonging tire service life and creating a new experience for tire users.

未来, 中策橡胶秉持产品创新的不懈追求, 将持续推进产品的开发和改进, 并将旗舰产品的成功经验延伸至斜交轮胎、自行车胎、摩托车胎、电动车胎、橡胶履带等集团旗下的多个核心品类。在交通工具与物流装备智能化、电动化的新趋势下, 中策将联合全球一流车企与装备制造商共创新一代绿色节能轮胎, 力争在人民出行和生产运输两大领域充分展现中策轮胎及衍生品的核心价值, 为双碳目标贡献中策力量。

With the relentless pursuit of product innovation, ZC Rubber will stay committed to product development and improvement, and extend the successful experience of flagship products to a number of core

categories under the Group, such as bias tires, bicycle tires, motorcycle tires, electric vehicle tires and rubber tracks.

ZC Rubber will collaborate with global first-class automobile and equipment manufacturers to develop next-generation energy-saving tires, following the emerging trend of intelligent logistics and electric mobility. We are working hard to demonstrate the fundamental product value in the areas of travel and transportation, as well as contributing to China's objective of Carbon Neutrality by 2060.

3. 服务价值创新: Service Innovation

新消费时代, 体验变得至关重要, 因此中策坚持在供应链各个环节升级服务, 满足合作伙伴与消费者多方面需求——

Experience is more crucial than ever in the new consumption era. ZC Rubber is committed to improving services across the supply chain to meet the diverse needs of partners and customers.

(1) 消费者沟通宣传:

中策橡胶面对全球不同市场不同产品需求, 积极通过多种方式加强与经销商及终端消费者的沟通, 包括报纸杂志、社交媒体等, 目前已经开通了针对不同区域的多个网站和社交媒体账号, 以英语、法语、西班牙语、阿拉伯语及葡萄牙语等多个语种发布相关信息, 便于全球终端消费者更进一步了解中策橡胶。

Consumer Communication:

In response to varying product demands in various markets across

the world, ZC Rubber aggressively enhances communication with distributors and end consumers using a number of channels, including newspapers and magazines, social media, etc. Currently, there are official websites and social media profiles for different areas, and important information is updated in multiple languages, including English, French, Spanish, Arabic, and Portuguese, to make it easier to keep global end consumers informed.

(2) 物流服务:

因全球供应链拥堵导致的物流费用飞涨, 为中策橡胶的全球合作伙伴带来了极大的困扰。为此中策橡胶积极与各家船公司签订战略合作协议, 充分利用中策橡胶的强大实力实现保障运输舱位、稳定运输成本, 支持合作伙伴渡过难关, 进一步拓展市场。同时中策橡胶积极尝试在部分地区建立当地仓库, 助力缩短客户采购周期, 提升周转效率, 实现高效配送。

Logistics Service:

The soaring logistics cost caused by the global supply chain congestion has brought great trouble to our global partners. For this reason, ZC

Rubber has formed strategic partnerships with shipping companies in order to ensure shipping space and stabilize transportation costs, supporting partners in overcoming challenges and expanding the market. At the same time, ZC Rubber made a concerted effort to establish local warehouses in some regions to assist customers in shortening their procurement cycle, increasing their turnover efficiency and achieving efficient distribution.

(3) 培训服务:

中策橡胶的产品开发力度有目共睹, 但如何将产品的卖点及时向市场传播成为当前的重要任务。中策橡胶传统上以平面文字介绍的方式宣传自身产品, 近年来为适应消费者不断提高的需求, 积极探索通过线上展厅、产品视频、3D动画的多媒体方式, 更直观、更具科技感地向经销商、消费者推介产品特性, 更进一步加强消费者粘性。

Training Service:

The product development capacity of ZC Rubber is obvious to all, but how to effectively communicate our unique selling

points to the market in time has become a critical task at present. In recent years, ZC Rubber has been actively exploring multimedia marketing through the online showroom, product videos and 3D animations to introduce product features to dealers and consumers in a more intuitive and modern way, thereby increasing consumer stickiness.

(4) 经销商服务:

中策橡胶为提升沟通效率, 于2021年3月开通了线上服务平台, 通过平台为经销商提供售前及售后服务, 经销商可以在线下载中策橡胶的各种宣传资料和文档, 提交产品索赔请求, 未来还将进一步增强功能, 增加市场营销支持及新产品推广等服务模块, 为经销商提供强大的支持, 推进经销商全面提升市场份额。

Dealer Service:

ZC Rubber created a global online service platform in March 2021 that delivers pre-sales and after-sales services to all customers to improve communication efficiency. Customers can access a variety of promotional materials and product information and



file tire claims online. To help our dealer partners create strategies for increased market share, we will strengthen the platform's features and introduce additional service modules, such as marketing support and new product promotion in the short term.

4. 数智价值创新: Digital Innovation

目前,中策正致力于在产业端建立数字模型,通过智能制造和业务数字化两大抓手,实现上下游双向增效、相互赋能。

ZC Rubber is committed to building digital models at the industrial end to boost productivity and efficiency by empowering upstream and downstream sectors through smart manufacturing and business digitization.

在生产端,中策以“数字经济,绿色制造”为宗旨,以“节能减排、流程再造、技术创新、智能制造”为核心理念,大规模利用先进生产工艺和装备、先进机器人、人工智能、自动物流运输、5G、物联网(IoT)云端技术,建设全过程自动化、全流程信息化、全领域绿色智能化的世界最先进轮胎数字化“灯塔工厂”,实现产品高效率、高质量定制化生产,目标超越欧美日等传统轮胎制造强国,成为轮胎行业“数字化制造”和“工

业化4.0”的示范者和领导者。

ZC Rubber is now creating one of the world's most advanced lighthouse factories with digital process automation technology, based on the tenet of "Digital Economy & Green Manufacturing" and the core concept of "Energy Conservation, Process Reengineering, Technological Innovation & Smart Manufacturing." The facility will be equipped with advanced manufacturing technology and equipment, robotics, artificial intelligence (AI), automated logistics, 5G, Internet of Things (IoT), and cloud technology to achieve high efficiency and high quality customized production. ZC Rubber aspires to be a digital manufacturing and Industrial 4.0 pioneer in the tire industry, surpassing traditional tire manufacturing powerhouses such as Europe, Japan and the United States.

未来中策橡胶将在数字化制造技术的支持下,实现产品生产效率的全面提高、生产柔性的极大改善,大幅度降低生产成本的同时,达成生产与供应的紧密匹配,实现快速、高效的生产配送流程,推动全供应链降本增效,提升市场竞争力,不断推升市场份额。

With the help of digital manufacturing technology, ZC Rubber

will achieve a comprehensive improvement in product production efficiency and flexibility, a significant reduction in production costs, and a close match between production and supply to complete a fast and efficient production and distribution process. We will continue to lower costs and enhance efficiency throughout the supply chain, improving market competitiveness and growing market share over time.

5. 绿色循环价值创新: Green Innovation

中策建立的循环科技公司长期致力于实现废旧轮胎橡胶资源回收与再生利用最大化,已先行先试建立了全国领先的废旧轮胎回收与综合利用体系——

ZC Rubber's recycling technology company (referred to as "Recycling Tech" hereinafter) has long been committed to maximizing the recovery and recycling of waste tire rubber resources, and has piloted a national leading waste tire recycling and utilization system.

2021年,循环科技已形成年产2万吨全自动清洁化再生胶产能,建成国内技术规模领先的再生橡胶“工业4.0”智能工厂,成为国家发改委认定的“双百工程”及轮胎行业绿色循环

利用示范工厂。

In 2021, Recycling Tech formed an end-to-end automatic tire recycling system that yields an annual production capacity of 20,000 tons of clean reclaimed rubber. It has established China's leading Industry 4.0 reclaimed rubber smart factory, which has been recognized by the National Development and Reform Commission as a "Double Hundred Project" and an eco-friendly pilot factory in the tire industry.

公司运用全球前沿技术打造的同向双螺杆挤出设备,建成2500吨/年液体再生胶生产线,其核心工艺技术为国内首创,不仅可提升下游轮胎应用材料的性能,也是促进我国橡胶工业节能减排的重要举措。

Using the world-leading co-directional twin-screw extrusion machine, the company built a liquid recycled rubber production plant with an annual output of 2,500 tons. Its core process technology is the first in China, and it is a significant undertaking to enhance energy conservation and pollution reduction in China's rubber industry.

为聚焦废旧轮胎热解产物的高品质资源化利用技术研究与应用,公司与浙江大学开展废轮胎高效梯级裂解合作,目前轿车轮胎热裂解项目已完

成500吨中试,2023年将实现5000吨/年工业化规模生产。

Our company has partnered with Zhejiang University to conduct high-efficiency waste tire cascade recycling, focusing on high-quality resource utilization technologies for waste tire pyrolysis. The project has passed a 500-ton pilot test and will reach a production capacity of 5,000 tons per year in 2023.

中策积极响应国家绿色循环经济发展的号召,在“无害化回收,环保型利用”理念指引下,采用先进技术持续提升材料的可再生循环利用价值。目标在2030年-2050年之间实现新材料循环再生利用率达50%,助力“碳达峰”与“碳中和”及轮胎生产材料的实现可持续经营与发展。

In response to the government's call for the development of the Circular Economy, ZC Rubber adopts advanced technology to continuously improve the renewable recycling value of materials under the concept of "Harmless Recycling & Eco-friendly Utilization". ZC Rubber aims to achieve a 50% recycling rate of new materials between 2030 and 2050 and the sustainable management of resources and energy consumption in tire production, contributing to the objective of Carbon Peak and Carbon Neutrality.

二、2022年:5大战略升级——坚定“价值创新”,共建“生态繁荣”

5 Major Strategic Upgrades in 2022 - Value Innovation and Ecological Prosperity

未来5年,全球市场即将迎来一个以新能源、物联网和需求个性化为关键词的新市场,而轮胎行业也将会在消费者认知和服务需求升级的驱动下加速迭代,最终只有能够在研发持续投入、供应链整合、智能制造、高性能高质量产品、渠道转型赋能和用户需求解决这6大方面具备综合竞争力的龙头企业能够在激烈的竞争中拔得头筹。

In the next five years, the global market will enter a new era marked by new energy, the Internet of Things, and personalization. The tire sector will speed its iteration as a result of increased consumer awareness and service demand. In the end, only the leading companies with competitive advantages in the six areas below will be able to stand out in the fierce competition: continuous R&D, supply chain integration, smart manufacturing, high-performance and high-quality products, channel transformation and empowerment,



and on-demand solution.

为让中策大家庭每一位成员能够与集团并行、持久发展，2022年起中策将以“价值创新 生态繁荣”为核心提出未来四大关键战略及举措——

In 2022, we will put forward four main strategies, with “Value Innovation & Ecological Prosperity” at the core, to thrive in a sustainable manner with all members of the ZC family.

1. 品牌形象升级战略：实现中策品牌与其他竞争对手的区别，支持中策品牌持续稳定增长

Brand Image Upgrade: Brand differentiation and sustainable growth

品牌是中策橡胶实现与竞争对手区隔、获得消费者认可的重要手段。在中国市场中策品牌日益受到消费者认可的同时，中策橡胶将进一步增强海外品牌建设，支持全球经销商合作伙伴，依托高性价比的产品，通过门头、路牌、线上线下媒体等多种手段，大力推动品牌推广和提升的力度，让更多的终端门店了解中策、熟悉中策、喜爱中策，实现中策产品市场份额的持续增长。

ZC Rubber relies on its brand to differentiate itself from competitors and raise consumer awareness. While our brand is becoming more well-known among Chinese consumers, ZC Rubber will focus on international brand growth. We will continue to support global distributor partners with cost-effective products and a variety of marketing supports, including store signboards, road signs, and online and offline media advertising. ZC Rubber will continue

to invest in brand promotion and enhancement in order to make retailers our lifelong partners and ultimately evangelists for our products and services. In this way, we will be able to maintain a steady market share expansion.

中策橡胶将依托现有经销商服务平台，积极与经销商伙伴沟通交流，设定针对不同市场的品牌升级策略和营销计划，并全力按计划推进相关事项，力争通过合作共赢，实现品牌宣传投入效果的最大化，达成中策橡胶跻身世界一流轮胎品牌的伟大目标。

ZC Rubber will actively communicate with its dealer partners, develop brand upgrade strategies and marketing plans for various markets, and make every effort to advance as planned based on the current global dealer service network. We will seek to optimize brand promotion through win-win collaboration to realize the goal of making ZC Rubber a world-class leading tire brand.

2. 产品结构升级战略：从市场需求出发，为消费者提供最适合的产品

Product Portfolio Upgrade: Customized product on market demand

中策橡胶在研发科技方面的持续投入，已经结出丰硕的成果。当前中策橡胶的产品线，业已实现符合不同市场、不同技术、不同消费者的要求，并具备了高中低档产品搭配，高档产品性能达到主流品牌水平，中档产品足以应对同档次竞争对手的挑战，低档产品具备极强的供应及成本竞争优势，为经销商伙伴提供了强大的支持，有力推动了市场份额的持续提升。

Our ongoing investment in

research and development has yielded fruitful results. ZC Rubber has now built a product portfolio of premium, high-end range, and mid-range products to meet the needs of various markets and consumers. Our premium and high-end tires perform at a level comparable to mainstream tire brands. While our mid-range tires offer exceptional supply efficiency and cost-effectiveness, ensuring solid support for distribution partners and thereby driving continued market share growth.

同时中策橡胶积极与经销商伙伴保持持续沟通交流，及时获取消费者的偏好和需求，并根据消费者的需求，实现持续开发和不断改进，确保新产品推出的节奏和现有产品的改善力度，从而牢固树立中策产品的形象和优势，进一步助力经销商拓展市场空间。

At the same time, ZC Rubber is always responsive to issues and communicating with our distributors and customers to stay on top of existing problems and upcoming consumer needs, which is tied to our product development and upgrading. By focusing on products, we will strengthen ZC Rubber's brand image and competitive advantage, and support dealers in increasing their market shares.

3. 渠道服务升级战略：通过海外网点和销售服务人员，为经销商提供全面支持

Servicing Channel Upgrade: Channel support via overseas outlets and sales service teams

消费者通过品牌认知产品，好的产品需要渠道分销送达消费者，中策橡胶充分意识到渠道在产品分销、消

费者沟通交流方面的重要意义，并在过去的几十年中持续支持渠道不断进步。随着市场商业模式和消费者需求的变化，中策橡胶在原有的渠道支持服务模式之外，大胆探索和尝试新的渠道服务方式，一方面在多个市场如北美、欧洲、巴西、泰国等设立销售公司及/或服务机构，并考虑进一步向其他重点市场延伸，另一方面通过招聘当地销售服务代表、技术支持人员的方式，努力贴近市场和经销商，深入了解消费者需求和喜好，支持经销商合作伙伴更好的理解市场状况，实现产品质量性能与消费者需求的完美匹配。

Brands are how consumers learn about products, and successful products need channels to connect with consumers. ZC Rubber understands the value of channels in product distribution and consumer communication, and we have been supporting channel partners for decades to ensure sustained improvements.

In response to changing needs of the marketplace, ZC Rubber

continually investigates new servicing channels in addition to the traditional ones. On the one hand, we've set up sales companies and service organizations in multiple markets, including North America, Europe, Brazil, Thailand, and others, and we're considering expanding that mode into new ones. On the other hand, we attempt to get close to the market by hiring local sales and service representatives as well as technical specialists to obtain a complete grasp of consumer needs and preferences to ensure our product features and customer needs are in line with each other.

为此中策橡胶在中国市场推出“车空间”品牌，在乘用车轮胎市场整合汽车产品上下游资源，围绕轮胎“装卸、修补、养护、跟踪、定位、平衡及智慧管理”7大板块提供标准化、专业化培训，支持门店为消费者提供专业化服务，创造更多的利润；在商用车轮胎市场借鉴欧洲车队服务的先进经验，支持经销商伙伴建立自己的车队服务团队，提供专业化、标准化服务和轮胎TCO解决方案的中策

商用车胎车空间旗舰店。

To this purpose, ZC Rubber has introduced the service brand Auto Space in the Chinese market, which provides specialized services around tire replacement, repair, maintenance, alignment, balancing, cleaning, intelligent management services. In addition, ZC Rubber supplies retail outlets with standard and professional training to increase profits. For the commercial tire sector, ZC Rubber aids its dealer partners in establishing their fleet service teams and delivering standardized services and tire TCO solutions in its commercial vehicle Auto Space flagship store.

4. 集团客户合作升级战略：聚焦集团客户，充分满足集团客户个性化需求

Group Customer Cooperation Upgrade: Personalized service for group customers

集团客户对轮胎产品需求不仅是产品质量稳定、价格合理，还有根据各自实际情况提出的更多个性化需





求。传统上这一细分市场长期被国际品牌利用长期合作关系、品牌形象、服务团队等各种有形无形手段把持。中策橡胶在零售市场不断拓展的同时，积极支持经销商合作伙伴，针对集团客户的需求检视自身的竞争状态，及时填补各项空白和短板，在全球市场与经销商合作伙伴一起，倾力进入集团客户消费市场。目前中策 WESTLAKE 品牌已经为 DSV, B&B Logistics, Nickel & Goeldner Spedition 等欧洲知名物流车队所认可，在泰国也获得了 W A F A VEHICLE 的青睐，其他市场也在中策合作伙伴全力合作中不断推进，这一业务模式必将成为未来市场的又一增长点。

The demand for tire products among group customers is not only for consistent quality and reasonable prices, but also for more customized requirements based on their actual business needs. International top brands have traditionally dominated this market area, owing to long-term partnerships, brand image, and

service teams, among other factors. While continuing to develop its retail market, ZC Rubber evaluates its competitive advantages in response to the needs of group customers, promptly fills in gaps and strengthens weaknesses, and makes every effort to tap into the group customer market with its global distributor partners. The WESTLAKE brand has been recognized by DSV, B&B Logistics, Nickel & Goeldner Spedition, and other famous logistics fleets in Europe, and has been favored by W A F A VEHICLE in Thailand. This business segment will contribute to ZC Rubber's future market growth.

水击三千里，碧空九万丈！我们即将面对的新市场，唯有通过创造价值才能迎来前所未有之新机遇，而工厂、经销商和门店也将必然通过整个生态资源的整合与相互赋能才能够获得更多的回报。这也将会成为中策大家庭引领行业发展和创造生态繁荣的共识与基石！

In the new market we are about to face, only by creating value can we

usher in unprecedented new opportunities. Tire manufacturers, dealers, and retailers will certainly obtain more benefits through the integration and mutual empowerment of the entire ecological resources. It will also become the ZC family's consensus and cornerstone for leading the industry's development and creating ecological prosperity.

守正笃实，久久为功！2022年，中策将与广大合作伙伴一同以务实的姿态实践价值创新、以不息的信念共建繁荣生态，创造中策大家庭的新未来！

We will stay upright and honest, and work hard with persistence. In 2022, ZC Rubber will collaborate with its partners to develop a prosperous ecosystem and a new future for the ZC family by practicing value innovation with a pragmatic attitude and unwavering trust!

ZC Rubber Ranks Top 9 Global Tire Company in 2021

18 • August 30, 2021, TIRE BUSINESS

Visit us on the web at www.tirebusiness.com

36th Global Tire Report
Tire Business Special Feature
2021 Global Tire Company Rankings
Based on 2020 results. Includes subsidiaries.
(Figures in millions of dollars, translated at average annual currency exchange rates)

2020 Rank	2019 Rank	Company/Headquarters	2020		2019		2018		2017	
			Tire sales	% of total corp. sales	Tire sales	% of total corp. sales	Tire sales	% of total corp. sales	Tire sales	% of total corp. sales
1	1	Group Michelin ¹¹ Clermont-Ferrand, France	*22,935.0	*93%	*25,000.0	*92.5%	*23,275.0	*93.0%	*23,560.0	*95.0%
2	2	Bridgestone Corp. ¹² Tokyo, Japan	*20,750.0	*74.0%	*24,325.0	*75.0%	*24,982.0	*75.0%	*24,350.0	*75.0%
3	3	Goodyear Tire & Rubber Co. ¹³ Akron, Ohio	*11,440.0	*93.0%	*13,690.0	*93.0%	*14,392.0	*93.0%	*14,300.0	*93.0%
4	4	Continental A.G. ¹⁴ Hanover, Germany	*9,908.0	*23.1%	*11,275.0	*22.6%	*11,757.0	*23.3%	*11,325.0	*29.0%
5	5	Sumitomo Rubber Industries Ltd. ¹⁵ Kobe, Japan	6,369.1	86.0%	7,060.0	85.9%	6,962.1	86.0%	6,755.1	85.7%
6	7	Hankook Tire & Technology Co. Ltd. Seoul, South Korea	*5,305.0	*97.0%	*5,725.0	*97.0%	*6,000.0	*97.0%	*5,535.0	*92.0%
7	6	Pirelli & C. S.p.A. ¹⁴ Milan, Italy	4,888.8	100.0%	5,935.0	100.0%	6,125.6	100.0%	6,034.2	100.0%
8	8	Yokohama Rubber Co. Ltd. Tokyo, Japan	4,349.0	81.4%	4,810.0	82.9%	4,746.1	80.5%	4,862.4	81.6%
9	10	Zhongce Rubber Group Co. Ltd. Hangzhou, China	3,896.2	99.8%	3,585.0	*98.0%	3,996.4	98.4%	3,621.9	96.4%
10	9	Maxxis International / Cheng Shin Rubber Yuanlin, Taiwan	3,788.7	100.0%	3,908.1	100.0%	3,907.1	100.0%	3,955.5	100.0%

ZC Rubber (Zhongce Rubber Group Co., Ltd.) is ranking back ninth in 2021 global tire companies released by Tire Business, improving from the tenth place a year ago.

According to Tire Business's ranking based on the revenue, ZC Rubber's global sales in 2020 reached 3.8962 billion U.S. dollars, an increase of 8.7% year on year, making it the ninth-largest tire manufacturer in the world. This achievement adds more significance as the company made historical results in both production capacity and economic performance through a difficult year highlighted by the challenges brought by the COVID-19 pandemic.

In addition to ZC Rubber's place in the global ranking, the company also gained significant recognition in China's automotive industry. It has been one of the top 500 manufacturers in China and ranked ninth among the Top 30 China auto parts industry companies in 2020. Meanwhile,

ZC Rubber was selected by Zhejiang Province as one of the pilot companies for the Future Factory project.

"We thank all partners and customers for overcoming difficulties and moving forward with us in the past year. We're confident to make more remarkable growth with all of you in 2021." Mr. Shen Jinrong, Chairman of Zhongce Rubber Group, stated.

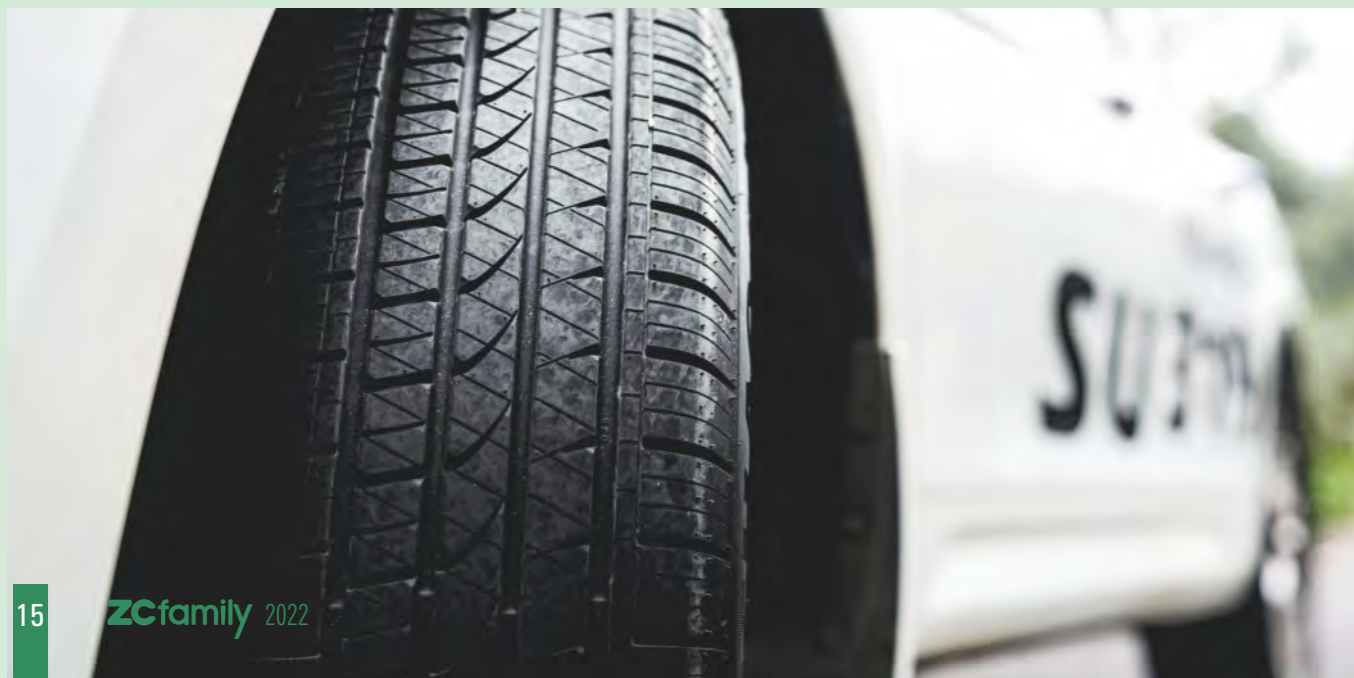
ZC Rubber invests billions in research and development to keep its product system up to date every year. While addressing the needs of the tire market, the quality of ZC Rubber's tire products has grown in popularity among international customers. At present, ZC Rubber's product footprint has expanded to every corner of the world, with sales to six continents, covering nearly 200 countries and regions. It has been welcomed and recognized by consumers around the world.

ZC Rubber Ranks 9th Among Top 30 China Auto Parts Companies

ZC Rubber (Zhongce Rubber Group Co., Ltd) has been ranked ninth among the Top 30 China auto parts industry companies in 2020 by the China Machinery Industry Federation and China Association of Automobile Manufacturers.

ZC Rubber has always been committed to developing the OE market and supplying high-quality, high-performance tires for the global market as China's largest and the world's 9th largest tire manufacturer.

ZC Rubber has achieved simultaneous progress with China's automotive industries, relying on the group's continuous effort in technological innovation. It aided a number of domestic automobile manufacturers in improving user safety and driving experience and achieving quality and service advancements. ZC Rubber's tire products have been recognized unanimously by renowned domestic automakers such as Jianghuai, SAIC, Shaanxi Automobile, FAW, Foton.



ZC Rubber Establishing Europe Technical Center in Germany



ZC Rubber named Martin Wells (Right) as its new Vice President Global OE and Jörn Tietjens (Left) as Key Account Manager OE and Automotive Engineer, both at the new Europe Technical Center.

Zhongce Rubber Group Co., Ltd (ZC Rubber) has launched its new Europe Technical Center (ETC) in Hanover, Germany. The ETC officially started operations on November 1, 2021.

The Europe Technical Center will provide major technical support to ZC Rubber's head R&D Center in China, focusing on global original equipment project development that benchmarks evolving tire technologies and helps raise the standard for new product performance.

ZC Rubber also has named Martin Wells as its new Vice President Global OE and Jörn Tietjens as Key Account Manager OE and Automotive Engineer, both at the new Europe Technical Center.

Mr. Wells will oversee all work at ETC, including OE project development and account management on a global basis, and will be in charge of the company's OE business. He formerly worked for six years as Director KAM OEM at Giti Tire R&D Centre (Europe) GmbH and has substantial experience in the European OEM business, particularly with Volkswagen Group. He is also a senior expert in the field of VDA auditing.

Mr. Tietjens will be responsible for developing, testing, and marketing new products to Key OE accounts, as well as coordinating commercial and technical support in order

to meet all customer-related targets. He previously served as Key Account Manager OE and Automotive Engineer OE in Giti Tire R&D Centre Europe, where he had a strong record of increasing customer relations and successful management of several OE projects within the VW Group.

"As the world's ninth-largest tire manufacturer, ZC Rubber's Europe Technical Center is one of our most valuable assets," stated Mr. Shen Jinrong, chairman of Zhongce Rubber Group. "With the new Europe Technical Center, ZC Rubber will be able to create cutting-edge technologies not only for our OEM partners but also to raise the standard on new product performance. We are glad to have Mr. Wells and Mr. Tietjens spearheading our efforts at Europe Technical Center."

ZC Rubber now supplies original equipment tires to a number of well-known automakers, including Ford, Volvo, Hyundai, and KIA Motors, among others, many of whom have recognized the excellence of ZC Rubber's products.

"The OE business is critical because it not only allows us to partner with the world's leading automakers, but it also enables us to expand our replacement business." With the establishment of the Europe Technical Center, ZC Rubber looks forward to extending its OE portfolio and collaborating with the world's leading automakers in the future.



ZC Rubber Won Second Prize at 2021 Global Internet Competition of "Straight to Wuzhen"



Mr. Shen Jinrong at the Global Internet Competition of "Straight to Wuzhen" Forum

On September 28, 2021, Zhongce Rubber Group (ZC Rubber) won the second prize of the 2021 Global Internet Competition of "Straight to Wuzhen" with its project ZC Rubber - 5G Smart Collaborative Digital Factory.

ZC Rubber uses 5G technology to promote data network platform innovation and data-driven production process reengineering. It will establish a replicable 5G smart digital factory platform for the tire industry, enhancing core competitiveness and corporate value through network collaboration, flexible production, and service extension.

Mr. Shen Jinrong, Chairman of Zhongce Rubber Group, advocated that the 5G low-latency benefits be used to transform data transmission, processing, and utilization, and to support the technological revolution with digitalization.

The "Straight to Wuzhen" Global Internet Competition is an annual worldwide event that focuses on the digital economy and runs throughout the year. It is one of the most important sections of the World Internet Conference. By exploring new technology and business modes, the competition encourages the creation of multinational

projects as well as talent sharing, collaboration, and innovation.

This year's "Straight to Wuzhen" Global Internet Competition, despite the pandemic hindering physical distance, still attracted 1,012 projects from 19 countries, including the United States, the United Kingdom, and France, including 180 overseas projects, and the number of Chinese and foreign projects both reached a record high. In the finals on September 26, the 5G + Smart Collaborative Digital Factory project brought by ZC Rubber was widely praised and won second prize.

Despite the pandemic hindering physical distance, this year's "Straight to Wuzhen" Global Internet Competition attracted 1,012 projects from 19 countries, including the United States, the United Kingdom, and France, including 180 overseas projects, and the number of Chinese and foreign projects both reached a record high. The 5G Smart Collaborative Digital Factory project presented by ZC Rubber took second place in the finals on September 26 and was widely praised.

ZC Rubber Targets Efficiency Improvement with 5G Smart Factory Project

Zhongce Rubber Group (ZC Rubber) plans to use 5G technology to create a Smart Factory platform for the tire industry. It will promote data network platform innovation and data-driven production process reengineering. The initiative will also enhance the core competitiveness and corporate value through network collaboration, flexible production, and service extension.

The project is currently in progress and has not yet been officially launched. It will be implemented in ZC Rubber's pilot Future Factory, which is currently under construction. ZC Rubber plans to expand this technological approach in the future by applying it to more factories.

The 5G Smart Factory will respond to three new manufacturing trends in the tire industry: mass customization, small-batch production, and unpredictable supply-chain disruption management. It will drive the business to transform from traditional B2M (Business-to-Manufacturer) to C2M (Customer-to-Manufacturer) and realize smart production and lean management through the Industrial Internet and the Internet of Things.

AR-Aided Equipment Maintenance: More efficient equipment maintenance through human-machine collaboration



ZC Rubber's Augmented Reality-Aided Equipment Maintenance

Our operators can complete the maintenance work without prior knowledge through the visual guidance from the AR-aided (Augmented Reality-Aided) equipment. Even junior operators can determine the condition of the equipment and complete the maintenance under the direction of AR quickly and accurately. The goal is to maintain equipment at a lower cost and higher efficiency and strengthen process reliability and standardization.

Smart Monitoring: Faster decisions and actions via remote control

The smart monitoring system in ZC Rubber's smart factory features 4K/8K HD video recording and real-time analytics based on 5G and machine vision technology. For example, in equipment troubleshooting, operators can request guidance from remote experts at any time. The expert team can perform playback, screenshots, and on-demand video signals and send advice combined with images and voice to the site. Experts can also use various gestures, handles, keyboards, etc., to issue instructions to control the robot's operation. Smart monitoring will benefit the entire production network with faster decisions and actions to improve automation's operation process and productivity.

Indoor Positioning: Improved workflow efficiency and worker safety

The indoor positioning system can display the real-time location of personnel, issue safety warnings, and conduct emergency evacuation. This system will help realize indoor navigation, personnel asset management, behavior analysis, etc., thereby helping our factory save costs, improve service and management efficiency, and reduce or even avoid accidents.

Predictive Maintenance: Enhanced equipment life and factory safety

The intelligent early warning system will be established to accurately determine the operating conditions of plant equipment, allowing the equipment lifespan to be optimized to its fullest. Combined with data research, it can also provide a comprehensive assessment of the operation conditions of plant machinery and equipment, which helps the factory discover the hidden dangers in time. In the long run, this process will significantly improve working conditions and increase safety.

Smart Factory Key Performance Indicator Projections

ZC Rubber has outlined its forecasts for the 5G Smart Factory's predicted efficiency versus more traditional factory models. It expects the concept to achieve:

- 50% reduction in the product development cycle;
- 15% increase in production efficiency;
- 40% reduction in product defect rate;
- 30% reduction in loss rate;
- 5% reduction in energy consumption.

In addition, the 5G smart factory will also change the original labor-intensive model, and the number of workers will be reduced by about 70% compared with traditional factories.

ZC Rubber has been actively exploring the latest digital transformation strategies since 2016 when it first introduced the ET Industrial Brain to create an Industry 4.0 Intelligent Manufacturing System. By embracing 5G technology, ZC Rubber is committed to enhancing its production capacity and efficiency, improving product quality, and lowering production costs to provide customers with better products and services.



ZC Rubber 5G Smart Factory Project

Key Performance Forecast



Index

Index Name	Before	After	Improvement Rate
Product Development Cycle	6 months	3 months	50%
Production Efficiency	35.50 million PCs p.a.	40.85 million PCs p.a.	15%
Product Defect Rate	1.80%	1%	40%
Loss Rate	10%	7%	30%
Energy Consumption	6309.80 GJ/ton tires	5993.30 GJ/ton tires	5%

ZC Rubber's 5G smart factory will also change the original labor-intensive model, and the number of workers will be reduced by about 70% compared with traditional factories, from 450 to about 140. At the same time, it provides a model case for the construction of a 5G smart factory, creating broader commercial value for the rapid digital development for the tire industry.

People's Daily Highlighted ZC Rubber's Technological Innovation and High-quality Development



On the 63rd anniversary of Zhongce Rubber Group (ZC Rubber), China's largest newspaper, People's Daily, reported and praised its continuous technological innovation and high-quality development.

Originated in Hangzhou, ZC Rubber has been developing tire production for 63 years since 1958 and successfully became one of the top brands in the industry. ZC Rubber has been ranked No. 1 in China for 12 consecutive years and Top 10 brands worldwide for nine straight years. Its global sales in 2020 reached 3.8962 billion U.S. dollars, making it the ninth-largest tire manufacturer in the world. It also ranked 284th among the Top 500 Chinese Manufacturing Enterprises in 2020.

ZC Rubber has actively pursued industry-university-research cooperation projects with universities and scientific research institutes throughout the years, strengthening and improving its R&D system and capabilities by introducing external intelligence.

ZC Rubber has established many technological innovation platforms such as provincial-level technology centers, provincial-level research institutes, post-doctorate workstations, academician workstations, etc. The company employs almost 2,000 people in R&D and holds 667 patents, including 116 innovation patents.

With the development of big data, the Internet of Things, cloud computing, artificial intelligence, 5G, and other technologies, ZC Rubber has actively embraced new technologies, focusing on ET industrial brains, cloud store ecosystems, smart tires, and future factories.

In the future, ZC Rubber will continue to promote technological innovation and digital transformation to provide high-quality products and services to customers worldwide.



ZC Rubber Launches New Flagship Series Passenger Car Tires

ZC Rubber announced the global launch of its new Flagship Series Passenger Car Tires at the "Innovate into the Great Future" Global Online Dealer Conference in 2021.

The company unveiled the Flagship Series product line for its tire brands CHAOYANG (ARISUN), WESTLAKE, GOODRIDE, TRAZANO, and its built-in innovative technology, underscoring its commitment to meet the growing and diverse needs of consumers.

The Flagship Series passenger car tires offer consumers seeking quality, value, and style a wide range of quality products. This brand new lineup represents both a symbolic and tangible proof point for ZC Rubber's vision to grow in the high-end passenger car tire market.

"We have invested considerable research and development on Flagship Series products, which are the consolidation of our scientific research achievements in recent years. After rounds of testing and modification, we

are confident that the Flagship Series will become comparable to the world's top tire brands," said Mr. Shen Jinrong, Chairman of Zhongce Rubber Group.

Flagship Series has achieved great breakthroughs in safety, controllability, and comfort by improving fuel economy, silence, and grip performance while incorporating Chinese aesthetics in the carcass design. Each brand of this series product has different features to meet a variety of consumer needs.

"Flagship Series is designed to meet the ever-evolving and more diversified consumer needs. We can proudly say that we have redefined premium tires made in China. We also believe that this series will become a smart choice with quality, value, and style for consumers," said Mr. Ge Guorong, Vice President of Zhongce Rubber Group.

ARISUN



ARISUN Unveils New Passenger Car Tire Lineup for North America

ZC Rubber unveiled the new ARISUN lineup for passenger cars, SUVs, and light trucks at SEMA 2021.

The brand released two consumer tire lineups, AGGRESSOR for passenger cars and ARESTA for SUVs and light trucks.

The AGGRESSOR lineup includes two tires, ZS03 and ZP01. ZS03 is a premium ultra-high performance all-season tire developed for drivers of sports cars seeking comfortable driving. Meanwhile, ZP01 is a high value touring all-season tire with exceptional handling and stability.

The ARESTA lineup includes ZG02, H/T ZG04, A/T ZG06, R/T ZG07, and M/T ZG08, designed to provide a wide range of options perfect for both highway comfort and off-road durability.

"ARISUN initially focused on developing premium truck tires suitable for the North American market. It is the first time that ARISUN brand has tapped into the consumer tire segment. Based on our years of thorough research, we are optimistic that we will be able to provide high-quality passenger car tires with reliable service to a broader spectrum of end-users," stated ZC Rubber.

The ARISUN brand is now ready for a gradual expansion throughout the world.

ZC Rubber is pleased to expand the ARISUN product line and strengthen its global brand presence as it grows in brand recognition and sales volume. The company will always be committed to providing safety and value to customers and end-users.

Premium Truck Tires Based on PSCT



ZC Rubber launched new premium truck tires AS858, AZ850, EZ865, EZ867, EZ870 for long haul, regional, on & off, and mining applications. The new products lines are mainly designed for Asia Pacific, Africa, and Latin America, targeting customers who value reliability, quality and cost efficiency.

The new truck tire line has been built with ZC Rubber's latest PSCT design theory (Pre-Strain Contour Theory). Under inflation, the tire profile change is efficiently controlled with proven technologies derived from this theory, which effectively improves the tire footprint for increased tire life and fuel economy. At the same time, the tire durability and load capacity are considerably enhanced through stress analysis and control of the steel belts and the endpoints.

AS858 covers truck, trailer, and bus needs, offering longer mileage and even wear as a steering axle for Long Haul applications.

AZ850 is designed for Regional hauling and accommodates a wide range of vehicles while also delivering excellent durability, among other advantages.

Both EZ865 and EZ867 fit the purpose of On & Off trailer tires, with excellent chip and cut resistance and the ability to handle the demands of On & Off usage.

The EZ870 is built specifically for mining applications, delivering necessary heavy-duty endurance and superior solid traction to withstand harsh conditions and complex operations.

New Two-wheel Tires: CHAOYANG Phantom Elite and Hot Melt Tires



The 2022 ZC Rubber two-wheel new products launch conference with the theme of "Value Innovation, Leading China" was held in Nanjing International Expo Center on Oct 26, 2021.

ZC Rubber released its next-generation two-wheel tires based on its continuous tire technology innovation and ongoing exploration in intelligent manufacturing.

With its extraordinary safety, technology, and intelligence, the newly introduced CHAOYANG Phantom Elite and all season high performance hot melt tires drew the attention of exhibitors and industry peers.

The Phantom Elite consists of two new models, Phantom Dry and Phantom Wet, with which David Valero Serrano from the BH Templo cafés UCC team has won the bronze medal in the men's cross-country mountain bike race at Tokyo 2020.

The Phantom Elite version's covers are made from the compound E-Bike 25, developed exclusively for electric bikes. It boasts a low rolling resistance and excellent high-speed grip, ensuring safety in sharp turns. The Elite version features a structure with an extra-strong folding heel and rubber reinforced sidewalls, and they are tubeless-ready,

which reduces the risk of flattening. In addition, it has SPS (Shark Skin Protection System) side puncture technology, which provides maximum resistance on the flanks, making them extremely resistant to jagged pebbles. It also contains the basic dual compound 2C-MTB of high performance for mountain tires.

The all season high performance hot melt tires were introduced as a new safety product addressing the issue of tire slippage when electric vehicles and motorbikes travel at high speeds. It is less impacted by temperature since it is made of a semi-hot melt compound, and it has outstanding wear resistance, grip performance, and stability. The new tires can achieve the effect of "halving braking distance and doubling safety and care," considerably improving the overall vehicle's safety performance.

In addition to the grand launch of these two new products, ZC Rubber also brought a wide variety of two-wheel tire products to the show, including low rolling resistance graphene tires (long distance runner), anti-skid snow tires, racing-grade, and track-grade semi-hot melt tires, as well as electric scooter tires and tire protection armor.



OE Portfolio Growth for Electric Vehicle Market

ZC Rubber has been working hard to develop premium tires for electric cars to satisfy their specific needs.

Over the last decades, electric and hybrid vehicles have made a transition from a marginal part to one of the fastest-growing areas of the global automobile industry. According to the International Energy Agency (IEA), electric cars have accounted for 2% of the global car industry by the end of 2020. This may not seem like much, but their global share was close to zero ten years ago.

According to new data from BloombergNEF, electric vehicles, including battery electric and plug-in hybrids, made up 7.2% of global car sales in the first half of 2021, up from 2.6% in 2019 and 4.3% in 2020. The facts demonstrate that global momentum towards electric vehicles has accelerated significantly.

As the technology advances and EVs are becoming ever more common, ZC Rubber has invested extensively in the R&D of premium low rolling resistance tires. By utilizing big data simulation, new compounds, innovative technical processes, etc., ZC Radial Tire R&D Center has developed low rolling resistance tires with premium quality. Currently, a number of leading Chinese vehicle manufacturers are already equipping their electric and hybrid models with ZC Rubber's tires as a standard fitment.

- RP76+ is equipped with XPeng P5/M5, a family sedan from Xiaopeng Motor with a focus on comfort, technology, and affordability, and will be mass-produced and released in 2022.
- China electric vehicle leader BYD also uses the RP76 pattern as the original equipment tires for its traditional top-selling products in the Dynasty Series Qin, Song, Yuan and the all new e-net Dolphin. ZC Rubber will expand its OE portfolio



to 8 models of BYD under a strategic partnership between the two companies.

- The WM Motor's E5, a new sedan-like EV specifically for the mobility market, selects RP76 and SU318 as its original equipment tires.
- ORA, the new energy brand from GWM, has chosen ZC Rubber's tires for its entire line since the brand was established. ZC Rubber provides e-series tires RP18ae and RP58ae with low rolling resistance and excellent comfort for ORA's White Cat, Black Cat, and Good Cat series that female users favor.
- Aion, a new electric vehicle marque of GAC, is the Chinese A-class pure electric SUV leader. Aion Y chose ZC Rubber's SU318 as its preferred OE tire.
- ZC Rubber has supplied four of the Top 5 models sold in China's A00 Class mini electric car market, including Chery Ant, ORA Black Cat, SAIC Clever, and Changan BenBen. Chery Ant is one of them, having used ZC Rubber's tires from its inception in 2017 and received rave reviews. ZC Rubber is also going to make breakthroughs in the supply of A00 Class mini electric vehicles in 2022.

ZC Rubber continuously invests in research and development and is well prepared for the changes in the mobility industry. In the future, the company will continue to offer up-to-date technologies, high-quality products and professional services to global customers.

New Two-wheel Tires 2022

Bicycle Tire

New patterns for
CHAOYANG GRAVEL series:

**GRAVEL AT /
GRAVEL MT**

Available size:
700×38C



GRAVEL AT

GRAVEL MT



PERSUADER WET PERSUADER DRY PERSUADER SPEED

CHAOYANG ENDURO series:
**PERSUADER WET /
PERSUADER DRY /
PERSUADER SPEED**

Available size:
**27.5×2.4
29×2.4**

Lawn Garden Tire

ARISUN Lawn & Garden Tire:

New pattern LAWN PRO

Available size:
**20×8.00-8
20×10.00-8**



ZC Rubber Tackles Truck Tire Market Changes: Products, Service & Solutions



The commercial truck tire segment has shifted into high gear as the trucking industry gains momentum and has become more competitive than ever. Commercial truck OEMs and enterprise fleets are increasingly looking to partner with tire manufacturers and service providers who can help them maximize their tire assets through tire-centric solutions that improve safety and cost efficiency. As a Top 9 tire company in the world, ZC Rubber provides differentiated commercial truck tire products, services and solutions to the global markets to ensure customer satisfaction.

Enhanced Solutions to Maximize Fuel Efficiency

According to new policies in China, companies will place more emphasis on transformation and upgrading related to environmental protection, energy efficiency, 5G, and industrial IoT in the future. The major landing point of these changes in the commercial vehicle industry lies in upgrading products, technologies, and service models.

With China's new energy vehicle industry development, mainstream commercial vehicle companies have also put forward higher tire requirements, driven by freight companies' demand for digitization, convenience and specialization.

For example, Sinotruk and Foton Motor's new-generation traction trucks for mainline haulage have rolling resistance requirements of 4.0 and mileage requirements of 300,000 kilometers for 12R22.5 tires.

In response to market changes, ZC Rubber has

introduced next-generation fuel-efficient and high-quality tires based on PSCT 2.0 technology, as well as new solutions for the two consumables, fuel consumption and tires, which account for the highest proportion of a commercial vehicle's total cost of ownership (TCO).

Scene-based Customized Products

Aside from the obvious changes in policy trends, the market demand for commercial vehicle products is also shifting in a diversified manner. As logistics efficiency has improved, the logistics structure has begun to specialize in areas such as mainline haulage, regional distribution, urban distribution, last-mile delivery and industrial logistics. The segmented scene-based demand will dominate the iterative upgrade of commercial vehicle products for a long time.

To the consumer end, commercial vehicle tire trends are also changing. Young users, such as those born in the 1980s and 1990s, account for about 70% of all major customers in China, according to data, and their consumption habits are more sensible. Comfort and functionality should be considered in addition to vehicle appearance. Therefore commercial vehicle manufacturers are confronting the demand for customized products.

To this end, ZC Rubber incorporated the cutting-edge technologies derived from PSCT2.0 theory into the design of the next-generation commercial vehicle tires, balancing both appearance and performance. Younger people favor the new products. Meanwhile, ZC Rubber launched a variety of tire series to meet scene-specific needs, including heavy-duty truck tires, light-to-medium trucking, economical products, etc.

Differentiated Strategies for Global Market

To expand the commercial tire business in global markets, ZC Rubber formulates customized regional strategies to provide differentiated products and services in each market.

ZC Rubber differentiated its products lineups by developing new technologies for various markets. The company works with the international technical R&D teams to localize the design for different regional markets, thus ensuring that ZC Rubber tires meet consumers'

requirements in each country. It makes appropriate improvements and adjustments for each market regarding tire design, manufacturing, sales and logistics.

Banking on its optimal commercial tire product portfolio, ZC Rubber provides differentiated value to customers through brand building. The company manages its main brands WESTLAKE, GOODRIDE, ARISUN, TRAZANO, YARTU, and CHAOYANG as the base for continuing profit creation. In addition, ZC Rubber will further enhance its distribution channels and integrate marketing strategies to increase the brand value to better support distributors around the world.





ZC Rubber Expands Hyundai Commercial Vehicle OE Fitments in China

ZC Rubber has been a long-standing original equipment supplier for Hyundai Commercial Vehicle. The company is now supplying new patterns and sizes of its truck tire ranges for various Hyundai long-haul truck models in China.

Hyundai Motor Group has been ranking 5th among global automotive manufacturers by sales for five years. Its commercial vehicle subsidiary in China is one of ZC Rubber's largest commercial OE customers.

The Hyundai Hongtu EV model, a high-quality pure electric light truck, is equipped with ZC Rubber high-performance tires. The equipped tires have been optimized for efficient transportation, boasting both ecological and economic advantages. They come with a whole new pattern design and compound developed specially to achieve seamless performance and increased safety, mileage, and environmental friendliness for the Hyundai Hongtu EV.

ZC Rubber will also be an OE tire supplier for the premium truck Hyundai Xcient for improved fuel economy.

Under average driving conditions, the equipped tires might save more than 30,000L of fuel over the course of 300,000 kilometers, according to a Chinese fuel-saving competition test result. In the meanwhile, it contributes to a significant reduction in carbon emissions. ZC Rubber and Hyundai have now conducted multiple tests in order to develop the low rolling resistance version that will be released soon.

"The expansion of our OE business cooperation with Hyundai is of great strategic importance to us, as we can now offer a wide range of patterns and sizes to its multiple models in a variety of applications. It is yet another critical proof point of our strong brand, investment in R&D, and leading technology in the commercial vehicle segment." ZC Rubber said.

As growth continues throughout 2022 and in the years ahead, ZC Rubber looks forward to extending this partnership and developing further in the premium commercial vehicle market and providing better products and services to global customers.



ARISUN Tires Supplies OE Tires for WAFA VEHICLE in Thailand



ARISUN Tires is now supplying its commercial truck tire AS673 as the original equipment on all semi-trailers of WAFA VEHICLE in Thailand. The ARISUN AS673 has been fitted on WAFA's skeleton semi-trailers, flatbed semi-trailers, and cement tank semi-trailers in size 11R22.5, H/16. The tire is designed for enhanced durability and stability as well as improved traction in all road conditions.

The first batch of supporting vehicles is estimated to be around 400 this year, with a further 1,000 planned in 2022.

The ARISUN AS673 is engineered with an optimized tread pattern that delivers remarkable steering, efficient water evacuation, and excellent traction under various road conditions. The tire also features a stone ejector design for durability, and the Smartway-verified technologies guarantee high fuel efficiency.

"We are thrilled to partner with ZC Rubber to equip all of our semi-trailers with ARISUN tires," stated Thomson Yan, Sales & Purchasing Manager of WAFA VEHICLE. "The

inclusion of ARISUN's commercial tire line, as well as its dependable service, will round out our dedication to quality and performance, resulting in increased value for our customers."

WAFA VEHICLE is one of WAFA GROUP's most important manufacturing bases in Southeast Asia, focused on special vehicle production with professional teams for more than 20 years. Its market service network spans Thailand and more than 50 countries across Asia, Africa, America, and Europe.

"Our partnership with WAFA further proves our market knowledge and commitment to customer satisfaction. ARISUN Tires will continue to build on its reputation for providing premium products and reliable service." stated ZC Rubber.

ARISUN is a premium tire brand of ZC Rubber for the North American market. It is now ready to expand into other markets throughout the world.



WESTLAKE Tire Expands Retail Business in Thailand with FIT Auto

WESTLAKE Tire is expanding its retail business in Thailand through its local distributor Initial Tire & Accessory Co., Ltd. It cooperates with FIT Auto, a car-care business arm of PTT Plc. WESTLAKE Tire is now available at the 60 branches of FIT Auto around Thailand, both on e-commerce channels and at offline service centers.

FIT Auto is a car service center that provides light maintenance services for vehicles. It was formerly known as PROCheck at PTT stations. With the extensive service network of PTT stations across the country, FIT Auto will further develop and expand in Thailand. It will also help boost the local retail business for WESTLAKE Tire.

"WESTLAKE Tire is one of our brands boasting both premium quality and high value and has boomed in the international market in recent years," Stated ZC Rubber, the brand owner of WESTLAKE Tire,

"We teamed up with FIT Auto because it has one of the largest online and offline auto service net in Thailand through which most Thais can access our brand."

With one flagship store and more than 200 retail locations in Thailand, WESTLAKE Tire has been well on its way to becoming a preferred tire choice in Thailand.



WESTLAKE Tire has been launched on the official FIT Auto website.



ZC Rubber Expanding OTR Footprint Globally

ZC Rubber is rapidly expanding its OTR footprint throughout the world. The company offers an extensive range of Off-Highway tires for vehicles in the Off-the-Road (OTR), industrial handling, construction, and agriculture sectors. As a main player in the OTR market, ZC Rubber has been working with more than 500 partners worldwide, and its products are currently running in more than 160 countries. "To provide one-stop Off-The-Road tire solution" is always the key part of ZC Rubber's commitment to customers.

Recently we have expanded our OTR lineup by introducing giant sizes in 49, 51, and 57 inches, strengthening our position in the industry, especially in the rigid dump truck mining segments.

We are continually striving to bring the very best OTR products to our end users. We achieve this by forging strong working relationships with both our distributors and end-users. By keeping close contact with our customers, we are

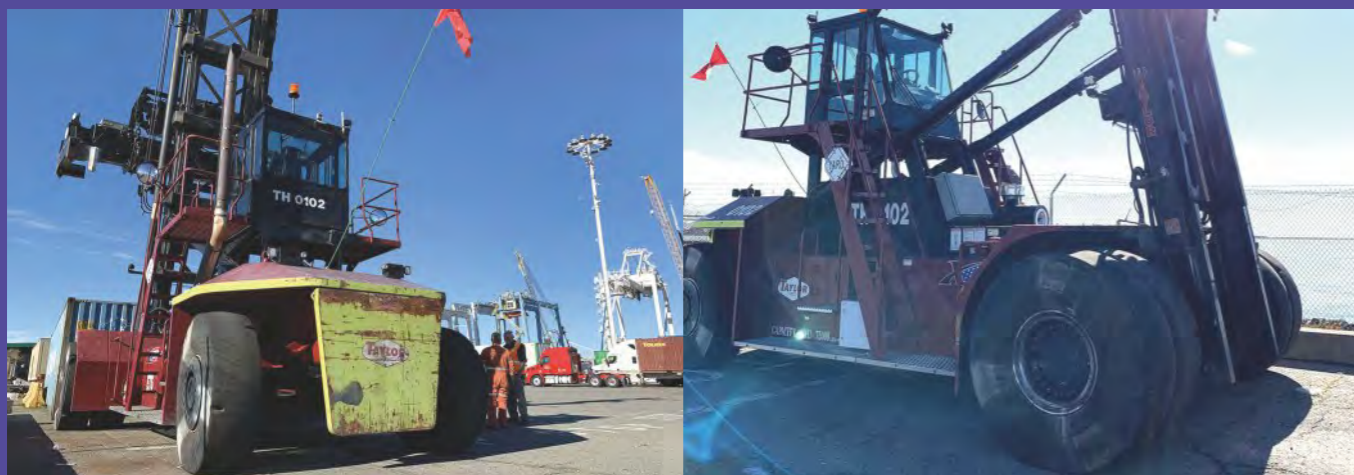
constantly monitoring the performance of our tires in the field. This feedback on tire performance allows our technical engineers to understand what is happening in the marketplace and, in turn continually offer the very best tires for each application.

We have many examples throughout the world where our OTR tire range offers our customers the best cost per hour.

Location: Evergreen Marine Corp Port Terminal in Oakland, United States

Equipment: Taylor XLC-976

Tire: WESTLAKE 18.00-25 40 ply SM04



In Oakland, California, the WESTLAKE 18.00-25 40ply SM04 is running across the Evergreen Port Terminal. The SM04 is mounted on the Taylor XLC-976, both steer and drive positions.

"The bead is easy to mount, and the tire is performing exceptionally well." Preston's Maintenance Manager said. This Taylor XLC-976 is currently getting 1,078 hours and projected to get close to 4,000 hours. WESTLAKE SM04 has less downtime, higher performance and longer tread life.



Location: Albinsson Maskincenter AB in Bjärred, Sweden

Equipment: Volvo L90F wheel loader

Tire: WESTLAKE 650/65R25/* 180B/200A2 TL CB798**



Location: a civil engineering company, Ireland

Equipment: 25ton and 40ton articulated dump trucks

Tire: WESTLAKE CB763 E4/L4

The civil engineering company in Ireland with a fleet of 25ton and 40ton articulated dump trucks has made the move to ZC Rubber's CB763 pattern. They found our tires offered excellent cost per hour, but more importantly, they did not experience any downtime.



Location: a recycling company in Germany

Equipment: Volvo L110H wheeled loader

Tire: WESTLAKE CB790



Location: a limestone quarry in Ireland
 Equipment: Volvo L220F
 Tire: WESTLAKE CB790



Location: a quarry in UK
 Equipment: Volvo L120 wheeled loader
 Tire: WESTLAKE CB773



Location: a waste disposal company in Sweden
 Equipment: Volvo L120G wheeled loader
 Tire: WESTLAKE Solid SR01H

Solid tire pattern SR01H is proving to be very popular with waste disposal operators.



Location: quarries in German
 Equipment: rigid dump trucks
 Tire: WESTLAKE CB771 E4

The German based quarries use CB771 on their rigid dump trucks with great results. The CB771 E4 for rigid dump trucks proves very successful and is now available in a three-star load rating.



Equipment: Kone crane reach stacker
 Tire: WESTLAKE CL629

Bias pattern CL629 is a top performer on reach stackers operating at ports. End-users are achieving excellent life from this pattern.



ZC Rubber Selected by Dingli as Main Supplier for Aerial Work Platform Tires

Zhejiang Dingli Machinery, one of the world's top 10 aerial work platform manufacturers, has selected ZC Rubber as its main supplier for original aerial work platform tires. ZC Rubber's EL86, EL73 and EL79 are the first choices of Dingli, making up more than 40% of the latter's original equipment tires.

Currently, ZC Rubber is supplying Dingli with EL86 in size 240/55-17.5, EL73 in size 385/45-28, and EL79 in size 315/55-20.

The main features of ZC Rubber's foam-filled tires have been highlighted by experience from multiple field applications to completely meet Dingli's expectations in terms of increased safety, long tread life, and high damage resistance.

"We are excited to be working with ZC Rubber," said Dingli, "Their premium range of foam-filled tires with durable, extra-tough compounds, plus high-traction treads with self-cleaning properties help deliver outstanding reliability on site."

ZC Rubber has become a key OE tire supplier to a number of leading Chinese heavy equipment manufacturers, including Zoomlion, LGMG, and Sinoboom, as well as being in the trial-matching stage for world leading access equipment providers JLG Industries and Genie (Terex AWP).

ZC Rubber has been pursuing technological

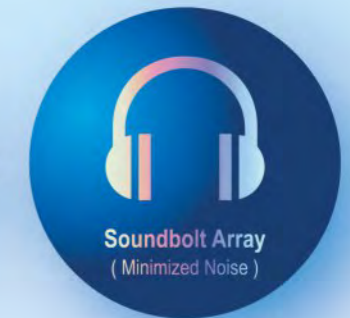
advancement and innovation in the field of foam-filled tires in recent years to provide customers with more efficient, economical, and valuable solutions. The company is also expanding its product portfolio for use in ports and terminals, mining and other heavy industry applications.



EL73

EL79

New Technologies for Flagship Series Passenger Car Tires



Enjoy the performance



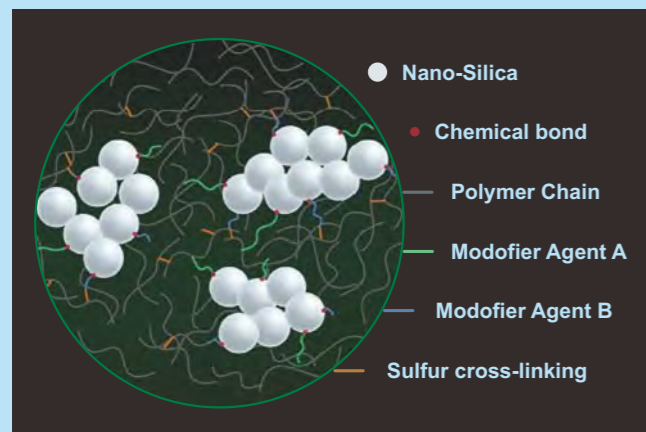
Hybrid Formula & BPOT New Technologies for Flagship Series Passenger Car Tires

ZC Rubber's latest introduced Flagship Series passenger car tires are based on a series of new technologies. Our research and development team has further optimized the original Trinity Technology System, which was supported by a number of core technologies, as well as enhanced tire structure design and production process. As a result, the Flagship Series' tire performance has been significantly improved, striking the ideal balance of fuel efficiency, quietness, and grip.

Hybrid Formula

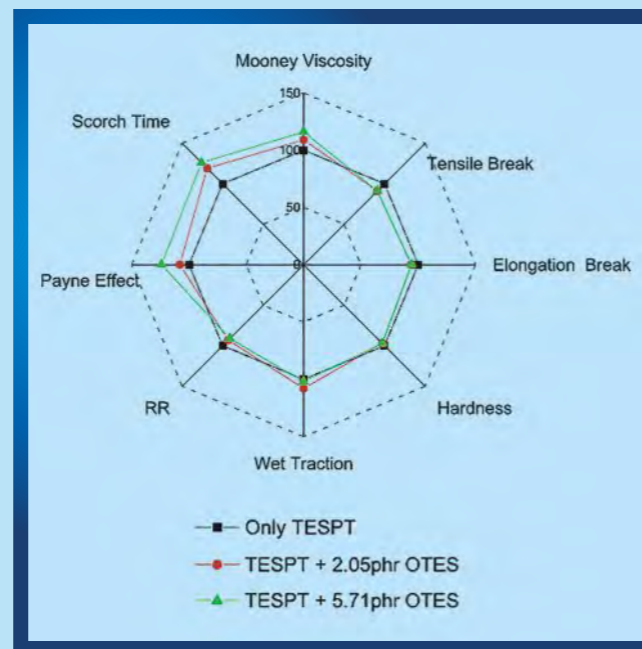
Hybrid Formula™ consists of two patented technologies, Mixing-Technology and Hybrid Silane.

The Mixing-Technology optimizes the distribution of nano-scale silica to improve mileage and fuel efficiency while increasing grip.



Hybrid Silane technology improves silica dispersion while weakening silica flocculation to keep the tread soft without compromising handling. By combining silica particles of varying sizes, Hybrid Silica achieves a better rolling resistance and handling balance.

This radar chart shows improved tread performance in rolling resistance, grip, and wear resistance after using the Hybrid Formula.



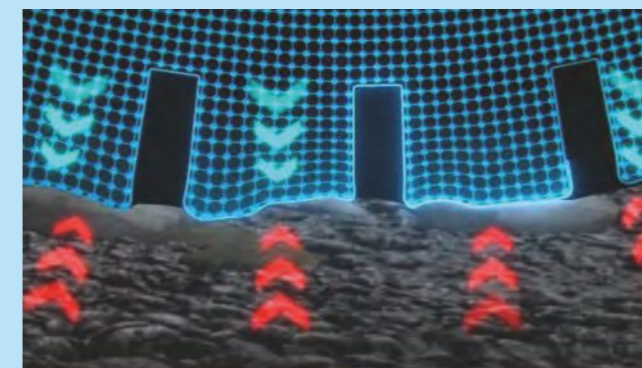
Hybrid Formula™ has obtained more than ten patents. With this new technology, ZC Rubber's R&D team has published two papers in the top international rubber journals, Rubber Chemistry and Technology and Journal of Applied Polymer Science. The team was also invited to

present this achievement at the International Rubber Conference and Tire Technology Expo.

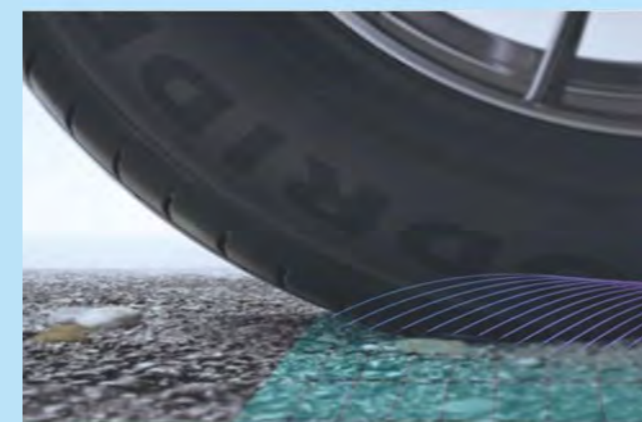
BPOT (Belt Pre-stress Obtain Technology)



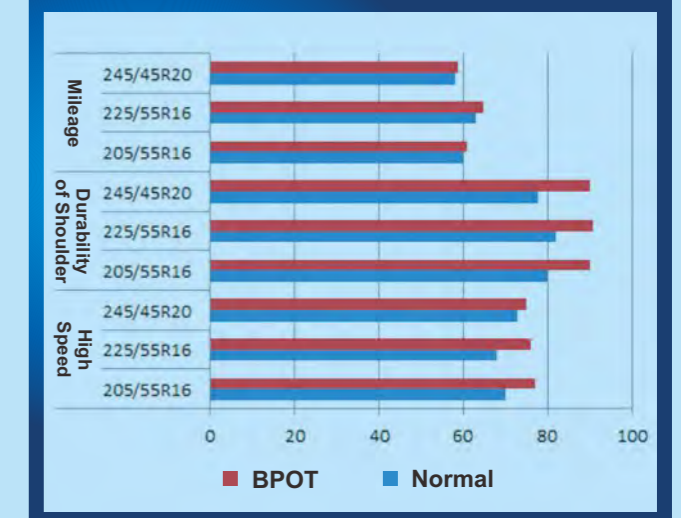
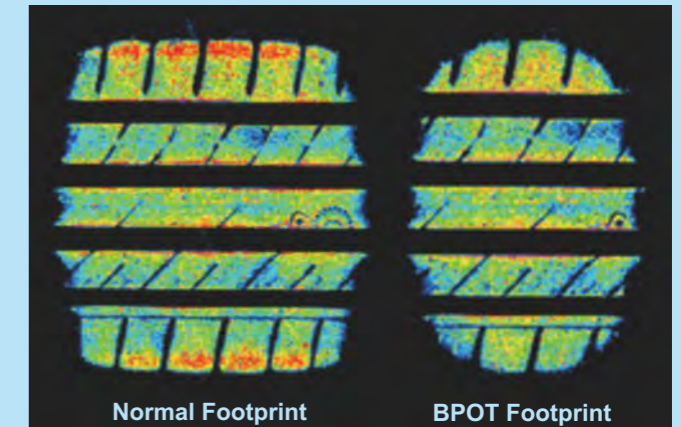
BPOT technology significantly improves a tire's high-speed performance, shoulder durability and wear resistance.



Even Pressure Distribution



Improved Contact Patch



It effectively solves the problems of insufficient tension of the tire shoulder belts, improves tread pressure distribution, and makes the tire crown tension evenly distributed, thereby effectively improving tire contact pressure distribution.

When we compare the two footprints, we notice that the BPOT footprint is more rounded, which means less stress on the tire shoulder. Such enhancements assist the tire footprint in achieving an optimal rectangular ratio between 0.85 and 0.95, which helps reduce tire tread wear and increase mileage.

And according to the test results, the tire's high-speed performance, shoulder durability and wear resistance are improved by more than 5%.

Independent Research & Development is a key component of ZC Rubber's continual development strategy. We will keep focusing our resources on advancing innovative tire technological capabilities that will provide the highest level of performance, safety, fuel efficiency and eco-friendly driving for consumers worldwide.



PSCT 2.0

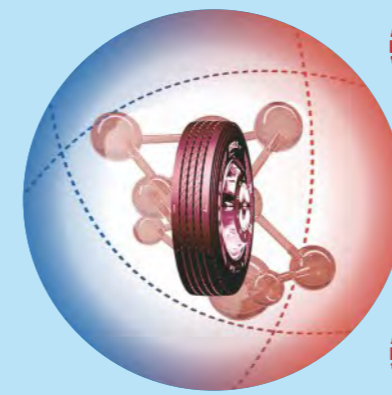
Upgraded Pre-strain Contour Theory

Key Performance Indicators



Super Tread Compound

SuperTread Compound is formulated with three advanced compounding technologies to achieve outstanding thermodynamic properties of the rubber material through the optimized configuration of its molecular chains, material interface, crosslinking degree and bond type. It contributes to improve the tire's durability, rolling resistance, and fuel efficiency.

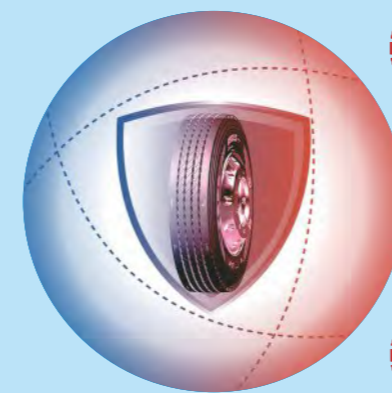


- Ultra Fuel Saving Compound**
High abrasion resistance & longer mileage
- SX7 Carbon-silica Compound**
Reduced rolling resistance & higher fuel economy
- Super Hybrid Formula**
Enhanced tire life & durability



Super Casing Technology

Super Carcass Technology provides enhanced casing stability and tire life cycle performance. It combines the hooping effect of the steel belts on the carcass with the restriction of the bead reinforcement to deliver balanced sidewall stiffness and improved bead durability in different usage scenarios.



- High Tensile Strength Carcass**
Minimized tire deformation & greater sidewall stiffness
- S-shape Belt-wrap Technology**
Enhanced crown durability and stiffness
- Double-ply Steel Chafer Bead Reinforcement Technology**
Improved bead uniformity and durability

ZC Rubber's Low Rolling Resistance Tire Development in Three Phases

Conventional wisdom says that conversion of a 3% reduction in truck tire rolling resistance correlates to a 1% gain in fuel economy.

Tires are projected to contribute 30% to 33% of the truck's total fuel efficiency, on a typical 6x4 tractor-trailer combination with 18 tires, according to tire specialists. Broken down further, dual drive tires contribute around 45% of total tire rolling resistance, eight dual trailer tires contribute around 40%, and two steer tires contribute 15%.

So, there is no question that low-rolling-resistance tires can significantly reduce truck fuel consumption.

ZC Rubber has been working hard to produce low-rolling-resistance truck tires to give consumers more fuel-efficient and eco-friendly tire options.

The ZC R&D team uses a number of technologies, including special silica compound and structural design efficiencies, as well as availing of production facility technologies to enhance the tire's rolling resistance performance.

The company has specially initiated the low rolling resistance truck tire project. It will be completed in three stages through four segments: material research, structural research, simulation analysis, and process research. The first stage's objective is to get the RR below 5.0, the second stage's goal is to get the RR below 4.0, and the third stage's goal is to get the RR below 3.5.

In the first stage, the rolling resistance of the truck tire is reduced to less than 5.0 by adding silica and super silane, also employing a series of internal mixer mixing techniques. Some existing products have been manufactured using this technology.

To lower rolling resistance to below 4.0, the second-generation low rolling resistance tires combine a high silica and carbon nanotube tread compound. It is important to note that the rolling resistance test value of most mainstream tubeless tire brands is less than 4.0, with some less than 3.8.

The third-generation low-rolling-resistance tires use

both solution-polymerized styrene-butadiene rubber and high silica tread compound, providing an excellent balance between wear and rolling resistance. Its rolling resistance can be reduced to below 3.5.

By constantly developing technologies and adjusting materials and design elements in compounding, tread and tire construction to minimize performance trade-offs, ZC Rubber will continue to develop low rolling resistance truck tires, offering global customers even more advanced fuel-saving choices.

Second generation low rolling resistance tire

Size	Pattern	PR	Rolling Resistance
315/70R22.5	AS578	20PR	3.78
295/80R22.5	AT586	18PR	3.56
	AS578	18PR	4.0497
275/80R22.5	AS578	18PR	3.65
12R22.5	AS578	18PR	3.819
11R22.5	CR915	16PR	3.63



Tire Test

GOODRIDE Solmax 1

VS

M Brand Competitor

In September 2021, ZC Rubber conducted a benchmark test in Shandong's Zhaoyuan Proving Ground, where GOODRIDE Solmax 1, the newly launched flagship passenger car tire, was pitted against M Brand Competitor in size 235/45 ZR18. The testing was carried out in the test vehicle Tesla Model 3.

GOODRIDE Solmax 1 is one of ZC Rubber's latest flagship passenger car tire series, designed to provide improved ride comfort, fuel efficiency, and durability.

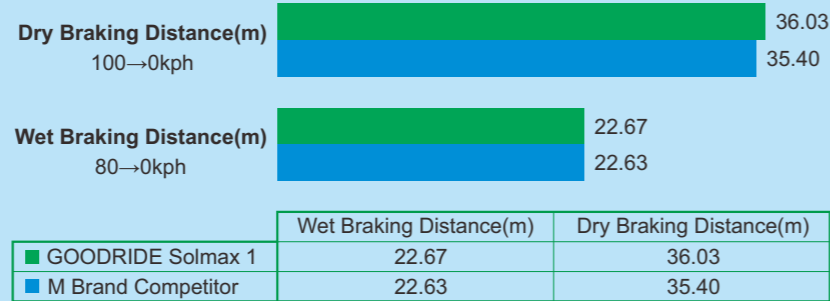
The M Brand Competitor is a high-performance all-season tire focusing on grip and handling, particularly in wet conditions. In this test, it was the standard tire.

Both tires were rated in a series of key performance assessments, including dry & wet braking and handling, noise, and comfort.

Test Field	Zhaoyuan Proving Ground	M Brand Competitor		GOODRIDE Solmax 1	
Ground Temperature	39°C	Spez.	235/45 ZR18 98Y	Spez.	235/45 ZR18 94W
Atmospheric Temperature	30°C	Rim	8J*18	Rim	8J*18
Wind Speed	2.2m/s	DOT	2220	DOT	2721
Test Vehicle	Tesla Model 3	Pressure	220kPa/220kPa	Pressure	220kPa/220kPa
Test Result Summary					
Wet Braking		22.63		22.67	
Dry Braking		35.40		36.00	
Noise		7.35		7.31	
Comfort		7.26		7.22	
Steering		7.63		7.45	
Dry Handling		7.52		7.38	
Wet Handling		7.56		7.48	

Dry & Wet Braking

Both had excellent dry and wet grip, with average braking distances nearly identical in dry and wet conditions.

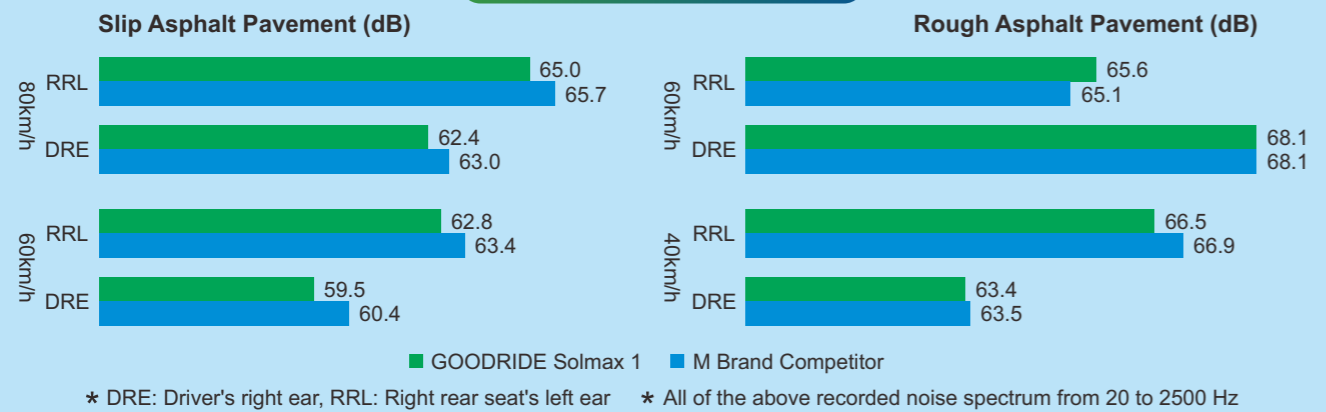


Noise Level

In the Bandwidth Test, the GOODRIDE Solmax 1 was noticeably quieter than the M Brand tire on both slip and rough roads. When it came to the internal noise feeling, the test driver

commented GOODRIDE as "the rough road noise was slightly lower than that of the standard tire, and there was a slight cavity sound at 150km/h."

Noise Bandwidth Test



Comfort

The GOODRIDE Solmax 1 delivered almost as good comfort as the standard tire.

"The GOODRIDE tire performed well in vibration damping. Yet

the impact on the test tire's casing is slightly higher than that of the standard tire, but not messy." The test driver noted.

Conclusion

On average, the GOODRIDE Solmax 1 impressed with a very close performance to that of the M Brand Competitor. This GOODRIDE Solmax 1 was even quieter than the standard tire in this test. At the same time, it offers high reliability in dry and wet conditions. The test proves that GOODRIDE Solmax 1 is an ideal tire for family sedan drivers looking for a quiet and smooth driving experience and better fuel economy.

Delivering convincing results in many other domestic media tests, the GOODRIDE Solmax 1 boasts many technological features.

Its variable pitch distribution tread block design, unique sound-bolts design, and optimized tread compound based on Hybrid Silane patent technology ensure minimum vibration and noise for maximum driving comfort across all road conditions. Thanks to the patented Nanometer Mixing-Technology, it provides better wear resistance and increased mileage by 8%. Such technological excellence has contributed to building GOODRIDE Solmax 1, a true all-rounder that combines top-of-the-line comfort, all-season performance, and optimal fuel efficiency.

How Does ZC Rubber Help to Reduce Your Fleet Costs?

Tire spending has undoubtedly become a major expense of vehicle ownership, given the increasing growth of the logistics industry and the overall rise in commodity prices. Truck and bus tires, being the most consumable part of a vehicle, have a significant impact on fuel efficiency, safety, and fleet operating costs.

After conducting a sample survey of about 2,000 vehicles from our logistics partners' fleets, we found that these fleets generally are plagued by issues such as mismatched tires, improper tire inflation, and abnormal vehicle condition, with the tire inflation pressure issue accounting for 49% of the total. Incorrect tire pressure may result in high fuel consumption, early tire wear, irregular tire wear, rim damage, and so on, all of which raise the fleet's tire expenditures.

Therefore, reducing costs through adequate tire care has become a top priority for logistics fleets.

Customized Tire Solutions for Fleets

For commercial and off-the-road fleets, ZC Rubber offers a customized solution to help reduce their operating costs.

In 2021, ZC Rubber introduced an updated truck tire line to fulfill the needs of professional transportation fleets in terms of increased mileage, fuel efficiency, and safety.

Based on the newest PSCT II (Pre-strain Contour Theory II) tire design theory, the new generation truck tires feature the latest silicon-carbon compound and proven tread designs, resulting in a 20% improvement in wear resistance, 15% improvement in fuel economy, and a 50% improvement in uneven wear. Furthermore, it significantly enhances load capacity and further lower fleet transportation costs.

To keep fleets running efficiently, ZC Rubber offers digital toolsets for tire inspection and analysis. In 2018, ZC Rubber and its strategic partner Zhilun Technology jointly developed the VITS system, aiming to monitor tire conditions in real-time to help fleets stay ahead of and manage maintenance issues. Now the VITS system has served thousands of companies.

Linwei Logistics, a logistics and transportation company based in Shanghai, is one of our most important customers. Mr. Su Jianqiang, deputy general manager of the company, stated that the VITS System has greatly enhanced tire life and fleet fuel efficiency. The average fuel consumption has decreased by 2% to 3%, while the average mileage has increased from 250,000 km to 400,000 km.

“The most incredible thing for our fleets is that only one person is required to manage

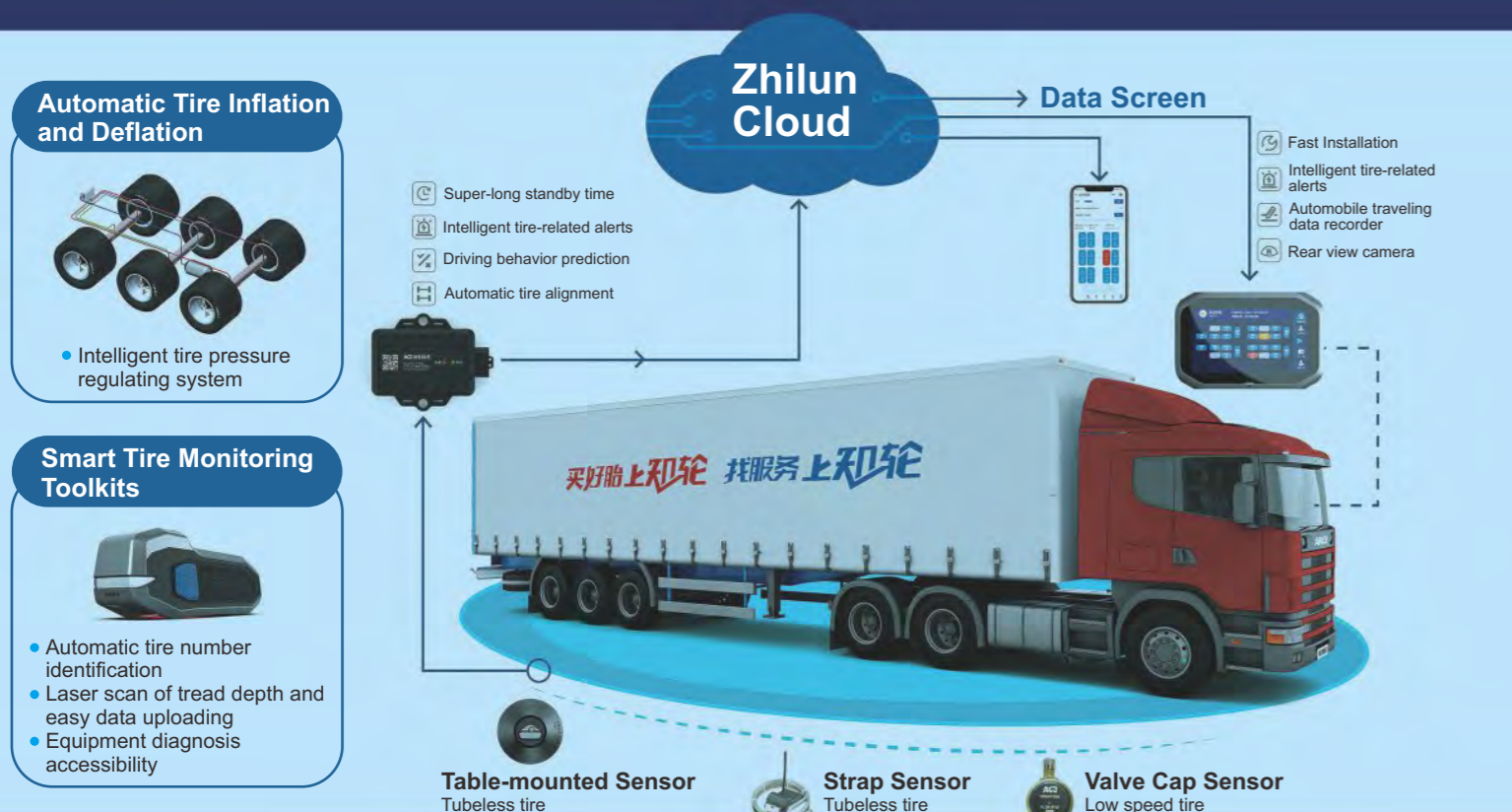
thousands of wheel positions. Once the tires have issues such as high temperature, improper tire pressure, and air leakage, the VITS system will provide accurate alerts so service can be deployed in needed.” said Su.

Professional Fleet Tire Management Program

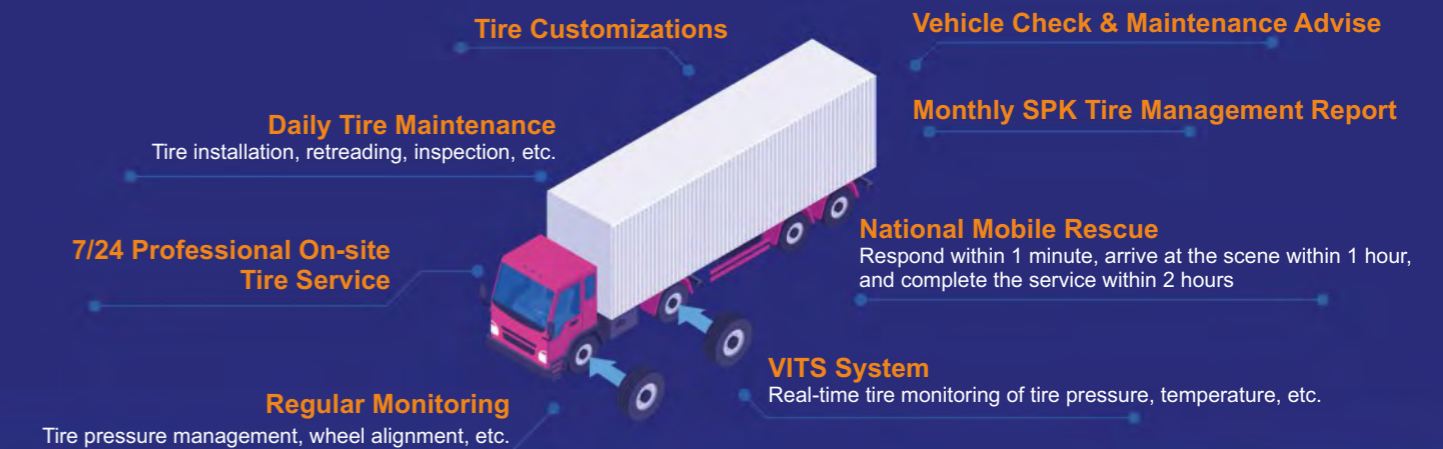
ZC Rubber, together with its strategic partner Zhilun Technology, has launched the Smart Rent SPK (SPK: Save Per Km) service package based on CPK (CPK: Cost Per Kilometer) and PPK (PPK: Price Per Kilometer) for large-sized and medium-sized fleets in all logistics scenarios.

Smart Rent SPK is a professional tire management program including services like tire customization, daily maintenance, 7/24 on-site service, regular monitoring, tire management reports, mobile rescue service and VITS system. The customizable offerings will keep fleets informed and proactively service any issues. The program can help the fleet save more than 1% of overall transportation costs, reduce tire failure by more than 90%, reduce vehicle accidents by more than 30%, and enhance rescue efficiency by more than 50%.

With over 100 operation centers, over 7,500 chain stores and service stations, over 15,000 alliance service providers, and 8,000 licensed rescue service cars, ZC Rubber has created a comprehensive commercial tire service network in China. In the future, this tire servicing program will be expanded to provide improved products and services to global partners and assist local markets around the world.



Smart Rent SPK Tire Service Program (SPK: Save Per Km)





24.5 Liters per 100 Kilometers

ZC Rubber Achieves Excellent Results in “Run, Truckers” FAW Jiefang TCO Challenge

The final round of the 15-day “Run, Truckers” FAW Jiefang TCO Challenge was successfully held in Guangxi, China.

TCO, or Total Cost of Ownership, has become a popular term. TCO in the commercial vehicle industry refers to all costs associated with the vehicle itself, including initial purchase costs, sales, end-of-life disposal expenses, and pretty much everything in between, including fuel consumption and maintenance costs. As a result, fuel consumption and mileage performance were of particular interest at this event.

In this competition, FAW Jiefang chose the J6H high-end model, fitted with the ZC Rubber’s high-end fuel-saving tire AS578 in an all-wheel-drive configuration. With a total mileage of over 10,000 kilometers, the three racing vehicles traveled along Qingdao, Shanghai, Zhejiang, Fujian, and Guangdong before meeting up at Zunyi.

Triumphs in Fuel Efficiency Testing: 24.5 Liters per 100 Kilometers

All the racing vehicles equipped with ZC Rubber tires completed the competition, and the ZC Rubber Empower Team finished the entire competition with outstanding performance and results.

According to the competition results, the AS578’s best fuel consumption performance was 24.5 liters per 100 kilometers, far better than similar tires in the market. When installed on a regular heavy vehicle in an all-wheel-drive configuration with a standard load and driven on the highway, AS578 can consume 50% less fuel than some first-tier tires, saving up to 10 liters per 100 kilometers.

Success in Original Equipment Market

Such exceptional performance comes from years of research and development by ZC Rubber. Based on the

latest PSCT Pre-strain Contour Theory, AS578 has accomplished a triple performance breakthrough in mileage, safety, and fuel efficiency. It has been chosen as the original equipment tires for FAW Jiefang high-end J6H models.

Over the years, ZC Rubber’s brands and products have always been highly recognized by the market and users for their excellent quality and performance. Our tires are also being acknowledged by a growing number of high-end commercial vehicle OEMs due to the superiority of the tire design and production process.

ZC Rubber will continue to focus on developing high-quality tires and technological innovation based on market segmentation needs in the future. We’ll keep growing and iterating to provide automobile owners and logistics fleets with a better experience and a more cost-effective product solution.





David Valero Won the Bronze Medal at Tokyo Olympics with CHAOYANG Phantom Tires

On July 26, 2021, Mr. David Valero Serrano from team Spain's BH Tempo cafés UCC won the bronze medal in the men's cross-country mountain bike race with CHAOYANG Phantom Tires in Tokyo Olympics.

The BH Tempo cafés UCC team is a well-known local team in Spain. ZC Rubber (brand CHAOYANG) has cooperated with them since 2019. There are now four riders in the team, Carlos Coloma Nicolás (team Captain, 3rd place in Men's cross-country at Olympic Games 2016), David Valero Serrano (1st place at National XC Championships 2021), Rocío García and Pablo Rodríguez.

CHAOYANG is one of ZC Rubber's tire brands with international influence. It will continue a long-term partnership with BH Tempo cafés UCC team. For sure, the team will use CHAOYANG tires officially for further international World Cup seasons and important national circuits as well.



David Valero Won the Bronze Medal at Tokyo Olympics with CHAOYANG Phantom Tires

Online VR Showroom for WESTLAKE, GOODRIDE and ARISUN Websites



ZC Rubber Launched an online VR Showroom for the official websites of its tire brands WESTLAKE, GOODRIDE, and ARISUN, bringing a new virtual and immersive online experience with more than 50 of its best tire products.

The immersive, 360-degree VR experience allows users to experience each virtual tire up close. By moving forward and zooming around, users can explore tire details from different angles to get a real sense of the tire, along with specs highlighting the unique features. Additionally, users can also learn more through introduction videos and product descriptions.

The VR Showroom exhibits three types of tires, consumer (PCR/LTR) tires, commercial truck (TBR) tires, and OTR tires displayed in series according to different scenarios.

Users can also experience the history and culture of ZC Rubber while immersing themselves in a virtual company

headquarters building.

"We are thrilled to create a highly engaging online tire tour for users around the world to see and learn more about our tires in an easier way safe at home. This VR Showroom allows us to interact with our customers and end-users like never before." ZC Rubber said. "We are also thinking about bringing our smart factory to the public through VR in the future."

Access our VR Showroom under the SUPPORT & SERVICE category of the following official websites. They are available for smartphones, tablets, and PCs.

WESTLAKE: www.westlaketyre.com

GOODRIDE: www.goodridetire.com

ARISUN: www.arisuntires.com

WESTLAKE Tire Launches New Global Website



ZC Rubber Highlights at SEMA 2021

ZC Rubber attended the SEMA 2021 with brands ARISUN, WESTLAKE, and GOODRIDE. The company also unveiled the new ARISUN passenger car tires and Generation II commercial truck tires.

The ARISUN brand debuted its first two passenger car tire lineups, AGGRESSOR for cars and ARESTA for SUVs. It also launched the Generation II commercial truck tires, AS600+, AZ692 and AD739, which featured improved mileage, excellent handling, and superb fuel efficiency.



WESTLAKE Tire launches its newly redesigned global website www.westlaketyre.com. The new website, featuring a more intuitive and responsive user interface, is optimized for various digital devices such as PC, smartphones, and tablets.

Through the new website, visitors can access a variety of information on WESTLAKE Tire, such as its products, services, news, corporate information, and VR showroom. The simplified layout will deliver an easy-to-read experience.

"WESTLAKE Tire is always committed to providing customers with a better quality of service, and we are striving to get closer with them through a digital way. We will continue to support and interact with our customers via our online customer service system, social media channels, as well as the new website", Stated the WESTLAKE Tire brand owner ZC Rubber.

For more details on WESTLAKE Tire's new website, please visit www.westlaketyre.com



WESTLAKE Tire at Trucker Trucking Festival in Sweden

WESTLAKE Tire exhibited at the Trucker Trucking Festival in Mantorp Park, Sweden, from October 8th to 9th, 2021. Safe Cargo, the local WESTLAKE Tire dealer presented a comprehensive range of WESTLAKE truck and bus tires, including WDS1 and WTS1, specially designed for winter applications with new technologies.

"It's fun to represent an excellent tire brand and also see the brand has gained a lot of interest from visitors." said the representative from Safe Cargo, "The WESTLAKE brand has grown considerably in Nordic areas in recent years as a result of its excellent cost per mile performance. We are proud to provide these reliable products and services for customers."

WESTLAKE Tire is committed to developing products that will bring greater value and safety to the fleets and enable the continued success of its dealers.



EICMA Show in Italy

ZC RUBBER showed a total of 18 ARISUN ATV tires and CHAOYANG motorcycle tires during the EICMA show 2021. The EICMA Show, organized by the country's National Association of Bicycles Motorcycles and Accessories, has been an important event in the motorcycle calendar in Italy for over a century to attract over half a million motorcycle enthusiasts from all over the world.





Racing & Sponsorship



ZC Rubber has sponsored several series of drifts, motorcycle races, road rallies, etc. in the year 2021 in different countries to further improve its brand awareness.



Formula Drift Japan



Cebu Drift Championship



Malaysia Drift Events



British Drift Championship



NDC Norwegian Drift Championship



Drift Masters European Championship



Shell Helix FIA F4 Chinese Championship



SMA International Drift Grand Prix



Ningbo International Speedpark Festival



CHAOYANG Mountain Bike Challenge in Brazil

CHAOYANG Mountain Bike Challenge is a mountain bike event for practitioners from beginners to professionals. In 2021, CHAOYANG has sponsored Mountain Bike Challenge to hold four stages in the city Camboriú-SC, Nova Trento, Orleans and Garopaba separately. Each stage attracted more than 600 athletes to participate in.



Events from Brazil



Jalapao Rally

- 1st UTV1 - Gabriel Varela
- 4th General - Gabriel Varela
- 5th UTV Over Pro - Reinaldo Varela

RN1500 Rally

- 1st General - Bruno Varela
- 1st UTV1 - Bruno Varela
- 1st UTV Over Pro - Reinaldo Varela
- 2nd General - Reinaldo Varela

Cuesta Rally

- 1st General - Rodrigo Varela
- 1st UTV1 - Rodrigo Varela

Serra Azul Rally

- 1st General - Bruno Varela
- 1st UTV1 - Bruno Varela
- 2nd General - Rodrigo Varela
- 2nd UTV1 - Rodrigo Varela
- 1st UTV Over Pro - Reinaldo Varela

Rota SC Rally

- 1st General - Rodrigo Varela
- 1st UTV1 - Rodrigo Varela

Poeira Rally

- 1st General - Rodrigo Varela
- 1st UTV1 - Rodrigo Varela

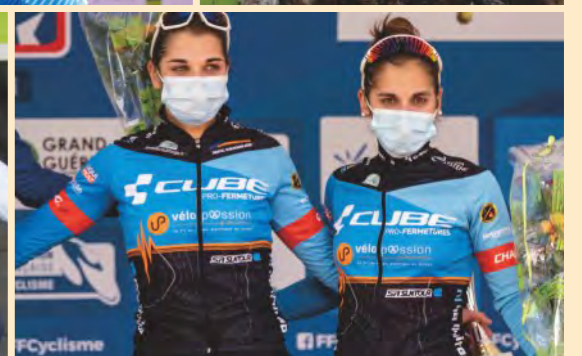
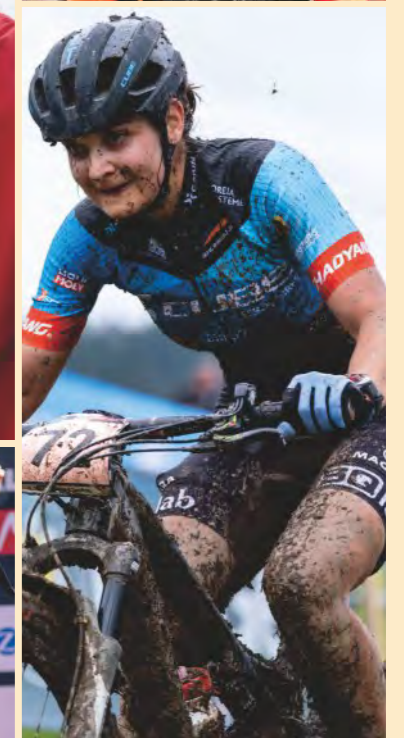
Rodrigo Varela is Brazilian Champion of Rally Baja 2021



2021 Was the Most Successful Season Ever for CHAOYANG Phantom Series



Bronze medal at the Olympic game in Tokyo
World Champion title in Eliminator
European Champion title in Marathon
3 medals at World and European Championships
3 World Cup wins
13 National Champion titles
8 medals at National Championships
24 victories at UCI races
60 podiums at UCI races



Teams and Riders



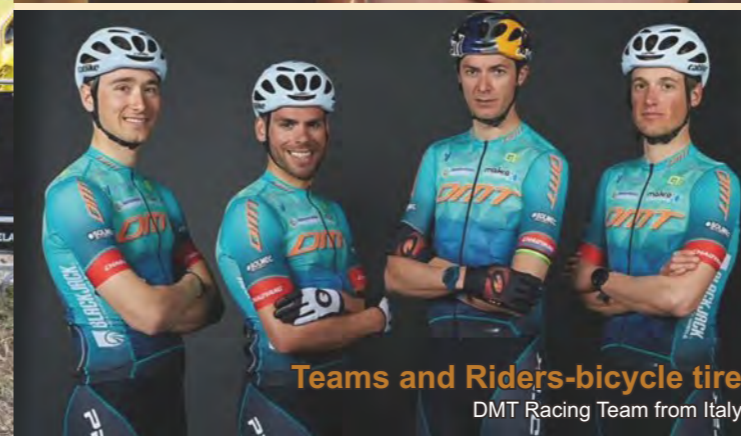
Team-ATV tire
Varela Canam Monster Team from Brazil



Teams and Riders-bicycle tire
The MTB Racing Team from Germany



Teams and Riders-bicycle tire
Four ES Racing Team from Italy



Teams and Riders-bicycle tire
DMT Racing Team from Italy



Teams and Riders-bicycle tire
@oldwurst power team from Austria



Teams and Riders-bicycle tire
Jb Brunex Superior Factory Racing from Swiss



Teams and Riders-bicycle tire
BH Tempo cafés UCC from Spain



Teams and Riders-bicycle tire
Austrian National Team



Teams and Riders-bicycle tire
Peter Kaiser from Austria



Teams and Riders-bicycle tire
Stefano Dolfin from Italy



Teams and Riders-bicycle tire
Team Cube Profermetures Sefic from France



Teams and Riders-bicycle tire
Team herzlichst Zypern from Germany

ZC Rubber Focuses on Innovation and Growth at Global Online Dealer Conference

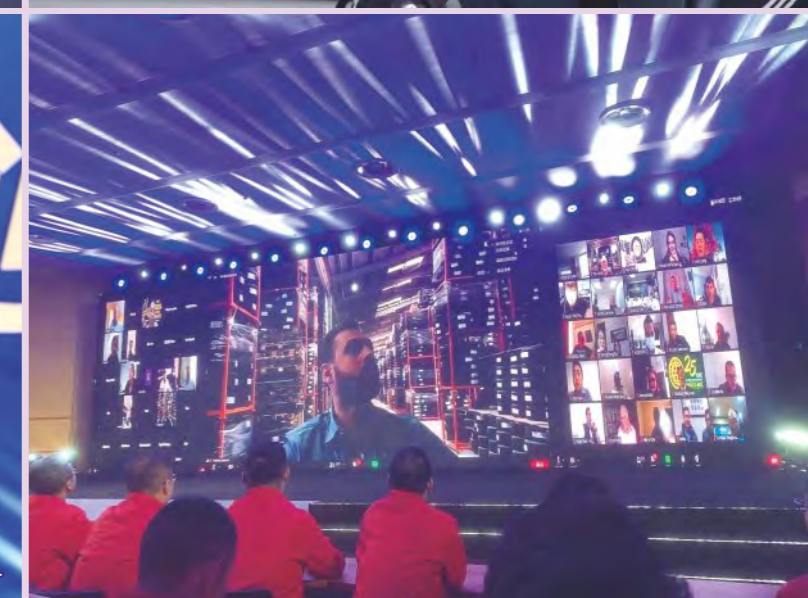
ZC Rubber hosted its first Global Online Dealer Conference with the theme "Innovate into The Great Future." The conference gave a series of speeches outlining the company's strategic vision and plans for continued growth and introduced its latest products, technologies, and services to provide distributors and customers with resourceful information for better collaboration in the future.



Mr. Shen Jinrong, Chairman of ZC Rubber



Mr. Ge Guorong, Vice President of ZC Rubber



ZC Rubber Charity: We Want a Better Shared Future for the Society

ZC Rubber has always been committed to giving back to the community and creating value for society by supporting various groups. Our charitable donations have been made around the world, focusing on groups of people in need, such as providing financial children with cleft lips, ethnic minorities, left-behind children, etc. In 2021, we continued to work on issues related to youth empowerment and local community engagement during the global COVID-19 crisis.

Xinjiang Charity Tour to Help School Children

In May 2021, ZC Rubber teamed up with local distributors to launch a two-day Charity Tour in Xinjiang. ZC Rubber's volunteer team visited Jiangbulake Village School in Yumin County and Kostik Town Boarding Central Primary School in Burqin County. With blessings and warmth, the team started out from Urumqi to donate shoes, schoolbags,

computers, teaching facilities, and other daily necessities to the students. They also visited the school campus to learn about the students' living situations and studies and encouraged them to overcome challenges, study hard, and face life with optimism.



Food Donation to Local Thais during COVID-19



ZC Rubber Thailand organized a charity initiative that brought together more than a dozen caring local Chinese businesses to raise a total of 250,000 baht. The fund was used to buy rice, water, drink, instant noodles, and other supplies distributed to local Thais to help them cope with the COVID-19 pandemic.

ZC Rubber has a long history of social responsibility and philanthropic contributions as a leading Chinese tire

manufacturer. Each of our actions is aimed to provide practical assistance as well as spiritual care to those in need so that they can experience the love and support of a large social family. ZC Rubber will continue to inspire a better quality of life in the future by providing long-term, sustainable support and contributing to public welfare initiatives and social development.

Challenge the Desert

ZC Rubber Dealer Trip

Nothing invokes the romance of adventure like driving across the desert. In 2021, ZC Rubber's dealer team took desert trips both at home and abroad.

Silk Road Trip, an Off-Road Adventure in Northwest China

The ZC Rubber Dealer Team embarked on a four-day journey across Lanzhou, Wuwei, Zhangye, Jiayuguan and Dunhuang along the Silk Road in northwest China. This journey was full of thrilling experiences. Despite the presence of towering mountains, roaring rivers, vast plains, and harsh deserts, they were never discouraged.

"Catching chances and facing challenges straight on is

the core spirit of our ZC Rubber dealer team. We'll keep moving forward with ZC Rubber to create a better future," stated the dealer team leader.

Moreover, throughout the trip, all of their vehicles were equipped with ZC Rubber's latest flagship tires, which proved exceptional off-road prowess on a range of terrains.



Crossing the Simpson Desert with GOODRIDE Australia

In June 2021, GOODRIDE Australian Team, a group of 14 people, drove across the Simpson Desert in Australia, the world's largest parallel dune desert. It took 15 days to travel from Sydney to Perth and six days to cross the Simpson Desert. In the desert, they marched west from Birdsville, past Poeppel Corner, and finally reached Dalhousie Springs, about 700 kilometers across.

"The GOODRIDE Tire brand celebrated 20 years of development in Australia since 2000. We are proud to continue our journey across the desert delayed by the COVID-19 pandemic and to resume it this year as our new starting point," said Jason Sun, General Manager of HRB Pacific, the GOODRIDE Tire distributor in the Greater Sydney Area.

There were seven cars on this trip, six of which were wrapped with GOODRIDE SL386, and one was GOODRIDE SL366. GOODRIDE Mud Legend Series SL386 and SL366 were professional off-road tires designed to provide excellent handling, extra traction, and superior braking performance for safe and reliable driving on tough roads such as mud and sand.

"Desert driving is very demanding for tires, and we thought this was also a great opportunity to demonstrate the off-road capability of GOODRIDE Tires. And through our own experience, we'd like to show a wider audience that GOODRIDE is a brand that offers exceptional quality and value," said Jason.



ZCfamily
ZHONGCE Club 2022 中策家苑



ZHONGCE RUBBER GROUP CO., LTD.

www.zc-rubber.com