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NOVEMBER 05-07,2024



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RAY FU ENTERPRISE CO., LTD.

Tightening Up on Sustainability: Ray Fu's Versatile Screws



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Huang Chi-ming

With over 23 years of experience, Ray Fu Enterprise has established itself as a leading manufacturer and exporter of screws, wires, and fasteners from Taiwan. The company is renowned for its high-quality screw products, which are supplied to customers worldwide. Ray Fu offers a comprehensive onestop screw production service, encompassing everything from wire materials and screw manufacturing to heat treatment, surface treatment, packaging, and export. Their diverse and customizable product range serves various industries, including construction, automotive, and

aerospace, providing multiple solutions to meet customer needs.

Equipped with multi-station manufacturing lines capable of producing products from M4 to M12 with lengths up to 150mm, Ray Fu is expanding its range of automotive products. Certified under the IATF16949 quality system, the company boasts a professional R&D department and a TAF-certified quality testing laboratory, enabling the design of specialized products and tailored solutions for customers. Ray Fu is well-regarded in markets across Europe, the U.S., Australia, New Zealand, Japan, and the Middle East for its stable and efficient manufacturing services.

Ray Fu is dedicated to fostering sustainable transformation across multiple sectors, including green building, green energy industries, and electric vehicles. The company's greenhouse gas inventory report has secured ISO 14064-1 verification, and energy monitoring systems have been installed in their factory areas. By analyzing energy data and integrating power consumption, Ray Fu can efficiently adjust equipment energy use, minimizing waste in the production process. Additionally, the company actively promotes digital transformation within its factory areas. Consequently, in response to the EU CBAM requirements, Ray Fu could assist customers in providing complete declaration information.

Looking ahead, Ray Fu will continue to deliver high-quality products and services, expanding its product range to meet the evolving needs of its customers.



Ray Fu, an IATF 16949-certified manufacturer, is highly regarded by buyers for the exceptional production quality of its automotive screws. (Photo courtesy of Ray Fu Enterprise)



Modern vehicles now prioritize fuel and power optimization while incorporating active safety features and AI technology to enhance driving safety. (Photo courtesy of CENS)

TAIWAN SHIFTS GEARS INTO SMART CAR SOFTWARE REVOLUTION

Andrew Hsu

As the global vehicle industry shifts towards software-based development, Taiwan is poised to play a pivotal role in the burgeoning smart software-defined vehicle (SDV) sector. This is largely due to Taiwan's robust integration of artificial intelligence (A1) and semiconductor industries, combined with extensive driving context data.

Modern vehicles now prioritize fuel and power optimization while incorporating active safety features and AI technology to enhance driving safety. The future of automotive control is transitioning from hardware-centric to software-centric systems, focusing on DCU and ZCU. This shift, known as the Software-Defined Vehicle (SDV) model, allows smart vehicles to develop versatile applications similar to smartphones.

Advancements in AI recognition software, integrated with automotive sensor modules, are key to next-generation intelligent driving safety products. These systems significantly improve the detection of objects related to vehicle and pedestrian safety. Supported by the Department of Industrial Technology, Ministry of Economic Affairs, the Institute for Information Industry (III) has spearheaded the development of the "Formosa Dataset" for smart driving and autotronics. This comprehensive AI database encompasses over 100,000 kilometers of driving data from across Taiwan, featuring various AI sensing data types including images, radar, LiDAR, and thermal imaging.

Additionally, III is pioneering DriveGPT Intelligent Driving Perception Technology, leveraging the multimodal big data of the Formosa Dataset. This technology aims to generate previously hard-tocollect dangerous driving and crash data, enhancing sensing capabilities and enabling intelligent judgments and decisions. DriveGPT promises to improve driving safety and adaptability, marking a significant step forward in the intelligent driving and autotronics industry.





Z3F-1, No. 366, Bo-Ai 2nd Road, Tso Ying District, Kaohsiung 81358, Taiwan TEL : +886-7-556-0180 | FAX : +886-7-556-0174 export@ray-fu.com | www.ray-fu.com



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TAIWAN AUTOMOTIVE EXPRESS • 3

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STAND TOOLS ENTERPRISE CO., LTD.

STAND TOOLS' OLED Digital Torque Wrench: 2024's Game-Changers

Ralph Yang

Founded in 1988 in Taiwan, STAND TOOLS has established itself as a resilient entity through perseverance, training, proactive measures, a commitment to guality, and continuous research and development (R&D). Despite limited resources, STAND TOOLS has steadily progressed, propelled by the swift introduction of new products to the market and the dedicated efforts of its staff and researchers.

In 1996, facing the challenges posed by the devaluation of the New Taiwan Dollar, STAND TOOLS made a strategic move to relocate and expand its factory. This decision aimed at enhancing manufacturing efficiency, increasing output, and creating an improved working environment.

It can be said that this strategic step contributed significantly to the remarkable achievements of STAND TOOLS throughout the decade. Despite economic challenges, the company not only weathered

the downturn but also maintained consistent sales growth. The establishment of a new 6,000-squarefoot factory played a pivotal role, empowering STAND TOOLS to elevate product quality, expand capacity, and provide enhanced services.

Nowadays, amidst escalating competition in the hand tool market and the swift advancements in transportation and technology, STAND TOOLS has ventured into international business. In line with this expansion, STAND TOOLS standardized its production procedures, obtaining ISO 9001 approval in March 1999. This move has endowed STAND TOOLS with a competitive edge over other manufacturers and trading companies.

In late 2024, STAND TOOLS unveils one groundbreaking products. STAND TOOLS introduces the "OLED Display Digital Torque Wrench with Angle Measuring Function." This wrench breaks the boundaries of previous digital torque wrenches, uses an OLED display, and successfully combines "compactness" and "sensitivity" in a digital torque wrench. The OLED display provides a clearer numerical display than ever before, and also takes the first step towards graphicalization. The multifunctional and advanced built-in functions can meet any work situation that professional users may encounter, such as the wrench can be adjusted in length through

software to measure new torgue values, or through the Screw Counting function to remember how many screws have been locked. Last but not least, the aluminum alloy color shell is used for the first time, making the entire wrench more attractive and lightweight, but also full of durability.

STAND TOOLS' " OLED Display Digital Torque Wrench with Angle Measuring Function". Professional users not only pursue precision in tightening screws, but also a better user experience.



OLED Digital Torque Screwdriver & OLED Digital Torque Wrench. (Photo provided by STAND TOOLS)

Electric Vehicles Spark New Opportunities for Taiwan's Auto Industry



Andrew Hsu

Traditional auto parts manufacturers have long faced challenges in penetrating the vast and established automotive industry. However, Taiwanese manufacturers have earned a strong reputation in the automotive aftermarket for their cost-effectiveness, high-quality standards, and ability to produce low-volume, diversified products. As the industry undergoes a paradigm shift with the rise of electric vehicles and automotive electronics, new opportunities may emerge for Taiwanese companies to break into the global market.

Taiwanese manufacturers have earned a strong reputation in the automotive aftermarket for their costeffectiveness, high-quality standards, and ability to produce low-volume, diversified products. (Photo provided by CENS)

The United States, the world's largest automotive aftermarket, boasts a nearly 90% automobile insurance rate. For aftermarket (AM) parts, the Certified Automotive Parts Association (CAPA) has established verification standards, which many Taiwanese manufacturers have successfully met. This has bolstered Taiwan's performance in the AM auto parts sector. However, a significant hurdle for many Taiwanese manufacturers remains entering the international supply chain-a process often hampered by the extensive certification timeline required for automotive parts, which can range from two to three years, and sometimes extend up to ten years. Given that most auto parts

producers in Taiwan are small to medium-sized enterprises, the costs associated with lengthy certification processes are prohibitive.

The emergence of electric vehicles, however, is reshaping the auto parts market. Newer entrants like Tesla and NIO, which have roots in technology rather than traditional automotive manufacturing, present a different landscape. The certification process for components in these new systems is often significantly shorter, sometimes taking just a few months. As these companies have yet to fully develop their industrial systems, they offer Taiwanese manufacturers a unique window of opportunity to integrate into the global supply chain more rapidly.



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A-KRAFT TOOLS MANUFACTURING CO., LTD.

A-KRAFT Tools: Crafting Success with Precision and Innovation

Alex Lee

Established in 1988 in Taichung, Taiwan, A-KRAFT Tools Manufacturing Co., Ltd. is a quality-oriented company with ISO 9001:2015 certification. Serving as a professional and trustworthy partner in the tool world, A-KRAFT boasts a robust in-house R&D team, ensuring the launch of new products at least twice each year.

A-KRAFT employs a rigorous quality control system, maintaining precision and consistency in product design. With a forward-thinking marketing and sales team, the company provides clients with top-tier quality service that

consistently exceeds expectations.

Meeting the diverse needs of clients and showcasing market competitiveness while understanding global demand trends, the company primarily provides 1/4", 3/8", 1/2",3/4", and 1" DR sockets, screwdriver sockets, ratchet handles, accessories, and various types of wrenches for the repair and maintenance of cars, trucks, and similarsized machines. All products adhere to DIN and ANSI standards.

The A-KRAFT manufacturing facility. (Photo courtesy of A-KRAFT)

lemand trends, the company t", 3/8", 1/2",3/4", and 1" DR sockets, ratchet handles, us types of wrenches for the e of cars, trucks, and similarroducts adhere to DIN and facturing facility. A-KRAFT)

TAIWAN'S AUTO PARTS INDUSTRY TAKES CENTER STAGE AT AAPEX 2024

∽ ■ Andrew Hsu

As one of the world's top three automotive aftermarket exhibitions, where over \$1.8 trillion of the global automotive aftermarket industry converges, AAPEX 2024, taking place from Tuesday, November 5th to Thursday, November 7th, is the must-attend event for professionals in the sector. This year's edition spotlights the latest innovations and trends, ensuring attendees and their businesses thrive in this evolving industry landscape.



At AAPEX 2023, the dedicated team from Economic Daily News/CENS was actively distributing their professional trade magazines. (Photo courtesy of CENS)

According to the organizers, AAPEX 2024 has announced that the show floor will be bustling with product and technology displays from over 2,500 exhibiting companies, spanning nearly 5,500 booths. The new expansion into Caesars Forum this year offers attendees even greater opportunities to explore a wide array of products from more exhibitors. The exhibits for this year encompass over 1,000 items, ranging from various auto parts, airconditioning system components, and car audio to security fittings, electronic elements, storage batteries, safety belts, motor brake clutches, body parts, cooling system components, chassis parts, suspension systems, transmission system parts, steering system parts, and transmission components.

To foster business growth, attendees can explore new sections on the show floor dedicated to electric vehicles (EVs), advanced driver assistance systems (ADAS), and sustainability in the aftermarket. These areas will feature companies showcasing the latest EV advancements, providing comprehensive access to cutting-edge products and specialized expertise for this rapidly expanding market. Sessions led by industry-leading experts in EV technology will offer visitors the essential training needed to excel in an electric and hybrid future.

Economic Daily News/CENS is seizing this great opportunity to promote Taiwan's top-notch auto parts suppliers. For the show, CENS has curated the "Taiwan Pavilion" at the newly expanded Caesars Forum, featuring a distinguished lineup of 86 high-caliber suppliers occupying a total of 112 booths. This pavilion aims to showcase the cutting-edge technological advancements and innovative products that Taiwanese suppliers bring to the global stage.

Moreover, CENS maintains a booth at C52021, distributing the AAPEX 2024 Show Express and professional trade magazines, including the latest editions of the Taiwan Transportation Equipment Guide (TTG) and Taiwan Hand Tools, along with a portable USB version. These publications offer insights into industry trends and highlights from prominent exhibitions, featuring wellrecognized Taiwanese suppliers and their high-quality products. Additionally, real-time business matchmaking services are available during the exhibition, enabling professional buyers to connect with suitable Taiwanese suppliers, even those not physically present at the fair.





Green Wheels Drive Taiwan's Public Transit Transformation

Taiwan has made significant strides in the electrification of its public transportation system, with electric bus services now widely available across the country. Currently, nearly 1,900 electric buses are in operation, and the push for low-carbon green freight transportation has garnered the attention and investment of major players like TSMC and the logistics industry.

To achieve the National Development Council's ambitious targets—complete electrification of municipal buses by 2030

and a 100% market share for electric vehicles by 2040—the Ministry of Economic Affairs (MOEA) is working closely with industry stakeholders. Key initiatives include the localization of electric bus production, demonstration trials for electric logistics vehicles, and efforts to establish local production of electric passenger cars. These efforts aim to create a cleaner living environment for the public and offer a sustainable, low-carbon transportation option for industries.

Electric buses offer numerous benefits, including stability, low noise, zero emissions, and high reliability. They are also equipped with advanced driver assistance systems (ADAS), enhancing safety and providing a high-quality, eco-friendly transportation service that encourages more people to use public transit. Since 2020, the Ministry of Transportation and Communications, in collaboration with MOEA, has been actively promoting the adoption of electric buses. Thanks to these efforts, 50 domestic coach companies have integrated electric buses into their fleets, increasing the number of electric buses from just over 100 a decade ago to nearly 1,900 today.



Electric buses offer numerous benefits, including stability, low noise, zero emissions, and high reliability. (Photo courtesy of United Daily News Group)

FAITH Drives Taiwan's Smart Car Revolution

Andrew Hsu

In recent years, the automotive industry has been increasingly shaped by the trends of Connected, Autonomous, Shared, and Electric (CASE) vehicles, with security and intelligent vehicle development becoming critical focal points. In response to these industry shifts, the Institute for Information Industry (III) has established



FAITH was founded by III's Software Technology Institute, leveraging years of expertise in information and communication technologies. (Photo courtesy of CENS)

the Formosa Automobility Intelligence Trustworthy Hub (FAITH).

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FAITH, supported by over 40 industry and academic experts—including those from the Taiwan Electrical and Electronic Manufacturers' Association (TEEMA) Electric Vehicle Committee, Taiwan Telematics Industry Association (TTIA), Taiwan Advanced Automotive Technology Development Association (TADA), and Taiwan Electric Vehicle Industry Alliance aims to deliver comprehensive smart vehicle software safety assessments. The initiative seeks to build a robust smart vehicle ecosystem in Taiwan that aligns with international standards, driving the nation's industrial development forward.

Dr. CH Cho, President of III, emphasized the growing application of AI, sensors, and intelligent information and communication technologies in the automotive sector.

As vehicles increasingly rely on these advanced systems, there is a pressing need to not only comply with international automotive regulations but also to optimize regional assessments that ensure the reliability and safety of mobile products. To address these needs, FAITH was founded by III's Software Technology Institute, leveraging years of expertise in information and communication technologies. This includes the development of the Formosa dataset, the world's first 5G satellite-based private network system, a disaster prevention and relief firmware network system, and a security assessment framework that adheres to international standards.

FAITH aims to create, through an independent third-party organization, the necessary assessment mechanisms and scenarios for "AI awareness," "firmware communication," and "information security." These frameworks will serve as a foundational element in developing future mobile security environments, addressing critical gaps in industry standards, regulatory demands, security services, and technical consulting.

Dr. Henry Meng, Senior Vice President and Director General of III's Software Technology Institute, highlighted that FAITH evaluates vehicle AI recognition performance, data leakage risks, and firmware communication mechanisms, as well as information security and threat resistance. These three key indicators are applied across the entire industry chain, from chips and modules to systems, Tier 1 suppliers, and automotive manufacturers. This comprehensive approach will enhance mobile AI sensing capabilities, reduce security vulnerabilities in vehicle and drone networks, and effectively counter international cybersecurity threats, positioning Taiwan's intelligent vehicle industry for a prosperous future.





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 Equip Auto Algeria
- 西非汽配展 2025.05.13 05.15 WAAS
- 墨西哥汽車零配件展 2025.07.16 07.18 INA PAACE Automechanika Mexico
- 韓國汽車工業及配件展 2025.10 Auto Salon Week
- 美國汽車售後服務暨零配件展 2025.11.04 11.06 AAPEX
- 美國改裝車零配件展 2025.11.04 11.07 SEMA
- 泰國汽車零配件展 2025.04.03 04.05 TAPA
- 法國巴黎汽配展 2025.10.14 10.18 Equip Auto

建材五金 Building Materials & Hardware

- 全美五金展 2025.03.18 03.20 National Hardware Show
- ▲ 日本建築建材展 2025.03.04 03.07 Architecture+Construction Materials
- 西班牙畢爾包工具機展 2025.06.03 06.05 Industry Tools by FERROFORMA

照明燈飾 Lighting

- 香港春季燈飾展 2025.04.06 04.09 H.K. Lighting Fair (Spring Edition)
- 香港秋季燈飾展 2025.10.27 10.30 H.K. Lighting Fair (Autumn Edition)
- ▲ 香港戶外及科技照明博覽 2025.10 H.K. Outdoor and Tech Light Expo

綜合精選展覽

Comprehensive Selected Show

- 日本商店設備展 2025.03.04 03.07 Japan Shop
- 香港春季電子產品展 2025.04.13 04.16 H.K. Electronics Fair (Spring Edition)
- 香港時裝節 2025.04.27 04.30 Fashion InStyle
- 香港印刷及包裝展 2025.04.27 04.30 H.K. Printing & Packaging Fair
- 【香港國際時尚匯展 2025.09 CENTRESTAGE
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- 亞洲時尚生活產品展 2025.07.16 07.18 Mega Show Bangkok

SHUENN CHANG FA ENTERPRISE CO., LTD.

SCF's Sustainable Screws: A Solution for a Greener Tomorrow

Huang Chi-ming

Renowned for its production of high-quality longlength screws, Shuenn Chang Fa Enterprise Co., Ltd. (SCF) has been actively addressing a critical issue: CDP-Climate Change. Since 2015, SCF has been assisting customers with their participation in the Carbon Disclosure Project (CDP) focused on Climate Change. In 2022, SCF initiated Carbon Footprint Verification (CFV) with the support of governmentdesignated tutoring units for both scope 1 and scope 2 emissions and acquired ISO 14064-1 in the end of 2023.

Moreover, from 2019 to 2023, SCF saved 226,379 kWh, reducing emissions by 113.606 Ton·CO2e. Initially generating about 2,300-2,800 Ton·CO2e per year, SCF set a goal to reduce power consumption by 1% annually. This was achieved by transitioning forklifts from diesel to electric, utilizing solar power, and implementing



SCF's factory is now equipped with fully installed solar panels, capable of generating 1,500,000 kWh of electricity annually, equivalent to reducing carbon emissions by 750 metric tons of CO2e each year. (Photo provided by SCF)

waste recycling. SCF's commitment to ESG principles allowed them to apply for ISO 14064-1, positioning the company as one of the leading ESG factories in Taiwan. They are now working on ESG compliance that aligns with GRI rules.

Throughout its 40-year history since its inception, the company has maintained a steadfast focus on the production of customized design screws, specialized long screws, and automotive screws. The majority of these screws are manufactured in-house and subjected to rigorous inspection at each stage of the production process. SCF has earned certifications including IATF 16949, ISO 14001, and ISO/ IEC 17025, attesting to its commitment to quality and environmental standards.

Additionally, SCF provides a comprehensive range of customized screws, with lengths spanning from 10mm to 1000mm, offering customers a one-stop solution to meet their diverse needs.

JOLONG MACHINE INDUSTRIAL CO., LTD.

Jolong's Eco-Friendly Lubrication Saves Money and the Planet

Alex Lee

Since 1991, Jolong Machine Industrial Co., Ltd. has been producing top-tier lubrication equipment and automotive and motorcycle repair tools under its own brand name. The company is committed to the principles of quality and exceptional service, continuously investing in research and development to create innovative products that are highly regarded in the industry.

Recently, Jolong introduced its latest breakthrough: a quantitative lubricant distribution system. This innovative system aims to boost cost efficiency, operational effectiveness, and environmental sustainability. Jolong emphasizes that timely and precise lubrication can significantly extend the lifespan of machines and products, reducing the high maintenance costs associated with premature wear and tear. Conversely, over-lubrication can drive up lubricant costs, especially for expensive or long-term-use products.

Moreover, adding lubricating grease often requires halting machinery or vehicles. While moderate lubrication might take a certain amount of time, excessive lubrication can extend this by 10% to 20%, thereby impacting work efficiency. Environmentally, over-lubrication leads to excess



recise an of hance tear. costs, quires erate

lubricant overflow, causing spillage during machine operation and polluting the workplace.

Jolong adheres to a business philosophy centered on quality first, striving for customer satisfaction and continuous improvement of service. Each product undergoes professional testing and data analysis to ensure high-quality, highperformance outcomes and consistent after-sales support. The new quantitative lubricant distribution system offers substantial benefits in terms of cost, efficiency, and environmental protection. Jolong looks forward to collaborating with more companies to enhance equipment performance and work efficiency.

> Jolong's quantitative lubricant distribution system aims to boost cost efficiency, operational effectiveness, and environmental sustainability. (Photo provided by Jolong)







TAIWAN AUTOMOTIVE EXPRESS •

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TAIWAN BRAKE TECHNOLOGY CORP.

TBT's Quality Brake Pads: A Driving Experience Like No Other



Huang Chi-ming

Prioritizing quality over engaging in pricecutting competition, Taiwan Brake Technology Corp. (TBT) specializes in the production of automotive brake friction and linings. With a wide range of molds and major international certifications, the company is dedicated to delivering the most comfortable and noise-free driving experience to drivers worldwide.

Founded in 1986, TBT has consistently maintained its industry leadership by placing a strong emphasis on research and development, particularly in the field of brake pads. According to Daren Wang, the manager of the marketing & sales department at TBT, the company's commitment to adhering to global standards and protecting the environment led to the development of asbestosfree brake pads as early as 1994. In 2015, they

furthered their eco-friendly efforts by introducing the copper-free series. Moreover, in response to the growing prevalence of electric vehicles (EVs), TBT has expedited the development and production of ceramic brake pads.

Due to the inherent noiselessness of EVs, the challenge lies in balancing braking force with minimal noise and preserving driving comfort, a task that may seem to defy the laws of physics. However, TBT's ceramic brake pads, created from a unique formula comprising nearly 20 different raw materials using TBT's exclusive method, provide the optimal solution for brake pad use in electric vehicles.

TBT's major export markets encompass Japan, Europe, North America, and more, spanning business operations across over 60 countries and serving a clientele of over 200 direct customers.



TBT has consistently maintained its industry leadership by placing a strong emphasis on research and development, particularly in the field of brake pads. (Photo courtesy of Andrew Hsu)

Daren underscores the paramount importance of "finding the right customer." Rather than plunging into the saturated Red Sea market, TBT focuses on research and development, aiming to excel in the brake pads sector with distinctive products

and exceptional quality. To achieve this goal, TBT has obtained various major international certifications, including ISO 14001, IATF 16949, ISO 9001, ECE-R90, TÜV, EAC, NSF, AMECA, and others, facilitating seamless connections with the global market.

Advanced Steel Paves the Way for Greener Vehicles

Andrew Hsu

In alignment with the global push toward 2050 carbon neutrality, leading automotive manufacturers are increasingly introducing environmentally friendly and energy-efficient vehicle models. A key focus is on the use of lightweight body materials to reduce energy consumption and carbon emissions, while still ensuring the structural safety of vehicles.

In recent years, Taiwanese auto parts manufacturers

have mastered hot stamping technology, leading to a rise in the use of hot-stamped steels in safety-critical structural components. This trend is particularly evident in the U.S. and Europe, where hot-stamped components now make up about 4% to 15% of a vehicle's structure, reducing vehicle weight by 10 to 30 kilograms.

China Steel Corporation (CSC) has recently developed a new generation of hot-stamping Anti-Oxidation (AO) coated steels for the automotive industry, including the 15B22 and 15B36 products. These steels, after undergoing hot stamping and in-mold quenching, achieve a martensitic structure with a tensile strength exceeding 1470 MPa-three to four times stronger than standard mild steel-while maintaining over 5% elongation. The hightemperature anti-oxidation properties of these steels also eliminate the need for sandblasting or peening, contributing to carbon reduction and enhancing the dimensional accuracy of automotive components. This innovation is poised to drive the automotive industry toward a new era of low-carbon manufacturing.

In recent years, Taiwanese auto parts manufacturers have mastered hot stamping technology. (Photo courtesy of CENS)













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10 • TAIWAN AUTOMOTIVE EXPRESS

UN Fuel Tank Manufacture Co.

Green Energy Meets Vintage Charm at UN Fuel Tank

Dennis Hsiao

Owning over 2,000 molds and comprehensive production equipment, UN Fuel Tank Manufacture Co. offers more than 3,000 products, including fuel tanks, fuel filler pipes, gas tank straps, fuel sending units, and oil pans for engine systems. As a globally competitive supplier and a tier 1 automotive parts provider, all UN Fuel Tank products are manufactured inhouse without subcontracting.

Under the dedicated management of Chairman Chan Yu-Peng and the collective efforts of its staff, UN Fuel Tank has achieved impressive global sales. To enhance product value, the

company has integrated its original brand, LC Fuel Tank Manufacture Co., and now markets under a dualbrand strategy. This approach aims to improve services and product offerings comprehensively.

To meet growing customer demand, UN Fuel Tank has invested in a stateof-the-art 15,424 square-meter factory equipped with advanced automation. This facility, located in Xiluo Futian Industrial Park, Yunlin County, is nearing full capacity. Moreover, to align with the global trend of energy saving and carbon reduction, UN Fuel Tank is committed to environmental protection.

The company has established a green zone within its factory area, planted trees, and installed a solar power generation system capable of producing 497kW of electricity to meet factory demands. This initiative supports carbon neutrality and fosters a friendly working environment in line with international green energy standards.

In recent years, with the rise of electric vehicle sales, a growing interest in owning vintage cars is anticipated. Chairman Chan highlighted that UN Fuel Tank's fuel tank product line is strategically integrated into the vintage car parts supply system through rigorous testing in the automotive aftermarket and feedback from international buyers. Emphasizing craftsmanship, each product is meticulously crafted and subjected to strict manufacturing controls to meet the classic tastes and values of vintage car enthusiasts.

UN Fuel Tank offers a one-stop shopping service and participates in 3-4 international auto parts exhibitions annually, facilitating

Fuel-sending units manufactured by UN Fuel Tank. (Photo provided by UN Fuel Tank)

direct buyer engagement, experience exchange, and technology sharing. This proactive approach enables the company to stay ahead of market trends and be well-prepared for future product developments.

NAN HOANG TRAFFIC INSTRUMENT CO., LTD.

ESG in Motion: NHC's Responsible Braking Solutions

Tzeng Lung-nan

Based in Taiwan, Nan Hoang Traffic Instrument Co., Ltd. (NHC) stands as a leading manufacturer of automotive friction material products with a robust global presence. Under the leadership of Chairman Austin Cheng, NHC has strategically focused its "YangPo" brand on expanding through international distribution channels. The company anticipates substantial growth in the European and Middle Eastern markets this year, reaffirming its commitment to high-quality products and industry leadership.

Chairman Austin Cheng highlighted that certain U.S. states have already started or are planning to implement regulations requiring non-asbestos, low-copper, and non-copper friction materials in component production. As an industry pioneer, NHC has proactively begun

Yang

mass production of these compliant products to secure its position in these emerging markets.

Beyond its business objectives, NHC is deeply committed to Environmental, Social, and Governance (ESG) principles. The company invests heavily in sustainable manufacturing practices, aiming to reduce its environmental footprint through energy-efficient processes and waste-reduction initiatives. NHC also prioritizes social responsibility by fostering a safe and inclusive workplace and actively participating in community development projects. With a robust governance framework, the company ensures transparency, ethical behavior, and accountability across all operations, underscoring its commitment to long-term sustainable growth.

Over its 63-year history, NHC has built a

formidable R&D team with extensive expertise in friction material production. The company has developed key technologies and employs advanced, multifunctional testing equipment for comprehensive physical property testing, analysis, and comparison.

This capability enables NHC to offer a diverse range of friction materials tailored to various industrial, mechanical, and automotive applications. With over 8,000 friction products developed, all

Optimum barking potentials, infinite performance.

Nan Hoang exhibits a wide range of products, offering professional services for international buyers at the AAPEX in the USA. (Photo provided by Nan Hoang)

manufactured in Taiwan, NHC's products meet stringent standards including CNS, SGS, R90, R78, TUV, ROHS, and REACH certifications, ensuring compliance with global OEM, OES, and AM market requirements.







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The New Generation of Ceramic Formulation Technology

The drivers often face to several common problems like noise, dust and brake fade. The new generation of YangPo brake pads solve these problems for you now! You can experience the better braking force without noise, dust to stop your vehicle, keep your wheels clean, and solve every problem when you brake during your drive. YangPo brake pads make everything so easy by its new ceramic formulation technology.

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YangPo's exclusive formula and technology provide a quiet, low dust, low-noise and high-quality driving experience; the perfect braking power enhances driving pleasure, safety and unprecedented comfort. The NHC Group is striving to continue to work hard. It is expected that YangPo's design and elopement capabilities, products and services will be your most satisfying hoice.

TAIWAN FIRST BRAKES TECHNOLOGY CO., LTD

NHC Manufacture NAN HOANG TRAFFIC INSTRUMENT CO., LTD

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<u> IATF16949</u> ISO14001 ISO/IEC17025

Product Features

- Excellent wear resistance.
- ► Low rotor attack/aggressiveness.
- ▶ Stable braking force.
- ▶ Long lasting.
- ▶ No noise & dust.
- ▶ Better performance than OE pad. High heat resistance, the structure is not easily deteriorated.

Application: All cars Material: Ceramic brake pads Maximum Temperature in Disc Testing: over 710°C

