

# TAIPEI CYCLE SHOW DAILY

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# INSIDE:

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PRODUCT HIGHLIGHTS | EMPOWER 20-SPEED GEARBOX

PRODUCT ROUNDUPS: PEDALS LIGHT SUPPORT DRIVE SYSTEMS | DRIVETRAINS | TIRES | LOCKS  
PUMPS & TOOLS | SUSPENSION | GRIPS & BAR TAPES | CHILDREN'S BIKES | DISC BRAKES

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GUIDE TO EVENTS**

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## WHAT'S ON TODAY

EVENT TIME	EVENT NAME	LOCATION
06:00-12:00	TAIPEI CYCLE Ride Together	TBA
09:00-18:00	Outdoor Demo	Outdoor booth at TaiNEX Hall 1
09:00-18:00	OUTDOOR TAIPEI	Outside of TaiNEX Hall 2
09:00-18:00	TAIPEI CYCLE Workshop	Booth# L1306, 4F TaiNEX Hall 1
09:00-18:00	TAIPEI CYCLE Live Studio	Booth# L0128, 4F TaiNEX Hall 1



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*Many technology companies are exhibiting at Taipei Cycle this year, including Thermaltake, a leader in the PC DIY, Case Mod & Gaming Market. The company possesses a bike-friendly culture and a thriving cycling community and in 2021 officially ventured into the bicycle industry, establishing the Thermaltake Bicycle Division. At Taipei Cycle the company is hosting bicycle trainer demonstrations and fashion shows.*

## GRAVEL MADE FAST AND COMFY

In professional bicycle racing, **FSA (M1209)** is well-known thanks to its long-standing and intense cooperation with various World Tour teams. One of the highlights the brand is premiering at Taipei Cycle is aiming at the booming gravel segment, however. True to the brand's DNA it adds some racing pedigree. Since some gravel races in the United States cover distances of up to 200 miles, multiple positions on the handlebar are a must to reduce the stress on wrists, shoulder and bum. This is where the new K-Force Loop AGX handlebar comes in handy.

Weighing in at just 320 grams, this dropbar is built entirely from high-modulus carbon and consists of two parts. The base bar weighs in at 230 grams on its own, and thanks to its generous flare it provides solid control when riding rough stuff in the drops. Its upper cross section is slightly curved to put the wrists in an ergonomically correct position. For long, flat passages into a headwind, the K-Force Loop AGX features aero bars with comfy pads. These weigh 90 grams and can be taken off for transport – or for gravel races that have banned the use of aero bars.

With the Pro Wing AGX, FSA offers a more affordable alloy version weighing 472 grams. Last



**FSA's Vice President Claudio Marra presents the brand's K-Force Loop AGX handlebar.**

but not least, the VAS stem improves riding comfort on unpaved surfaces thanks to a rubber insert on the clamping surface. Available in three durometers, this insert keeps vibrations away from the rider and reduces fatigue.

## ACER BRINGS ACTIVITY TO THE WORKPLACE

With 7500 employees and an annual turnover of over US\$ 9 billion, Acer Inc. is one of the biggest players in Taiwan's tech sector. In 2015, the corporation branched out into the bicycle business with its Xplova sub-brand, known for smart trainers, bicycle computers and micromobility offerings. At Taipei Cycle, **Acer Gadget Inc [K0429]** is a new subsidiary exhibiting its eKinect Bike Desk. You may already know the concept of charging electronic devices by pedal power from airports such as Barcelona or Brussels. But Acer Gadget Inc. is taking this idea to a new level with the eKinect Bike Desk. Designed for offices, hotels and waiting areas of all kinds, this combination of a desk and a workout station weighs just 45 kilograms and can be moved around easily thanks to two wheels built into its base.

For proper ergonomics, the saddle height is adjustable. That goes for the desk itself as well, so you can set the right height to use a keyboard or a tablet. Since many parts of this device are built of recycled plastic and it is partially made in Taiwan, it also ticks the box in terms of sustainability. Given the recent focus on ESG-related criteria and the upcoming CO2 tax in the European Union, this is about much more than just image. First shown at this year's CES in Las Vegas, the eKinect Bike Desk saw a lot of publicity. Acer Gadget plans to bring



**Acer Gadget's product manager Leo Liu and the eKinect Bike Desk.**

it to the market at a retail price of US\$999.

## CELXPERT CHOSEN AS A SUPPLIER TO SPECIALIZED



**Representatives of Celxpert receive the ISO 14067 certification**

**Celxpert Energy Corporation [N0018]** has been producing battery packs since 1997. Yesterday the company received the first-ever ISO 14067 certification for a battery module produced in Taiwan, passing the stringent standard adjudicated by the independent TÜV Rheinland testing service.

The firm is listed on the Taiwan Stock Exchange and is well-known for making lithium-ion batteries for consumer electronics. Recently, it's expanded its business to cover the cycling industry, with e-bike products now accounting for around 10% of its business.

Its proficiency as a supplier to the bicycle industry was further cemented when it was recently chosen as a collaborator by bikemaker Specialized. This endeavour has seen Celxpert provide a custom battery for Specialized's new Haul ST bike. This unique 772Wh IPX7 waterproof unit fits precisely into the bike's rugged frame and is an excellent example of

Celxpert's capabilities.

"We're committed to developing lithium battery modules and providing customers with related design and manufacturing services," explained Chairman Shiming Huang at the show on Thursday. The customer is then free to select cells from various manufacturers, with Celxpert also assisting in packaging and case design.

Alongside its technical expertise, the firm is equally keen to emphasise its green credentials as it looks for new partners who share its values. Commenting on Celxpert's ISO 14067 certification, Jingrong Huang, Celxpert's deputy general manager in charge of greenhouse gas inventory said that "such carbon footprint verification results can be used as the basis for green product development strategies." This increased transparency will appeal to e-bikemakers keen to ensure their supply chains maintain the highest environmental standards.

## FPD BOOSTS COLOUR AND SERVICEABILITY

Component maker **FPD [J0307]** has revitalised its extensive range of pedals with a slew of fresh finishes plus new design options. "People love bold colour and we want to show customers we can provide that," explained Arthur Huang at the company's booth in Taipei.

The firm's striking iridescent electrophoretic deposition coating is an excellent example of this. It joins anodising, painting, and water transfer printing in the firm's arsenal of treatments that can be applied to its vast range of metal-bodied pedals. The firm's many plastic options also benefit from candy-style options, with dyes run through the resins to create either block or swirling colour effects.

As an OEM producer, FPD can collaborate on custom products, or customers can choose from an expanding range of stock models. These have recently been supplemented by models sporting a revised platform design and a new axle configuration. "Usually, the body of the pedal needs to have a cap for assembly and adjustment of the axle," Huang explained, "but the access hole for this can make the body susceptible to damage." FPD's latest design does away with this weak point. Instead of being fixed from outside the pedal, the axle now screws in from beside the crank. This modular cartridge-style system allows users to slot in a fresh bearing and



**FPD's massive range of treatments provides pedals in any colour you desire**



**New axle options make for more robust pedals and easier servicing**

axle assembly with minimal effort. This technology is now available to FPD's customers across several products, including aggressive mountain bike-style pedals with both resin and alloy bodies.



# TAIPEI SHOW N1329

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➡ Controller 36V/48V



➡ Color screen panel



➡ LCD control panel

**VOX POP****HOW HAS THE SHOW BEEN FOR YOU SO FAR?**

We asked visitors and exhibitors their impressions of the first Taipei Cycle after the opening of the borders.



**Thibaud Alran**  
Sales Manager  
Zephyr E-Bike

It's very good to see customers and investors returning again to the Taipei show. It's a really joyful time to welcome back our customers to Taiwan and see them again. We have been talking about and developing our Route Ohlala project for so many years and it's great to have been able to prepare the booth and show our new products.



**Yu Ting**  
Electrical Engineer  
CT Green Tech

It's very exciting. It's the first time CT Green has exhibited at Taipei Cycle. We saw the rising popularity of e-bikes and felt it was the right time to exhibit. We've found that the interest in this sector is not just about the electronics but also about the environmental protection aspect along with the personal health benefits. It's been a great show so far and we're looking forward to keeping our momentum going.



**Simon Wittmann**  
Product Engineer  
Thömus AG

I think a lot of people are back. To be frank, I didn't expect so many people to attend the show this year especially from Europe. I like the size of this show much more than Eurobike. It's more compact and easy to get to appointments, see what you need to see, and generally easier to get things done. It's great to be back and be able to visit our Taiwan suppliers in person.



**Stephen Jack**  
Sales Adviser  
Ibera Co. Ltd.

It's great to be back at the show after four years, great to catch up with old customers because that's always a lot of fun. We weren't quite sure what to expect in terms of numbers but we're surprised as well as very pleased to see people returning to the show in such numbers. It feels like a normal show.



**Gregory Mausbach**  
International Sales  
Sun Synergy  
Technology Co., Ltd.

It's good to be back. We've got to see all of our clients that we haven't seen face to face for so long. But not only them. It's been great to meet new customers not only from Taiwan but around the world. We've had a lot of new interest in our products. People have been waiting to come in and are certainly enthusiastically making the most of it.



**Andreas M. Dammann**  
General Manager  
Palatina Works Co., Ltd.

It's much better than I anticipated. I was expecting way fewer international visitors than this. It was a bottleneck, and I'm really surprised — the bicycle industry's starting again. 2020 and 2021 were really good years. The cancellations of 2022 had me worried but now I'm much more optimistic about the future. No new orders as such right now. But the show has still some way to run and I have plenty of good leads to follow up on.



**Jacky Chiang**  
Marketing Manager  
San Fang Chemical  
Industry Co., Ltd.

This is only our second time attending Taipei Cycle. We've found this year to be very crowded, especially compared with last year which was our first time at the show. We were actually anticipating a big show given the clear upsurge of interest in sustainable products. ESG is a subject that has come up and people are on the hunt for products with a lower carbon footprint particularly for vacuum forming products.



**Andrew Huang**  
CEO Scada  
International Co., Ltd.

The customers are coming back in droves. But some customers are still struggling with unsold stock and that has led to tricky conversations and negotiations between suppliers and their customers. But also many have skipped the show because of those stockpiles. The spring selling season has arrived so they are focused on moving that stock before they can begin to think about the future.

**WELLGO PEDALS PROFILE****ALL GOES WELL, THANKS TO DIVERSIFICATION**

With over 40 years of experience in building bicycle pedals and factories in Taiwan and China, Wellgo is a big player within Taiwan's bicycle industry. The last three years have been a rollercoaster ride, but the company is well positioned to weather the storm.



**A look at the new office building, built in 2018.**



**Wellgo's sales director Jennifer Chen in front of an Xpedo logo.**



**A row of CNC lathes to work on alloy pedal bodies.**

Founded by John Chen back in 1980, Wellgo has grown with Taiwan's bicycle industry over the last more than 40 years. With its headquarters less than two kilometers away from Giant Manufacturing's main factory in Taichung's Dajia district, the distances have always been short and the cooperation close. And while Wellgo dabbled with the production of other bicycle parts and components in its early years, the company has become well-known as a specialist for pedals covering all price points. Apart from producing under its own name, Wellgo has also become a trusted OE partner with a monthly production capacity of 800,000 pairs of pedals.

Wellgo's headquarters in Taichung's Dajia district have been growing over the years, with factory halls of various age covering the area and the staff counting 400 employees. Next to the new office building that has been built in 2018, a substantial pond with various small waterfalls houses John Chen's beloved collection of fish — mostly of the well-known colorful koi variety, but also some truly gigantic silver carps that have been growing with the company over the decades. Wellgo's second factory is close to Shanghai. As more production steps have been outsourced in China when compared to Taiwan, it only counts half as many employees.

One distinctive change in the bicycle industry, and a challenge for Wellgo, has been the fact that more and more bicycles are sold without pedals. "Nowadays 80 percent of our production is sold separately and only 20 percent are sold as part of complete bicycles", Wellgo's sales director Jennifer Chen explains. "As far as trends are concerned, the rise of e-bikes has shifted demand away from slim clipless pedals towards platform pedals. We also see a new market for high-quality pedals for utility bikes that treat shoe soles gently. With our Xpedo brand, we have also expanded our business to smart indoor trainers — a market that thrived during the

pandemic." The last three years have been challenging, and like all manufacturers Wellgo at first struggled to keep up with fast-growing demand, only to see it drop sharply in the second half of 2022. "If anything, Covid has taught us that you can never be prepared for everything", Jennifer Chen reflects. "At least pedals are easy in terms of logistics as we can pack 70,000 pairs into one standard container, so we were not hit badly by the price hikes for sea freight. Since our products are not strictly linked to model years, the current situation with high inventory levels is also not as bad for us as it for some others in the industry." ■ **LvR**

# SNAPSHOTS FROM THE SHOW



George Chen & Ellen Lin with Dosun cargo e-bike



Hank Kao & Billy Yu visit old friends at SRAM



Katsuhiko Kondo, Dia-Compe



Sally Hsieh & Alex Chen at Alex Rims



Frank Hsu with Silic1 colorful silicone bartapes and grips



Bicycle trainer demonstration at Thermaltake Bicycle stand



Ryuger's Brent Richards with super fast carbon e-bike

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# FPD

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TAIPEI CYCLE @ J0307, Hall 1, TaiNEX

## STATE OF THE INDUSTRY IN TAIWAN

# WORKING TO BALANCE SUPPLY & DEMAND

Taiwan's manufacturing industry depends heavily on exports, but key markets have recently seen a sharp drop in consumption and consumer sentiment. Decision-makers in Taiwan's bicycle industry expect this slump to continue in 2023, but they are taking this challenge in their stride.



**Ann Chen, Velo**



**Michael Zellmann, SRAM**



**Otis Chen, Tektro-TRP**



**Managing Director Leo Chen, Tektro-TRP**

From the second half of 2020 through June 2022, the biggest concern of Taiwan's bicycle industry was keeping up with high global demand for its products due to the Covid-19 pandemic, and to keep lead times from getting completely out of hand. Velo vice president **Ann Chen** points to the 'bullwhip effect' that exaggerated demand and complicated planning: "If one customer kept asking for a specific bike model not available at the time at two to three different dealers, an overinflated demand resulted as feedback to distributors and then producers. This and the crazy fluctuations in demand would not really allow for reasonable planning over the last two and a half years."

Following the border closure in March 2020, the first serious wave of domestic infections would not hit Taiwan before April 2022. This was good news for manufacturing industries that needed to keep producing at full capacity in order not to get drowned in back orders. "Taiwan was lucky that it closed its borders as early as mid-March 2020, so the pandemic did not affect Taiwan's daily life much. For this reason, we could keep producing at full capacity in Taiwan", as Wellgo's Sales Director, **Jennifer Chen** explains. This is reflected in the export statistics for the past year that still show very solid growth.

There were limiting factors for growth however, as Sram's Global Corporate Public Relations Manager Michael Zellmann explains: "Sram has seen tremendous growth over the past 2.5 years, adding 20 percent to our workforce globally and mainly in Taiwan. Production capacity was more than doubled for specific products, and increased appropriately throughout the product line. There has been massive investment, including adding hundreds of team members,



**Jennifer Chen, Wellgo**

running continuous shifts at all factories, while maintaining a critical focus on quality and employee safety. We were challenged with sourcing raw materials, IC chip shortages, as well as shipping disruptions, including container shortages."

According to provisional export statistics from the Taiwan Bicycle Association (TBA), exports in 2022 kept growing, with e-bikes, conventional bicycles and parts and components all seeing double-digit growth. Giant also reported growth of 12.5% in revenue for 2022, narrowly missing out on the US\$ 3 billion mark. One thing the numbers for the entire year do not show is how business slowed down in the second half of the year. As Giant put it in a company statement: "At present, the balance of supply and demand of the bicycle market has yet to be normalized. The demand for low- to mid-end products has cooled down, but demand for high-end and e-bikes remains strong."



**President Hubert Chen, KT Taiwan**

The sharp drop in demand caused by soaring energy costs and inflation has resulted in high levels of inventory. Last November KT Taiwan's President **Hubert Chen** referred to the orderbook adjustments that started in June 2022 as a "tsunami of cancellations" that led to a full year of inventory clogging up the pipelines. When contacted in early March, Chen sounded slightly more optimistic for the higher price points that Taiwan's bicycle industry focuses on: "For the high-end markets, the inventory is relatively low and perhaps the new inquiries could come faster. But for the mass-production markets, inventory levels are still high and it is expected to recover more slowly, and no one can predict the turning point yet."

Inventory levels are the major concern in the industry right now, as Tektro-TRP's **Otis Chen** confirms: "Since the entire economy has reversed, market supply and demand got out of balance, resulting in

excessive inventory. But we remain optimistic that the market will return to normal and grow a little in the future. In the long run, the bicycle industry is moving toward e-mobility which is a positive for the industry." When asked about priorities for 2023, one word that comes up repeatedly is destocking. As Astro Engineering's General Manager **Samuel Hu** puts it, "The main challenge we face is how to expedite the process of eliminating inventory issues. We need to closely monitor the consumption situation in the bicycle industry and determine a clear direction for our next steps."

Inventory clearance could be achieved by postponing the introduction of the 2024 model year to give distributors and bicycle dealers more time to sell current products without pressure to discount. The other option is to switch to the production of the 2024 model year earlier than planned to cut down on the production of current products that are filling warehouses already. Either way factories in Taiwan are running well below capacity, as Wellgo's **Jennifer Chen** points out: "In the first quarter of 2023 business has been very slow. We did expect to see this, but it has really reached a point where it feels like we hit a stop button. Right now, we are still working five days a week, but we know that there are factories where staff has been working only two or three days a week."

**Fritz Jou** of FJ Manufacturing doubles down on this analysis: "Overall, the biggest challenge for the bicycle industry is to work through and flush out existing inventory at all levels with minimum loss of margin. Cash flow will be challenging at all levels, and assembly factories seem to be bearing the brunt of this challenge. Many warehouses are currently full. With the Russian invasion of Ukraine,



General Manager Samuel Hu, Astro Engineering



Fritz Jou, FJ Manufacturing

along with continuing high global inflation, the economic picture is fragile. However, the bicycle industry often has its best sales when the economy is not performing at its highest globally." When looking at numbers for 2022, one thing needs to be kept in mind: these are being compared to 2021 which was a record year throughout the industry.

As KT Taiwan's President **Hubert Chen** explains: "Thanks to our new ratchet freewheel, KT managed to grow its turnover by 80 percent from 2019 to 2021, mainly by entering higher price segments. In 2022, we probably lost 25 percent of our OE orders due to cancellations and postponements, but that still puts us at 35 percent growth compared to 2019." When asked about a time frame for the markets to improve, nobody contacted by the Show Daily would commit to a date,

but there is a consensus that things will not improve significantly this year due to high inventory levels and that the higher-end and e-bike segments have not been hit as hard as the low-to mid-end of the market where issues are likely to continue well into 2024.

One bright spot in the current messy situation is that lead times are quickly coming back to normal, which has made production planning and purchasing much easier and predictable. From a consumer's perspective the availability in key markets has improved drastically – to the point that the inventory levels are likely to cause discount battles as cash-strapped distributors and retailers look to turn some of the stored goods into available assets in order to cover operational costs and make room for new products. ■ LVR

# INNORADIA'S EMPOWER GEARBOX EXPANDS THE LIMITS

An international team has contributed to developing **Innoradia's [Q0932a]** unique Empower ten and 20-speed internal gearboxes.

"We designed our gearbox to cater to the needs of cargo bikes," explained GM Ryan Lee at Taipei Cycle on Thursday. "With a derailleur, your gear range is quite limited. We've increased this to 1200%, from a smallest gear covering half a meter to a largest that covers six metres". Unlike a derailleur system, the Empower gearbox also avoids duplication while providing sequential ratios. "We also wanted to provide consistent steps," said Lee. As a result, each jump between gears is precisely equal.

The firm is working on two versions of its gearbox, one for e-bikes and one for solely pedal-powered vehicles. The 20-speed version is designed to provide the small jumps that unaided riders need. However, Empower believes a 10-speed version is better suited to making the most effective use of a motor's electrical assistance.

The entire project has run in conjunction with the firm's development of its cargo bike platform. This has led to a focus on providing the easy minimum gear needed to get



Belt drives make a perfect partner for neat internal gearing

a heavily loaded bike moving even when heading uphill. Neat integration of the system is ensured by wireless electronic activation from the handlebars.

Visitors to Taipei Cycle can see Empower's progress in the form of several refined and operational bikes. The firm is currently also working towards a retail offering in time for Eurobike in June.

Lee cited how German firms operate as an inspiration for his team's approach. "I have so many friends in Taiwan and elsewhere with cycling and general engineering backgrounds," said Lee. "We're all exchanging ideas". It's this ability to call on a wealth of shared expertise that's helped the firm confront a problem as complex as developing a gearbox.

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# TECH COMPANIES AT TAIPEI CYCLE ADVANCED ELECTRONICS: THE FUTURE OF THE BIKE INDUSTRY?

Electronics companies have been taking an increasingly larger stake in the bicycle industry over the last five years. We asked some of these new entrants about their reasons for getting into the industry, their plans for the future, and new products for this year. Whilst acknowledging that the remainder of 2023 and early 2024 will be challenging, they all agree that the best is yet to come.

Battery technology is a key focus for Merry Electronics, Celxpert Energy Corp, and Trendpower Technology. Coming from an electroacoustics background, **Merry Electronics [N0003]** officially entered the bicycle industry in 2021. "The Covid-driven e-bike boom together with the broader industry movement towards ESG fit well with Merry's particular expertise in electronics as well as our recent moves to strengthen our approaches to sustainable industrial development," said Merry's Battery Unit Head, Chester Chiang. New products in 2023 include a dual battery model, a smart battery and a full range



**Merry Electronics SPB014**

of 24V/36V/48V batteries designed to comply with the EN ISO 13849 safety standard. Several IoT applications are also in the pipeline.

**Celxpert [N0018]** also saw the potential in e-bikes, coming up with their first e-bike battery in 2019. Anticipating strong demand in 21700 (21mm diameter, 70mm in length) cells in coming years they will work on developing products to complement this battery type. In 2023 the company will release an in-tube battery and range extender battery.



**E-bike batteries from Celxpert**

**Trendpower [K0120]** has been involved in the bike industry the longest. They entered the market in 2010 with the aim to target high power batteries, that is batteries exceeding 100Wh. "It was a matter of innovate or die," said spokesperson Sabrina Tu. "Once a battery model is out there, the market tends towards saturation, so you have to keep coming up with something new." The transition from the familiar territory of IT into bicycles was not easy. "The key was finding the right person, namely our current sales manager, Kevin Chang, who brought a background in the bicycle industry to the role," said Tu. Product development will focus on producing a more differentiated range of batteries for a variety of applications built to last made from lightweight, high density, eco-friendly, and recyclable materials.



**Trendpower Slim tube battery**

smart products to produce our first e-bike power system in 2023. The design breaks away from the traditional e-bike motor. It's more compact, gives an e-bike a more streamlined appearance and is lightweight." With an extensive presence across continents and well-developed global sales and service infrastructure, Delta will also have a global service system in place. With Made in Taiwan (MIT) as a core principle Delta envisages the creation of a "co-prosperity ecosystem" in which components manufacturers and systems manufacturers together enhance Taiwan's place in the production of e-bike motors.

A leading company in the electronics industry, **Delta Electronics [N1032]** entered the bicycle industry in 2018 and will have their first stand-alone booth at this year's Taipei Cycle. "Looking to take advantage of the rapid growth in Taiwan's e-bike sector from the middle of the last decade, we saw that complete motor

Also making their debut at the show this year is **Valeo [L0618]**, an automotive supplier that celebrates their centenary in 2023. "The mobility space is undergoing the biggest transformation in its history. It is becoming safer and more electric," said Valeo Ebike Platform Director Benjamin Morliere explaining the rationale for the launch of the company's innovative Valeo Cyclee 48V motor in 2020. This single module unit containing an automatic gearbox and controlled through predictive software that adapts to a cyclist's riding style was one of four products winning Innovation Awards for Valeo at CES 2023. "Valeo's development plan going forward is articulated in our 2022 Move Up initiative, a value creation strategy at the heart of the four megatrends disrupting mobility, electrification, ADAS, reinvention of the onboard experience, and lighting," said Morliere. ■ GR



**Integrated system from Delta Motor**

systems were overwhelmingly produced by non-Taiwanese companies," said Josh Chi, Delta's Low-voltage Electro Mobility Business Development Department Manager. "Assembling an R&D team, we worked to integrate motor reducers, sensors, controllers and other



**Valeo's Cyclee with integrated gearbox**

## THINKING OUTSIDE OF THE BOX

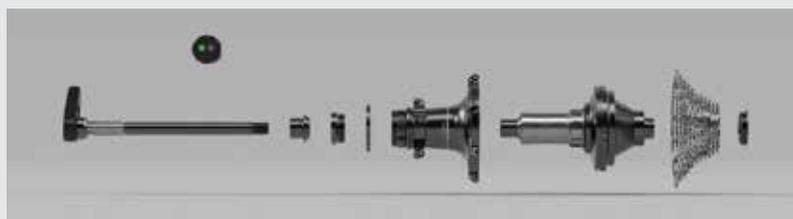
One-by drivetrains may have taken the mountain bike world by storm, but for road bikes the discussion continues about the use of a front derailleur and two chainrings. Saving some weight and complexity is offset by a loss in terms of range and narrow steps between gears. Belgian start-up **Classified Cycling [L1206]** has made waves by combining the advantages of both solutions with their highly innovative Powershift drivetrain. This features a proprietary hub with a built-in planetary transmission. Its two gears shift lightning-fast and mimic the gear ratio familiar from dual-chainring set-ups. Due to the oversized dimension of the rear hub, the Powershift system needs special cassettes. Classified Cycling first offered these with 11 and then with 12 gears – and now with 13 gears as well for Campagnolo's Ekar gravel groupset.

The signal to initiate a gear change is transmitted wirelessly from tiny shift button on the



**Classified Cycling's CEO Mathias Plouvier (left) and CTO Roëll van Druuten at the manufacturer's booth.**

handlebar to the lever of the rear wheel's thru-axle and then to the hub. Shifting happens within 15 thousandth of a second without the risk of derailing or jamming the chain. Since the power needed for this signal is generated by induction on the rear axle, the Powershift only needs a tiny cell battery that sits in the handlebar plug. So far Classified Cycling has been focusing on the road and gravel bike markets, but a version for mountain bikes is soon to be released as well.



# INVESTMENT IN TAIWAN NO LACK OF NEW FACTORIES IN TAIWAN

Despite all the talk of investments in Vietnam, Taiwan's bicycle industry has been investing domestically as well throughout the pandemic. While some of the investments look to add capacity or increase productivity, others have been made to be easier to reach for international partners.



**The new office building next to Scada's main factory**



**Scada's managing director Andrew Huang**

Most of the production of Taiwan's bicycle industry is for export, and the high demand throughout the pandemic brought many manufacturers to the limits of their capacity and beyond. With interest rates low and business running hot, investing in additional manufacturing capacities was an easy decision for many. One example for this is pedal and dropper post manufacturer **Scada**. "We doubled our turnover in 2021, and we were only able to do since we had already acquired a second factory the year before. Early on in 2022 we rented a third factory hall, but due to cancellations from a key account it turned out we did not need that space anymore", explained Scada managing director Andrew Huang. In November 2022, a new office building next to the

main factory was about to be completed as well.

In terms of sheer size, the two new factory halls that **Tektro-TRP** built at its headquarters that became operational in 2021 are hard to beat. These halls almost dwarf the existing buildings and add another 50,000 m2 of factory floor to the operation, allowing for an additional production capacity of 40 percent. One large project that is on par with this investment was announced in early February by **Sram**: In a bid to unite all of its manufacturing operations, which employ about 4000 people in the Taichung area, into one building, Sram announced the construction of a new headquarters in the Northern Tanzi district. This new factory represents an investment of NT\$ 10 billion – a serious commitment to Taiwan as a manufacturing base.

From 2019 to 2021 **Marwi** invested NT\$ 500 million in its Smart Pedal Factory, next to the company's headquarters. A large part of this investment went into machinery and industrial robots in particular to speed up the flow of inventory, cut down lead times and ramp up productivity and consistency in production without the need of additional staff that is notoriously hard to find. Saddle and grips specialist **Velo** also invested in an additional four-story building at its headquarters. Here the R&D depart-



**The two new factory halls of Tektro-TRP are impressively sized**

ment and the makers of prototypes and early samples have more space to work – and a whole array of differently sized 3D printers at their disposal. After all, **Velo** has a reputation for building parts according to the wishes and ideas of its customers.

**SR Suntour's** Taiwan factory in the Changhua area has been running for 35 years and is the oldest factory of the group. For that reason and due to the increased demand, planning for a new location has been pushed forward, with construction set to start in 2023 and operations to start in 2025. While the new facility will be used for the production of higher-end parts, the heavy production such as magnesium smelting and casting will remain at the old site. According to general Manager Wen Ching Liu, the new factory will allow for the expansion of SR Suntour's in-house production capacity and for a reduced carbon footprint, as it is more energy efficient and has large solar panels on its roof.

Located at the Central Taiwan Science Park and next to the enormous factories of TSMC in Taichung's Xitun district, the new headquarters of the **Giant Group** consist of a 15-floor office tower and a three-floor cycling culture museum and event venue with an underground parking garage. Apart from the R&D department, the building also houses space for the sales department and meetings with OE customers. Originally this complex, with a total gross floor area of approximately 33,000 m2, was scheduled to be opened just before the 2020 edition of the Taipei Cycle Show. But since that show got cancelled and Taiwan



**Work on the Taiwan factory of SR Suntour starts this year**



**With its Smart Pedal Factory, Marwi makes a big bet on robot automation**



**Velo has expanded its R&D and prototyping department**



**Giant Group's new R&D Center in the Xitun district of Taichung**

closed its borders from March 2020 to October 2022, the opening ceremony was scaled down. In October 2022, the big celebrations for the 50th anniversary of Giant were held at the new headquarters. ■ **LVR**

ENGLISH

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# NEW PRODUCTS



## WELLGO PEDAL'S CORP. FOLDING PEDAL F367DU

Wellgo's F367 folding pedal is a new design with a sandpaper surface that offers great grip and a fresh twist to the pedal's appearance. The 343g/pr pedals have a PC body and a 2DU bearing.

J0517



## POLINI MOTORI 250WH BOTTLE BATTERY

This is an original extender that can be connected to the 500Wh Polini battery: the E-P3+ 2023 system is already set up for automatic matching. The new Bottle Battery guarantees a further 250Wh, making the e-bike systems modular: in addition to the standard 500Wh, the user has additional 250Wh available, thus reaching a total of 750Wh, ensuring more operating time for longer or more challenging routes.

M2022

## HYENA E-BIKE SYSTEMS E-UTILITY DRIVE SYSTEM UNIT

Hyena's E-Utility drive system unit is powered by a 750W rear hub drive and equipped with an 810Wh high-capacity removable battery. This system set is mainly designed to provide a quick solution to the popular fat-tires utility and cargo models in the NA market, provides incredibly powerful torque to a maximum 70 Nm on the hub axle, and supports pedal-assist or throttle drive.

N0616



## MEILAN ORBIT

Orbit is a new generation of breadcrumb navigation GPS bike computers for 2023. With a 2.3-inch anti-glare display, Orbit offers route planning, breadcrumb navigation and power training. It supports Cute Eye rear light and Meilan scheme power meter connectivity. Up to 30 hours of run time.

meilancycling.com

## NECO TECHNOLOGY INDUSTRY CO., LTD/ CABLE ROUTING HEADSET H323MP

The 8X (16-23)mm design of the 35-degree opening on the top cover makes the introduction of the brake cable and transmission cable easy. The top cover material is nylon + fiber design, which reduces cable resistance and prevents scratches. The top cover has two cable inlets, so rotation is not restricted when turning. China Patent No.: ZL 2019 2 1752428.6 /Taiwan Patent No.: M590559

J0632



## JETSET RIMS AM-30+ RIMS

The unique design of these new lightweight rims from Jetset removes unnecessary aluminum from the rim wall, yet has the strength for road and MTB applications. The new ARCOS technology is patented and is the basis for several new products from Jetset now being exhibited at Taipei Cycle.

J1002



## HAFNY IT SEES EVERYTHING!

The HF-M901L/R-FR08 is designed for 45km/h e-bikes. The mirror has a hollow design to decrease the weight and improve wind resistance. The body is made of fiber-reinforced nylon, and can fit 14.8-23mm inside the diameter of the handlebars. The mirror has three pivots joints which can be adjusted to any desired angle. Available in HD glass lens and Anti-glare blue lens. This mirror is an E13 Approved speed pedelec bike mirror.

L0405



## BAFANG M820 MID MOTOR SYSTEM

Allowing riders to move like the wind, M820's lightning speed and minimal weight always excite. At only 2.3kg, the discreet, high-performance motor can achieve 250W of rated power and a strong 75Nm (max. torque) for a maximum extended cadence support of 120 rpm. The new system is the perfect solution for many eRoad riders.

M0112



## ALEX RIMS BEB004/504 E-BIKE HUB

The BEB004 and BEB504 rear hub with Power Stroke Technology is Bear Pawls' solution for the increased power and torque requirements of E-bikes. A hardened steel cassette body is mated with a semi-high flanged hub shell to allow for wider spoke angles resulting a stronger wheel. Four sealed cartridge bearings are spaced to distribute internal forces while maintaining high rolling efficiency.

J1018



## TAYA CHAIN GST TECHNOLOGY

TAYA's Green Surface Treatment (GST) is a breakthrough in chain and bolt coating technology, providing exceptional corrosion resistance in the most challenging environments. With a 1000-hour salt spray test, GST ensures chains and bolts remain durable for up to 25 years. TAYA's commitment to innovation continues with the introduction of the GST Black chain, expanding the color options within the GST series.

## VELO ENTERPRISE CO., LTD. VLG-2064D3

This new grip is extremely durable, 100% UV resistant and features a lock-on system for easy fitting. Its unique EVA material is perfect for high-end, performance-oriented E-bikes and MTB use. The VLG-2064D3's unique EVA material is harder traditional EVA for demanding riders to maintain precise control. The grip's chemical-resistant material means they will remain completely safe without any sticky feeling, even after years of use.

J0717



# NEW PRODUCTS

## MESSINGSCHLAGER M-WAVE - ALL A CYCLIST NEEDS

M-Wave stands for more than 1000 products used by passionate cyclists who attach importance to technical products. M-Wave offers full range of products for cyclists with high technical demands, searching for innovative, high-quality materials. M-Wave backs German engineering and design which includes a high standard of quality

control and reasonable pricing. The longstanding practical experience and tremendous know-how of Europe's largest importer of bicycle parts and accessories tops off that service. At M-Wave you can choose from complete ranges in a wide variety of product areas, with which every need in the bicycle retail trade can be

covered. In the area of seat posts, for example, there are many variations available, from standard posts to remote-controlled retractable seat posts with integrated cable routing. There is also a large selection of spare parts such as disc brake pads. Learn more at the Messingschlagler booth in Hall 1 / J0512. **J0512**



ENGLISH

## MAXXIS E-SPECIFIC SERIES

Maxxis' e-bike tires feature robust butyl insert enforcement and upgrade the casing structure for all models certified to ECER-75, ensuring safety and durability at speed. Besides popular models like Minion, Assegai and Forekaster, Metropass/Metroloads specially designed for commuter and cargo are available now. Visit Maxxis at booth J0218 to find out more. **J0218**



## KMC EGLIDE



The eGlide is KMC's newest chain combining technology from both X-Series and e-Series chains. The chain is optimally hardened through perfectly tuned heat treatment to pin and roller, double X internal bridge expand spacing between chain plates, providing

increased durability, smoother and decisive shifting performance. Shield Tech riveting technology providing highest torsional and tensile-strength standards to 1350kgf. The eGlide is suitable for the Shimano Linkglidea system. **J0118**

## V-GRIP (CHEN WHUA INTERNATIONAL) 1-CLICK MAGNETIC BOTTLE & CAGE SET

With this clever bottle & cage design, you can firmly secure the bottle to the magnetic bracket by sliding in from the left or right side or directly down from the top. Perfect for small frames with limited room. **I1318**



## KT TAIWAN DYNAMO HUB



KT's light and compact dynamo outputs 6W3V of power to illuminate the path on dark nights. Supports QR and TA axle designs and can accommodate rim or disc brakes. For detailed specifications and further information visit booth **I0218**.

# Meet our all new A70.

This light and powerful 250 W mid drive unit has a maximum torque of 90 Nm and a noise level of less than 60 dB, which contributes to a comfortable ride. Connect with Bluetooth and GPS to get the most out of your e-bike experience.



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## OVERVIEW: PEDALS

# E-MTBS DRIVE MOVE TO LARGE PLATFORM PEDALS

Most mid- to high-end bicycles are sold without pedals nowadays, and the bulk of the business of pedal manufacturers has moved to the aftermarket. Both the electrification of bicycles and the stronger focus on the utility segment have pushed for their own breed of pedals.



They are being stamped on all their lives, and they are also exposed to the elements and impacts. Bicycle pedals are an essential contact point to keep control of a bicycle and get the rider's power to the drivetrain. From the axle construction to the materials used for the pedal body and the methods to keep the feet on the pedals and avoid slipping, the market offers a wide variety of products. And since the number of complete bicycles that come with pedals has been declining for years, pedals have become an aftermarket

product that offers retailers a welcome chance for additional sales at a decent margin – and manufacturers a chance to showcase their expertise.

Market trends have a clear impact on the type of pedals in high demand, and this can be seen at the booths of pedal makers at Taipei Cycle. One example is the dynamic growth of e-mountainbikes, surpassing conventional mountain bikes in terms of sales. For added control and safety on exposed terrain, most riders of e-mountainbikes have ditched the type

of compact clipless pedals known from cross-country racing, opting instead for large-surface platform pedals, with pins to prevent slipping on either both sides or just on one side, and featuring a clipless mechanism on the other. This combination greatly enhances the confidence of less skilled riders in technically demanding sections while still offering advantages in terms of efficiency.

One example for this dual-interface concept is the E-PM835 pedal of **Exustar [Hall 1, K0715]**: One side of this pedal features a larger contact surface and ten replaceable pins for solid traction. Exustar's own, SPD compatible EPS-M clipless mechanism with adjustable tension is fitted into the other side. So you can either enjoy the full efficiency of a clipless pedal or dab a foot at any time. The B365 pedal of **Wellgo [Hall 1, J0517]** also offers an oversized platform with replaceable pins for added grip on one and a clipless mechanism with only four pins on its other side. For longevity in foul weather conditions, the axle spins on sealed bearings. Probably the most commuter-friendly take on this concept is the SP-5200



**Wellgo**  
**B365 eMTB**

pedal of **Marwi [Hall 1, I1014]**. While one side features an SPD-compatible clipless mechanism, the other uses a serrated anti-slip surface machined into the alloy body for added grip.

Whether for trick-heavy rides in bikeparks or trials-like daredevil descent: some riders do not want to go clipless at all and still demand lots of grip. Their pedals of choice feature large platforms and aggressive pins – like the E-PB572 model of **Exustar [Hall 1, K0715]**. Its wide body is CNC machined from quality alloy and



**Reverse**  
**Base platform**

comes in an anodized camouflage finish. Eight replaceable pins per side and the shape of the body keep the rider's feet in place while the mix of bushing and bearings that the axle spins on strike a good mix of light weight and reliability. The Base model of **Reverse Components [Hall 1, K1302]** combines a large concave platform and eight pins per side with novel Baurillium bushings for a balanced mix of grip, longevity and

**Exustar E-PM835**



**Exustar**  
**E-PB572**



**Hafny HF1550**

# TAISPO REPORT

## SPORTS AND FITNESS BRANDS SMARTEN UP WITH DIGITAL ECOSYSTEMS

The compression socks produced by Sunstar feature a bulky round sensor inserted at the back of the calf. That's how it precisely measures muscle strength and fatigue, then produces data that is easy to read on an app.

These smart running socks fit with the rise of increasingly smart tracking and analytics systems integrated into products for all sorts of sports, from volleyball to golf and fitness.

Along with **Sunstar Taiwan Enterprises [Q0317]**, some of the latest entrants in sports and digital technology are gathered in the new "sports tech" area at TaiSPO Sports & Fitness Taiwan, the sporting goods show that is held concurrently with Taipei Cycle.

Tromin Technology is among the firms grouped together by a specialist unit at the **National Taiwan Normal University [Q0108]**. Its Goalgo Mobile system tracks the movements of players in team sports with four portable antennae mounted on tripods around the court. It precisely follows up to 20 players, who wear vests with small trackers inserted into a shoulder pocket.

"It helps to analyse the positioning of the players, to spot the gaps if they're not placed well, and to



Tanya Liao shows Sunstar's smart running socks and app.

discuss tactics with them," said Shan Wang, Tromin's chief executive.

The Taiwanese sporting goods industry is taking advantage of assets in digital technology to create such connected products. The government wants to push this advantage with the Sports and Technology Action Plan, which was launched last year to invest an estimated 4.6 billion Taiwan dollars in five years to support the rise of Taiwan's sports technology industry. The declared purpose is to turn Taiwan into a hub for sports technology in the Asia-Pacific region. "We need to upgrade our

equipment to take into account the changes in consumer behaviour, and to encourage more people to practice sports," said Jeff Chen, who became president of the Taiwan Sporting Goods Manufacturers Association earlier this month.

For fitness equipment suppliers, the focus is on integrating digital technology that helps to track and sometimes gamify workouts – preferably across the gym, home and outdoor training.

The digital ecosystems created by suppliers are most sophisticated for commercial fitness equipment, using interactive consoles. They may be customized to interact with gym management software and a slew of digital options.

But exhibitors at TaiSPO also showed more connection for home equipment, such as the SRVO strength training platform by Sole Fitness the consumer brand of **Dyaco International [P0114]**. "You can connect it with the Sole+ app to track your reps, the speed and the weight you're lifting," explained Brian Murray, Dyaco's chief technology officer.

**Johnson Health Tech (P0506)** is showcasing the @Zone app for its Horizon Fitness home gear brand. It



Henk Lin demonstrates the @Zone app with a Horizon treadmill.

delivers workouts that interact with the equipment, exclusive programs and compatibility with third-party platforms such as Fitbit and Strava.

"That way, if you don't have home equipment with a console, you can still use our software and contents," said Henk Lin, product manager at Horizon.

TaiSPO brings together about 170 exhibitors at Tainex 2, including camping and outdoor gear in the Outdoor Taipei section. ■ BS



bySchulz M1

a better power transfer thanks to the larger interface, but walking in those shoes was never part of a functional specification.

One look at the price tags of utility e-bikes is all it takes to realize that the electrification has forced the bicycle industry to up its game. It has created a demand for high-quality, long-lasting



Marwi SP-260

pedals that do not damage the soles of your shoes while still offering plenty of traction. Basic US\$ 25 pedals with a metal cage won't do. Instead, higher quality axles and bearings are combined with bodies made of either alloys or composite materials. And rather than relying on pins that tend to eat away at shoe soles, many of the new utility-bike pedals rely on sandpaper-like finishes to keep the feet from slipping without eating away at shoe soles.

A prime example for this is the M1 pedal of **by Schulz [at Castello Cycle, Hall 1, I0104]**. At just 19 mm in height, its body made of high-strength alloy improves pedaling efficiency while still conforming with legal requirements thanks to integrated

reflectors. For plenty of grip its large surface is covered with a grip tape, and the axles and bearings are chosen for longevity. **Marwi [Hall 1, I1014]** claims that its sandblock treatment on the SP-890 and the more affordable SP-880 models is particularly long-lasting, offering plenty of grip with no danger to shoe soles. Showing its capabilities in composite manufacturing, **Wellgo [Hall 1, J0517]** combines two different surfaces on its extra-large urban pedal C368 with sand paper and kraton rubber. To withstand the abuse of daily use, the body is made of impact-resistant, high-strength composite.

During the pandemic, stationary indoor trainers were in high demand. While ambitious cyclists are likely to combine road bike clipless pedals and matching shoes when doing workouts on smart trainers, more fitness-minded consumers not owning dedicated bicycle shoes need other pedals to combine with running shoes for their cardio workout. As one example for this kind of pedals, the Union SP-260 model by **Marwi [Hall 1, I1014]** features a large surface with a structured rubber coating for plenty of support and grip. Wide straps keep the shoes firmly in place without pinching, allowing for comfortable workouts without a missed pedal stroke. Another specialist pedal manufacturer with plenty of experience in this regard is **Scada [Hall 1, I0709]** after having produced a lot of these pedals for Peloton as of late.

One last trend focuses on ergonomics and proper sizing of bicycle pedals. With its Ergotec brand, **Humpert [Hall 1, I0810]** is betting heavily on ergonomics as their EP Med pedals show. Thanks to their larger surface, these pedals offer better support, with



Humpert Ergotec EP-2

little tabs on the inside to keep the feet away from crank arms and chainrings. These pedals have been certified as a medical product. **Reverse Components [Hall 1, K1302]** is debuting the Black One JR model in Taipei as a high-quality platform pedal for young shredders. Its alloy body has been narrowed to perfectly fit shoe sizes from 33 to 39 (US sizes 2 to 7), with 16 replaceable pins providing plenty of grip. Running on two sealed ball bearings and one IGUS bushing, the axle made of chromo steel should offer plenty of durability. ■ LVR



Reverse Black One JR



Wellgo C368 urban pedal

## ZEPHYR'S ROUTE OHLALA OPENS UP LONG-DISTANCE E-BIKE TOURING TO EVERYONE

**Zephyr E-bike Taiwan [N1232]** has been designing light and efficient e-bikes from their workshop in downtown Taichung for more than a decade. While the company's main focus is on OEM and e-bike project management, it also produce bikes under their own Zephyr brand.



One of Zephyr's recent projects involved developing the Route Ohlala e-bike which earned them a 2023 Taipei Cycle d&i Gold Award. The project involved a two-year collaboration with a new entrant to the bike industry. "We worked with a travel company looking to give cyclists the experience of tracing the Tour De France or 'The future mythic route of France'," said sales manager and co-designer Thibaud Alran. "The idea is that cyclists of any ability can ride the classic routes in the alps. But even

more than that, it opens up a world of bicycle touring throughout the whole of the French countryside," he said.

In this vision, the e-bike enables anyone who has dreamt of riding those challenging routes to achieve that dream. And they won't be doing it on a generic e-bike design—the Route Ohlala is as good looking as it is technically advanced.

This is a fully customized hefty cargo/trekking hybrid fitted with a powerful MPF mid-drive motor with internally routed cables entering the

all-alloy frame at the headset. From a short extension out of the head tube, the top tube makes a beeline down to the rear dropout.

The seat tube curves up to the clamp into which a suspension seat post is inserted, topped by a Velo Plush saddle. A black carrier is mounted on the front, while the rear carrier is designed for saddlebags. It sports Satori riser bars and Tektro disk brakes with an option for ABS.

The innovation making it perfectly suited to the task of covering long

distances through the Alps are the twin batteries: one in the down tube, one in the top tube. Together they'll give a trekker a range of around 240 km in eco mode.

The handlebar-mounted display provides the key statistics with the MPF app covering a wide range of additional parameters and integrates with the cloud via eSim card. This enables software updates as well as provides the status of the drive system and the geographical position of the rider at all times. ■ GR

# xpēdo

BOOTH# Hall 2, P0728



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# JETSET'S ARCOS E-BIKE RIMS GAIN A SUPPORTIVE INTERNAL PROFILE

Wheelmaker **Jetset [J1002]** have a new patented technology explicitly tailored to the rigours of e-biking. Its latest rim design allows extreme spoke angles while maintaining complete contact between the nipple and the rim. This is particularly pertinent to makers of e-bike wheels, where the width of the hub and the number of crossings in the lacing pattern can create added stress.

To achieve full support of the spoke within the rim, the rim's internal profile is perfectly aligned with that of the nipple. "Normally, even with a slight angle, only one part of the nipple will touch the rim," explained Jetset's William Hsu at the firm's Taipei Cycle booth yesterday. "This will cause the wheelset to have a reduced lifespan. Our patent fixes this problem. Even at a 45-degree angle, you'd have the same support, although a 15-degree angle is the usual maximum".

This asymmetric profile extends to the drilling of the access points in the rim bed. The design is now available as an option on Jetset's e-bike wheelsets and is protected by an exclusive patent. The technology joins



**An exclusive patent protects Jetset's new spoke bed technology**

a raft of unique specification options offered by the firm. Also of note is the firm's custom extrusion process. "We use the thinnest wall possible, then add material where it's needed," says Christy Hsu. This allows Jetset to tailor each rim to its intended use. "Take downhill," she explained, "the sides of the rim are very important, so we add material there. We can also add to the area where the spokes meet the rim as needed". Both technologies can now be found as part of Jetset's Arcos offering.

# WIRELESS E-BIKE CHARGING OFFERS PARK-AND-GO CONVENIENCE



**Wireless e-bike charging that's impervious to rain or damage**

Semiconductor maker **Voltraware [N1026]** has developed a system for wirelessly recharging e-bikes. Simply place an equipped bike above a pad on the floor, and the battery will begin to refill.

"Our wireless charging system is capable of delivering 150 watts at a distance of up to 15cm," explains Voltraware's Gary Chi. "If we take as an example the 380Wh battery on our demo bike, that can be charged from zero to full capacity in about two and a half hours."

With dockless fleet operators like Tier or Lime currently ferrying batteries to their bicycles, the possible increase in efficiency could be massive. The firm also believes its system has several advantages over conventional in-dock charging.

"When you operate outdoors, water is always an issue," explains Chi.

"There's also no physical interface, so no possibility of electrical hazards and no mechanical wear or erosion of any contacts."

Large scale operators are currently Voltraware's primary target, although there's no reason consumer bikes couldn't also benefit from the system. The technology only adds around 700g and works with standard batteries.

"At the show, you can see a beneath charger, with a pad on the floor charging upwards to a receiver. We also offer a side charging variation where we mount the receiver by the handlebar." This configuration is ideal for bikes that will be returned to racks when not in use.

Voltraware is now working with several manufacturers to integrate the technology into bikes, the first of which should be released within the year.

ENGLISH

sks-germany.com



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Infinately flexible. The new **INFINITY UNIVERSAL**-luggage rack system.



## OVERVIEW: 'LIGHT SUPPORT' E-DRIVES FOR SPORTY E-BIKES, LESS IS MORE

A number of suppliers are aiming to appeal to more sports-oriented riders with lightweight assistance drives that opt for smaller and slimmer batteries and less support. This "light support" category is gaining traction, and some examples will be on display at Taipei Cycle Show.



**Mahle X20**

Apart from refined sensors and algorithms for a more natural and dynamic riding sensation and pushes for more connectivity, the big trends in electric assistance drives are larger batteries for more range and more powerful support. But the latter two trends come with added weight, and this is not to everybody's liking. In an attempt to convince sports-oriented riders to give e-bikes a try, some manufacturers and suppliers of assistance drives are focusing on ways to lower the weight of their offerings. This can be seen with e-road bikes and e-gravelbikes, but also with some minimalist utility bikes and e-mountainbikes. The most obvious places to shed weight are the motor and the battery.

One of the first companies to bet on lightweight assist drives has been **Mahle [Hall 1, N1423]** or E-Bike Motion to be precise as this Spanish company launched its X35 system before it got acquired by Mahle, a large automotive supplier from Germany. With a complete system weight of 3.5 kilograms and a slim battery with a capacity of 250 Wh that fitted into slightly oversized down tubes, the X35 was an ideal option to put electric support on road bikes while sticking to traditional

optics. Since the compact hub motor with a maximum torque of 40Nm is well hidden between the cassette and the rotor, bikes equipped with the X35 system are not easily identified as e-bikes. As a consequence the X35 system has seen massive success in the OE market.

But Mahle has come up with ideas for further improvements. The second-generation X20 system is setting new benchmarks for compact and lightweight assistance drives: the weight of the system has been reduced to 3.2 kilograms, while the maximum torque has been bumped up to 55 Nm. As for the battery, bicycle manufacturers get to choose from either a 250 Wh or a 350 Wh version that only differ in length but not in diameter. For long rides with plenty of climbing Mahle offers an optional ranger extender with a capacity of 172 Wh that fits into standard bottle cages. A lot of effort has also gone into additional sensors in the bottom bracket area and improved algorithms for a more dynamic and natural riding feel at all cadences.

Taiwan-based manufacturer **Hyena Inc [Hall 1, N0616]** is launching a weight-optimized assistance drive at Taipei Cycle Show with their E-Road Air Drive system. Thanks to a claimed system weight of 3.2 kilograms and a slim battery with a capacity of 250 Wh, this assistance drive is aiming at the market for e-road bikes, e-fitness bikes and e-gravelbikes. The compact hub motor cranks out 150 Watts and a maximum torque of 30 Nm. With a compact controller that fits neatly into the top



**Hyena E-Road Air Drive System Unit**

tube and an ISIS type bottom bracket with two-sided torque sensors and a cadence sensor, Hyena's E-Road Air Drive system is easy to integrate and versatile in terms of specification. As standard the hub motor comes with an HG-style body to fit cassettes with 9 to 11 speeds, but other bodies can be mounted as well.

In the past **Alber [Hall 1, F0535]** has focused on the utility, trekking and cargo bike segment with its popular hub motors marketed under the Neo-drives brand. At Taipei Cycle Show the German supplier will be showing first samples of an entirely novel product aiming at the light support trend. Dubbed Nano, the system features a hub motor with a proper 142x12 mm thru-axle, a shell diameter of 120 mm and a weight of approximately 1.8 kilograms. The Nano motor delivers up to 32 Nm torque and 250 Watt power and is combined with a 360Wh battery that fits into slightly oversized down tubes. This battery weighs just over 2 kilograms and can be removed to be charged indoors. For longer rides Alber also offers a range extender weighing in at 1.9 kilograms designed to fit in a standard bottle cage.

Another way to lower the system weight is being demonstrated by **Bafang [Hall 1, M0112]**: to shed weight off its M820 mid-motor it has opted for a magnesium housing. This brings down the weight to a very respectable 2.3 kilograms – slightly heavier than the hub motors of other lightweight assistance drives, but significantly less than the benchmark motors from the likes of Bosch eBike Systems and Shimano. At 75 Nm the maximum torque is slightly lower as well, but this allows for the use of a smaller battery – like the BT F050 in-tube unit that only weighs 2.2 kilograms and has a capacity of 360 Wh. This combination brings the weight of the entire system under 5 kilograms while offering more torque than its lightest, hub-based rivals. To appeal to sports-oriented riders Bafang has built the M820 unit with an ISIS bottom bracket axle and a narrow Q factor.

With a background in precision manufacturing, **KHGears International [Hall 1, N0224]** mainly sells transmission parts for industrial robots and for power and gardening tools. Now it's entering the e-bike market with its new Karmina brand, being launched at Taipei Cycle Show. Its compact Harmonic Drive system consists of a drive unit with a splined axle, a motor unit and a controller unit connected to fit into a downtube under the battery. The HD500 version of this system delivers 56 Nm of torque up to a cadence



**Bafang M820 system**

of 120 rpm at a weight of 2.4 kilograms (battery not included). Speed, cadence and torque sensors collect the data needed to calculate and deliver the right amount of support in every situation. KHGears also offers the option to combine its drive system with a third-party battery and controller.

Other notable examples for lightweight assistance drive systems that are sadly not exhibiting at Taipei Cycle Show are Germany's TQ-Group with the HPR50 system. Built around a compact mid-motor, this system weighs as little as 3.9 kilograms and is being used



**Karmina HD500 from KHGears**

by brands such as Trek, Scott Sports, BMC and Simplon for the 2023 model year. Another example that claims to even weigh slightly less is the Bikedrive Air system from Swiss supplier Maxon, allowing for the weight of fully-suspended e-mountainbikes to drop to below 15 kilograms. German supplier Fazua, one of the pioneers for such lightweight concepts, made headlines last year as it was acquired by luxury sportscar manufacturer Porsche. The company's latest offering, the Ride60, can be seen at **Wilier [Hall 1, M2018]** as part of the Urta Hybrid e-mountainbike platform. And at the stand of **Look Cycle International [Hall 2, Q0831]** you can check out the E-765 e-road bike that relies on Fazua's compact mid-motor system. ■ **LvR**



**Look E765 equipped with Fazua system**

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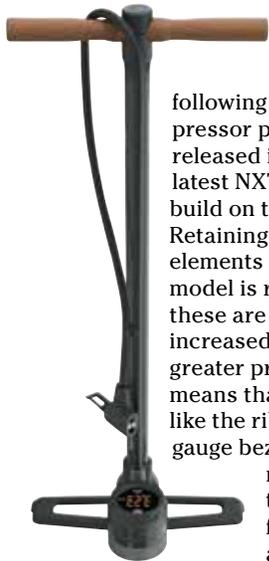
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# OVERVIEW: PUMPS AND TOOLS

## LATEST EQUIPMENT KEEPS YOUR BIKE AT ITS BEST

At home, in the workshop, or on the road. It's essential to be ready for mechanical issues before they strike. From the simple task of inflating your tires to complex workshop jobs requiring specific tools, it pays to be prepared. Of course, a well-maintained bike will also cut down the chances of getting caught out in the first place. However, as bicycles evolve, so do the tools needed to work on them. Make sure you're equipped for every eventuality with our rundown of the latest designs.



German brand **SKS [L1032]** has built a cult following for its Rennkompressor pump. First released in the 1960s, the latest NXT model aims to build on this reputation. Retaining the essential elements the original model is recognised for, these are now joined by increased volume and greater precision. This means that while details like the ribbed pressure gauge bezel and robust

metal construction are familiar, features like the addition of a digital pressure gauge and MV

Easy multi-valve head are right up to date. Always known for its excellent ergonomics, the pump's stable die-cast aluminium base with a non-slip rubber pad still guarantees a secure grip when inflating tires. At the same time folding plastic-coated metal feet can be quickly snapped into place for transport. Guaranteed for a lifetime, each should represent a purchase you'll only need to make once.



**Airsmith's Airbase pumps**

Pump-specialists **Airsmith [I0501]** is showing its wide range of compact tools and compact and full-size pumps. These include its flagship Airbase models, which are designed as the perfect carry-along inflator and use a solid but lightweight aluminium construction. Flexibility is then ensured thanks to a supplementary hose carried within the pump. The Airbase comes in several versions, including one with a neat inline gauge, and is suited to high-volume applications. Also on show are the recently introduced Airlift models, which feature a similarly high-end construction and come in both high-volume and high-pressure configurations.

**Shiang Long [L1006]** is a manufacturer of professional bicycle



**Shiang Long Ratchet Tool**

tools. Specialising in developing new parts, it's recently expanded its range to include ultralight carry-along tools that can be secreted inside your handlebar. Suited to road riders, the first is a simple screw-on CO2 adaptor. It combines with an expanding bung to sit solidly within the end of your bar, while its weight of just eight grams means it fits well with even the most high-end bikes. Working on the same system is the firm's Ratchet Tool. Made of aluminium, this weighs just 22g. Its 67mm body houses a trio of hex bits that can snap into the driver for easy ratcheting. It's suited to working on almost any bike and allows users to customise the selection of bits they carry with them.

Modern bikes often require users to work to precise torque settings for safety and to avoid damaging their machines. Tool maker **Jcool [K1415]** is aware of this and has worked hard to create what it claims is the world's smallest torque wrench. Its Pocket Torque tools offer a range of 2-14Nm and are accurate to within +/- 4%. At just under 15cm long, they provide enough leverage for most jobs yet weigh only 142g thanks to a CNC machined aluminium construction. Users can also save additional weight and money by opting for a version without a ratcheting function. Each arrives with ten of the most common bits and an extender. They're available in six bright colours. Also new is the Speedy Torque, a similarly diminutive, if slightly heavier, option for users



**Jcool Speedy Torque**



**Lezyne Pro Tubeless Kit**

after a compact and foldable torque wrench for use at home or on the road.

**Lezyne [L0517]** has products in several categories, including pumps and tools. It claims to have developed the perfect travel-ready bicycle floor pump for cyclists on the go. The Digital Travel Floor Drive offers the features of a stay-at-home floor pump in a package that's much easier to transport. Weighing only 792g and measuring 51cm long while folding down to 10cm wide, it's easy to throw in a travel bag. However, you still get a long flexible hose, a capacity of 160psi, plus a rebuildable construction featuring an aluminium barrel and steel piston. Built into an ergonomic design with a full-size handle and foot stands, its digital pressure gauge is integrated into the hose. Moving onto the firm's latest tools, among our favourites is the Pro Tubeless Kit. This neat-looking aluminium capsule includes all the bits you need to get your tubeless tires rolling following a puncture. It's ideal for throwing into your backpack or bikepacking bag. It houses two different-size tire plugs, a plug insertion tool, a plug retention tool, a valve core remover, a CO2 inflator, and a micro knife.



**Jcool Pocket Torque**

Distributor and designer **Colmax [M0504]** promotes its RTP-1 Rescue Tool Pod as a complete get-you-home solution. It combines the firm's MTB-5 Multi-Tool and TPT-1 Tubeless Tire Plug Tool into one ultra-portable package. Ensuring your mechanical

**Colmax RTP-1 Rescue Tool Pod**



**Colmax's TPT-1 Tubeless Tire Plug Tool in action**

self-sufficiency isn't undermined by a flat tire, the included TPT tool is designed to fix tubeless bicycle tires without the need to remove them from the rim and comes with five plugs that can easily be inserted to seal minor cuts. The included holster securely accommodates both tools and can be mounted or strapped to most bike frames. Once removed, the tool itself provides users with 16 different functions, including a complete set of hex wrenches and screwdrivers, a T25 Torx-compatible driver, and five speciality tools for complex trail-side repairs.

Finally, **Super B [K0515]** offers a full range of workshop and carry-along tools. At this year's show, it's keen to highlight several versions of the classic Y-style wrench. The firm's traditional model is designed for professional mechanics and daily shop use. It features heat-treated steel for superior durability in high-torque applications and a dual-density moulded handle for leverage and comfort. Less conventional is the new 13-in-1 Y Wrench. This small and portable tool is equipped with 13 bits which are stored in the body of the tool. Allowing for on-the-fly repair with the leverage and control of a workshop tool, it's a highly versatile addition to your carry-along kit. Finally, the even more minimalist and easy-to-carry foldable wrench is ideal for lightweight bikepackers. This tiny sliver of a tool can house three user-selected bits and folds out to allow valuable leverage when needed while taking up a minimum of space when not in use. ■ **JD**

**Foldable wrench by Super B Super B Y-wrench**



# E-CARGO BIKE

Urban commuting has transformed from individual cycling to now cargo transport. Whether you need to simply get from point A to point B, or to transfer large loads to desire places, e-cargo is the bicycle line that can satisfy your need.

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## EG4A-B11

<b>Material</b>	Aluminum #6061
<b>Mfg. Method</b>	Tig Welding
<b>Frame Size</b>	51cm
<b>HT</b>	1-1/8"
<b>Seat Post</b>	ø34.9mm
<b>Motor System</b>	Bosch Drive Unit Cargo Line, Gen 4
<b>Battery</b>	Bosch Power Pack 800Wh*2
<b>Rear Hub</b>	142 x 12mm E-thru System
<b>Dropout</b>	Post Mount
<b>Tire</b>	Front-20.0" x 2.15" Rear-26" x 2.35"
<b>Weight</b>	9.4Kg(Frame)



Meet us at booth I1117



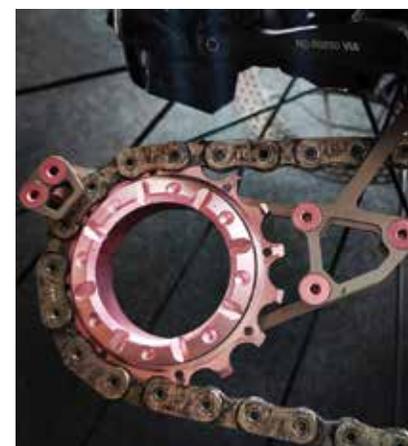
## OVERVIEW: DRIVETRAINS

# POWER TRANSMISSION CONTINUES TO EVOLVE

Drivetrains are the most highly engineered area on a bike. With that kind of complexity comes opportunity and room for improvement. Category leaders in drivetrains didn't get there by chance, they took calculated risks and often surprised riders by meeting demands they didn't even know they had. The proliferation of e-bikes has opened up new opportunities in drivetrain technology but who knew there was still room for improvement in traditional pedal-powered bikes? 2023 looks to be a good year for new developments in drivetrains – below are just a few of what you can see in Taipei.



*3X3's NINE internal gear hub makes up for its weight in efficiency and ease-of-use*



*How to increase drivetrain efficiency? Gearoop's Titanium Wormhole Derailleur Cage*

**SRAM MO612** took control of the dedicated 1x drivetrain 11 years ago and has maintained leadership of the category ever since. In fact, SRAM has come to own the 1x drivetrain system in mountain biking, road cycling, and cyclocross. In 2016, SRAM soared ahead of its rivals with the introduction of the Eagle drivetrain ecosystem, a totally reimagined drivetrain conceived to work flawlessly as a complete system. During the six-year history of the Eagle and 11-years of the dedicated 1x drivetrain, SRAM has sustained its lead by refining the facets of the system under its control. Even with this legacy, SRAM asked itself whether a new level of performance was possible. The result is the Eagle Transmission, a first-of-its-kind approach to the mountain bike drivetrain.

Eagle Transmission is a robust, fully integrated and interdependent wireless transmission without derailleur hanger or adjustment screws. SRAM is confident in the system's reimagined derailleur and supporting parts, which have foundationally changed the relationship between cassette and derailleur. The T-Type derailleur mounts around the wheel axle itself, where it contacts the cassette directly with a Hangerless Interface. According to SRAM, this game-changing full mount attachment method creates

a far stronger connection than a traditional hanger-mounted derailleur. Critics might say that this durable connection is fundamental since replacing a derailleur hanger is far cheaper than replacing a SRAM derailleur. SRAM has addressed this in its FAQ's about the system with the declaration that, "The Eagle Transmission rear derailleur is connected to the axle system and is designed to be extremely robust against side and frontal impacts so you can continue your ride after a crash."

Also making a statement is the AXS Pod Controller, which weighs less than its predecessor Eagle Ecosystem AXS Controller and features updated ergonomics and a vastly superior range of adjustability. AXS Pod's "click and fire" two-button design works intuitively with rider input. Its flippable design allows the Pod to be mounted either on the left or the right and, same as with previous Controllers, Pod allows riders to personalize button assignments via the AXS app.

Conceived as a whole, Eagle Transmission is available in three complete groupsets for cross-country style riding: the XX SL; XX; XO, which vary in their materials composition, and two complete groupsets for e-mtb: the XX Eagle AXS E-bike, and the XO Eagle AXS E-bike. The groupsets are composed of the AXS Pod controllers, cranksets, 10-52T

cassette, flattop chain, and Eagle Transmission Powerlock. Options include removable bashguards, powermeter-ready cranksets with a spider-based design or left-side power measurement inside the DUB crank spindle, and of course direct mount or thread mount chainrings from 32-38T and e-mtb chainrings with a 104 BCD or e-mtb chainrings compatible with Bosch, Brose, or Steps motor systems. SRAM also introduced a new Force AXS groupset at the beginning of March. The new groupset's list of features reflects changing attitudes toward so-called "road riding" to accommodate variations such as "all road" and "gravel."

While some manufacturers are reinventing the past, **3X3 F0100** is focused on fortifying itself against the future with its internal gear hub, which made its world debut at Eurobike last year. The Nine by 3X3 is a maintenance-free gear hub with nine gears and an input torque of up to 250 Nm. This high torque input is captivating because those numbers are well-suited for powerful motors, which will become increasingly more common in the shift away from fossil-fueled vehicles. The Nine can be used on conventional bikes as well as e-bikes, with either a chain or belt drive, yet its two-kilogram weight is a hefty load to haul under pedal power.

There's a tradeoff however, and that's its high efficiency gear ratio of 554 percent, which makes it perfect for touring and mountain biking, according to 3X3. The other big bonuses are its calibrated gears and grease-packed assembly – the former is a "set-it-and-forget-it" maintenance solution; the latter effectively eliminates oil leaks.

3X3 may be new but don't call it a start-up. It's a brand under the umbrella of the highly specialized manufacturing company, H+B Hightech, which focuses on future-proof engineering. Parts are manufactured and assembled in Adelmansfelden, Germany, according to Industry 4.0 standards to ensure that excellent quality can be combined with high volume production. The company is committed to sustainable manufacturing and its European location shortens delivery routes to its majority customers.

For a company that established its reputation in cycling through e-mobility components, **Bafang M0112** naturally progressed to developing parts that support its flagship products. First introduced last summer, the GHA-3 three-speed automatic gear hub has eliminated the rear shifter and cable, and has implemented precise shift points at 25 km/h and 32 km/h. Weighing in at 1.7 kg, the gear hub isn't exactly lightweight but it's designed to operate flawlessly with



**Bafang's 3-speed automatic gear hub features two shift points, at 25 km/h and 32 km/h**

a Bafang motor on an e-cargo bike that's intended for urban riding. The rider can cycle safely and comfortably without distracting gear shifts, which underscore the hub's main goal, which Bafang says is "enjoyment."

When applying science to cycling, friction is a term that gets attention with respect to drivetrain performance. **Gearoop K0026** has an answer to "how to increase drivetrain efficiency" with its Titanium Wormhole Derailleur Cage. Its oversized pulley wheel is designed to reduce drivetrain friction. Older, brand-name systems claim that the oversized pulley wheel is the most efficient system available, and the claim is supported by tests that resulted in 40-60 percent less friction compared to stock pulleys. Instead of trailing the big names in the category of drivetrain parts with a solution of lesser value, Gearoop designed its derailleur cage to compete with rivals and then opted for titanium to save weight and add value.

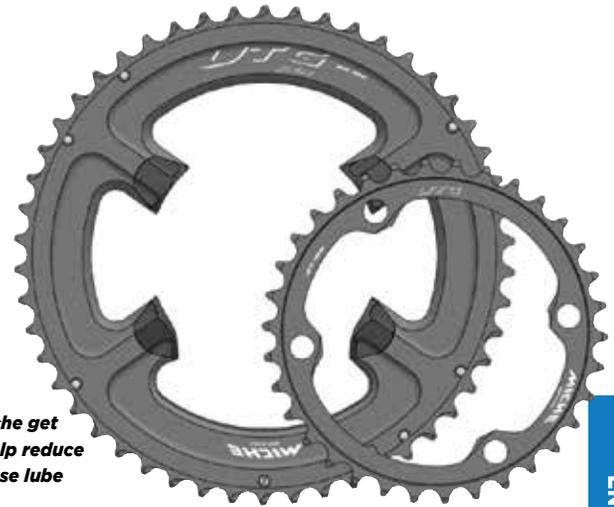
The Titanium Wormhole Derailleur Cage is compatible with both SRAM and Shimano drivetrain systems.

Another company that's taken friction to task, **Miche M2026** has focused on reducing all unnecessary friction to maximize fluidity and smoothness with its new Pistard Oro sprockets. CNC-machined out of hard steel to eliminate surface imperfections, together with an innovative WC/Co treatment based on tungsten carbide to optimize the machining process, help to reduce friction without the need for lubrication. The sprockets measure 1/8" in width, are available with 13-18 teeth, and weigh between 13-30 grams.

Miche traces its history back more than 100 years to Italy, where it has produced bicycle parts in-house since 1919. The company has expertly navigated the ever-evolving market with a combination of tradition, passion, the latest technologies, and a drive for innovation. Miche has manifested these values in its Italian production and testing facility where products that bear the Miche name are crafted and tested according to the most stringent standards. The new UTG 8100 chainrings are CNC anodized aluminium, compatible with Shimano Ultegra



**Hard steel sprockets by Miche get the WC/Co treatment to help reduce friction without having to use lube**

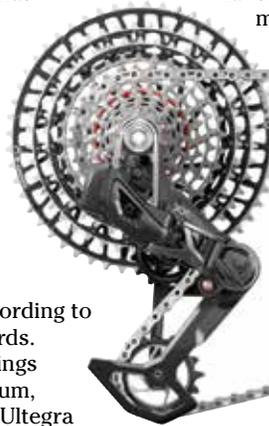


8100. The large rings are available in 50, 52, and 54 teeth and weigh between 50-125 grams while the small rings come in 34, 36, and 40 teeth and tip the scales at 34-36 grams.

Recent news reports about the struggling global economy haven't favored drivetrain components manufacturers. Instead of

playing it safe and peering ahead with caution, some brands are eyeing the future with optimism. Other more hopeful news reports predict massive increases in cycling as a strategy for combatting climate change. Cautious or optimistic, makers of drivetrain parts will play a vital role in moving the cycling revolution forward.

■ WB



**SRAM leads the drivetrain category (again) with the debut of the Eagle Transmission. Shown here the XX SL system.**



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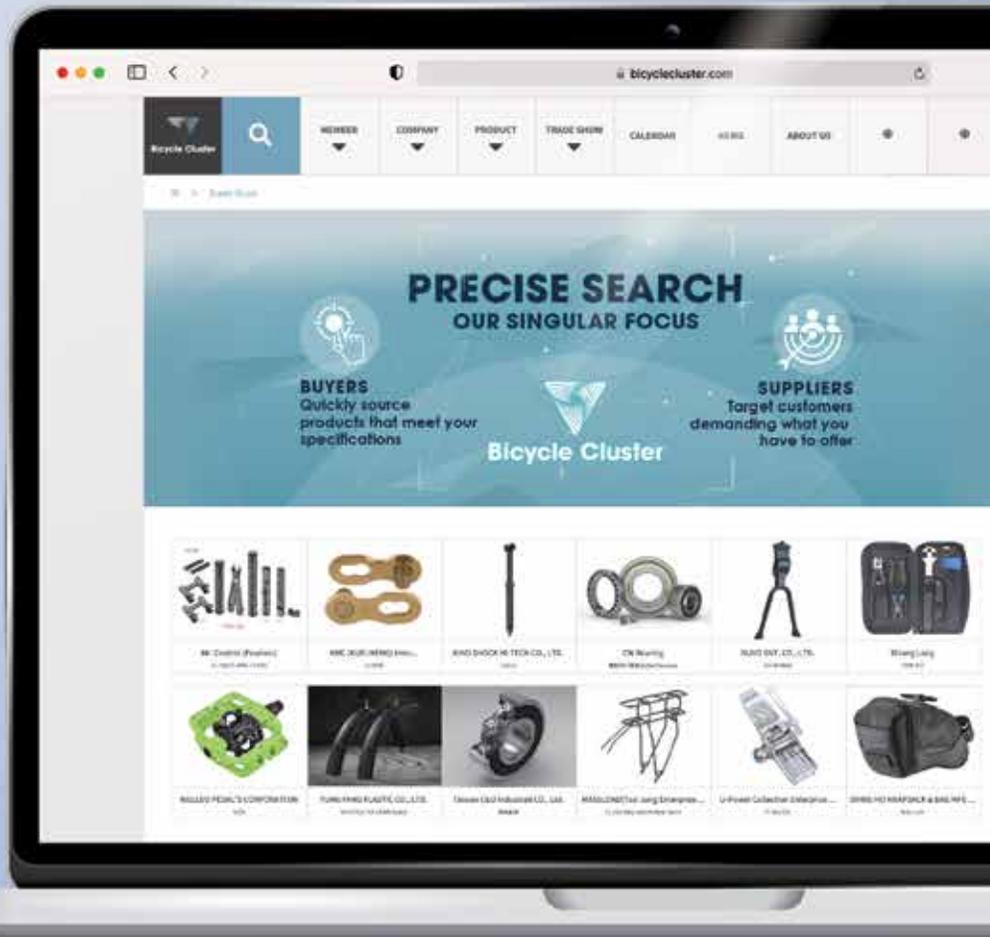
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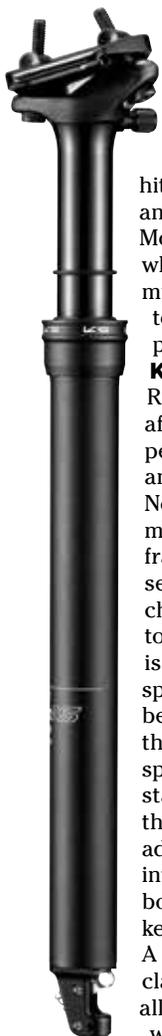


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**OVERVIEW: SUSPENSION****NEW SUSPENSION PRODUCTS CAN TAKE A HIT (AND ROLL WITH IT)**

Suspension solutions have bounced in favor of beefier products that can manage heavy loads. New forks and shocks for e-cargo, e-SUV, and electric mountain bikes boast the features that we can't do without, like compression and rebound adjustments, and show their strength when fully loaded on the street, dirt road, or trail. A suspension dropper post that fits gravel frames will smooth out the grind and soften the "noise" coming from the surface below. Suspension manufacturers with a reputation to maintain make a good thing even better with redesigned products engineered to keep up with evolving consumer trends. Whether it's more bounce for a bargain or more cush for your tush, here's what there is to see in suspension.



**Rage-iS**  
from **Kind Shock**

Suspension seat posts help reduce the transfer of high-frequency vibrations from the road to the rider, which have made them a big hit with the gravel racing and bikepacking crowd. More specifically, cyclists who take on long-haul, multi-day rides will want to know about suspension posts, like the Rage-iS from **Kind Shock [I0818]**. The Rage-iS was designed as an affordable, full feature dropper post with 65 mm of drop and up to 30 mm of travel. Now it's available in a 27.2 mm diameter to fit more frame standards, including seat tube widths that are characteristic of gravel and touring bikes. The Rage-iS is a dropper post with air spring suspension that can be easily accessed to adjust the preload and rebound speed. A one-piece forged stanchion and head houses the air valve for making adjustments, while an internally routed polycarbonate cable connector keeps things neat and tidy. A micro adjustable head clamp with black steel bolts allows for some fine-tuning without breaking the bank, and a precision machined alloy mast with integrated seal collar helps minimize product fatigue and/or

failure due to varying tolerances and invasive contaminants. The Rage-iS is compatible with all Southpaw, KG, and Westy remotes.

Celebrating its 35th anniversary this year, **SR Suntour [J0818]** has made a name for itself over the years as one of the world's most prominent bicycle suspension components manufacturers. This Japanese-owned company credits its success to its collaborative global infrastructure and a shared drive to create suspension and drivetrain products for the widest range of cyclists, from world cup racers to urban commuters to kids who are just experiencing the excitement of riding a bike for the first time. In the do-or-die world of product development, SR Suntour has thrown its weight behind big loads and created suspension solutions for the e-SUV and e-cargo categories. With the proliferation of e-bikes changing



**SR Suntour SF23 MOBIE34 CGO**

the game of suspension development, the Mobie suspension fork line is SR Suntour's answer for everything from the daily commute to fully loaded bike touring. The complete Mobie line ranges from 20" cargo forks and micro mobility solutions to heavy duty trekking bikes. With the introduction of the SF25-MOBIE36, SR Suntour has sought to strike the perfect blend of peak mountain bike performance with useful, practical, and safety-enhancing features for both off- and on-road riding. Equipped with the same high-end PCS cartridge performance and EQ air spring technology that has taken racers to the top of the podium in the Olympics and world cup races, the new Mobie36 also has fender mounts, a crown mount for a light, and ABS mounting interfaces to support rider safety and comfort. The SF25-MOBIE36 offers 120-150 mm of travel with offset for 27.5" or 29" wheels.

Cargo bikes are changing the way people move within an urban environment and how they transport kids and goods. As a more sustainable and healthy way of living, using a cargo bike allows for a connection

and interaction with the environment while getting the "job" done. Of course, when transporting precious goods like kids or heavy loads, safety is the absolute must and comfort is an undeniable plus. SR Suntour first entered the cargo market with the Mobie A32 and, while it's still being used on many cargo bikes, the Mobie 34 CGO gives us a glimpse at the future. By using a magnesium-alloy monocoque casting, the Mobie 34 CGO's weight loss is significant, yet its new 34mm stanchion tubes add stiffness, while boost spacing keeps up with current trends. The added stiffness results in the most predictable steering currently available, according to the company; a range of crown concepts allow for different steering solutions for modern cargo bikes. Extra reinforced structure and revamped internals ensure a smooth ride in both unloaded and loaded situations. The new cargo fork also features an integrated light mount and interfaces for ABS devices.

Part of the mountain biking experience is progressing from light trail

riding to increasingly rugged terrain. Just because a rider is going for more gnarly terrain doesn't mean they want to lose their fillings when on a routine ride. For a world less shaken, SR Suntour has completed its new product offerings with the RS24-EDGE X. The Edge was created to perform as a lightweight rac-

**RCP2PLUS** from **DNM**  
Performance Suspension





SR Suntour SF25 MOBIE36

ing shock for cross-country and, while the Edge name remains synonymous with short to mid-travel suspension, the X indicates a reinforced and updated structure to meet the demands of full-suspension e-bikes. The new Edge X features a redesigned shaft for extra strength and improved sliding action for small bump compliance under heavier loads. Comfort was a priority for the Edge X, yet its efficiency prevails. The shock's efficiency is supported by an increased amount of mid-stroke support when paired with precise rebound damping to provide a calmer ride. A

switch allows the rider to adjust the suspension for a comfortable ride and ultimate traction.

Manufacturers that have already forged a reputation for their suspension products need only do one thing to maintain their status: make a good thing even better. **DNM Performance Suspension [N1229]** has refined its RCP2 rear shock and given it high and low speed adjustability for fine-tuning the shock's rebound speed. The RCP2PLUS gives the rider greater control over the suspension performance, which can be dialed in according to the terrain.

Designed for descending, the RCP2PLUS is targeted toward all mountain, free ride, and downhill disciplines and comes in three sizes with travel ranging from 60-80 mm and eye-to-eye lengths spanning 220-265 mm. DNM also has a pair of lighter duty shocks for cross-country and trail riding: the TRU-8RC and the AO-8RC, both with adjustable rebound, lock out, and air pressure and altogether available in seven lengths and travels.

**X-Fusion [L1123]** also has a history of making reliable suspension products for each category as demands for bigger and better bounce have evolved over time. 80-200 mm of travel spans four fork models suitable for cross-country, enduro, and downhill, each with specs answering to current trends for each discipline. While X-Fusion's suspension products have been on the market for a while now, they hold steady for their price and utility. For instance, the Trace 36 Coil – developed for the relatively new progression of 29er super enduro bikes – stands out for its daring advance into gravity suspension (up to 170



X-Fusion-Trace 36

mm of travel) with a second backup spring for bottom out control, yet its 10 mm of travel adjustment indicates that the fork can handle the most technical bits of trail – even

when the trail goes up instead of down. With the Trace managing things up front, X-Fusion has supplied two shock options for the rear. Both the H3C RCP coil spring shock and the O2 Pro RLX air spring shock give the rider three suspension settings plus rebound compression adjustment. Given the spring technology, X-Fusion has targeted the coil spring at enduro riding, while the lighter weight air spring has been designed for cross-country and all mountain riding.

As government initiatives lean into bikes more than cars, with many countries committed to adopting cycling strategies by 2030, expect to see future suspension solutions evolve to attract riders to cycling mobility. Air, coil, elastomers, foam...suspension "springs" eternal with innovation. ■ **WB**

ENGLISH

# PORTUGAL BIKE VALUE

THE FUTURE STARTS NOW

## IN PORTUGAL, THE FUTURE HAS ALREADY BEGUN.

Portugal Bike Value is present at Taipei Cycle. In the booth M301 you may find the next step to quality, innovation, research and design. Portugal Bike Value is participating under the ABIMOTA FEST 2020 program, co-financed by COMPETE and Portugal 2020.

The new global reference for technology and innovation has a name: Bikinnov – Bike Value Innovation Center – Association, is the institution that will manage the Technological Interface Center (TIC) specifically designed for the two-wheel and soft mobility sector.

This TIC is going to be a shared center for the industrial development of two wheels and smooth mobility, which is intended to give companies the conditions to be able to innovate and develop their products in an appropriate ambience. It intends to assert itself as a multi-functional project, which aims to respond to the different demands of the sector and to be on par

with the best that exists worldwide in the sector, in terms of research and development, combining and developing, internally, the existing capacities in Portugal. The commitment is to produce bicycles, but also components of the best quality, encouraging the development of existing companies and the creation of new modern and technologically developed companies, as well as laboratories that allow the creation, development and testing of the best solutions and technologies. In this way, together, we go further, in a commitment assuming a more responsible and sustainable future.



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**OVERVIEW: TIRES****INNOVATION INSIDE AND OUT  
AS TUBELESS EXTENDS REACH**

Tubeless systems, including tire liners, are well-established in mountain biking, but the increasing adoption of tubeless in road riding up to and including the pro peloton has brought new tires and run-flat systems.



Continental's new All-Season and TT versions of the GP5000 tire extend its appeal

The GP5000 is the flagship of the **Continental [LO524]** road range, and the company has launched two new versions of the tire this year. The new Grand Prix 5000 AS TR is touted as the strongest tire in the line-up, whereas with the Grand Prix 5000 TT TR the emphasis is on speed.

The AS stands for All Season, and for this tire Continental has married the speed of the Grand Prix 5000 with the longevity and puncture protection of the Grand Prix 4 Season. The new tire has a deeper tread pattern, a multi-layer ply construction and additional sidewall protection. It's the heavier of the two new tires, starting at 300g per tire, but will appeal to riders looking for the performance of the GP5000 tire in a slightly more durable package for year-round use. Continental uses its BlackChili compound rubber, offering a good balance of rolling resistance and grip. For puncture protection it's infused with Vectran Breaker liquid crystal polymers. The tire is tubeless-ready and hookless compatible, and available in widths from 25mm up to 35mm. Black and cream sidewalls are available.

If speed is your main concern then what you want is the tire that Filippo Ganna used to break the hour cycling record last year. The Grand Prix 5000 TT TR was released last year

in a limited edition 25mm version, but now a 28mm tire is available too, with a weight of just 235g. The tread thickness is reduced and the lightweight construction is intended to reduce the tire's losses from material deformation, offering a lower rolling resistance. Continental says the fastest times on the GP5000 TT TR tires are achieved when you pair the 25mm at the front with the 28mm at the back. Again, the tire uses Continental's BlackChili compound rubber and is tubeless and hookless compatible. It's only available in black sidewalls.

**Goodyear [Messingschlager, JO512]** has a number of new tyres on display. The Peak SL is a new XC race tyre that's lighter and more speed-focused. It features a 120TPI casing, closely-tread constructed from XC Race compound rubber, and enhanced sidewall protection. At only 710g for a 29x2.4" tyre it's very light for a high-volume race tyre. On the road side the Eagle tyre range has been revamped, with the Eagle F1 SuperSport R at the helm. Goodyear describes it as "our lightest weight Ultra High-Performance

road tire, designed to provide ultimate race day performance", and it's constructed using a 150TPI casing and Goodyear's new Dynamic:UHP compound which reduces rolling resistance by up to 17% as well as improving grip. Even though the tyre is 8% lighter than the previous model it manages to incorporate an R:Shield breaker belt for better puncture protection.

**Maxxis [JO218]** is on a mission to make its tires more fun and durable, according to the company. To that end it's putting a lot of work into making more of its range e-bike compatible, specifically conforming to the more stringent ECE-R75 standard for e-bike tires that includes speed pedelecs with top speeds of up to 50km/h.

Maxxis uses a robust butyl insert enforcement and has upgraded the casing structure on a number of tires to meet the standard, and make sure that tires are safe and long-lasting for riding at speed. Popular MTB models such as the Minion, Assegai and Forekaster are included in the upgrade, and Maxxis has also acknowledged the growing prevalence of e-bikes in commuting and cargo use: both the MetroPass and the cargo-specific MetroLoads tires are now



**SEAWASTEX**  
海洋回收耐隆絲

**Maxxis tires will incorporate Seawastex nylon reclaimed from fishing nets**

ECE-R75 certified.

Maxxis is also looking into the environmental impact of its manufacturing processes, and taking steps to use more sustainable materials where possible. It's a company founded on an island, and is actively engaged in protecting the natural environment. To that end it has announced a partnership with Seawastex, an innovative program that recycles scrapped fishery nets and turns them into raw nylon, a key component of bike tires.

**Wilderness Trail Bikes [LO818]** offers a wide range of tires across road, gravel and MTB. In the mountain bike line-up, the Vigilante has been a



A wide range of Maxxis tires are now ECE-R75 certified

Goodyear's Eagle  
F1 Supersport R

**The Agilest from Panaracer is available in five different versions**

long-standing model, but the original 2.3" carcass has been updated to offer wider widths for modern MTBs.

**Panaracer's legendary Smoke/Dart MTB tire combination is still in production**

"Aggressive, premier and unwavering... those were all words we used to describe the original Vigilante 2.3 and they still ring true about this updated Vigilante", says WTB. The tire is versatile enough to use for anything from trail riding to gravity, offering a square-lugged tread with extra depth to dig into loose terrain. The spacing has been increased to help the tire shed sticky mud. It's available in 2.5", 2.6" and 2.8" widths for 27.5" and 29" wheels.

**The latest Tannus airless tire is aimed at cargo bikes**

Similar to the Vigilante, the Trail Boss originally launched in a fairly narrow 2.25" width, but has been redesigned to keep up with mountain biking trends. A trail and enduro tire, the Trail Boss carcass has been increased in size, with 2.4" and 2.6" options in the range for both 27.5" and 29" wheels. At the same time the tread pattern has been made more aggressive, with a generously-spaced central section and large, supportive side knobs to dig deep in the corners. It's most often employed as a rear tire but is also a good front choice on hard packed trails.

While some tires might be getting a redesign, **Panaracer [M1010]** still offers the legendary Smoke and Dart combination in its original 26x2.1" size. Originally launched in the 1990s the rear-specific Smoke and front-specific Dart were ubiquitous at the turn of the



**The hexagonal Vittoria Air Liner allows tubeless tires to run flat**

century. Bike and tire technology may have moved on, and wheel sizes certainly have, but if you're building up a classic bike then it's hard to look past this classic combination. Both tires feature Panaracer's Anti-Snake-Bite Chafer, a rubber strip by the bead that reduces the chance of pinch flats by an average of 40 percent. The tires are available in the single original size in Black/Black and Black/Amber.

It's not all retro at Panaracer though: the new Agilest road tire has been critically acclaimed since its launch, and is available in five versions, including a race tubular and a super-light sunday-best-bike build. Probably the best all-rounder is the Agilest TLR Folding, which is tubeless-compatible and works with hooked or hookless rims. It's impressively light at just 250g for a 28mm tire, and is available in sizes from 25mm to 32mm. The Agilest uses Panaracer's ZSG Agile Compound which offers good grip in all conditions.

**Challenge** will be showcasing its new top-end tubeless road tire, the Criterium RS. "This new road tire aims to enhance the perfect mix of speed, grip and durability while providing refined control and shock absorption capabilities thanks to its handmade construction," the firm says. The new tires are handmade round a supple 350tpi Corespun Cotton casing for optimized weight. Cotton casings can be fragile, so the Criterium RS includes a bead protection strip to enhance longevity by reducing the effects of chafing or rubbing against the rim's carbon bead hooks. The contrasting black chafer also acts as a precise line around the rim to help the user confirm that the tire bead has uniformly been seated all-around. The Criterium RS is also compatible with tubeless setup and hookless rims. The tire uses Challenge's new SMARTPRIME compound. "This new compound consistently increases grip in both dry and wet conditions, significantly reduces rolling resistance, and it is flexible and shock-absorbing at the same time", says the company. The Criterium RS is available in 25mm and 27mm widths, weighing 225g and 260g respectively.

**Vittoria [F0441]** scored a double success at the inaugural UCI Gravel World Championships in 2022, with Pauline Ferrand-Prévo and Gianni Vermeersch both riding to victory on Vittoria's Terreno Dry tire. A fast gravel tire for dry condi-

**The Vittoria Terreno Dry took both wins at the UCI Gravel World Champs**



**Vittoria's Corsa N.EXT is aimed at the everyday rider**

tions, the Terreno Dry uses a unique angled hexagonal "fish scale" design, that allows the center tread to roll extremely quickly, but also offer traction when loaded in cornering and braking. The tire transitions into a more open tread over the shoulder to give more traction when cornering. The Terreno Dry is available in three carcass styles - rigid, folding and tubeless-compatible - and in a range of widths from 31mm to 47mm.

Tubeless tires have become increasingly popular in the pro peloton over the last couple of years, but one of the things that they don't offer when compared to tubular tires is the ability to run flat until a wheel change can be made. For that reason tire liners have become increasingly common, and the Vittoria Air-Liner was one of the first to emerge. Adding an insert to a tubeless setup has a number of advantages. The liner offers an amount of impact protection, and also works to lock the bead of the tire in place at low pressures so that the tire doesn't roll off the rim. Vittoria's system is also specifically designed to be a run-flat solution should the worst happen. The Vittoria Air-Liner Road system is compatible with all tubeless road tires on the market and comes in three sizes for a perfect fit. The lightweight material absorbs no sealant, and the proprietary tubeless valves eliminate valve clogging. Gravel and MTB liners are also available.

Vittoria will also be showing its Corsa N.EXT, which is designed for the everyday rider and to fill the gap between the Pro Competition and Advanced Training tire categories. The Corsa N.EXT uses a premium vulcanized 3-layer nylon construction and a new graphene silica compound for ultimate speed, high grip, puncture resistance and longer mileage. The proven tread design is the same as

that used by Vittoria teams in the World Tour. The Corsa N.EXT is available in foldable and tubeless versions in sizes from 24mm to 34mm

**Tannus [L0718]** tires have long been innovators in the sphere of airless tires. Their solid tire range is made from a durable polymer called Aither 1.1 that's similar to the shock absorption layer in the soles of running shoes. Completely puncture-proof, Tannus tires attach to a standard rim using an arrangement of locking pins that are fitted through holes in the base of the tire and clip into the bead of the rim.

Tannus tires are available in sizes from 16" Brompton wheels all the way up to 700x40c to replace a larger commuter or gravel tire. New to the range is the Tannus Cargo Airless, which comes in a 20x2.2(55-406) size and has specifically been developed for the wider 30mm internal rim width found on many load-carrying bikes. The tires themselves are rated up to 130kg per tire, and are available with a reflective stripe.

As well as airless tires, Tannus offers a range of tubeless inserts for different widths of tire. The Tubeless Armour system is a modular design with 3 different models, and features a new rib structure that makes mounting easier and supports the tire bead more firmly. The Tubeless Armour inserts allow lower pressures to be run, and support the tire sidewalls for better cornering and less risk of burping air. If the worst happens and your tire is compromised, the Tubeless Armour inserts are run-flat compatible to get you home. The system comprises the Lite (28-32mm), Gravel/XC (35-52mm) and Pro (52-65mm), and you can combine Lite and Pro to create the Fusion insert, a bulletproof solution for hardcore conditions. ■ DA

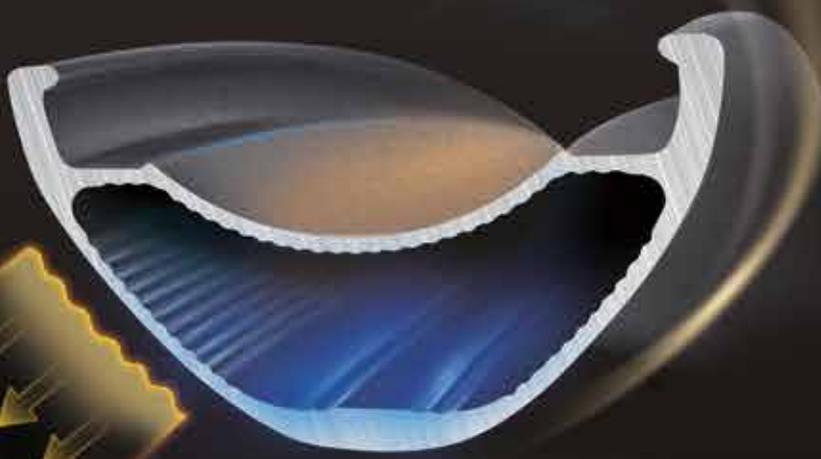
**The WTB Trail Boss is most often used as an all-round MTB rear tire**

**The WTB Vigilante is available in widths up to 2.8"**

**The Tannus Tubeless Armour insert is a modular system**



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## OVERVIEW: BICYCLE LOCKS SECURITY SOLUTIONS TO MAKE THIEVES THINK TWICE

Just as with any career, thieves need to update their skills to stay current. The recent increase in the number of cyclists with outdated solutions for bicycle security provides abundant opportunities for thieves to “do their job.” Fortunately, manufacturers of bicycle locks are outpacing thieves with new solutions to keep bikes safe. These folding combination locks, locks integrated into the steerer tube, and stylish bike security solutions all have one thing in common: to prevent bicycle theft.

The key to choosing a lock, according to **Crops L0924**, is the balance between weight, ease of handling, and security. The stronger the lock, the better the security, but the lock is often proportionally heavier and harder to handle. To achieve both strength and ease of handling, Crops created the Benlock, a foldable U-lock with keyless combination security. The Benlock’s square shackle makes it difficult for would-be thieves to gain the leverage needed for breaking the lock, and there’s one more security feature to keep the owner from losing their bike forever: the Benlock can be equipped with a smart tag, which is currently one of the most advanced anti-theft measures for protecting bicycles. Made of zinc diecast, a folded Benlock weighs 550g and is 43 percent smaller than a traditional U-lock, which makes it more portable and easier to manage on those errand runs with multiple stops.

User-friendly folding locks provide theft-proofing that outsmarts bolt cutters and crow bars in a compact, easy-to-carry unit that fits neatly on the frame. Lost keys, however, will frustrate the owner too who will have to seek alternative transportation if they can’t free their bike.

**Activa Health Tech N0830** has a solution with its **Metroneer** brand combination folding lock made from strong



*The Benlock by Japanese brand Crops.*



steel and coated with acrylonitrile butadiene styrene (ABS) to keep bikes secure and free of scratches. Activa has also empathized with the hassle of carrying a bunch of keys and opted for a keyless combination lock to free up the user from having to keep track of one more key. The lock’s compact design can be mounted on the bike’s downtube, making it easy and efficient to carry without taking up cargo space. Even more portable than a carry-along lock, **Defend Q0731** has created a locking device that’s installed on the steerer tube and can lock the stem in three directions. The device has been engineered



*Defend DIY installation lock*



*Activa Metroneer*

for easy DIY installation on almost any model of bike and is designed to make a statement about security with a visible cylinder lock resting on the top tube. The lock body is made from rust-proof carbon steel with a polyurethane exterior. The lock cylinder is an electroplated composite that withstands punishment from harsh outdoor elements. The locking disc is made of



Ming Tay 778 multipurpose cable locks

zinc-aluminum alloy for its lightweight and rust-proof properties.

Cable locks, however, still have their place because they are light, easy to throw in a bag or even a back pocket, and they provide a little peace of mind for quick stops around town. Even better is a multipurpose cable lock, like the MT-778 from **Ming Tay Hardware K0928**. The cable ends are threaded through a barrel-shaped lock body and can be adjusted to secure valuables of varying sizes, like luggage, motorcycle helmets, skis, and of course, bikes. If the customer can't be bothered with a lot of moving parts, then Ming Tay's other cable lock, the classic MT-3505C wraparound cable lock and key features a few modern touches like a refined lock head and cable end design to enhance its theft-proofing. The modest MT-730 pocket combination lock can be personalized with a combination that's easy for the owner to remember.

One of the main drawbacks to cable locks is how easy they are to cut through with cheap cable cutters. To a thief, a bike secured with a cable lock may only be a temporary deterrent. Now add in an alarm that sounds whenever the cable is moved or cut and there's no mistaking that a bike theft is in progress. **Ulac K0425a** has equipped its Bulldog high security alarm cable lock with a 110dB alarm, which will activate if the cutting and moving sensor is triggered. The alarm runs on two triple A batteries and comes with high security dimple keys with 500 unique key combinations. The lock has a braided steel cable with a strength core and includes a transportation bracket system for versatile carrying. Ulac conceived the Bulldog for commuters who park their bikes out in the open for longer periods of time.



Ulac Bulldog

**Abus K1129**, arguably the market leader in bicycle locks, has a reputation to uphold, but that doesn't mean it can't add a little style to security. The Goose Lock is a dimensionally stable, flexible chain lock that features Abus's signature technology enclosed in an eye-appealing soft casing. It is made up of several components: classic 6-millimeter steel chain, the gooseneck, a foam cover, and a coating made from plastic fibers. The steel chain – like the housing and structural parts of the locking mechanism – is manufactured from specially hardened steel. The term "gooseneck" refers to two metal spiral springs wound together that ensure the

dimensional stability of the lock. This allows the lock to be bent into the desired shape and wrapped tightly around the bicycle frame. The foam ensures rattle-free transport while the durable, highly flexible coating provides excellent protection against abrasion and scratches. Thanks to the Goose Lock's dimensional stability and foam, the lock can be easily

transported. It is available in black, mint green, blue, and pink for an individual color statement to match almost any bike.

Bicycle security solutions like these that make bike thieves want to change careers not only make your bike safer, but they also provide a service to all bike owners by preventing the number of would-be thefts. ■ **WB**



Abus Goose Lock

Abus Goose Lock



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# OVERVIEW: GRIPS, BAR TAPES AND MORE TOUCH POINTS WITH STYLE AND COMFORT

Bicycle grips and bar tapes may appear insignificant, but they can make a big difference in the cycling experience as they provide riders with a comfortable and secure grip on their handlebars, while helping to dampen vibration. They can also play a crucial role in enhancing the bike's performance and add a stylish touch to the bike's appearance. While ergonomics and comfort continue to be important, there's a growing emphasis on sustainability among manufacturers.



In the MTB world, **DA BOMB [1F, I-0503]** has taken notice of the Enduro trend, developing the Holy Shit 3.0, a grip with improved function and ergonomics. Made of rubber compound, the half-flange facilitates the movement of the thumb making it perfect to control the shift levers and its checked and knurl pattern keeps the hand in place.

With over 40 years of experience in manufacturing bicycle parts and components,

**Profile Design's Ergo + / Race + pads and Heatshrink bar tape offer optimum control to tri-athletes**

**Profile Design's Grip It bar tape feels soft and tacky**

**VP Components [1F, K0810]** specializes in OEM and ODM projects with prominent industry partners, and now offers grips featuring GRS (Global Recycling Standard) materials. Giving priority to ergonomics and comfort, they say their ergonomic grips offer style without compromise.

Creating cycling components designed for speed, Profile **Design [Hall 2, Q0124]** understands that comfortable and reliable touch points can help athletes during long rides. Besides their Grip-It bar tape offering a tacky feel with a high level of cushioning, their focus this year is on their new Ergo+ / Race+ Pad.

The firm has spent a lot of time researching materials, manufacturing and design in developing the product. The Ergo+ / Race+ Pad takes the shape of the popular Ergo armrest and lengthens it to 124mm to increase the contact surface, and has a new surface pattern that helps lower pressure on the skin and improve air circulation while maintaining high grip performance. In addition, Profile's Heatshrink bar tape offers a hardwearing and low profile option for any aerobar.



**Da Bomb Holy Shit 3.0 is made for smooth shifting**



**VP Components' VPG Series offer maximum control and comfort**



**The ergonomically shaped VPG-ER09A from VP Components is made of recycled cork**

The VP-ER08A features an ergonomic shape and special ventilation channels to improve traction and the similarly shaped VPG-ER09A brings in recycled cork in a TPR matrix. On the other hand, their new MTB grips, like the more high performing VPG-127A and the entry-level VPG-106, offer maximum comfort and control to suit all types of riders' needs.

Made in Germany, the new EG Grips Series from **Ergotec [1F - I810]** combines ergonomic design with dynamic aesthetics. At the heart of the EG grip series, the EG Active Flex grip offers a large ergonomic hand rest which, thanks to the

heart of the EG grip series, the EG Active Flex grip offers a large ergonomic hand rest which, thanks to the

unique Ergotec Flex adjustment, allows the hardness of the hand rest to be set to two different degrees of hardness by changing the Flex-Stick. Initially, two flex-sticks are offered in green (more cushioning) and red (less cushioning). For the inner material of its EG Performance grip, Ergotec uses a TP material composite made of recycled, glass-fiber reinforced thermoplastic. The absence of classic Kraton means sticking of the hands to the grip is a thing of the past.



**The Ergotec EG Active flex comes with 2 Flex Sticks for adjustable hand support**



**V-Grips new lock-on grip V-184 is comfortable and eco-friendly**



**Silicone foam bartape by V-Grip**



**The new VLT-8121 tape from Velo offers better dampening for gravel bikes**



**The new VLG-2070 from Velo is made out of their new EVA material**



**Co-Union CB-3881 MTB grips offer better grip and comfort thanks to its 143mm length**



**Ciclovation's Halo Touch adds a touch of style**



**MHL's bar tapes in printed PU leather enhance the bike's aesthetics**

the emergent brand from Huang Smart Cycling Inc. knows that enthusiastic cyclists care about how bar tape looks, as well as how it performs. The Halo Touch series tapes have proved very popular since their launch. Uniquely formulated synthetic Halo Touch surface with prismatic texture turns heads while improving grip and providing all-out performance. Multi-layer, multi-density foam laminates effectively absorbs shock, dampens vibration and minimizes fatigue.

Relatively new in the industry, **Z.J. Global [4F, L0011]** aims to redefine grips beyond traditional designs by integrating different functions and parts that were previously installed separately. By integrating LED lights that indicate when the cyclist is turning or braking, the IB Grips eliminate the need for additional peripheral products and enhance safety.

**Apex/MHL [1F, K0022]** has a strong presence in the tennis racket segment and applies its knowledge of grip technology to handlebar tape. Its high-performance PU material is made of two-sided polyurethane with a soft, wet feel & high elasticity. The tacky high density PU Wet Tape employs a non-woven microfiber substrate from Japan in conjunction with very soft tacky polyurethane for optimum feel and durability. ■ **MW**

With years of experience behind it, **V-Grip [1F, I1318]** carefully assesses current trends and styles and consistently predicts market demand year after year. The new ergonomic lock-on grip (V-184) offers a more comfortable ride but it's also eco-friendly thanks to the incorporation of biomass and green materials.

Furthermore, V-Grip says that their new bar tape (CWT926SL), which is made entirely of silicone foam, is a game changing innovation in ultra-lightweight bar tapes.

Leading manufacturer of high-quality grips and bar tapes **Velo [1F, J0717]** also continues to innovate and provide cyclists with a comfortable grip during rides. Riders can experience improved performance with the new EVA material used in their performance-focused e-bike and MTB grips (VLG-2070), which have a higher density compared to conventional EVA and boasts 100% UV resistance and long-lasting durability. Velo's new elastomer tape (VLT-8121) is designed for long-term use and provides higher shock absorption for gravel bikes.

Besides new product innovations, Velo says they're dedicated to sourcing new eco-friendly materials, using 35%-50% substitute recycled materials in the current product range.

With a wide product range from bike helmets to LED flashlights, **Co-Union [1F, K1008]** is presenting its latest PCR lock-on ergonomic grip CB-3881, which they say offers better grip and comfort thanks to its 143mm length. Also following the eco-friendly trend, "Post-Consumer Recycled" material is used, helping reduce 50% of carbon emissions while not affecting the quality of the products.

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# OVERVIEW: CHILDREN'S BIKES

## RACE-LEGAL BIKES ARE NOW CHILD'S PLAY

While the industry may be involuntarily spinning its wheels due to slowing sales and overstocked shops, kids don't care about market woes - they're still riding bikes. There's good news for young riders, who can choose from a vast range of push bikes in a variety of designs including adjustable frames and materials from steel to plastic and wood. To accelerate a child's embrace of cycling, there's even an electric balance bike. There have been options for kids up to around age 12 for decades but then what? Road bikes with race-legal junior gearing and mountain bikes with 26-inch wheels cater to this cohort of cyclists, in between bikes for kids and bikes for adults. At some point in the future, bike manufacturers will get rolling once again and make bikes for all riders. Until then kiddos have their pick from bikes like these created especially for them.



**Paco Bike's UCI-compliant bikes are race-ready from the start(line)**

While "children's bikes" often refer to bikes for young children, ages 2-12, **Paco Bike M1405** has been committed to developing products for older children and teenagers since 2007. Company founder, Paco Chang, built his brand on the belief that children should have safe bicycles that conform to their own unique geometry. Disc brake systems, 7- or 8-speed cassette options that meet UCI regulations for junior gearing, 2x drivetrains, and 320-360 mm handlebars are key features for the bikes, which also boast suitable stack and reach numbers to give young riders greater control and improve bike handling.

Road and cyclocross bikes and their related spare parts are the company's main focus this year and to that end, the brand's 20/24/26" road and 'cross bikes have been designed for aspiring young racers. The Pro Road Bike Disc comes in frame sizes 20, 24, and 26-inches and features components that favor smaller riders. The bike's crankset is available with crank arm lengths from 145-155 and 42/34 chainrings; the aluminum alloy handlebar width measures 360 mm; and the 12-25 8-speed cassette is race legal for UCI-sanctioned junior races. The 24-inch version weighs in at 9.4 kilograms.

**VoomVoom Bikes**, the pioneering house brand of **Crankgears M1334** aimed at the children's market, is presenting the third generation of its 12-inch wheel bikes. The relatively young Taiwanese company was founded in 2016 by two bike lovers with extensive skills and experience in different sectors of the bike industry. With a claim

**VoomVoom's third generation of push bikes is leaner thanks to upgrades to drop extra weight**



to be the first in Taiwan to establish a "children's bike aging system, VoomVoom bikes took into consideration children's cognitive skills, linguistic expression, social and emotional control, and self-reliance when designing its bikes. The most significant difference in this new generation is the weight reduction. The VoomVoom third generation 12" push bike has also been upgraded with alloy bearing hubs and features a reduced number of spokes for the wheelset. The bike's total weight has been reduced to 3 kilograms, which VoomVoom has determined to be the ideal weight after prototype testing and evaluation. In addition to the push bikes, VoomVoom is also focusing on its 16" and 20" children's bicycles that use the cleaner, more durable belt-drive system instead of a traditional chain.

Push bikes are nothing new, which is what **X Zone I0401a** sought to exploit when it drafted the concept for its X-mini push bike back in 2015. The company highlighted push bikes' popularity and noted the lack of variation in weight and functionality between the diverse brands offering push bikes. This Taiwanese brand commenced an investigation of consumer demands with a goal of evolving the category. Made from CNC'd aluminum and weighing in at

**The adjustable wheelbase on X Zone's award winning X-mini provides a custom fit that's rare for kids' bikes**



just 2470 g, the X-mini captured attention for its adjustable wheelbase. When the wheelbase is adjusted to a shorter position, the bike provides better steering flexibility. By contrast, if the wheelbase is adjusted to a longer position, the bike provides better riding stability when accelerating. This innovation leads to a more customized fit and greater comfort for young riders, gives them more confidence on the bike, and ultimately makes riding more fun. The X-mini earned a gold award at the 2016 Taipei Cycle Show and followed that up with an iF Design Award the following year.

**Girasol M1435**,

the house brand of Yu Zhan Metal Industry, made its brand debut with a push bike back in 2016 and has stayed with the concept ever since. Yet Girasol still finds value in 26-inch wheel mountain bikes, which are a suitable size for youth shredders. Girasol offers two models of mountain bikes with 26" wheels: the RS400 and the RS700. The RS400's frameset is hydroformed 6061 aluminum with a house brand air spring suspension fork and 100 mm of travel. It has Shimano Deore drivetrain and brake options, Girasol wheelset, tires by Maxxis, and Easton stem and handlebar.

The RS400 is available in black and fluorescent green.

The RS700 levels up Girasol's mountain bike offering with a carbon fiber frame and DT Swiss suspension fork with 110 mm of travel. SRAM



**Girasol's mountain bikes only feature 26-inch wheels**

XO 10-speed drivetrain and hydraulic disc brakes bring a little bling to the specs, as do the Bontrager carbon stem and handlebar, Prologo Zero II saddle, and the Crank Brothers Iodine 3 Elite wheelset. Weight differences between the models are 11.5 kg on the low end of the line and 9.5 kg for the RS700.

**Kool Sports International M1127a**

spans a range of sporting goods that includes recumbent tricycles and balance bikes for kids, and even a 2-in-1 push bike that can be converted into a pedal bike in 60 seconds. Theoretically, if you start them young, they'll be riders for life. Kool is betting that this is also true for e-bikers and, to give them a boost in that direction, Kool has an electric balance bike for the youngest riders to help them learn balance, coordination, and gain confidence on the bike. The balance bike's Continuously Variable Transmission (CVT) responds to rider input by sustaining forward momentum at a velocity corresponding with

the rider (up to 15 km per hour). An 80-watt brushless DC motor is powered by a detachable lithium battery with a duration of 40-60 minutes. The rear drum brake is activated by a brake lever that instantly triggers a power-off function when braking. 12-inch inflatable tires with integrated aluminum rim connect the lightweight aluminum alloy frame to the riding surface and an adjustable seat allows for rider customization.

Kids' bikes have been moving away from its status as a toy for years and are now taken seriously as tools for transportation and sport. Thanks to efforts to influence attitudes toward mobility and to grassroots organizations oriented around youth racing (or just because riding a bike is fun), the youngest riders to 'tween riders also have bikes to fit their lifestyles too. ■ **WB**



**Kool Sports's balance e-bike shifts away from speed settings with Continuously Variable Transmission**

OVERVIEW: DISC BRAKES

# CARGO & E-BIKE DEMANDS LEAD TO BETTER STOPPING POWER WITH ABS

With very few exceptions, disc brakes have become the norm on new bicycles. From ABS systems for e-bikes to clean and integrated solutions to compact designs for road bikes, several trends are clearly emerging. Meanwhile some manufacturers have turned bottlenecks in the supply chain into business opportunities on the OE market.

**The second-generation ABS disc brakes of Bosch eBike Systems and Magura can be built around four- and two-piston calipers from the MT C series.**



ENGLISH

The electrification of bicycles has taken the industry by storm. In some European countries such as the Netherlands, half of the bicycles sold are e-bikes. This shift is the main reason why the average retail price of bicycles has been on the rise for years – and with it the turnover of the entire bicycle business. Thanks to the support of electric motors cargo bikes have become much more popular as well, not just in flat areas such as the Netherlands and Denmark. Higher average speeds and heavier bikes call for more powerful brakes. But since many buyers of e-bikes and cargobikes are no skilled cyclists, this power needs to be held under control as well. That's where anti-lock braking systems (ABS) come into play. While these have become standard equipment for cars, it's a different story with bicycles. The relatively low mass of e-bikes and the added weight and costs of ABS systems have slowed their adoption.

After a first attempt saw very low acceptance from OE partners, **Magura [Hall 1, N1208]** went back to the drawing board and developed a second-generation product that works with Bosch eBike Systems' new Smart System. Focusing on keeping the front wheel from locking up under braking, it is much more compact in size and easier to integrate into the design of e-bikes. As for disc brakes compatible with the novel ABS technology, Magura's choice is the OE-oriented MT C

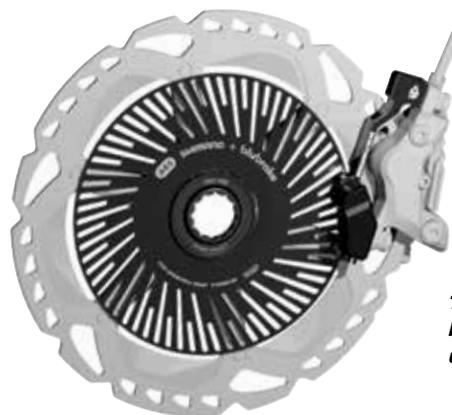
series. Since the ABS system requires more hydraulic oil to work flawlessly, the MT C's master cylinder comes with an oversized expansion reservoir and the choice of two- or three-finger levers. Magura offers both two- and four-piston versions for the one-piece forged calipers. Apart from the compact ABS control unit, the sensor ring mounted to the front rotor is the most obvious feature of this second-generation ABS brake system.

At last year's Eurobike show **Shimano [Hall 1, M0814]** surprised the entire industry by showing two

e-bikes with an ABS system – one trekking and one cargo bike model. Rather than starting from scratch, the Japanese component manufacturer chose to adapt existing technology and partner up with Italian company Blubrake. Using a sensor ring mounted to the rotor to constantly measure the rotational speed of the front wheel and additional sensors built into the control unit,

the system aims to keep both wheels on the ground, avoiding skids and over-the-handlebar accidents. Blubrake's control unit can either be integrated into the top tube or be attached externally using the bottle cage mount on the frame. The latter option means that the ABS system presented by Shimano and Blubrake is retrofittable in theory – but it is primarily aimed at the OE market.

To expand its e-bike related OE business, **Tektro-TRP [Hall**



**Thanks to a cooperation with Blubrake, any hydraulic disc brake from Shimano can be upgraded to offer ABS functionality.**



**With the Clean Cockpit lever, Tektro is aiming at stylish utility bikes.**

**1, J0701]** has started a cooperation with Bosch eBike Systems. The goal is to make its disc brakes work with the 2nd generation ABS system by the German supplier. The entire ABS topic is nothing new to Tektro-TRP as the company had already been the original development partner of Blubrake some years ago. The big news from Tektro-TRP for this year's Taipei Cycle Show is aiming at another trend. For clean looks many bicycle manufacturers are integrating cables and brake lines as far as possible. With its Clean Cockpit brake solution Tektro-TRP is ready for this trend. The master cylinder comes with a three-finger lever, positioning it in the utility and trekking segment. Thanks to the larger-diameter brake lines, plenty of mineral oil is moving within the system to avoid over-heating. As for the calipers Tektro-TRP offers a selection of four-piston and two-piston designs, the latter in either postmount or flatmount versions.



*For clean looks, Sram's Stealth series of brakes feature levers with an angled port for the brake lines.*

With its Stealth brakes, **SRAM [Hall 1, M0612]** is following the same trend of clean cockpits and integrated cables and brake lines. The Stealth levers have been redesigned and the exit of the brake line from the master cylinder has been changed to position the brake line closer to the handlebar. This way it is guided under the handlebar, allowing for a shorter section of line from the cylinder to the entry port at either the headset or head tube. Stealth versions of the levers will be offered for both the more powerful Code series and the more lightweight Level series of disc brakes, thus primarily aiming at mountain bikes. While the Ultimate versions feature brake levers made of carbon and titanium hardware to shed some weight, the Silver versions rely on alloy levers and steel hardware. Another new product of SRAM is aiming at the OE market: the entry- to mid-level DB8 is the first disc brake of this manufacturer to work with mineral oil rather than DOT brake fluid.

As demand for bicycles skyrocketed during the pandemic, so were the lead times for key components such as drivetrains and disc brakes. This opened up opportunities for smaller players to increase their OE business. One example is **Clarks Cycle Systems [Hall 1, L0918]**: a well-known supplier of brake and shift cables, brake pads and miscellaneous spare parts, this manufacturer ventured into complete disc brake systems and saw some success in the OE market during the pandemic. When the big names could

not cover demand, companies like Clarks offered a welcome alternative. With the C2 and the C4 respectively, the Taiwan-based manufacturer launches two new top-of-the-line hydraulic disc brakes aiming at mountain bikes and e-bikes at this year's show. A special emphasis has been put on build quality and heat dissipation, with matching features built into the CNC-machined one-piece calipers and the floating rotors.

To cover the needs of e-bikes and cargo bikes, **Alhonga [Hall 1, J0425]** is launching its first four-piston hydraulic disc brake at 2023's Taipei Cycle Show. Tested to a system weight of 300 kilograms, the unmemorably-named HJ - HF 572 brakes rely on mineral oil and come with compact two-finger levers. Aiming at heavy cargo bikes, the HJ - HT 534 model features three-finger levers with a built-in parking mode and a cut-off sensor for various types of assist drives. Tested to a system weight of 350 kilograms, Alhonga claims these brakes deliver 30 percent more stopping power than comparable brakes on the market. To facilitate servicing, these four-piston brakes have been designed to work with existing mineral oil and offer easy bleeding.

An interesting niche player is Japanese company **Growtac [Hall 1, M0409]**, showing its road disc model 'Equal' at the Taipei Cycle Show.



*The mechanical Equal disc brake of Growtac is available in six colourways.*

caliper is very compact, precision-machined from high-strength duralumin alloy and built from a small number of alloy parts to increase reliability and serviceability. Since only the outer piston moves, the deflection of the rotor makes it touch both brake pads. For easy maintenance the caliper can be disassembled and rebuilt. This and the ease to replace a brake cable compared to bleeding a hydraulic system may attract gravel pilots, adventurers and randonneurs alike.

A stepless pad adjustment screw helps to hit that sweet spot between drag-free function and putting the point of engagement exactly where you want it to be. Not cutting any corners, Growtac has teamed up with compatriots Vesrah to develop specific brake pads for the 'Equal' as well. And since the 'Equal' caliper is available in four standard colours and one special colour, it also appeals to people into individual custom builds. Hitting the scales at 136.5 grams per caliper, this high-end mechanical disc brake will also please the weight-conscious. ■ **LVR**

*Due to its mechanical actuation Growtac's Equal can be combined with various brake and shift levers for road bikes.*



*The long lever of Alhonga's HT534 brake system comes with a built-in parking mode.*

*With its short and ergonomic lever, Alhonga's HF572 is a good choice for e-mountainbikes.*

Catering to quality-conscious cyclists who prefer mechanical functionality but still want reliable all-weather braking or space for wider tires, Growtac has opted for a mechanical disc brake. This allows for the combination with shift and brake levers of various manufacturers such as Shimano, SRAM or Campagnolo. The



*With Clark Cycle Systems' C4 brakes, you get plenty of stopping power, easy bleeding and a premium finish.*

*Clarks Cycle Systems' new C2 brake offers easy bleeding and a premium finish.*

# NEW PRODUCTS

## JIASHAN SHENGGUANG ELECTRONICS JY-7175 E-BIKE HEADLIGHT

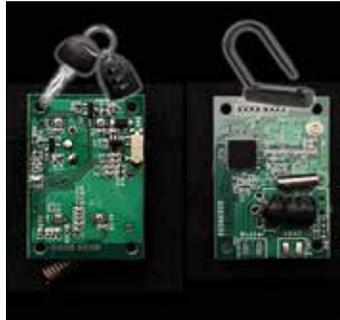
This high brightness 170LUX headlight with high and low beam for e-bike, combines energy efficient LEDs with sophisticated styling, using advanced double-lens technology greatly reducing the energy loss of illumination. The light body is high quality aluminum, ensuring effective heat dissipation. With a metal bracket to improve safety and a detachable

reflector, the light is StVZO certified, and the wide voltage 8-48V input is suitable for most e-bikes. **Q0924**



## ESEENS INC. LOCK EVOLUTION MODULES - ES211 AND ES311 FOR LOCK MAKERS

Lock Evolution modules add Eesens' proprietary theft alarm functions to bike locks. The game-changing electronic lock modules provide triple theft alarm functions for extra layers of bike security. It notifies cyclist quickly and blasts a loud alarm when detecting a



theft event. Helps stop the thief from stealing the bike before its lock is cut off. The user can also use the panic button to help locate the bike. **DigitalGo! only**

## Announcing the New **Twin Mode** High-flow and Cooling spray mode "SprayMe" Series Bottle from V-Grip



HALL 1 BOOTH I1318



**BPA Free** and FDA/Rohs approved



**Highly Elastic Material** provides easy-squeeze high water flow



**Cooling Spray Mode** delivers a refreshing shower on hot days



**High Flow Stream Mode** makes it easy for riders get water fast



**Easy Cleaning** remove each part of cap for easy access



**Eco-Friendly Material** lower carbon emissions, recyclable



Email: [vg@v-grip.com.tw](mailto:vg@v-grip.com.tw) [www.v-grip.com.tw](http://www.v-grip.com.tw)



## 720ARMOUR PARTNERS WITH LIFE & SOUL TO PRODUCE AUDIO SMART GLASSES

Eyewear specialist 720armour has teamed up with premium audio company "Life & Soul" to develop a sunglass collection that includes speakers for music playback as well as a microphone for hands-free communication.

The 720armour frame features HiColor lenses to enhance the visual experience. In addition, the frame style is perfectly suited for Asian faces. Embedded in each arm of the glasses is a speaker, and near the temple on the right arm is a microphone and multi-function button. The speakers are precisely angled for the optimum listening experience without the need for earbuds.

"720armour always strives to advance technology through innovation - last year we introduced exclusive NFT sunglasses and Zero & Ocean environmental-friendly glasses. This time, we would like to advance further in technology since Taiwan has the edge in technology and manufacturing,"



**Three of the lenses offered by 720armour have HiColor technology for different lighting conditions, and one of the lenses has photochromic technology so that it may be worn both indoors and outdoors.**

said Laura Hsu, 720armour's deputy general manager.

The audio glasses are compatible with Bluetooth-enabled devices, including smartphones, computers, and even smartwatches. It is compatible with Android and iOS devices without the need for an application to be downloaded. Battery life is around six hours. With an overall weight of 48 grams, the glasses are extremely lightweight compared to competitors. HEV420cut high performance lenses are 100% anti-UV and filter harmful blue light. In addition, myopia can be accommodated by 720CRx custom-made optical lenses in order to improve the clarity of vision. **K0325 [Hall 1]**

## NEW PLANT TO OPEN IN 2024 SRAM DOUBLES DOWN ON TAIWAN COMMITMENT

While many companies have been investing heavily in Vietnam lately, SRAM is doubling down on Taiwan as the heart of its industrial operations. The components and parts maker has announced the construction of a new factory that is set to become operational by 2024.

Founded over 37 years ago as Gripshift, a maker of twist shift levers for triathletes, SRAM has become one of the most important players in cycling's OE business. Through the consecutive acquisitions of the cycling division of Sachs, Rock Shox, Truvativ, Zipp and others, SRAM has become a one stop-shop for components and parts. The corporation has grown to 4000 employees, with two thirds of them stationed in Taiwan's Taichung area. So far SRAM is operating three factories in various locations, owning some facilities and renting others.

With the construction of a new multi-story factory in Taichung's Tanzi district, SRAM wants to improve in terms of efficiency, productivity and quality by putting all of its production under one roof. The new facility, scheduled to become operational by 2024, is aimed at increasing the company's competitiveness while reducing its eco footprint. SRAM also stresses that based on its 30-year history of production in the Taichung area it wants to



**SRAM's new plant will bring production under one roof**

strengthen its connection to the local bike community and continue efforts toward economic growth in the region.

"I am very pleased we are making this investment," said SRAM's founder and board chairman Stan Day. He added, "The people here are extraordinary, and they represent such an integral part of the cycling industry's supply chain. We are excited to expand our capabilities in Taiwan as it's a very productive and quality-driven location to manufacture our product lines." ■ LVR

## 自転車産業への投資の流入

# 新たな資金を引き付ける自転車ビジネス

デロイト社や Cycling Industries Europe などによる市場調査では、2022 年に入っても断然、自転車産業は好調であることを示しています。ロシアのウクライナに対する攻撃と、それに伴う燃料およびエネルギーコストへの影響に起因する事前注文の増加と消費者心理の悪化が、業界の不意を突き、高い在庫水準とあらゆるレベルでの資金の引き締めを招いています。それでも、スポーツとしての自転車、さらには交通手段としての自転車に対する中長期的な展望は、いずれも非常に有望です。その結果、新たな資金が投入されています。



BRP Pinion SmartShift 電動機。



徳昌電機收購了德國Pendix所推出的電機系統。



Fazua Ride 60 中置電機。

ランドの Gasgas を立ち上げた後、Pierer Group はその子会社である **Pierer New Mobility** 社を拡大し、Felt Bikes、Johansson Bikes、Liteville、Syntace などのブランドを展開しています。2021 年夏、Pierer 社はブルガリアの大手自転車メーカー、Maxcom 社とのジョイントベンチャーを発表しました。台湾における自転車産業の中心地でその位置付けをさらに強化するべく、このオーストリア企業は 2022 年に台中市街にアジアオフィスを開設しました。

有名なスポーツカーメーカーであるポルシェも、自転車に大きな関心を示しています。**ポルシェ**は 2021 年後期にクロアチアの電動スポーツカーメーカー、Rimac を買収し、それに伴って、台湾製の MPF Drive ミッドモーターと連携する高度なソフトウェアで知られている、子会社の Greyp Bikes も買収しています。ポルシェは昨年、軽量アシストドライブで注目を集めたドイツのスタートアップ企業、Fazua の株式の 20% を取得しました。2022 年 6 月、ポルシェはその関わりをさらに高めるべく、Fazua の完全買収を決定しました。ポルシェによるもう 1 つの動きは、さらに先を見据えた野心を示すものとなっています。またポルシェは、オランダの PON グループの子会社である Ponooc Investment 社との 2 つのジョイントベンチャーを通じて、独自の e バイクとマイクロモビリティソリューションを開発し、これらの市場に参入しようとしています。

e バイクの推進と実用自転車の増加で利益を上げているのは、間違いなくドイツの変速機専門メーカーである Pinion 社です。Pinion 社はそのラインナップを多様化することで、より幅広い価格帯をカバーし、100 を超える自転車ブランドのサプライヤーとなっており、サービス窓口として世界で 600 以上の販売店と連携しています。同社に注目したカナダ企業の **BRP** (ボンバルディアレクリエーションプロダクツ) 社は、8 月に Pinion 社の過半数の株式を取得

しました。BRP 社は、Pinion 社の密閉型変速機技術について、自転車だけに留まらず、同社の中核的事業であるパワースポーツや船舶利用、その他の人力補助車両においても大きな可能性を見出しています。

深圳を拠点とし、あらゆるサイズの電気モーターを製造する中国有数のメーカーである **ジョンソン・エレクトリック・グループ (徳昌電機)** は、自動車、産業、医療用途向けのモーター、アクチュエータ、モーションサブシステム、関連電気機械部品のサプライヤーとして知られています。世界 22 か国に 35,000 人の従業員を擁し、年間売上高 34 億 5,000 万米ドルを誇る大手企業でもあります。ジョンソンエレクトリック社は、これまでも e バイクのアシスト駆動システムに電気モーターを供給してきたようですが、今後は自転車関連製品を増やしていく予定です。このプロセスを加速するために、ジョンソンエレクトリック社はドイツのスタートアップ企業、Pendix 社の株式の 80% を取得しています。本来後付けのアシスト駆動システムで知られていた Pendix 社は、最近その事業を拡大し、大型カーゴバイク向けのシリアルハイブリッド駆動システムを発表しました。ジョンソンエレクトリック社にとって、この買収は確立されたブランドだけでなく、活況を呈する e バイク市場の幅広い知識を獲得することにもなります。



達方電子董事暨總經理蔡耀坤。

台湾の電子企業として初めて自転車事業に参入した **ダーフォン・エレクトロニクス (達方電子) N0810** は、すでに BESV および Votani という e バイクブランドを展開しています。新型コロナウイルスの感染拡大中に、同社は自転車産業への関わりをさらに深めており、現在 OE メーカー兼組立メーカーである Kenstone 社の株式の 60% を保有しています。また同社は、2020 年に新竹を拠点とするカスタムバッテリーソリューション専門メーカー、TD Hightech 社を買収し、この会社を Darfon 社のエネルギー部門に統合しました。これにより、同社は標準的なバッテリーパ

ッケージだけでなく、カスタマイズしたソリューションを提供することが可能になっています。さらに、ダーフォン社は著名なフレームメーカーの Astro Engineering 社とジョイントベンチャーを設立し、その電子部品や IT のノウハウを e バイクに取り入れようとしています。



PON集團旗下的Swapfiets自行車月租方案公司。

また、さまざまな未公開株投資会社からも、多くの資金が自転車産業に流入しています。ダイナミックな成長に引き付けられたこれらの投資会社は、タイヤ専門メーカーの Vittoria 社や、カーボンフレームおよび部品メーカーの 3T 社、変速機専門メーカーの Enviolo 社などの企業に資金を投入しています。Enviolo 社は 2022 年 2 月に英国の投資会社、**Inflexion** 社に買収されました。Enviolo 社の買収額は公式に発表されていませんが、オランダの金融機関は約 2 億 5,000 万米ドルと推定しています。春にはもう 1 つ大きな取引があり、ドイツの防衛機器メーカーである Rheinmetall 社は、e バイク向けのミッドモーターシステム構築に取り組んできた子会社の Amprio 社にしびれを切らし、売却先を探していました。所有者の変更は確認されたものの、2023 年 2 月下旬時点で買い手として名乗り出た企業はありませんでした。しかしながら、スラムがその買い手ではないかと噂されています。

高い在庫水準と限られたキャッシュフローという現在の問題を踏まえると、自転車産業からの企業買収はこれからさらに増える可能性があります。結局のところ、自転車業界の長期的な展望は、最近の著しい成長の落ち込みにもかかわらず、依然として非常に良好です。■ **Lvr**



保時捷大學投資e-Bike産業。

概要：サドル

# 人間工学と素材技術を導入したサドルで快適に

サドルに対する最高の誉め言葉は、「気付かなかった」ということです。最高のモデルは、決して目立ちません。しかし、これは簡単に到達できる境地ではありません。それには、膨大な研究と素材技術に対する深い理解が必要となります。常にデザインに磨きをかけることが求められるこの分野で、サドルメーカーは快適な乗り心地を求めるライダーが真の意欲的な消費者であることを知っています。ここでは、そうしたライダーたちの注意を引くために競い合う最新のデザインを紹介します。

**Velo J0717** は、窒素を注入した同社の新素材、Atmos Foam を使用した Angel Revo を発売したばかりです。この独自の素材は、サドルの製造による環境への影響を最小限に抑えながら、性能と耐久性を高めた設計となっています。類似の複合材よりも軽く、反応に優れており、より均一に分布されたマイクロセルが安定した反発力、衝撃吸収力、熱放散能力を提供します。Angel Revo は、同社の Senso と Angel タイムトライアルサドルの要素を取り入れた形状となっています。また、Velo 社が特許を取得している圧力緩和のために搭載された Y 字型カットアウトは、これまでのどのモデルよりも長く設けられており、ライダーの快適性を最大限に高めています。さらに、カバーとベースをシームレスに結合する Atmos Shaping テクノロジーがサドル全体に使用されており、滑らかな外装と完全な防水性を実現しています。このサドルはロングライドやアスレチックに適した設計で、長さ 248mm、幅 148mm となっており、軽量で衝撃吸収性に優れたチタンレールを採用しています。印象的な 3 色のカラーバリエーションが用意されており、サンタバーバラを拠点とするデザイナー兼アーティスト、Molly Lofton 氏による限定版も含まれています。



Velo Angel Revo



All-wings evo4 Super Hornet



DDK 38201 alt 2

するこのシステムは、簡素化した外観を生み出しながら、より高い快適性と耐久性を確保します。VP-38201 はそれを使用して、釘やホッチキスを使わない軽量パフォーマンスサドルを実現しています。幅は 141mm であり、優れた柔軟性でアスレチックライダーに適した製品を目指しています。また、同社の他のレーシングサドルと同様に、圧力緩和用のカットアウトを採用しており、快適性を確保するとともに、軟部組織へのダメージを防止しています。DDK の環境、社会、ガバナンスへの取り組み改善の一環として、堆肥化が可能な環境に優しいパッケージで提供しています。このほか、同社は生産ラインを調整し、水の再利用や、ソーラーパネルで必要なエネルギーの 16% を賄う

今年の **All-Wings 10012** は、第 4 世代 Super Hornet サドルを出展します。その革新的なウイング型のデザインは、会陰部の圧迫問題を解決し、サイクリング中のしびれや痛みを軽減することを目的としています。また、長距離ライダーに理想的で、熱可塑性ゴムパッドを交換することにより、通常の距離のライドから超耐久カテゴリーのライドまで対応することができます。サドルの切り込みデザインと同様にユニークなのは、All-Wings が従来のシャモアパッドを使用しなくても、長距離のライドで快適さと爽快さを保てるようにしようとしている点です。また、ロードサイクリングから通勤・通学まで、さまざまな用途に対応することを目指しています。数々の賞を受賞しており、旧バージョンは現在、台湾国立科学工藝博物館に所蔵されています。

**DDK Group J0417** は、同社の VM Fit テクノロジーを新しいサドル、VP-38201 に適用しています。パッドをシェルに真空接着

なサドルとなっています。また、幅を広くしてノーズを短くすることで、ライダーの座骨を支え、内股の擦れを低減しています。そして Badass は、後方に衝撃を緩和する硬質ゴム部分が設けられており、空中トリックの際に手で持つことができる形状となっています。



Da Bomb Flap-X



Sunstar Brooks B17



WTB Koda

**Sunstar M0808** は、台湾を拠点とする販売代理店であり、数多くのプレミアムブランドを扱っています。中でも、台湾における Selle Royal と Brooks の代理店を務めています。同社のブースでは、著名な B17 Special をはじめ、英国メーカーのクラシックなレザーサドルを見ることができます。このサドルは、同社の名高いレザー構造と手打ちの銅製リベットを組み合わせ、時代を超えた外観と長期の快適性を実現しています。よりモダンなものが好みであれば、人間工学に基づいた Selle Royal の Vaia サドルは、切り込みによる圧力緩和を提供します。経済的で、すでに幅広いサイクリストの支持を集めている人気のモデルであり、サドルにさまざまなアクセサリを固定できる ICS クリップシステムアタッチメントが付属しています。

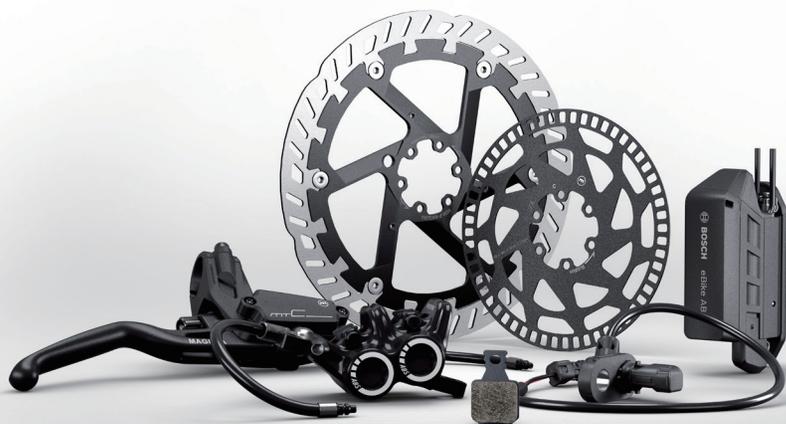
**WTB L0818** は、実績と信頼のあるサドルの全ラインナップを再び出展します。同社の最も人気の高い万能なサドルである Volt をはじめ、よりレース向けの Silvardao などが含まれます。アドベンチャーサイクリストに人気の Koda は、ウルトラエンデュランスのライダーである Rebecca Rusch 氏のフィードバックに基づいて開発されました。長時間の使用を想定して作られたこのサドルは、外側のサポートゾーンを分割する大きなオープンチャンネルを備え、敏感な部分への負担を軽減しています。また、ノーズが短いサドルの乗り降りがしやすく、わずかに上向きで身体を支えやすくなっています。女性向けではあるものの、同社の Deva と同様に、男女を問わず幅広いライダーに魅力的な形状となっています。■ JD

などの取り組みも実施しています。若者向けの自転車・コンポーネントメーカーである **Da Bomb 10503** は今年、3 つの新しいサドルを出展します。ダウンヒルとエンデューロに特化した Flap-X および Motion の各モデルに加え、ダートジャンプとストリートに特化した複数のバージョンの Badass があります。Flap-X は、AirForm のアッパーを採用し、標準的なポリウレタンと比較して衝撃吸収性を 30% 高め、快適性を向上しています。Flap-X は、主に高速のダウンヒル向けに作られていますが、アップヒルで後方に滑らないように、後部に防滑ストリップを備えています。一方、Motion は通気性を高めたオープンチャンネル構造を提供し、より人間工学に沿ったアグレッシブ

## 概要：ディスクブレーキ

# カーゴバイクと e バイクの需要が ABS による制動力向上を主導

ごく少数の例外を除き、ディスクブレーキは新しい自転車の主流となっています。e バイク用の ABS システムから、クリーンな統合型ソリューション、ロードバイク用のコンパクト設計まで、いくつかのトレンドが明確に生まれています。一方で、一部のメーカーは、サプライチェーンのボトルネックを OE 市場におけるビジネスチャンスに変えています。



Bosch eBike Systems とマグラの第2世代 ABS ディスクブレーキは、MTC シリーズの4ピストンおよび2ピストンキャリアを搭載することができます。

自転車の電動化は、業界を翻弄しています。オランダなどのヨーロッパの一部の国では、販売されている自転車の半数が e バイクとなっています。この変化は、自転車の平均小売価格がここ数年上昇傾向にあり、それに伴い自転車ビジネス全体の売上高が上昇している主な理由となっています。電動モーターのサポートにより、オランダやデンマークのような平坦な地域以外でも、カーゴバイクの人気の高まっています。平均速度がより速く、重量がより重い自転車には、より強力なブレーキが必要となります。しかし、e バイクやカーゴバイクを購入する人の多くは、スキルの高いサイクリストではないため、ブレーキの力も制御する必要があります。そこで活躍するのが、アンチロックブレーキシステム (ABS) です。ABS は自動車で標準装備となっていますが、自転車では話は別です。質量が比較的小さい e バイクに ABS システムの重量とコストが加わることが、その採用を遅らせています。

マグラ (ホール 1、**N1208**) は、OE パートナーからほとんど受け入れられなかった最初の試みの後、製図からやり直して Bosch eBike Systems の新しいスマートシステムと互換性のある第2世代の製品を開発しました。制動時に前輪がロックされていない状態を保つことに重点が置かれ、よりコンパクトなサイズで e バイクの設計に取り入れやすくなりました。新しい ABS 技術に対応したディスクブレーキとするために、マグラ社は OE 志向の MTC シリーズを選択しました。ABS システムの円滑な動作には、より多くの作動油が必要なため、MTC のマスターシリンダーには特大の拡張リザーバーが付属しており、レバー

の接地を維持し、横滑りやハンドル操作による事故を回避します。Blubrake 社のコントロールユニットは、トップチューブに組み込むか、フレームのボルトケージマウントを使用して外付けすることが可能です。後者のオプションは、シマノ社と Blubrake 社による ABS システムが、理論的には後付け可能であることを意味していますが、主なターゲットは OE 市場です。

Blubrake 社の最初の開発パートナーである **Tektro-TRP** (ホール 1、**J0701**) は、すでに数年前から ABS ソリューションを提供しており、Stromer 社のプレミアムスピードペデレック (電動アシスト自転車) に採用されているのはその一例です。その OE ビジネスをさらに拡大

するため、この台湾の大手自転車ブレーキメーカーは、Bosch eBike Systems と連携し、同社の ABS システムをドイツのミ

ッドモーターに対応させようとしています。今年の台北国際自転車見本市に向けた Tektro-TRP のビッグニュースは、もう一つのトレンドを狙ったものです。多くの自転車メーカーは、ケーブルやブレーキラインを可能な限り統合することで、外観をすっきり見せようとしています。Tektro-TRP 社はその Clean Cockpit ブレーキソリューションで、このトレンドに対応する準備を整えています。マスターシリンダーには 3 本指レバーが付属しており、実用車やトレッキングバイクの分野に位置づけています。直径が大きいブレーキラインにより、システム内を大量のミネラルオイルが流動し、過熱を回避できます。キャリアについては、Tektro-TRP 社は 4 ピストンと 2 ピストンの設計を選択可能としており、後者はポストマウントとフラットマウントのいずれかのバージョンで提供されます。

**スラム** (ホール 1、**M0612**) は、その Stealth ブレーキで、すっきりとしたコックピットとケーブルやブレーキラインの統合という同じ流れを汲んでいます。Stealth レ



Blubrake 社との協力で、シマノの油圧式ディスクブレーキはアップグレードにより ABS 機能の提供が可能です。

は 2 本指または 3 本指を選択できます。マグラ社の一体型鍛造キャリアには、2 ピストンと 4 ピストンの両バージョンが用意されています。コンパクトな ABS コントロールユニットのほか、フロントローターに取り付けられたセンサーリングは、この第2世代 ABS ブレーキシステムの最も大きな特徴です。

昨年のユーロバイクで、シマノ (ホール 1、**M0814**) は ABS システムを搭載した 2 台の e バイク (トレッキングモデルとカーゴバイクモデル) を出展し、業界全体に驚きを与えました。この日本の部品メーカーは、ゼロから始めるのではなく、イタリアの Blubrake 社と提携し、既存の技術を応用することを選択しました。ローターに取り付けられたセンサーリングで前輪の回転速度を常時測定し、コントロールユニットにもセンサーを組み込んだこのシステムは、両輪



Tektro は、Clean Cockpit レバーでスタイリッシュな実用車を実現します。



スラムの Stealth ブレーキレバーに設置された角度のあるポートにより、ブレーキラインをハンドルバーの近く下方に配置できます。

スラムのStealthシリーズブレーキは、角度のあるブレーキライン用ポートを備えたレバーにより、すっきりとした外観を実現しています。



グロータックのEqualは、その機械式の作動により、ロードバイク用の多様なブレーキレバーやシフトレバーと組み合わせることができます。



グロータックのEqualは、高品質で軽く、非常にコンパクトな機械式ディスクブレーキです。



グロータックのEqual機械式ディスクブレーキは、6色のカラーバリエーションで提供されます。

バーのデザインが変更されたほか、マスターシリンダーからのブレーキライン出口が変わり、ブレーキラインがハンドルバーにより近い位置に配置されるようになっています。これにより、ブレーキラインがハンドルバーの下に沿う形になり、シリンダーからヘッドセットまたはヘッドチューブにある入口までのラインを短くすることができます。Stealthバージョンのレバーは、よりパワフルなCodeシリーズと、より軽量のLevelシリーズの両ディスクブレーキに対応しており、主にマウンテンバイクをターゲットとしています。Ultimateバージョンでは、カーボン製ブレーキレバーとチタン製ハードウェアを採用することで軽量化を実現していますが、Silverバージョンでは、合金製レバーとスチールハードウェアを使用しています。スラム社のもう1つの新製品は、OE市場をターゲットとしたもので、エントリーレベル〜ミッドレベルのDB8は、DOTブレーキフルードではなくミネラルオイルで動作する同社初のディスクブレーキです。

新型コロナウイルスの感染拡大中に自転車の需要が急増したため、ドライブトレインやディスクブレーキといった主要部品のリードタイムも急上昇しました。その結果、中小企業にもOEビジネス拡大のチャンスが広がりました。その一例が、Clarks Cycle Systems (ホール1、L0918) です。

ブレーキケーブルやシフトケーブル、ブレーキパッドなどのスペア部品のサプライヤーとして知られるこのメーカーは、完全なディスクブレーキシステムに手を広げ、新型コロナウイルスの感染拡大中にOE市場で一定の成功を収めました。大手メーカーが必要に対応しきれないでいたとき、Clarks社のような企業が代わりに提供した製品は歓迎されました。台湾を拠点とするこのメーカーは、今年の見本市で、マウンテンバイクとeバイクをターゲットとした2つの新しい最上位油圧式ディスクブレーキ、C2とC4をそれぞれ発表します。品質と放熱性に重点が置かれており、それに対応する機能がCNC加工による一体型キャリアとフローティングローターに組み込まれています。

eバイクやカーゴバイクのニーズに応えるため、アルホンガ (ホール1、J0425) は、2023年の台北国際自転車見本市で同社初の4ピストン油圧式ディスクブレーキを発表します。システム重量300kgまでテストされた、やや覚えにくい名前のHJ-HF 572ブレーキは、ミネラルオイルを使用しており、コンパクトな2本指レバーが付属しています。重いカーゴバイクをターゲットとするHJ-HT 534モデルは、パークモードとカットオフセンサーを組み込んだ3本指レバーを採用しており、さまざまなア

シストドライブに対応しています。アルホンガ社によると、システム重量350kgでテストされたこのブレーキは、市場の同等クラスのブレーキと比較して30%高い制動力を発揮するとされています。メンテナンスを容易にするため、この4ピストンブレーキは既存のミネラルオイルで動作するように設計されており、フリーディングが容易です。

日本からの興味深いニッチプレーヤーであるグロータック (ホール1、M0409) は、台北国際自転車見本市でそのロードディスクモデル「Equal」を出展します。メカニカルな機能を好みながらも、信頼性の高い全天候型ブレーキや幅広タイヤのスペースを求める品質重視のサイクリストに対応するため、グロータック社は機械式ディスクブレーキを選択しました。これにより、シマノ、スラム、カンパニョーロなど、さまざまなメーカーのシフトレバーやブレーキレバーとの組み合わせを可能にしています。非常にコンパクトなキャリアは、高強度のジュラルミン合金から精密加工され、少数の合金部品で構築されており、信頼性と保守性が向

上されています。アウターピストンだけが動くため、ローターのたわみにより両方のブレーキパッドに接触するようになっていきます。キャリアは分解・再組み立てが可能のため、メンテナンスが容易であり、この点と、油圧システムのフリーディングに比べてブレーキケーブルの交換が容易な点が、グラベルライダーや冒険家、ランドヌールたちを魅了する理由でしょう。

無段階のパッド調整ネジは、引きずりが位置と、噛ませたい位置の間の最適な場所への調整に役立ちます。グロータック社は一切手を抜くことなく、同業者であるVesrah社と協力し、「Equal」専用のブレーキパッドも開発しています。また、「Equal」キャリアは標準色4色と特別色1色で提供され、自分だけのカスタムメイドにこだわるライダーにも対応しています。このハイエンドの機械式ディスクブレーキは、キャリア1つあたりの重量が136.5gとなっており、重量にこだわるライダーにも歓迎されます。■LvR



Clarks Cycle Systemsの新しいC2ブレーキは、容易なフリーディングと高級感のある仕上げが特徴です。

Clark Cycle SystemsのC4ブレーキは、十分な制動力、容易なフリーディング、高級感のある仕上げを実現しています。



アルホンガのHT534ブレーキシステムのロングレバーには、パークモードが組み込まれています。

人間工学的なショートレバーを備えたアルホンガのHF572は、eマウンテンバイクに最適です。

**概要：サスペンション****サスペンションの新製品は、  
衝撃に耐える（そして進み続ける）**

サスペンションソリューションは、重負荷に対応できるより頑強な製品に人気が集まっています。カーゴバイク、e-SUV、電動マウンテンバイク用の新しいフォークとショックは、圧縮と反発の調整など、欠かすことのできない機能を有し、道路、砂利道、トレイルでフルロード時にその強みを発揮します。グラベルフレームにフィットするサスペンションドロPPERポストは、グラインドを円滑にし、路面からの「ノイズ」を和らげます。定評のあるサスペンションメーカーは、消費者ニーズのトレンド変化に対応した製品に再設計することで、良い製品をさらに優れたものにすることができます。より安価でより高い反発力、あるいはよりクッション性に優れた座り心地など、サスペンションの注目点をご紹介します。



Kind Shock®Rage-iS

を保持しています。黒鋼ボルトを使用したマイクロアジャスタブルヘッドクランプは手軽に微調整ができ、シールカラーを組み込んだ精密加工の合金マストは、公差のばらつきや汚染物質の侵入による製品の疲労や不具合を最小限に抑えます。Rage-iSは、Southpaw、KG、Westyのすべてのリモートレバーと互換性があります。

今年 35 周年を迎える **SR サンツアー** **JO818** は、長年にわたり世界で最も有名な自転車用サスペンション部品メーカーの 1 つとして名を馳せてきました。この日本企業の成功は、グローバルな協力基盤と、ワールドカップレーサーから都市部の通勤者、そして初めての自転車を楽しむ子供たちまで、幅広いサイクリスト向けにサスペンションとドライブトレイン製品を作るという共通目標によるものです。食うか食われるかの製品開発の世界において、SR サンツアーは e-SUV やカーゴバイクの 카테고리向けに、大荷重に耐えるサスペンションソリューションを開発・製造してきました。e バイクの増加がサスペンション開発に変化をもたらす中、Mobie サスペンションフォークラインは、日常の通勤からフル装備のバイクツーリングまでのすべてに対する、SR サンツアーの答えとなる製品です。Mobie は、20 インチのカーゴフォークやマイクロモビリティソリューションからヘビーデューティトレッキングバイクまで、幅広いラインアップを揃えています。SF25-MOBIE36 の発売により、SR サンツアーは、マウンテンバイクにおける最高レベルの性能と、オフロード・オンロードの両方で役立つ実用性と安全が強化された機能の完璧な調和を追求しました。レーサーたちをオリンピックやワールドカップレースで表彰台の頂点へと導いたハイエンド PCS カートリッジの性能と EQ エアスプリング技術を装備した新しい MOBIE36 は、フェンダーマウント、ライト用クラウンマウント、ABS マウントインターフェイスなども搭載しており、ライダーの安全性と快適性をサポートします。SF25-MOBIE36 は、27.5 インチまたは 29 インチホイール用のオフセットで 120 ~ 150mm のトラベル量を提供します。

カーゴバイクは、都市部の環境における人々の移動方法や、子供・物品を運ぶ方法を変えています。より持続可能で健康的な生活方法としてカーゴバイクを使用することで、「やるべきこと」をこなしながら、環

境とつながり、触れ合うことができます。当然、子供をはじめとする大切なものや、重い荷物を運ぶ際は、安全が絶対条件となり、快適さは紛れもなくプラスとなります。SR サンツアーは、Mobie A32 で初めてカーゴ市場に参入しました。この製品は今も多くのカーゴバイクに採用されていますが、Mobie 34 CGO では未来を垣間見ることができます。マグネシウム合金鍛造によるモノコック構造を採用することで、Mobie 34 CGO は大幅な軽量化を実現しながら、新しい 34mm スタンションチューブで剛性を高め、ブーストスピングで現在のトレ

EDGE はクロスカントリー用の軽量レーシングショックとして作られたもので、ショート〜ミッドトラベルサスペンションを表すものとして EDGE の名前を残していますが、X はフルサスペンション e バイクの需要を満たすためにアップデートされた強化構造を表しています。この新しい EDGE X は、シャフトの再設計により強度を高め、重負荷でも小さな凹凸に対応できるようにスライド動作が改善されています。また、この EDGE X は、快適さを優先しながらも、その効率性をより重視しています。ショックの効率性は、ストローク中盤のサポート力を増



SRサンツアーのSF25 MOBIE36

ンドに対応しています。同社によると、この向上された剛性は、現在入手可能な製品の中でも最も予測どおりのステアリングを実現します。幅広いクラウンのコンセプトにより、最新のカーゴバイクにおける多様なステアリングソリューションを可能にしています。強化された構造と刷新された内部構造により、積荷の有無を問わず円滑な走行が確約されています。また、新しいカーゴフォークには、ライトマウントと ABS デバイス用のインターフェイスが搭載されています。

マウンテンバイク体験では、簡単なトレイルライドから徐々に険しい地形へと進んでいくことが楽しみの 1 つです。とはいえ、より険しい地形を目指すことを楽しむライダーも、日常的なライドでの激しい振動は避けたいと思っています。世界の振動を減らすために、SR サンツアーは RS24-EDGE X で新製品を完全なものとししました。この

やすことでサポートされており、正確な伸側減衰力と組み合わせ、より穏やかな乗り心地を提供します。ライダーはスイッチでサスペンションを調整し、快適な乗り心地と究極のトラクションを実現できます。

サスペンション製品ですすでに高い評価を得ているメーカーが、その位置付けを維持するために必要なことは、「良いものをさらに良くする」ということだけです。

**DNM Performance Suspension N1229** は、その RCP2 リアショックを改良し、ショックの反発速度を微調整するための高低速度調整機能を取り入れています。RCP2PLUS は、ライダーによるサスペンション性能の制御を強化し、地形に応じてダイヤルで調整することができます。下り用に設計された RCP2PLUS は、オールマウンテン、フリーライド、ダウンヒルの各分野をターゲットとし、トラベル量 60 ~ 80mm、アイツアーアイレングス 220 ~



SRサントア-のSF25 MOBIE36

265mmで3サイズが用意されています。またDNMは、クロスカントリーとトレイルライド向けの低負荷用ショックであるTRU-8RCとAO-8RCも提供しており、いずれも反発、ロックアウト、空気圧が調整可能で、7種類のレングスとトラベル量が揃っています。

**X-Fusion L123**も、より大きく、より良い伸縮に対する要求が時代とともに進化する中で、信頼性の高いサスペンション製品を各カテゴリー向けに製造してきた歴史があります。80～200mmのトラベル量で、クロスカントリー、エンデューロ、ダウンヒルに適した4つのフォークモデルを展開しており、それぞれの分野で現在のトレンド



DNM Performance SuspensionのRCP2PLUS

に対応した仕様を備えています。X-Fusion社のサスペンション製品は、発売からしばらく経っていますが、価格と実用性で安定した位置付けを維持しています。例えば、比較的新しい分野である29erスーパーエンデューロバイク向けに開発されたTrace 36 Coilは、ボトムアウト制御用の第2のバックアップスプリングを搭載した重力サスペンション（トラベル量最大170mm）への大胆な進出が際立っていますが、10mmのトラベル量調整機能により、トレイルが下りではなく上りであっても、最もテクニカルな箇所に対応できるフォークであることが示されています。X-Fusion社は、フロントには制御用のTrace、リアには2つのショックオプションを提供しています。H3C RCPコイルスプリングショックとO2 Pro RLXエアスプリングショックは、3つのサスペンション設定と伸縮調整機能をライダーに提供します。X-Fusion社はそのスプリング技術により、コイルスプリングをエンデューロライディング向けに、より軽いエアスプリングをクロスカントリーやオールマウンテンライディング向けにそれぞれ設計しています。

政府のイニシアチブが自動車よりも自転車に傾倒し、多くの国が2030年までにサイクリング戦略を導入しようと取り組んでいる中、未来のサスペンションソリューションは、サイクリングモビリティでライダーを引き付ける方向に進化することが見込まれています。エア、コイル、エラストマー、

フォーム…。サスペンションは、イノベーションで永続性へと「弾み」をつけます。

■ WD



X-FusionのTrace 36

## TAIPEI CYCLE 2023 SHOW PROFILE

<b>Organizer</b>	Taiwan External Trade Development Council
<b>Co-Organizer</b>	Taiwan Bicycle Association
<b>Years of Operation</b>	34
<b>Show Dates and Hours</b>	<b>Physical Show:</b> March 22-24: 09:00-18:00 March 25: 09:00-15:00 *March 22-23: Opens to trade professionals only *March 24-25: Opens to trade professionals and public by admission tickets <b>Online Show:</b> March 22-April 7, 2023
<b>Show Venue</b>	Taipei Nangang Exhibition Center, Hall 1&2
<b>Website</b>	Official Website: <a href="http://www.taipeicycle.com.tw">www.taipeicycle.com.tw</a> Online Show: <a href="http://online.taipeicycle.com.tw">online.taipeicycle.com.tw</a>
<b>Exhibition Scale</b>	Physical Show: 850 exhibitors, using 3,050 booths (50,000 square meters) Online Show: 205 exhibitors The exhibitors from the physical and online shows come from 31 countries (Taiwan not included)
<b>TAIPEI CYCLE Key Exhibitors</b>	Giant, Merida, Ideal Bikes, Darfon (BESV), Shimano, SRAM, KMC, Pacific Cycles, KTM
<b>Theme Pavilions</b>	TAIPEI CYCLE d&i awards Pavilion Country Pavilion: European Joint Pavilion, Japan Pavilion, Italy Pavilion Cargo Bike & Urban Mobility Pavilion
<b>Events</b>	<ul style="list-style-type: none"> <li>● Pre-show press conference</li> <li>● TAIPEI CYCLE d&amp;i awards</li> <li>● TAIPEI CYCLE FORUM</li> <li>● Outdoor Demo (outdoor booth)</li> <li>● Taipei Cycle Ride Together</li> <li>● Taipei Cycle Workshop</li> </ul>

<b>Unique Show Features</b>	<ul style="list-style-type: none"> <li>● A hybrid show, both on-site and online.</li> <li>● The long-awaited gathering of the world's leading B2B cycling industry leaders.</li> <li>● Direct access to cycling's leading global brands and manufacturers.</li> <li>● The gateway event for brands to reach the Asia-Pacific markets.</li> <li>● A hub to exhibit and see the latest designs, innovation and R&amp;D in cycling.</li> <li>● The one stop shop event to conduct business with stakeholders all across the global supply chain.</li> <li>● Witness the intersection and collaboration of the electronics and cycling industries through connected technologies.</li> </ul>
<b>Visitors Service</b>	<ul style="list-style-type: none"> <li>● TTS Match (Online Procurement meeting)</li> <li>● Live Studio &amp; Podcast</li> <li>● Business Networking Luncheon</li> </ul>
<b>Slogan &amp; Key Messages &amp; Main Themes</b>	<ul style="list-style-type: none"> <li>● <b>Slogan</b> : Envision a better cycling world : CONNECT. DISCOVER. EVOLVE</li> <li>● <b>Key Messages &amp; Main Themes</b> : <ul style="list-style-type: none"> <li>● <b>Resilient Supply Chain</b>: bicycle parts, accessories, and complete bicycles</li> <li>● <b>Digital Connections</b>: e-Bikes and drive units: e-Bikes, electric motor, battery, electric parts and components</li> <li>● <b>Vibrant Innovation</b>: d&amp;i awards, startups</li> <li>● <b>Dynamic Lifestyle</b>: cycling accessories, bike tour services, smart cycling services</li> <li>● <b>Sustainable Moves</b>: Forum, Green Force Talk, Green Initiatives</li> </ul> </li> </ul>

# 新品大觀園：輪組 & 花鼓

## 創新向前行

### 讓 Gravel 帶你挑戰未至之境

公路車輪組的設計有了新方向。隨著 Gravel 騎乘和跑車騎士有了挑戰混合地型的重口味需求，因此輪組的規格發展正在改變，其中以無框鉤輪圈以及無內胎技術，可說是奠定了新規範。在材料部分，碳纖維複材依舊位居高階性能輪組的首選；然而，碳纖維輪組之間的品質及設計存在著很大差異，因此產生了很大的價格區間。另一方面，並不是所有騎士都是追求極速性能，也有很大的族群更是重視輪組的耐用性。本文就來針對高級跑車輪組，探究它們帶來創新的輪框、花鼓、幅條的設計，讓您騎車更能享受高速帶來的暢快感。



**Deda Elementi SL6**頂規碳輪性能一流，高貴不貴。

**Deda Elementi M0804** 在去年的環義賽就搶先曝光一款輕量化輪組，這也預告著來到 2023 年，Deda 會帶來全新的輪組系列。據 Deda 資料，他們將亮相包括 SL6 DB、SL4 DB、RS3 DB 輪組，以及一款適用於計時賽的 Hero DB 無內胎系統輪組。RS3 DB 是一款帶有框鉤設計的輪圈，碟煞相容並且支援無內胎系統，框體採用 6061 鋁合金打造，是不傷荷包的入門首選，其價格不到頂級 RS4DB 陶瓷軸承輪組的一半。另外，此輪組系列的一個亮點，就是搭載全新的 RS 系列鋁合金花鼓，採用 7075 鋁合金打造，與前代相比重量減輕了 80 克，並且相容的系統包括 **Shimano M0814**、**SRAM M0612** 和 **Campagnolo F0404**。Deda 特別說明，SL4 和 SL6 是頂級碳纖維輪組，並在價格上極具競爭力（分別為 1350 歐元和 1450 歐元）。Deda 這兩組新輪的登場，顯示其要進軍跑車輪組市場佔有一席之地。

**Reynolds L1028** 作為一個經典輪組品牌，在過去數十年以來一直在輪界享譽盛名，現在的產品設計也從過去的公路輪組，轉向 Gravel 領域。其中 G 系列就是專為 Gravel 而生，在設計上採用無框鉤、無內胎技術，允許使用較低的工作胎壓並且適配較寬胖的車胎。無框



**Reynolds Blacklabel**(黑標)系列代表該品牌最頂規的旗艦輪組。

鉤技術相較於一般的無內胎系統輪框，在使用較低的工作胎壓下，可以提升輪胎的抓地力並有較好的衝擊保護。

G 系列提供 650 和 700 兩種輪徑規格，分別具有 Pro、Expert 和 G 共三種級數。輪框高度為 26mm、框寬 25mm，所有型號均提供 12x100 /

15x100 前軸和 12x142 後貫通軸規格。Pro 和 Expert 這兩種級數使用 Sapim CX-Ray 的空力扁幅條，並且框體採用非對稱設計，可以強化輪組在重度踩踏負載時的側向剛性。簡單一句，Reynolds 說這系列的輪組是「專為高性能及爬坡而生」。輪組系統可以對應包括 Shimano HG 11sp、Campagnolo N3W 和 SRAM XDR 棘輪規格。

**BLKTEC M1030** 重質不求量，是一個追求設計理想的新創品牌，旨在為追求極致性能的騎士打造最完美的輪組，贏得了一群忠實愛好者。其品牌精神是「要嘛不做，要做就要做到最好。追求完美，近乎苛求。」這家總部設於台灣的公司，其最新亮相的 C1D 顛覆你對輪組的想象，採一體整合式設計以及無框鉤的輪圈，最特別的在於六芒星的幅條編織。C1D 是結合 BLKTEC 歷年來的心血結晶，目的是要將騎士的踩踏力量，在重度踩踏時幾乎不會發生側向偏擺，完整轉化為前行的速度，這款碟煞適配輪組可以適用於 25-35mm 的輪胎寬度。據公司的資料說明，這款輪組採用最新的碳纖維複材技術，可以放心挑戰各種公路路況。這款輪組從

設計、開發到製造都在原廠進行，這是 BLKTEC 對於追求性能騎士的品質保證。

**Miche M2026** 是一個富有義大利風情的百年老牌，自 1919 年以年公司便投入自行車的生產製造。這是一間融合傳統、熱情、技術和創新的品牌，持續為自行車市場帶來令人耳目一新的傑作。源於義大利、測試於義大利、製造於義大利，這是 Miche 的品牌精神，每一項產品均是秉持加嚴的測試標準所製成。在今年北展，Miche 帶來了 Supertype Disc DX 全封閉一體式碟輪，並且榮獲「Made in Italy 義大利精品獎」的肯定。錯綜複雜的碳纖維紋理，是不同碳纖維層以及 3K 表面處理的巧妙結合，確保可以達到輕量化以及提升剛性。在制動部分適配 Shimano Centerlock 系統，並且搭載頂級的 Ceramicspeed 陶瓷軸承，可以確保最順暢且穩定的轉動。如果一體式碟輪對您太過狂野，那也可參考 Supertype SPX 5 DX 五刀輪，其碳纖維結構是採用 UD 單向碳纖布以及 3K 碳纖布交疊而成，打造出極佳的側向剛性以及符合空力效益。花鼓本體採用 7075 T6 鋁合金打造，並同樣搭載陶瓷軸承，讓騎士所踩下的每一瓦，都可以御風前行。SPX 5 提供兩種規格：Centerlock 碟煞以及框煞。



Miche Supertype Disc DX封閉碳纖維碟輪是頂級中的頂級，並且堅持義大利製造的卓越品質。



**Realworx I1401** 可以為你打造理想中的輪組，它會是你設計輪組時的可靠伙伴，提供一系列的輪組解決方案。其合作的客戶包括享譽歐洲、亞洲的品牌，其產品項目包括無內胎配件、花鼓以及完整的輪組。Realworx 的核心是為客戶打造堅固且耐用的輪組，以他們的 Gravel 碳纖維或鋁合金輪組而言，採用直拉式幅條設計，並且有 3 度或 6 度的棘輪齒快速咬合。目前他們的跑車及登山車輪組都適配碟煞系統，並且採用 Realworx 花鼓，打造出的胖胖輪框可以滿足市場的需求。另外，他們也提供獲得專利認證的 CNC 貫通軸，並且價格經濟實惠。

**DT Swiss F0534** 針對被眾多輪組品牌廣泛使用的 350 花鼓進行了升級，不僅提升產品的適配性，同時花鼓本體也更輕，棘齒的嚙合速度也優化。這一

款 350 花鼓透過壓入式棘輪座的結構，在幾秒內就可以免工具拆換不同系統的棘輪座，可以適配各種品牌的傳動系統。這種免工具拆裝的設計，不僅方便使用者維修，後續要更換棘輪座系統也很靈活。此外，使用者也可以更換 54 齒的轉換套件來提升嚙合速度。為了削減重量，DT Swiss 重新設計了花鼓殼和軸心，與前作相較減輕了 5% 的重量，而如果是跟直拉式的花鼓相較，輕量化更可以來到 10%。這款全新的 350 花鼓搭載 36 棘齒設計（前作為 18 棘齒），可以達到更快速的嚙合咬合，得到高效傳動動力。最後，在側蓋部分也做了更新，可確保更好的鎖付力，並且簡化拆卸。

**Novatec**（久裕，**I0922** 深瞭自行車市場的多樣性，並且不總是追求更快、更輕，另外還有重要的設計要點。對於

e-Cargo 載貨車 e-MTB 而言，需更加重視花鼓的耐用性。為此，久裕針對重負荷騎乘推出兩款全新花鼓。其中一款為中級定位的 Team 花鼓，耐操好用是它的設計理念，搭配 33t 棘齒以三組棘爪。花鼓殼也做了升級，並且使用更為粗壯的軸承規格來提升騎乘強度，採用 7075 鋁合金打造的軸心以及棘輪座，可以允許使用者自行更換為標準的登山車花鼓。Team 花鼓支援兩種輪軸間距：142mm 或 148mm，在碟盤鎖付也適配於 Centerlock 或是國際六孔。而另一款較高級數的 Pro 花鼓，比起 Team 更為耐操強壯，搭配 40t 加密棘齒以四組棘爪，可以加快嚙合速度、提升傳動；此外，Pro 的花鼓殼以及棘輪座，比起自家其他的登山車花鼓在強度上提升 30%。在碟盤鎖付也支援 Centerlock 或是國

際六孔，並提供 Boost 12x148mm 規格。Team、Pro 這兩款級數都可選配棘輪座，適配於 Shimano HG 11sp、Shimano MS 12sp、SRAM XD。

無論你是專業公路車騎士，還是實用主義的城市通勤，從重視空氣力學的超輕量頂級輪組，到重視性價比、耐用性的通勤族，以上介紹的輪組及花鼓都能涵蓋到各種騎乘場景。「輪組不只是轉動的車輪，而是推進業界發展的驅動力」，我們可預見未來會有新科技、新複材以及更優化的工程設計，讓輪子轉的更快、更久，也更耐用。 ■ WB



DT Swiss 推出廣受好評的 350 花鼓升級版。



Novatec 針對電動載貨車和 e-MTB 推出兩款新花鼓，主打耐操強壯。

BLKTEC C1D 六芒星輪組完美體現該公司的製造工藝，專為最極致性能表現的騎士而生。

# NEW PRODUCTS

## BAFANG 3速自動變速花鼓

迎接全新自駕世代。這款Bafang的3速自動變速花鼓僅重1.7公斤，可對應於25km/h或32km/h速限規範，並具有精確的換檔點；更重要的是，變速換檔自動進行，完全不需要額外的變速撥桿或變速線組。這套系統特別適用於e-trekking, e-city and e-cargo。讓騎士專注道路、開心騎乘，不再分心。

**M0112**



## WELLGO C368城市車踏板

這是一款超大踏面的城市車踏板，踏面採用兩種不同的防滑材質。藉由複合材質及搭配，不僅提升更好的抓附力，同時也帶來嶄新的外觀，進而實現出色的穩定性和舒適性。整組踏板478克，採用耐衝擊、高強度工程塑料打造，增加了踏板的安全性。

**J0517**

## A-PRO TECH E-CARGO電輔載貨車EG4A-B11

城市通勤有了不一樣的可能性，載人載貨一次搞定。e-Cargo可說是自行車界的載卡多，無論你是要接送家人，或是去採買大量雜貨，這一輛車通通滿足你的需求。

有了這輛車，想像力就是你的超能力，它能夠滿足你的日常及休閒所需。週間平日你可以將它作為一輛載貨車，來到假日則可以轉換身分，載著小孩子到公園休閒騎，讓一輛自行車充滿各種可能性。

需要更長的續航里程，我們也能滿足你的需求。另可選購Bosch雙電池版本，滿足你對性能及里程的要求。

**I1117**



## HYENA E-BIKE SYSTEMS E-ROAD AIR電機系統

這是Hyena(凱納)最新登場的超輕量電機系統：E-Road AIR。整套系統僅重3.2公斤，後花鼓馬達可帶來30Nm的扭矩輸出，搭配250Wh的下管電池。想進一步提升續航力，還可以選配增程電池(180Wh)。另外，這顆搭配LED的控制器可以整合於車架，以及一組雙按鈕的遙控器，方便騎士專心騎乘，直覺操作。

**N0616**



## NECO MM18中置電機

誌慶工業的這一款中置電機，內建扭矩感測器以及兩組速度感測器，並且以80KHz進行高頻偵測。可以得到包括曲柄扭矩、行車速度和踏板迴轉速等資訊，可供控制器使用，確保精確監控，同時實現最佳效率。值得一提的是，這款中置電機可帶來最大100Nm的扭矩輸出，但在運轉時非常安靜。馬達採用模組化設計並且整合控制器，讓拆卸變得容易。

**J0632**

## MESSINGSCHLAGER E-BIKE電動車「客製化概念」

「e-Bike 品牌的誕生從零到有，有可能在12個月之內完成開發、投放市場嗎？沒問題的！」這是德國Messingschlager做出的承諾。作為歐洲最大的自行車零件進口商，並具備開發、採購等全方位支援，客戶可以依其設計概念來打造一輛e-Bike。所有的自行車零組件，無論是變速或還是避震器，Messingschlager都可以幫您完成採購。

2023年，新推出一款Enduro e-MTB全避震鋁合金車架，這是旗下第9款的公模車架，配備Brose GEN 2電機系統和720Wh電池。後避震行程為170mm，是一款專為下坡而生的車款，並且在細部設計上也非常講究，例如採用隱藏式走線以及34.9mm座管。

另外一款新車SUV，同樣配備Brose GEN 2電機系統。這輛車搭配了專屬的行李架，配備了鋁合金擋泥板。歡迎來到Messingschlager了解更多資訊。

**J0512**



## VALEO CYCLEE SYSTEM



這套系統具有獨一無二的設計，同時整合了一顆48V電機以及自動變速箱，可以即時適應不同的騎乘風格以及地型。Valeo這一款自動變速電機系統，可以滿足各種騎乘需求，無論是登山車還是城市車，都帶來完美解決方案。

**L0618**

## V-GRIP辰驊國際 波浪型運動水壺

這款750ml的水壺採用動感的波浪型設計，搭載“SprayMe”噴嘴提供兩種出水模式：高流量或噴霧降溫。在拉開噴嘴後就可以開啟安全模式。所有配件均可以拆卸清潔，並可用洗碗機清洗。這款水壺可以回收，並獲得BPA/FDA/rohs認證。

**I1318**



## HAFNY HF-1550複合 材質踏板

高級踏板的黃金組合，配備高品質滑順軸承、踏板本體加大踏面並採用輕量化的複合材質，還有高達9根的可調式防滑釘。裝上它，即便是遇上最惡劣的騎乘天候，或是挑戰崎嶇不平的山道小徑，您的雙腳都會被牢牢地固定在踏板上。

**J0717**



## POLINI MOTORI 250WH水壺式增程電池

這款增程電池可以適配於2023 Polini E-P3+電機系統，連接自行車上的500Wh電池。這款固定於水壺架的增程電池，可提供250Wh電量，並且方便拆裝。讓原本車上的500Wh下管電池，再加上250Wh，讓總電量來到750Wh，為愛好挑戰長距離的騎士，降低里程焦慮。

**M2022**



# NEW PRODUCTS

## JETSET RIMS AE-3車框

AE-30的車框輻條孔經過重新設計，可精確配合銅頭角度，進而提升了輪組的耐用性。

J1002



## TINO 重複環保萬用繩

諦諾實業改良了傳統繫線帶的一次性使用模式，可重複使用高達500次以上，而且非常容易收緊和鬆開。這款萬用繩方便易用免工具：一撥即開，一按即扣，可串連，輕鬆好上手。

Q0834

## LITEMOVE AEW-230 E-BIKE頭燈

這款 AEW-230 頭燈搭載 Litemove 獨家 MTi 多光束整合技術，具有近光 230 lux / 遠光 950 流明輸出。提供寬達 10 公尺和最遠 300 公尺的照明，專為 e-MTB 車款而生。

此外，AEW-230 獲得了“2023 年德國設計獎”和 World of MTB 的“2022 年最佳設計獎”。車燈擁有多種固定方式，可以安裝在車把、龍頭或是前叉。控制開關也可以依操控需求，安裝在車把的左側或是右側，讓操控座艙更簡潔俐落。這款頭燈專為 25 公里 e-Bike/EPAC 而生。符合德國 StVZO K-Mark、EN-15194-CE、ROHS、REACH 等認證。

N1225



## VELO ANGEL REVO

維樂工業新推出的 Angel Rev (VL-1B96) 座墊採用專利技術 Y 型中空設計。另外，這款座墊的長度較長，可提供騎士靈活的騎姿變化。最特別的是，「大氣成型技術」將坐墊表層與底殼的接縫隱藏起來，這項創新科技能保證百分百防水，並且更方便清潔座墊。

這款座墊創新採用了注入氮氣的 Atmos 泡棉。這種特殊材質可以提升性能和耐用性，也更永續環保，在製造座墊時儘可能降低對環境的影響。此外，這種全新複材擁有更輕量、回彈更快的特性，讓座墊的每一個區域都像是獨立筒床墊一樣，可以為騎士的臀部提供最適回彈反饋，並且兼具減震和散熱功能。

J0717



## KMC E-BIKE鏈條

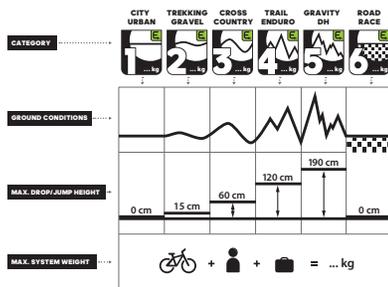
這款 KMC e-Bike 鏈條採用新式 Shield Tech 圓盾鉚合技術，強力征服各種地形環境，可以滿足中置電機系統所產生的高扭矩以及功率輸出。搭配特殊設計的齒形，使其與齒輪完美匹配，有效減少摩擦和阻力。這是一款高性能、耐用，而且專為 e-Bike 而生的鏈條。

J0118

## MESSINGSCHLAGER 零件適配分類標籤

PartFinder (零件適配分類標籤) 能為五花八門的自行車零件進行分類。它可以幫助消費者、經銷商和製造商，快速選擇能夠承受負重的自行車零件。系統的核心概念，是透過系統重量 (騎士 + 自行車 + 行李) 來進行系統分級，方便又快速就能依標籤選擇適配的自行車零件。在產品的包裝正面及背面，會各有一張標籤來說明該零件的適配範圍。PartFinder 根據 ASTM F2043-13 或 DIN EN 17406 (仍處於草案階段) 的測試標準進行分類。現行的 ISO4210 / EN15194 標準因為其荷重標準受限於 100 公斤或 120 公斤的系統重量，無法適用於更高的負載，例如登山車 / Enduro 等重負荷車款。PartFinder 的產品會附上品保標準和測試報告，適用於現行 ISO4210 / EN15194 標準未涵蓋到的範圍，可以滿足更大的負載和更極端的應用，部分規範可以承受 140 或 160 公斤的系統重量。這些標準是與第三方獨立機構合作開發的，這意味著 Messingschlagel PartFinder 的系列產品可以為高負載的車輛，提供更高的認證安全性。

J0512



## KT TAIWAN 全新棘齒系統花鼓



崑藤工業這一款全新棘齒系統花鼓可以加速啮合速度，讓傳動效率更高、更耐用。有兩種齒數可選：36T(一般版)或是54T(進階版)。相容於市售各種變速系統。歡迎來我們的攤位I0218，了解更多關於公路車以及登山車的完整對應方案。

I0218

## CROPS SCENES™ SC100R

這顆精巧的SC100R後燈搭載全新“A-LINK”科技，具有35個LED陣列以及8種功能模式，提供出色的警示效果。此外，這款後燈自帶一組尾夾，可以掛在騎士身上或是固定於車上。更聰明的設計是，這款後燈可以邊充電邊使用，你可以放一組行動電源在座墊袋，就不必擔心沒電了。

L0924



## KIND SHOCK RAGE-IS

它不只是一支升降座管，更重要的是，你只需要用有限的預算，就可以享受最新科技。RAGE-IS具有避震功能，讓騎士提升操控自信，去迎戰更加艱難的地型。前方的道路沒有極限，就讓RAGE-IS陪你一起激發潛能。

I0818



## KT TAIWAN 單速棘齒系統花鼓

崑藤工業推出全新鋼製單速棘齒系統花鼓，讓旗下的產品線更加全面。我們的花鼓耐操又好用，歡迎來我們的攤位逛逛，這裡有各種花鼓款式可以滿足您的需求。

I0218



中文

**疫後重返正軌****國際 Show 展檔檔全速前進**

終於可以脫下口罩喘口氣了，隨著新冠疫情的衝擊持續降低，越來越多的自行車展和活動也重回正軌，但也有一些秀展則發生了質變。我們接下來探究這一些商業秀展迎來了哪一些改變？

這一場疫情整整造成了三年的衝擊，使得全球經濟以及自行車產業，都因在一堆旅行限制和隔離政策之中，這也使得過去習以為常的實體會議變得不可思議。雖然我們可以透過視訊通話和線上會議，但網路還是無法取代面對面交流帶來的溫度及互動感。2023年，終於旅行限令以及隔離政策解開束縛，讓我們可以重返正軌。在今年三月，來自國際四方的買主將重返南港參加台北車展，並且預期熱鬧非凡，我們也接著一探其他國際秀展的情況。

Sea Otter Classic 在加州·蒙特瑞舉辦，是北美最大的自行車消費展覽，在近幾年已奠定 B2C (Business to Consumer) 秀展的王者地位，也成為媒體競逐的新品風向球。今年的 Sea Otter 將在 4 月 20-23 日舉行，吸引各個運動用自行車品牌爭先參加。此外，這場消費者秀展主打著產品測試以及賽事活動，近年來許多品牌都選擇在 Sea Otter 推出年度重磅新品，這股風潮預計將會持續。



Sea Otter Classic 在加州·蒙特瑞舉辦的，旗海飄揚。

2023 年有一個全新秀展值得關注 - (e)volution 是一個專注於 e-Bike 電輔車的國際展。其展覽總監 Lance Camisasca 是秀展界的大老，並且已經取得不少重要 e-Bike 品牌商的支持，它將在科羅拉多會議中心舉辦，並且宣布將與 2022 年秋季搬到科羅拉多的 The Big Gear Show 同場舉辦。值得一提的是，這兩個展會都是主打 B2B2C，意即展會的前兩天是 B2B 商業展，後兩天則是 B2C 民眾日，讓品牌和代理商可以和民眾互動。根據 Camisasca 所述，今年檔期將在 6 月 8-11 日舉辦，已吸引了不少亞洲品牌和製造商的關注。

來到全球規模最大、最俱指標性的歐洲展，在 2022 年有一個創新之舉：原本這個展會已在博登湖畔舉辦了 30 屆，從愜意平靜的腓特烈港搬到了繁華的金

融中心法蘭克福。這個動作也象徵著，歐洲展要從過去的傳統自行車展，躋身擴大到多功能自行車和 e-Bike 電輔車的宣言。法蘭克福是一座國際都市，無論是從機場交通到飯店住宿，各種風味飲食也是應有盡有，都為國際買主提供了更大的便利性。雖然歐洲展在法蘭克福舉辦的後勢看翹，但另一方面，也有許多品牌選擇缺席歐洲展，而是自己籌辦經銷商大會。

然而，歐洲展移到 7 月中旬舉辦，也不是十全十美，因為正逢歐洲的暑假而使得交通塞車、住宿打結。為此，今年歐展日期將往前挪三週，將於 6 月 23 日開展。2023 年歐展也嘗試一個新的 B2B 展覽方案，目的是針對 OEM 廠商可以只參加前三天的 B2B 商業展，這樣可以讓廠商的出差從五天減少到三

天以減少開支，並且跳開活動密集的消費者日。選擇此方案的參展商，將被規畫在 9 號展廳的一個單獨樓層，而在民眾日期間會予以閉館。這樣獨立的展覽空間，可以讓廠商在撤展打包時，不會影響到其他的參展商。目前這個展覽方案受到好評，9 號展廳也將增設三層，進一步加強歐洲展的 B2B 的導向佔比。

2021 年，德國最大的汽車展從法蘭克福搬到了慕尼黑，並更名為 IAA Mobility，宣誓了這場展覽對汽車以外的其他移動載具保持開放態度。慕尼黑



IAA 德國國際汽車展將吸引更多的自行車品牌加入。

市中心有充足的開放空間，受到遊客的稱讚及喜愛。但 IAA Mobility 將自行車及微型電機品牌像是發配邊疆一樣，使得逛展人潮顯得人清，也收到不小的批評。再者，主辦單位規定要使用標準的攤位設計，這也限縮了許多品牌商發揮創意以及表達與眾不同的概念。

今年 IAA Mobility 將於 9 月 5-10 日舉行並迎來改變，預計會規畫自行車以及電輔助力車專區。而這個自行車專區將不再被冷落，並且允許參展廠商自行依需求搭建展位。雖然這看起來是一個很大的進步，但由於汽車和自行車產業在行銷和展覽的預算上存在著不小的差異，因此兩個產業的攤位規模及整體設計，可能會產生很明顯的風格差異。

台中週是一個很特別的存在，它是專門用來談生意、敲定規格的展會。但過去三年因為疫情的衝擊，迫使 2020、2021 年台中週取消辦理。來到 2022



(e)volution 會展將於科羅拉多會議中心舉辦。



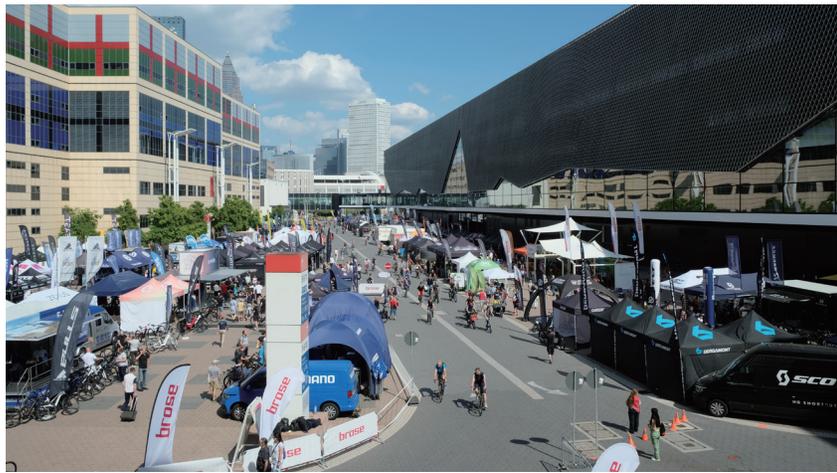
Verbier eBike 嘉年華。

年，由於當時疫情仍衝擊著台灣，但主辦單位已確定舉行，並且相關飯店也願意承辦，因此在重重限制之下舉辦，使得逛展人數稀稀落落。台灣的防疫政策在當時9月，從國外入境者需要入住防疫旅館進行隔離，這也降低國外業者的參加意願。另外，由於中部地區就是一個自行車產業鏈，因此有國外客人來訪時，直抵公司拜訪也很方便，並不需要由主辦單位統籌規畫、會另外產生費用的展會。

由於疫情衝擊期間，台灣的隔離政策落實的很嚴謹，這段時期來台灣的外國訪客明顯下降，因此跟客人的關係變的薄弱或是有還有許多待討論的事項。而

目前台灣的防疫政策已經大幅鬆綁，旅行限制也已經取消，今年台中週預計在10月3日至6日，預計會看到很多的外國面孔。

在過去三年中，北美和歐洲等主要出口市場的一個明顯趨勢，就是來逛自行車展的民眾明顯增加了，這可以從德國·杜塞爾多夫的Cyclingworld、西班牙·赫羅納的Sea Otter Europe、義大利的自行車嘉年華和韋爾比耶(Verbier)的電動自行車嘉年華，看到洶湧的人潮。雖然逛展的民眾人數持續活動，但上述提到的參加廠商類別，主要是地區代理商，而不是製造商。 ■ LvR



歐洲展去年移師法蘭克福舉行，成效亮眼。

## Tino 重複環保萬用繩：節能、萬用、好上手

諦諾實業成立於2011年，是一家自主開發節能、環保產品的品牌，其產品已取得歐盟各國專利，一直以來以節能、環保、綠色為出發點來研發各類產品，以滿足廣大客戶需求。

今年這是諦諾 Q0834 第一次參加台北車展，帶來剛開發上市的重複環保萬用繩，此款萬用繩改良了傳統紮線帶的一次性使用模式，可重複使用高達500次以上，而且非常容易收緊和鬆開。這款萬用繩方便易用免工具：一撥即開，一按即扣，可串連，輕鬆好上手。萬用繩提供各種長度和寬度，可以承受的最大負載為56公斤。

紮線帶的應用在自行車產業可說是無所不在，例如要固定整車或是零件等都會被用到。但是，當店家或消費者在組裝自行車時，這些用來固定的紮線帶就會被剪掉丟棄，最終進入垃圾掩埋場，或是遺落在地球的某一角落。而透過使用環保萬用繩，使用者就可以重覆使用，落實環保、節能的ESG理念。

環保萬用繩的生活應用還

有很大的潛力，例如可以用在居家生活、花園植栽的維護等，只要需要有用紮線帶的都可以被它取代。諦諾的設計理念，是希望解決當前紮線帶一次性用後就丟的不環保，讓大家可以為永續環境盡一份力量。歡迎大家來諦諾攤位實際體驗(Q0834)，您將會有全新的體驗。 ■ GR



中文

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## TAIPEI CYCLE SHOW DAILY Credit & Contact Info

<b>PUBLISHER</b> KB Media Ltd. D16A275, Ireland <a href="http://www.showdaily.net">www.showdaily.net</a> <a href="mailto:tom@showdaily.net">tom@showdaily.net</a>	<b>ART DIRECTOR</b> Ruth Gunning	<b>ITALY:</b> EdiConsult Internazionale <a href="mailto:sport@ediconsult.com">sport@ediconsult.com</a>
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