

TAIPEI CYCLE SHOW DAILY

DAY 2

ENGLISH
中文

AUTOMATIC DUAL SPEED.



NEW BUILT-IN H700
AUTOMATIC DUAL SPEED
REAR DRIVE SYSTEM.

BOOST YOUR RIDE.



UPDATE 2021
THE ULTRA STRONG M510
MID MOTOR SYSTEM.



More information on
bafang-e.com

POWER YOUR LIFE



INSIDE:

Taiwan's reshoring initiative
Saving the cycling environment

- Smart cycling products
- Transmission parts
- Saddles & grips
- Compact bikes
- Indoor trainers
- E-bike components
- Tyre overview
- New product roundup



BUILD YOUR OWN E-BIKE

EVERYTHING FROM A SINGLE SOURCE



messingschlager
E-Mobility Solutions

— NEW FRAME CONCEPTS 2022 —



URBAN SUV CONCEPT BROSE

YOUTH MTB BAFANG

MIRANDA FACTORY TEAM
WORLD CHAMPIONS
EWS-E 2020

Miranda
The European Bike Fundamentals



TESTED BY
CHAMPIONS

Our products are **proudly made in Portugal**. They are tested by our Quality Department and - in the most aggressive terrain - by some of the best riders in the World, followed by testing and certification in independent laboratories.



Spiderless G4 V1 + Kappa Crank

www.mirandabikeparts.com

Cofinanciado por:



<h1>TAIPEI CYCLE 2022 Show Profile</h1>	
Organizer	Taiwan External Trade Development Council
Exhibition Dates	March 9 - March 12, 2022
Main Themes	<ul style="list-style-type: none"> Bicycle supply chain: bicycle parts and accessories Complete bicycles Overseas exhibitors and international brands e-Bikes and drive units: e-Bikes, electric motor, battery, electric parts and components Cycling lifestyle and fashion: cycling accessories, bike tour services, smart cycling services, startups, fashion show, TAIPEI CYCLE+ salon
Unique Show Features	<ul style="list-style-type: none"> A hybrid show, both on-site and online. The long-awaited gathering of the world's leading B2B cycling industry leaders. Direct access to cycling's leading global brands and manufacturers. The gateway event for brands to reach the Asia-Pacific markets. A hub to exhibit and see the latest designs, innovation and R&D in cycling. The one stop shop event to conduct business with stakeholders all across the global supply chain. Witness the intersection and collaboration of the electronics and cycling industries through connected technologies.
Exhibition	TAIPEI CYCLE Show: 638 exhibitors/ 2111 booths TAIPEI CYCLE DigitalGo: 207 exhibitors. https://online.taipeicycle.com.tw/
TAIPEI CYCLE Key Exhibitors	Giant, Merida, Ideal Bikes, Darfon (BESV), Shimano, SRAM, KMC, Pacific Cycles, KTM
Events	<ul style="list-style-type: none"> TAIPEI CYCLE d&i awards Pre-show press conference TAIPEI CYCLE FORUM Outdoor Taipei (outdoor event)
Theme Pavilions	TAIPEI CYCLE d&i awards Pavilion
Free visitor services	<ul style="list-style-type: none"> Online & onsite registration In-hall wireless Internet Show publications Show APP Information Centers Muslim prayer room Legal consultation service

ENGLISH

<h2>TAIPEI CYCLE 2022</h2>	<h1>DigitalGo Calendar*</h1> <p>https://online.taipeicycle.com.tw/</p> <ul style="list-style-type: none"> Publications Physical event E Publications 				
WEEK ONE: THE REUNION	7	8	9	10	11
			■ Show Daily 1	■ Show Daily 2 ■ Forum ■ Live Tour Market Day US *GCN(TBC)	■ Live Tour Market Day Europe GCN(TBC)
WEEK TWO: ONLINE CONNECTIONS	14	15	16	17	18
	■ 1. E-Newsletter: TTS Match & d&i awards 2. DigitalGo's Bulletin board Announcement	TTS Match	TTS Match d&i award winners	TTS Match d&i award winners	TTS Match
WEEK THREE: THE KNOWLEDGE BANK	21	22	23	24	25
	■ 1. E-Newsletter: This week's feature exhibitors (schedules) 2. DigitalGo's Bulletin board Announcement	Video Feature: complete bike	Video Feature: Ebikes & Drive units Smart cycling devices	Video Feature: Bicycle Parts, Bicycle Accessories	Video Feature: Int'l brands & Cycling Services, Smart cycling devices
WEEK FOUR: THE HIGHLIGHTS	28	29	30	31	1
	■ 1. E-Newsletter: Highlights 2. DigitalGo's Bulletin board Announcement	Live Tour Video	Live Tour Video	Webinar video: Gina Chang <i>Discover Market Trends and Marketing Strategies</i>	Webinar video: Pacific Cycles, KTM <i>Sharing experience: How to Integrate ESG into Business</i>
WEEK FIVE: THE WRAP UP	4	5	6	7	8
	■ 1. E-Newsletter: Highlights 2. DigitalGo's Bulletin board Announcement	Forum Videos	Market Day US & Europe Videos	Live Tour Videos	

*The organizer of TAIPEI CYCLE reserves the right to modify.

OVERVIEW: SMART CYCLING PRODUCTS FROM TRAINERS TO FLEET BICYCLES, CYCLING IS GETTING A DIGITAL MAKEOVER

With developments like electric power assistance and GPS tracking, bikes are more connected to the digital world than ever. But it's not just bicycles that consumers now expect to integrate seamlessly with the rest of their electronics. Including smart turbo trainers that can replicate gradients using data harvested from the outside world to carry-along devices like computers and sensors, riders are increasingly linked up. Recording, navigating, or keeping you connected, below, you'll find some of the most innovative smart products and brands at the 2022 show.



Xplova's X5 Evo GPS cycle computer

The cycling arm of IT giant Acer, **Xplova K0426** produces a vast range of smart products. One of the cleverest is its X5 Evo GPS cycle computer. This unit will not only tell you your key metrics and display route mapping, it can also record your exploits as you ride. Allowing you to later review geo-located footage, the Xplova app also enables you to harvest ride data and create a digital overlay for your footage to add information like speed, power, and heart rate. Simultaneously able to employ these metrics to auto-trigger the camera when a set threshold is reached, you'll be sure to capture the most exciting moments from your ride. Equally able to bring the excitement of the outdoors inside is the firm's Noza S smart trainer. With ANT+ and Bluetooth connectivity, it also offers route simulation from your harvested real-world rides through Xplova's companion app.

Also making a range of smart GPS computers is **Bion Sport K1110**. With navigation features and a matching smartphone app, its computers offer high-end fea-



tures and are backed by a broad range of own-brand accessory sensors. Along with conventional heart rate, speed, and cadence units, the firm also produces a range of smart pedals. Including an aggressive flat pedal capable of sensing cadence, its F1, F2, and F3 pedals match either road or mountain bike segments and use ANT+ and BLE 4.0 to communicate with a range of head units or apps.

Offering a similar range of smart computers and sensors is **Top Action K0824**. The firm recently also introduced a smart pump to join its established range of head units and sensors. Its GA02 portable rechargeable

pump is a compact and rugged unit that takes all the effort out of inflating your tyres. Small enough to



Top Action's GA02 portable rechargeable pump



Smart pedal from Bion



Spin Up's 1,000mA dynamo-based USB charger

carry with you, its built-in rechargeable 2,000 mAH battery will effortlessly inflate your tyres to a preset pressure. With a clear LCD digital screen displaying real-time pressure, it also works as a torch to aid in working in low-light conditions. Capable of working on a range of vehicles and valve types, it's able to reach a colossal 150psi.

While cycling can be a great way to switch off, many of us would still like to take calls, listen to music, or follow the auditory prompts from a training app. But how to digest all this extra information safely? Using headphones isn't great when cycling as they tend to block out the world around you. Instead, head over to **Thinking Group DigitalGo only** for smart connected headphones that are safe when cycling. Its Shokz products offer a smart solution. These Bluetooth enabled wireless headphones can connect to various devices, including your phone. However, unlike traditional headphones, they don't obstruct your normal hearing. They do this by relying on bone conduction technology. Transmit-

ting sound through your cheeks directly into your inner ear, this means you'll still be able to hear ambient noise from the world around you.

Of course, none of these clever products will be any use if their battery runs out. Happily, **Spin Up N0501** has the solution. Its 1,000mA dynamo-based USB charger can be retrofitted to almost any bicycle. Likely to be a hit with tech-savvy touring cyclists and bikepackers, the unit is totally waterproof and creates a minimum of drag. Weighing just 380 grams, it's designed specifically for device charging rather than powering lights. This means it can generate a higher maximum power output of 6V12W at 18 km/h. With a built-in micro control unit, it won't hurt your phone when charging at different speeds either. Its onboard sensors also allow the device to switch to low resistance mode when climbing, cutting resistance by two-thirds until you're at the top.



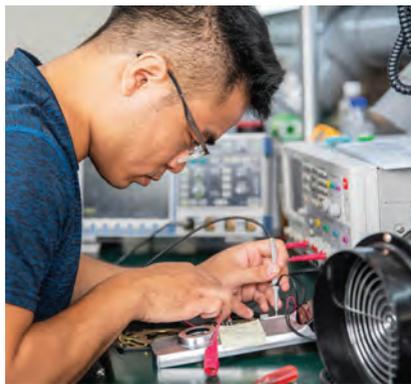
Shokz Bluetooth headphones by Thinking Group use bone conduction technology



Keego Mobility offers purpose-built IoT-enabled delivery bikes as part of a complete ecosystem.

And it's not just accessories for cyclists that are getting smarter. Bikes are increasingly joining the internet of things directly. In this area, the ability to track and manage fleets of integrated bicycles has been an enormous development. Two obvious benefits of seeing where all your bikes are at once are to track deliveries and make sure your bikes are evenly distributed. Helping firms do just that, Keego Mobility M0534 offers both the physical bikes and virtual tools for delivery companies that want to become both greener and more profitable. Offering purpose-built IoT-enabled delivery bikes, a driver's app, plus a fleet manager portal, it has all the elements users need to set up or grow their delivery company. Helping producers create these

kinds of smart products, Micro Program N1030 offers hardware, software, consultancy, and solutions for the next generation of bicycles and accessories. Having created the unseen technology behind several public access bicycle hire schemes, it's an expert in smart access control, wireless communication, and remote management. With competencies across several other sectors, the firm is also experienced in developing sensors and controllers for various applications. Having seen success through its work on the YouBike public hire scheme, it also helped Giant Bicycle develop its noted e-bike repair and inspection process. Allowing for Bluetooth enabled diagnostics, the firm's proven ability to add value to products means its services are likely to be even more sought after in coming years. JD



Micro Program is an expert in smart access control, wireless communication, and remote management.

MK4

BUILT TO PUSH BOUNDARIES

NEW MK4 RIMS AND WHEELSETS

STANS

photo: Sterling Lorenée, rider: Thomas Vanderham

GET YOUR SHINE ON



SPRY+ in Gold Slick

COME SEE ALL THE NEW SPRY+ COLORS AT BOOTH# J0418



View our full range at www.xpedo.com



INVEST IN TAIWAN INITIATIVE INCENTIVES LURE PRODUCTION BACK TO TAIWAN

With hardly any raw materials of its own and limited resources in terms of land and workforce, Taiwan's industries face some challenges to achieve growth. To address some of those challenges the current administration has come up with a set of incentives to help industries grow their operations on the island.

Even before the Covid-19 pandemic struck, the supply lines of the bicycle industry underwent some significant changes – and those of other industries as well. While Taiwan was looking to increase domestic investment to amplify economic growth, the ongoing trade conflicts between the EU, the United States and China were another strong incentive to lessen the dependence on one country for manufacturing. A set of underlying circumstances such as disturbances in sea freight, electricity blackouts, local lockdowns and temporary factory closings in countries such as China, Vietnam and Malaysia further exacerbated the issues during the pandemic, increasing the readiness to reassess existing set-ups and supply lines.

In January 2019 the Tsai administration launched the Invest in Taiwan initiative: a set of incentives to lure overseas Taiwanese capital back into the country and to increase domestic industrial production, creating jobs at the same time. A detailed look at those incentives shows some of the main challenges when setting up factories in Taiwan: apart from preferential loans and land rents, the state also offers customized tax incentive consulting services and assistance to recruit workers. As for the stable electricity and water supplies, this incentive seems to be aimed at alternative locations for production rather than to address a constant issue within Taiwan.

Taiwan's Ministry of Economic Affairs (MOEA) has been aiming at three kinds of companies with its initiative. The "Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan" program is tailored to the needs of large global corporations. To qualify for this program, parts of the production need to be brought back to Taiwan while the permitted percentage of foreign employees is increased – a nod to the endemic lack of industrial workers within the

country. Apart from that, there is an "Action Plan for Accelerated Investment by Domestic Corporations" and an "Action Plan for Accelerated Investment by SMEs". Given the structure of the bicycle industry and the size of its companies, the latter is the most relevant.

So how have these three action plans worked out from 2019 to 2021? According to data provided by Taiwan's MOEA, a total of 1144 companies have applied and qualified for one of the three plans that are part of the Invest in Taiwan Initiative, including 22 companies from the bicycle industry. The combined volume of investment added up to USD 54.2 billion (NTD 1.62 trillion) and a total of 128,960 jobs were created. Taiwan's Executive Yuan has decided to extend the Invest in Taiwan Initiative and its three plans by another three years to 2024, adding the need for carbon reduction plans and thus for more sustainability to the conditions that need to be met in order to qualify for the incentives.

What types of companies and what sectors of the industry were participating in the Initiative from 2019 to 2021? The data provided by MOEA give quite a clear picture: overseas Taiwanese businesses accounted for only 22.2% of the companies participating in the initiative. But they created 62.5% of the new jobs and invested 63.8% of the funds. Unsurprisingly companies from the ICT sector were the most prominent in this category. Under the second plan domestic corporations accounted for 11.8% of the companies involved, creating 15.4% of the new jobs and investing 16.5% of the funds. Last but not least domestic small and medium enterprises counted for 66% of the companies, 22.1% of the jobs created and 19.7% of the investments.

A look at the sectors of the industry show that the ICT sector was dominating with 59%, while metal and mechanical industries accounted for 21%, consumer goods for 18% and the service industry



for 2%. These numbers reflect the structure of Taiwan's industrial sector. As for the bicycle industry, the report of MOEA on the first three years of the initiative mentions Giant Bicycles as having participated while reports of local media point at SuperB Precision Tools. Apart from a total of 22 companies from the bicycle industry having participated in and profited from the initiative, the report also quantifies the volume of the investments from bicycle-related companies at USD 400 million or 0.7% of the overall investment volume.

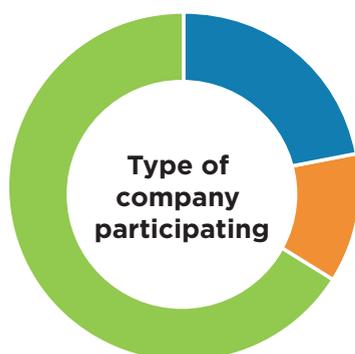
When asked about the expectations for the next three years, William Tang, Division Chief at the InvestTaiwan Service Center, answers: "Based on the experiences of the initial three-year phase we expect a total investment of about USD 30 billion and the creation of about 40,000 jobs. The numbers are somewhat lower than those for the first three years as many major companies have already done their investments. As for the second



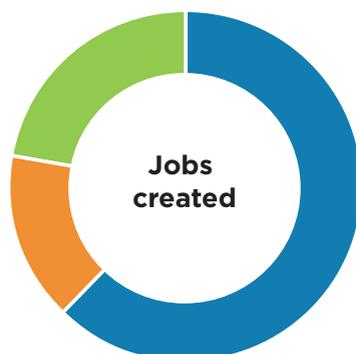
William Tang, InvestTaiwan

phase from 2022 to 2024 we hope for more organic local investment. The ICT sector is likely to play a slightly smaller role, and consumer goods may be more prominent."

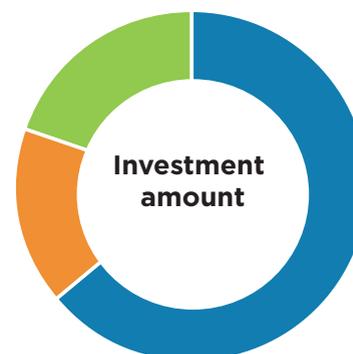
■ Laurens van Rooijen



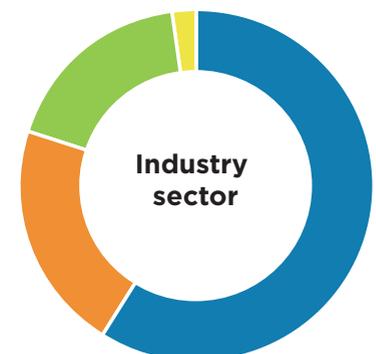
total 100% (1144)
TW corporations overseas 22.2% (254)
TW corporations domestic 11.8% (135)
Domestic SMEs 66% (755)



total 100% (128960)
TW corporations overseas 62.5% (80567)
TW corporations domestic 15.4% (19860)
Domestic SMEs 22.1% (28533)



total 100% (USD 54.2 billion)
TW corporations overseas 63.8% (34.6)
Domestic Corporations 16.5% (8.9)
Domestic SMEs 19.7% (10.6)



ICT sector 59%
Metal and Mechanical Industries 21%
Consumer Goods and Chemical 18%
Service Industry 2%



LINK TO PERFECTION

KMC Chainrings

+

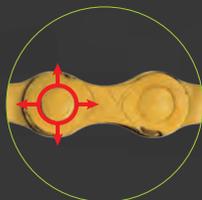
KMC e-Bike Chain

e-Bike Solutions



Chain Mate

The chainring roller seats between teeth are perfectly matched to KMC chains.



Shield Tech

e-ripping technology combined with oversized pin design enhances strength by 25% versus standard chain.



Optimal Tooth Design

Chain retention is enhanced to hold the rollers in place while preventing chain drop and reducing friction.



KMC (KUEI MENG) International Inc.
www.kmcchain.com

KMC Chain

KMC Chain Europe N. V.
www.kmcchain.eu

KMC Chain Europe

KMC Chain American Co.
www.kmcchain.us

KMC Bicycle Chain

EUROPEAN OUTDOOR CONSERVATION ASSOCIATION CALLS FOR BIKE INDUSTRY TO JOIN EFFORT BICYCLE COMPANIES CAN HELP CONSERVE THE WORLD'S EXTRAORDINARY LANDSCAPES

“Who is looking after the extraordinary habitats and landscapes that your customers love to explore on their bikes around the world?” That’s the question posed by Tanya Bascombe, Joint General Manager of the European Outdoor Conservation Association (EOCA). “Who is protecting threatened biodiversity in these special places, and ensuring that these ecosystems remain healthy so that they can play their part in drawing down and storing carbon? Well, the good news is that the EOCA is doing just that, and it can do that on your behalf!”

If you’ve been paying attention to the conversations in China at COP 15 about the urgent need to address the loss of biodiversity, and the conversations in Glasgow about the need to tackle the climate crisis, you’ll be aware that now is the time to reassess your company’s CSR strategy and to ensure that it is the absolute best it can be. “We all can and must play our part – now,” says Bascombe. “Together with looking at carbon emissions in your whole supply chain and sourcing materials ethically and sustainably, there is transport, waste, water use and a whole host of other things to think about. But what about the places where your customers use your products?” she asks.

Established in 2006, EOCA is a not-for-profit membership organisation which has over 150 members, all companies that make and sell products that are used in the great outdoors. So far, these members have collectively put over €4 million into conservation projects in 59 different countries around the world.

So how does EOCA work? Catherine Savidge, Joint General Manager, explains: “EOCA raises funds through a membership fee, with the amount dependent on European turnover. It also raises money from fundraising activities with its members. Twice a year, EOCA then invites not-for-profit organisations to apply for funding of up to €30,000 for conservation projects. Well established criteria for the types of projects it will fund, together with support from a panel of scientific advisers from different areas of conservation all ensure that the projects selected for funding are the best ones from a conservation point of view. The projects must protect, enhance or restore a threatened habitat or landscape, work with and benefit the local community, it must leave a positive legacy, tackle climate change, and provide an educational element. All projects must also have a link to outdoor enthusiasts to ensure they are relevant to our members.”

“A shortlist of the very best of the applications is drawn up using the criteria and then these projects are put into a vote,” Savidge continued. “There is a vote for members to select some of projects to be funded. There is also a public vote when members of the public and outdoor enthusiasts are asked to have their say on which projects they would like to see supported by EOCA. This vote attracts huge attention, registering nearly



Angofa Grassland Restoration and Nature Trail



Trash Free Trails - Purposeful Adventures
(photo credit: Sam Needham)

140,000 votes during 2021 and having a string of high profile people showing their support for projects involved over the years including the President of Costa Rica, Sir David Attenborough, popstars, politicians and Miss Nepal! This voting process benefits all of the projects involved by spreading the environmental message of the project on an international platform and often leads to them getting further support.”

Arturo Balderas Torres, from CI-PAD, a Mexican project which successfully won funding via the public vote in 2021, said ‘We were very surprised by the response and the way in which people were involved in the project voting, mainly young people. Thanks to this, we realised how many people are willing to support projects that contribute to conserving the environment and the eagerness that there is towards caring for forests and biodiversity in the face of the climate emergency. We received many expressions of support from all over Mexico and other parts of the world. It has been a fantastic and very encouraging experience! The implementation of the project will be a great responsibility for us due to the commitment we have acquired during the voting process.’

The projects EOCA has funded in the past are varied in location and methodology. They have included establishing biking routes to enhance protection of landscapes through ecotourism in Romania and South Africa; cleaning plastic pollution from environments with paddle boarders, mountain bikers, hikers, surfers and skiers; restoring, replanting and protecting forests in Scotland, Sweden,



Repairing paths and protecting peat bog on Cut Gate, UK

France, Indonesia, Spain and Nepal; and conserving the habitats of bears in Italy and Spain, red squirrels in the UK, orangutans in Borneo and elephants in Thailand.

Dom Ferris of Trash Free Trails, a recipient of EOCA funds in 2020, said “It’s our duty to provide riders, runners and roamers with the inspiration, information and tools to protect and enhance their trails and wild places. To achieve this, we need financial support, industry expertise and access to a broad network of outdoor sports stakeholders. EOCA provides all this and more, and their ongoing support is enabling our community to create a sustained improvement in the volume of single use pollution on our trails and wild places”.

Cristi Gherghiceanu, CEO of AD-EPT Transylvania which received funding from EOCA in 2019 said that “the way EOCA has helped us to link Angofa Wild Centre to the mountain bike trails network has increased the number of those who get closer to Nature. And with this outcome it be-

came easier to fulfil our mission of rural development and biodiversity conservation.”

All companies that manufacture, supply, distribute, retail, promote or use products that are used and enjoyed in the great outdoors are encouraged to join EOCA. EOCA offers a bespoke environmental giving programme, a key part in a company’s CSR strategy, with opportunities to get involved at various levels. This ranges from simply paying a membership fee, to funding your own company specific projects which EOCA finds and manages on your behalf via its Summit Membership programme. According to Catherine Savidge, “The association is unique in enabling a sector to work together to give back to nature. Nature that we all enjoy and on which we are all dependent. By working together, we can achieve so much more than by working alone.”

To find out more about EOCA or to join, please visit www.eocaconservation.org, or email to get in touch at info@eocaconservation.org

OVERVIEW: FOLDING BIKES SMALL BIKES, BIG ADVANTAGES

Although folding and compact bicycles remain a niche segment in Europe, in Asia they are very popular. Here are three designs to keep an eye on at Taipei Cycle Show.



Dahon's new Unio E20 with 200w of power assistance

Since its foundation **Dahon Global DigitalGo only** has focused on bicycles that take hardly any space to store and fit nicely in the trunk of a car. To celebrate its 40th birthday, Dahon is debuting the Unio E20. Rolling on 20-inch wheels, this model relies on an own-branded mid-motor to deliver 200 watts of pedaling support. The battery, with a capacity of 313 Wh, has been designed to fit into the oversized seat post of the bike. Thanks to a Sun-race drivetrain with 9 speeds and a cassette with 11 to 32 teeth, the range is ample for commuting. And V-brakes make sure you can stop on a dime if necessary. For transport or storage, the Unio E20 folds to a small package both quickly and easily.

Oullon N1002 has come with a rather unique rotational pivot to fold the main frame of its Kestrel E16-1 model. The fork relies on a one-armed design, further add-



Oullon's Kestrel E16-1 with unique pivot design

ing to this model's unique looks. Hidden in the rear hub and delivering up to 250 watts that can be adjusted with five support modes, the electric assist drive makes sure you do not break a sweat on daily commutes.

The battery is mounted behind the seat tube, and its capacity of 250 Wh should result in a range of up to 50 km while reducing the weight to just a bit over 16 kg. At Taipei Cycle Show, Oullon will debut a prototype of an all-new model, so make sure not to miss out on that one.

While most manufacturers rely on links or pivots to fold the frame, **Giatex Cycle N1220** has gone its own



The telescopic frame on children's models from Giatex allow the bike to grow with the child

way for many years with frames that are designed to extend like a telescope. Thanks to various wheel sizes the brand covers a lot of needs.

The latest addition are kids bikes with wheel sizes of 12, 14, 16 and 20 inch respectively to fit various ages. According to Giatex, the telescopic frame allows for the bike to grow with a child to a certain extent and helps when learning how to ride a bike: the shortest setting results in a more upright position on the bike for beginners, and the top tube can be lengthened as a child becomes more confident.

■ **Laurens van Rooijen**

KSS



**MADE FOR GRAVEL,
MADE FOR FUN**

RAGEIS

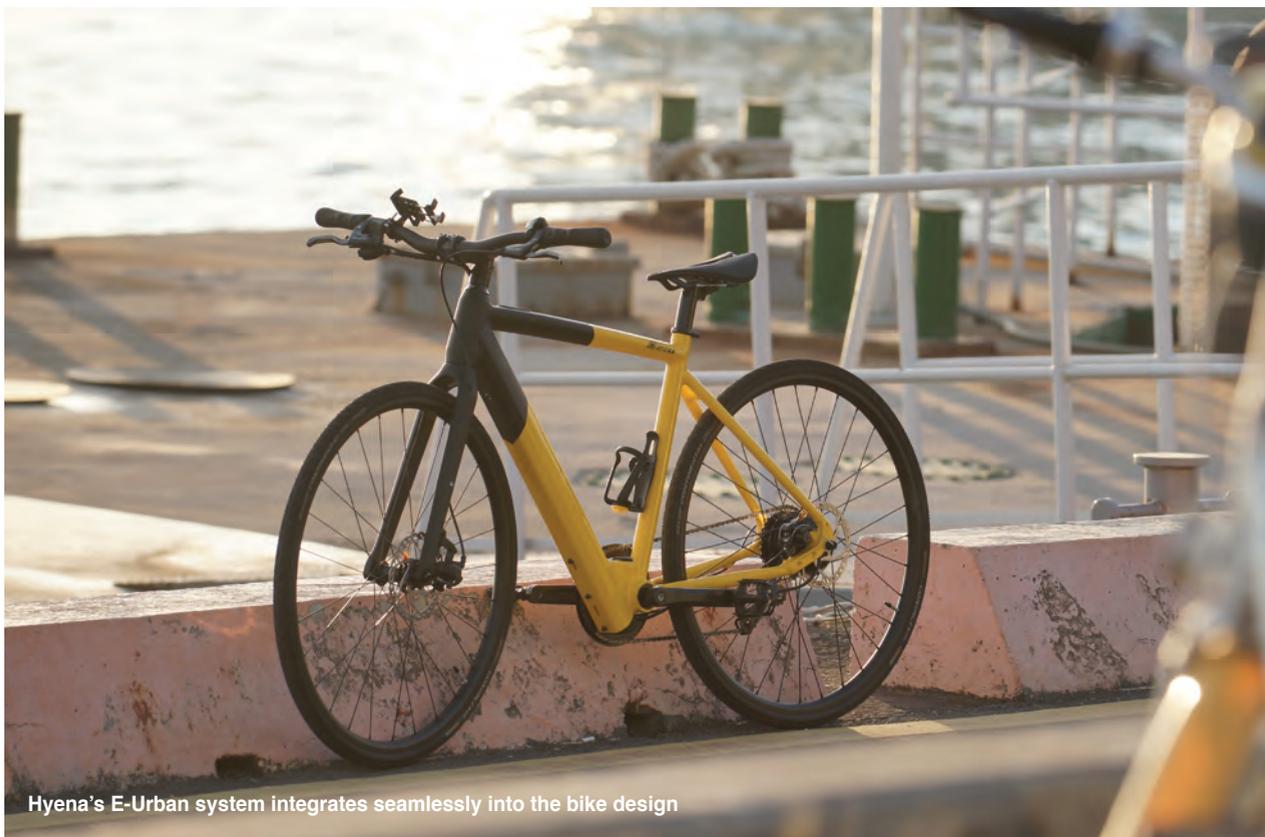
kssuspension.com

'22

OVERVIEW: BATTERIES

POWER PACKS: E-BIKE BATTERIES GET SLIMMER AND LIGHTER

Slim enough to disappear inside the frame yet durable enough to help you keep rolling all day, battery technology is providing increased freedom to bike riders and designers alike.



Hyena's E-Urban system integrates seamlessly into the bike design



Trend Power's latest battery systems snap into the bike frame

include the durable G2 Plus line. Designed specifically for the high-energy needs of mountain bikers, these batteries weigh 4.2kg have a capacity of either 720Wh or 830Wh, making them ideal for long-range bicycles. They're compatible with motors including those from Shimano and Yamaha. Ideally suited to the city and trekking bike markets, the firm's lighter Battery-Slim tube products provide either 360Wh or 420Wh. Housed in a minimalist 2.3kg shell, their exterior includes a light-up display showing the charge remaining. With each battery snapping into place within the frame, all benefit from a battery management system (BMS) developed to help maximize client technology. Produced subject to reliable verification programs in national laboratories, bike builders collaborating with the firm can be confident of the product's safety and efficacy.

Finally, **Coppercell N0130** also welcomes both OEM and ODM customers. Its huge range of existing batteries includes almost every conceivable type of fitment, from downtube or seat tube-mounted to in-frame, on-frame, and rear-carrier based options. Virtually all these products include locking mechanisms that can be integrated alongside to provide theft-proofing and added value. Experts in working with UART and CANBUS communication protocols, most of Coppercell's batteries also comply with the IXP5 waterproofing standard. Having already collaborated with several manufacturers to develop bespoke battery solutions, Coppercell is an expert in integrating batteries into all kinds of smart electrically assisted vehicles. So if you're thinking of designing the next generation of electric-assist bicycles, it's worth seeing if they can help you along the way.

■ JD



Complete drive system by Hyena

Hyena bikes N1014 is focused on supplying complete drive systems to bike makers. In 2021 it launched two new frame-mounted batteries, although owing to the pandemic, this edition of the show will likely be the first opportunity for many visitors to see them. The other possibility is that you've seen them on one of Hyena's client's bikes. Already included on several 2022 model e-bikes now out in the wild, the first new battery product is the 36V / 250Wh BP-B250 in-tube battery. Integrating the e-bike controller into the battery pack, it benefits from a slim shape and weighs just 1.45 kg. Allowing equipped bikes to remain almost indistinguishable from regular machines, it quickly became the firm's most requested product. Larger in size and capacity, yet still extremely compact, Hyena's 36V / 496.8Wh BS-A370/A500 in-tube battery is another way of integrating electrical storage into the frame. Quickly detached from the downtube, this makes remote charging and battery swaps more straightforward than with complete in-frame batteries while still maintaining a slimline silhouette.

Anyone looking to get a sense of the design possibilities unlocked by using such compact in-frame batteries should pop by bike maker



Elxey's stylish bikes use slimline batteries for a svelte look



Elxey's N0632 stand. Its stylish ZK1-E and ZK1-X bikes make good use of similarly slimline technology. Powering the bikes' 250-watt tube motors, their batteries also feed their lights, plus their keyless unlocking systems and GPS tracking features. In keeping with the unspoiled profile created by the unseen battery, each of these electronic features is just as neatly integrated.

Digging even deeper into the technology, **GWA's N0320** mission is to bring next-generation lithium polymer batteries to the cycling market. Its ibo e-drive system is designed specifically for electric car-



GWA's new ibo-R37 battery pack for smaller e-cargo bikes

go bikes. Spanning a range of broad and flat battery packs, these maintenance-free batteries use quality Samsung lithium-ion cells. Starting with the 374Wh ibo-R37, which weighs 3.2 kg, it joins the firm's larger ibo-R45 and ibo-R50 battery packs to provide tailored power specific to the needs of cargo bike users. Also on show this year is the firm's ibo-COP2 Cell Optimization Kit which works as a liaison between a charger and battery. Compatible with each of the ibo battery packs, it's designed to provide users with a cell balancing function while also serving as an at-home diagnostic tool. The firm's other products include chargers, GPS units, motors, and electronic control systems applicable to both bikes and an increasing range of electronically assisted personal transport solutions.

Trend Power J0512 has a similar mission. Aiming to improve design flexibility through better materials and lighter batteries, at this year's show it will be showing several models from its latest ranges. These



Coppercell offers a huge range of battery form factors, all with locking mechanisms

BATTERY EXPERTS FORUM AND EUROBIKE - PARALLEL EVENTS CREATE NEW SYNERGIES

The two leading events in the industries of battery technology and bike mobility are providing a unique opportunity for a cross-disciplinary transfer of knowledge and new contacts. The Battery Experts Forum, Europe's largest conference on the subject of battery technology, is moving into the time slot from 12 to 14 July 2022 for its 17th edition and will be a direct neighbour of the leading trade fair Eurobike (13 to 17 July), also taking place at the Messe Frankfurt site.

“The triumphant progress of the e-bike is closely linked with that of global battery technology. By coinciding with the prestigious Battery Experts Forum the new Eurobike will be promoting inspiration on both sides as it brings more international specialists into contact with each other and creates a greater momentum at the same place and same time,” points out fairnamic Managing Director Stefan Reisinger.

The Battery Experts Forum, Europe's largest conference for the battery industry, celebrated its premiere at the Frankfurt am Main exhibition site with a sell-out event in 2019. With the current expansion, the BMZ Group is responding to the high demand and has transformed the new location into a gathering for the battery technology industry as a whole over the three days. CEO and founder Sven Bauer explains: “In 2022 we are hoping for further

growth of the Battery Experts Forum and are rapidly becoming the world's largest battery conference. In conjunction with the parallel Eurobike show, we are creating new synergies and boosting exchange with other sectors of industry.” From 12 to 14 July (open daily from 9 am to 5 pm) the event with some 100 specialist talks on seven stages in the conference centre will additionally be occupying Hall 6 at the fair grounds and will expand its exhibition area to more than 10,000 m². The BMZ Group is expecting 160 exhibitors and around 5,000 participants from more than 50 nations. Further information is available at www.battery-experts-forum.com.

The 30th edition of Eurobike runs from Wednesday 13 July, to Sunday 17 July 2022, from 09:00 to 18:00 each day. On Saturday and Sunday, it will be open to the general public. The leading trade fair is using the entire western section of the Messe



Frankfurt site to create a perfect circuit covering more than 100,000 m² of hall space that will showcase the bicycle in all its many facets. Included in this tour are Halls 8 and 9 as well as the new Halls 11 and 12,

both of which have two levels. More than 1,400 exhibitors and some 100,000 participants are expected from all over the world. For more information, please visit: www.eurobike.com.

Bicycle Cluster

the global bicycle industry database.

Save Time and Money Using This NEW Way to Source Products and Components.

Sign up now for free





Here's How We Give You the Edge

- Precise Search
- Instant Product Upload
- Product Browsing Analysis
- Online Negotiation
- Exhibition Booth Guidelines
- Comparison of Product Specifications

get new customers on the spot!

HUNDREDS of members registered

THOUSANDS of products uploaded



Bicycle Cluster

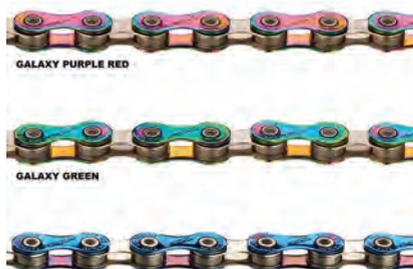
OVERVIEW: CHAINS AND CASSETTES

MORE SPROCKETS, WIDER RATIOS MAKE CHAINS AND CASSETTES WORK HARDER

As the cog-count on your drivetrain grows ever higher, unseen technology is helping the latest chains and cassettes keep pace. Two big factors are motivating chain makers. One is the quest to accommodate more sprockets. With the release of its new Dura-Ace and Ultegra products, Shimano has joined its rivals in offering 12-speed road groupsets. Providing roadies with the same huge range of sprockets previously enjoyed exclusively by mountain bikers, the number of gears an individual chain is likely to have to accommodate is only going to increase. A second motivator for innovation in the sector is the rise of electric bicycles, whose increased torque places even more demands on their chains. From practical city-going machines to mountain bikes and racers using the latest groupsets, chains are being asked to do more than ever.



Taya's rollerless chain series



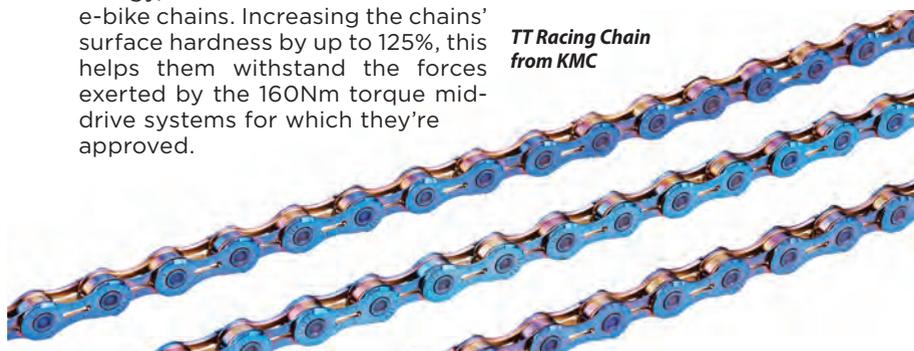
TAYA's galaxy series with unique surface available in three colors



KMC's e-Cargo Chain offers unparalleled tensile strength

Tackling the mechanical challenges thrown up by the addition of extra sprockets and electrification, dedicated chain maker **Taya K0610** is also taking time to consider the environmental impact of its products. Its latest e-bike chains feature an exclusive Green Surface Treatment coating that's free from hexavalent chromium and complies with both RoHS and REACH standards. Proven to resist 1,000 hours of salt spray testing, Taya believes treated chains could sustain corrosion resistance for as long as 25 years. Also increasing chain durability is Taya's Super DHT (Diamond Hard Treatment) technology, which is now found on its e-bike chains. Increasing the chains' surface hardness by up to 125%, this helps them withstand the forces exerted by the 160Nm torque mid-drive systems for which they're approved.

TT Racing Chain from KMC



SRAM chain with flat-top design

offers additional security via enhanced anti-drop protection. At the other end of the spectrum, the firm's TT Racing Chain promises to ensure no watt is wasted. Designed for racing bikes that rely exclusively on their rider for propulsion, it utilises an embossed double X-Bridge and optimal chamfering to provide smoother integration with the chainring while improving shifting performance. Finished with a distinctive rainbow coating, it's an ideal match for the latest low-friction racing bike drivetrains.

When it released its wireless and electronic groupsets **Sram M0612** also updated its chains. Besides providing incremental improvement to offer lighter, quieter, and stronger chains, their unique Flat-top design created a strong visual identity for an often-overlooked component. As their name would suggest, the links on these superlight chains combine to create an uninterrupted surface between chainring and cassette. One of the first firms to bring out a 12-speed groupset, Sram also offers more conventional-looking chains that provide an excellent after-market replacement for a range of different systems.

Covering everything from the simplest single speeds, up to options for the latest super-wide ratio mountain bikes, most

requirements are catered to at multiple price points.

Sometimes overlooked compared to the big three makers, **Full Speed Ahead's M1012** K-Force WE groupset is a wireless system that offers many high-end features. Supporting it is a matching range of chains and cassettes that are also cross-compatible with groupsets from other suppliers. Sitting at the top of the firm's chain hierarchy are the 11-speed K-Force and K-Force Light models. These feature hollow pins to reduce weight, along with optimised outer plate shapes to limit shift noise. With plate chamfers designed to decrease sprocket wear and increase shifting precision, the K-Force range also includes a 12-speed mountain bike option. Besides these, Full Speed Ahead now also offers a complete range of chains covering 9, 10 and 11-speed drivetrains. Spanning Team Issue and K-Force ranges, these are ideal for workshop use on premium and workaday bicycles respectively.

Falcon Tech I1302 is another company making an extensive range of gearing components. It recently launched the GYR single chainring groupset for mountain and gravel bicycles. To match the other components in the range, it's created a selection of tough 8, 9, and 10-speed cassettes. Available individually, they're ideal for bike builders looking for a cost-efficient way to get on board



Full Speed Ahead now offers a complete range of chains covering 9, 10 and 11-speed drivetrains



Falcon Tech has created a selection of tough 8, 9, and 10-speed cassettes



LLL offers a range of parts, including cassettes in 10, 11, and 12-speed models

with the trend for broad single-chaining drivetrains. The range includes an 11-46t 10-speed cassette, with 8 and 9-speed levels being supported by only marginally narrower 11-42t options. The firm has also created a cost-conscious 14-40t screw-on freewheel. All backed up by matching chains; these ensure Falcon can take care of the entirety of your gearing needs.

Another firm capable of supply-

ing quality OEM drivetrain parts is **LLL 1328**. Established in Taiwan over a decade ago, it produces a range of parts, including cassettes. Now covering 10, 11, and 12-speed models, these are well matched to the latest trends, featuring wide ratios and maximum sprockets as big as 52t. At this year's show, it's particularly keen to promote its wide range of re-designed 10-speed cassettes. Each promises to be a perfect choice for producers of mid-range adventure and mountain bikes.

Finally, taking a very different approach is **ATS Speed Drive M0530**. This Taiwanese firm won't sell you a chain, but it will sell you an almost infinitely durable shaft drive system. Compatible with three, seven, and eight-speed Shimano hub gears along with Sram's three, five, and seven-speed systems, it's also capable of propelling single-speed drives. With no dirt and little maintenance, the firm is always ready to advise bikemakers keen to explore developing chainless designs. ■ **JD**



ECO FRIENDLY

25 YEARS RUST-PROOF

-  Water cage nuts
-  Spoke nipples
-  Disc brakes bolts
-  Crank screw

BOOTH: K0610

e-BIKE chain: 12S e TOLV-121 GST-500



TAVIA

OVERVIEW: SADDLES AND GRIPS

CRUCIAL CONTACT POINTS BETWEEN RIDER AND BICYCLE

Few things affect our perception of a bike as much as its saddle and grips. While the place we sit dictates how comfortable we find riding, a fresh set of grips or tape is not far behind in its ability to alter or improve your experience. Both items that inspire strong personal preferences; below, you'll find some of the most exciting saddle and grip products on show this year.



Prologo Scratch M5 CPC

This summer, Prologo J0517 will hope Tadej Pogačar can grab a third straight Tour de France victory. If he does so, he's likely to again employ its Scratch M5 CPC, the saddle that's supported him to his last two wins. Unique in looks and profile, it features the brand's CPC technology. Derived from Formula 1 and patented by Prologo for the cycling industry, this takes the form of thousands of tiny polymer cones on the saddle's surface that maximise grip when assuming an aggressive position. The same technology can also be found on selected versions of the firm's Dimension saddle. With a trendy short length, it's an ideal alternative to the Scratch for road riders who favour a relatively fixed position. Sitting between the two is the Akero. This budget-friendly saddle mixes cushioning and an anatomic shape with performance-enhancing features. With all three saddles proven on the road, Prologo is also keen to emphasise the benefits of each design for the gravel segment.

Yet to score a win at the Tour but still generating plenty of interest, All-Wings' I1111 radical Falcon saddle is formed just as its maker's name would suggest. Designed to relieve pressure on soft tissue areas, it switches support from between the rider's legs to their sit bones. With a degree of flex in each wing for comfort, all positions on the bar are accommodated. This allows users to

shift their weight while retaining support when riding on the tops, hoods, or drops. With All-Wings touting both comfort and efficiency for road riders, it believes the design is particularly suitable for the needs of triathletes. Created from Nylon and with strong Chromoly rails, the saddle weighs 200g, while a wide range of colours allow it to match any bicycle.

For those after something more classic looking, Ideation Industrial's I0718 latest leather saddle could be just the thing. Part of a range of retro-



Ideation leather saddle

inspired parts made by the firm, it's the perfect complement for classic steel bicycles. At the same time, its narrow profile suits more modern racing bikes too. Made of traditional leather, this is breathable and will eventually form itself to the shape of the rider. Rounded off with rivets that are both functional and decorative, the shape of these ensures there's



Funn's colorful Holeshot grips



E-Bike specific grips from Velo

etary Airform padding, they're perfect for the moderately upright positions found on most urban bikes.

Moving from perches for your posterior to places for your palms, Velo also produces a range of matching grips. Its E-Bike specific models feature Velo's Microtech technology to increase comfort when in contact with the handlebar. Varied texture formations at critical points on the grip also allow for a secure connection in wet and humid conditions. Part of an extensive range of E-bike grips, this includes different pressure relief designs made to match various hand positions.

Made for more aggressive riding, Funn's L0931 Holeshot grips are motocross-inspired grips for mountain bike racers. Packing a lot of features into the last few inches of your bar, they should appeal to radical riders who like to get low through the corners. Made of a plush, squishy rubber, this is designed to provide grip and lessen vibrations. With a full-length wavy pattern, the underside also features three distinct ribs intended to keep your hands locked in place regardless of the weather. Each grip relies on a single collar to keep it in place while providing maximum space. Allowing you to run your hands right to the outside of the bars, the final section is also specially hardened to withstand crash damage. Available in ten different colours, there's sure to be the perfect shade to match your bike.



All-Wings radical Falcon saddle



Velo's VL-6535 E-City saddle

nothing to snag on your shorts.

Less racing-focused, Velo's J0518 E-City saddles make life easier for e-bike owners. E-Bikes are heavier than traditional bicycles. To mitigate this, the I-Carry hidden handle under the shell of Velo's VL-6535 saddle helps riders carry and move their e-bikes easily, a beneficial function when going up and down stairs. Also featuring the firm's Atmos Shaping technology and extra thick propri-



OXO-Pro Comfort grip range

Also making clever contact points, **OXO-Pro J0509** is a new company that will debut at this year's Taipei Cycle. On its stand will be its grip range which spans Comfort, Performance and Basic models. Having received a patent for its unique locking system, each set is adjustable and comes with specific left and right-hand units for optimal ergonomics. Varying in how pronounced the paddle-shaped section of each grip is, all models use two different densities to maximise comfort, while textured areas work

to increase control. Available both OEM and aftermarket, all OXO-Pro grips are open-ended and come with a plug that can be customised to include manufacturers' logos. Alongside these products, the young brand will also be releasing unpublicised new items exclusively at the show.

Similarly, if you head over to **Propalm J0126** you'll find both its massive existing range of grips plus a few new products released just in time for Taipei Cycle. Covering everything from grips for city and



Propalm plastic lockrings

trekking bikes through options for mountain bikers and BMX riders, the firm also makes many different tapes for drop handlebars. Fitted across the first three of these categories, many of the products it's promoting at the show feature its newly developed plastic lockrings. Robust and transparent, they make a striking and lightweight

alternative to more conventional metal fixings. Produced in Taiwan and arriving in attractive packaging featuring the brand's distinctive gecko mascot, many of Propalm's newest grips also come in wild combinations of swirling colours.

Another company providing brightly coloured finishing touches for bikes and riders is **Guee J0930**. Perhaps the most striking of these is its SL Dazzle bar tape. Living up to its name, it features all over 3M reflective material to help increase your visibility while riding. Other features carry across from the brand's established super light SL line, like the knitted surface that provides a non-slip grip and outstanding durability. Designed to absorb sweat, the fact

that Guee also makes socks means you can match both accessories for styling that's fresh in every way. ■ JD



Guee SL Dazzle bar tape



COMPIT+
WIRELESS CHARGING
NFC



SKS-GERMANY.COM



OVERVIEW: INDOOR TRAINERS

COVID-19 TURBOCHARGES THE RISE OF INDOOR CYCLING

The global pandemic has been somewhat of a perfect storm for many parts of the bike industry; on the one hand, demand for bikes and cycling products is higher than ever, and on the other global supply chain bottlenecks and other issues have impacted the ability to manufacture and deliver them.



Wahoo's KICKR ROLLR trainer

This is maybe especially true in the sphere of indoor training. Not only are some of the products reliant on some of the parts - for example, chipsets and electronic control gear - that have seen the most disruption in their supply chains, but at the same time lockdowns fostered the perfect conditions for a switch from outdoor riding to indoor training. At the same time we saw the gamification and general accep-

tance of indoor riding and racing quicken its pace. Zwift attracted hundreds of millions of dollars in funding in 2020, and at the same time the UCI established esports as a legitimate arm of cycling, with its own regulations and world and national champions.

Wahoo M0302 has been very active in pursuing partnerships both in the new esports sphere and also in more traditional racing. The brand is an official partner for the UCI esports World Championships, will see all finalists competing on the KICKR trainer.

Colin Eustace, Vice President Global Marketing at Wahoo, told the Taipei Show Daily, "Indoor cycling has seen continual growth over the last 5 years and the pandemic certainly created more awareness of the benefit and convenience of training indoors and the entertaining software apps such as SYSTM and Zwift that create an engaging and immersive experience.

"The KICKR, which is now in its 5th generation, continues to be the leading smart trainer in the



5th Generation KICKR smart trainer by Wahoo Giant

Giant's Cyclotron magnetic trainer



market, used by professionals and amateurs alike. In addition, the KICKR BIKE has been a strong addition to the line-up which has really resonated with those looking for the most convenient features to make virtual training as realistic as possible."

Wahoo has also recently become the partner for the UCI World Championships, and in the warm up zone for the races you'll see the company's new product, the ROLLR. The ROLLR uses a narrow two-roller setup for the rear wheel that's linked to an adjustable Safety Tire Gripper for the front wheel that will accommodate tyres up to 2.1" in width. The wheelbase is adjustable, and the ROLLR can pair with an on-bike

power meter to transmit power data to a third party training app. Wahoo will be offering the ROLLR bundled with the new SPEEDPLAY POWRLINK ZERO single-sided power-measuring pedals.

Wahoo says that it hasn't been too adversely affected by supply chain issues. "We've built a robust supply chain and been able to ensure the KICKR as well as the rest of the Wahoo line up such as the ELEMNT range remain fully available during the growth the whole of cycling has experienced", Eustace told us.

Giant Group M0820, DigitalGo have been making the Cyclotron mag trainer for a number of years, and it's a versatile unit that will fit wheels from 24" to 29". The magnetic resistance is adjustable through the use of a bar-mounted



Xpêdo APX Pro

New Xpêdo APX Lite entry-level trainer with 1200W resistance and up to 12% climb grade

T-Sox Soarcise



control, and the folding steel frame provides a stable base for training whilst also being easy to store. A through axle adapter is available for bikes that don't use a quick release rear wheel.

Direct drive trainers, where the rear wheel is replaced by a flywheel, are the most common way of providing smart control, where a third-party app can control the resistance at the pedals. The **Xpedo Wellgo J0418** APX Pro smart trainer features an 8kg flywheel, which helps to give the trainer a smooth road feel when in use. Xpedo claims that the trainer is also very quiet, at 55 decibels at 200W, so you're less likely to disturb other members of your household when you're training. The APX Pro smart trainer can provide resistance of up to 2000W at an accuracy of +/- 2%, and simulate a 20% climb grade. It features ANT+, ANT+ FE-C, and Bluetooth 4.1 connectivity and will work with all major training platforms. The folding design of the frame means it's also easy to store.

Garmin Tacx M0312 continues to be a major force in the indoor training market with a wide range of options, from models such as the wheel-on Boost all the way up to the Company's well-established

and range-topping Neo 2T direct drive trainer, and the Neo Bike Smart indoor training bike, which utilises the same resistance unit built into an adjustable gym bike frame.

The Neo 2T and Neo Bike Smart can both be used independent of wall power, which means that they're a great option if your training space is a long way from the nearest socket.

Yuen I O206, DigitalGo is offering a range of three traditional wheel-on trainers, which use a pivoting frame that allows the rider's bodyweight to load up the roller for good contact with the tyre. All three trainers have adjustable resistance; the 812 Corso Lite uses an adjustment knob on the resistance unit itself, whereas the 812A Corso Evo and the 812B Corso both get a bar-mounted remote resistance control. All three trainers are rated for a maximum rider weight of 100kg.

Lee Duo Trading L0926 are the distributors for Feedback Sports, who continue with their Omnium rollers. The Omnium is a popular choice for race or event warmups, as its super compact fold size makes it extremely portable. It's also a great option for working out in a small living space. The narrow double rollers and the adjustable fork mount give it a very small footprint. There are two versions of the Omnium currently available: the Omnium Over-Drive uses a progressive resistance unit that allows for harder efforts, and the Omnium Zero-Drive gets the minimal resistance of a traditional roller setup.

Unite Creative N0618, DigitalGo is

a company that has felt some of the effects of the disruption due to the pandemic.

"Due to the diversion of the supply chain to work and the interruption of port transportation due to the epidemic, the cost of chips and key components has skyrocketed, and the shortage of foundry materials has led to delays in delivery and shipments", the company's Steven Chiang told us. "The key components must be purchased at a premium for production but the selling price is maintained at the general set purchase cost for sales."

"Bike trainer production was finally handed over to Taiwan's own factory for consistent production. In addition to avoiding a large number of uncertainties in export tariffs made by China in the Sino-US trade war, it is also sold under its own brand, and it is offered to Taiwanese consumers at a price with the same level of specifications."

The trainer in question is the T-Sox Soarcise trainer, a direct-drive smart trainer with a 4kg flywheel and claimed accuracy of +/- 3%. The trainer can produce 2,000W or resistance and replicate a 15% incline and is ANT+ and Bluetooth equipped to enable it to connect to all major training platforms. Wheels from 24" to 29" are accommodated, and the trainer has a maximum rider weight of 114kg.

Geng Hung GH Bike K1132 is offering its GH-565 rollers, which are a folding design using a ramped roller design to keep the rider away from the edges of the trainer. Inside the rollers there are cylindrical bearings which GH Bike says will ensure many years of trouble free operation. The rollers are very adjustable, and will cater for wheels as small as 18", and the folding frame design makes the rollers easier to store and transport.

Ya Cheng YCT K0332 is another company making traditional rollers, with two models in the range, the YCT900 and the YCT1000. Both of the trainers use a similar design, with a centrally-folding frame and adjustable rollers for different wheel sizes from 20" to 29". The more fully-fea-

GH Bike's GH-565 rollers with folding design



tured YCT1000 gets a central frame brace for extra rigidity, and the front wheel roller is adjustable without using tools. The front roller of the YCT1000 also features a raised bumper on top of the ramped cylinder design to further guard against the wheel escaping the roller.

Xplova K0426 has established itself as a player in the smart training market, with the NOZA S trainer getting favourable reviews over the past year. With the ability to generate 2,500W of resistance and simulate an 18% gradient, it's suitable for even the hardest workouts, and it's compatible with wheels sizes from 24" to 29". The 5.9kg flywheel gives the NOZA S a high quality riding feel, and the belt drive internals mean it's also quiet, at a claimed 58dB. Bluetooth and ANT+ connectivity mean you can link up to your training app of choice, and Xplova also offers its own app, Xplova Workout, which allows you to complete training plans and keep your trainer's firmware up to date. Xplova says that the NOZA S is accurate to +/- 2.5%.

Cycle Chris N1206 Finally, Evolo offers a substantial range of wheel-on trainers built around both magnetic and fluid resistance units. There are options for fixed and remotely controlled resistance with the magnetic trainers, and also a variety of frame styles including standard foldable and gravity frames, where the rider's weight makes the roller contact the wheel. ■ DA



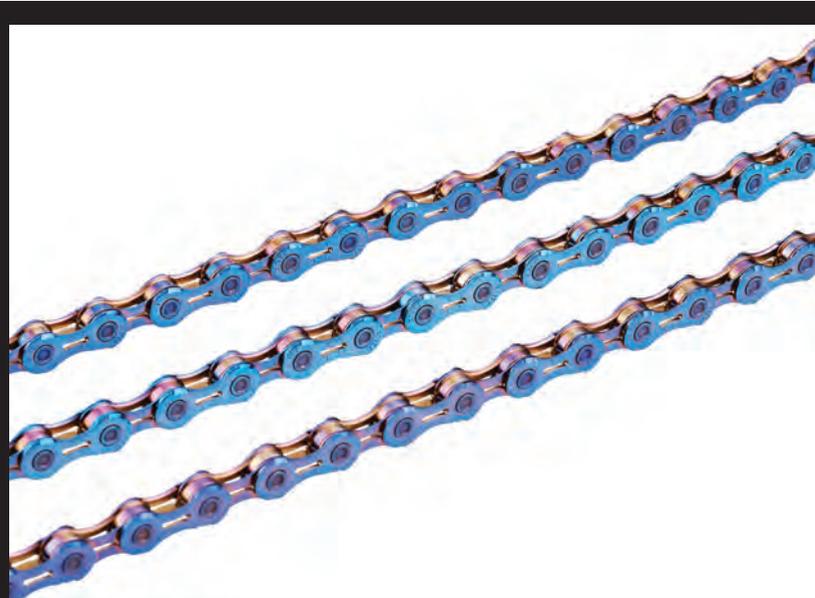
812 Corso Evo from Yuen I



Ya Cheng's YCT1000 roller (folded)

A-PRO R001-C35CL WHEEL

A-Pro's R001-C35CL wheels are suitable for both mountain and road bikes. The brand-new 35mm height wheel design offers high rigidity and light weight. It takes less effort while cruising through the wind due to low wind resistance. It's the best choice for all mountain and road riding. **JO608**



KMC TT RACING CHAIN

TT Racing Chain has created an embossed double X-Bridge and optimal chamfering to provide smoother chain/tooth interaction and enhance shifting performance. **JO118 & DigitalGo**

The unique design perfectly complements speed and efficiency through swift shifting via chain and gear tooth interference. Energy consumption is reduced via significantly increased cohesion to effectively reach and maintain top speed with less effort of all chain components working together.

HAFNY NO MORE ADJUSTING DURING UP & DOWN HILLS

The HF-M956-FR06 bar end mirror is specially designed for drop bar road bikes, but can also be used for MTB handlebars. This super convex mirror is made of HD shatter-proof glass, instead of the generic plastic mirrors which are commonly used in the market. Because of this, our mirror reduces distortion and provides the most realistic view to significantly improve your riding experience. **www.hafny.com.tw**

JO400



STAN'S NOTUBES FLOW MK4 RIM

The Flow MK4 combines Stan's patented BST tubeless design with a new asymmetric shape to create more balanced, stronger wheels. With a 30mm internal width ideal for trail and all-mountain riding, the 6069 aluminum rim's welded joint and reinforced spoke holes are built to last. Available in 27.5" and 29", the rims feature a 3-year warranty. **www.notubes.com**



KMC E-BIKE SOLUTION

e-Bike Solution's chainring roller seats between teeth are perfectly matched to chain rollers for exceptional component engagement. The benefits of this unparalleled "Chain Mate" are higher

power transmission efficiency and longer component lifespan. Utilizing a reinforced pin design - Shield Tech - the pin surface is raised by 10% and significantly increases 25% pin power. Chain retention prevents chain drop while also reducing friction associated with traditional narrow/wide designs.

JO118 & DigitalGo

XPEDO APX PRO SMART TRAINER

The APX PRO's 18lb flywheel provides smooth real-world road simulation. Intelligent temperature control prevents the trainer from overheating. Integrated sensors provide all the relevant data including speed, power and cadence. Maximum power can reach 2000W and maximize the stimulated slope up to 20%. Data-based training can effectively advance riding performance. APX PRO is your best training partner. **JO418**



MESSINGSCHLAGER M-WAVE TRAIL ROPE

Long bike rides with the family, where no child is overstrained and everyone can enjoy time together - wouldn't that be great? With the Trail Rope, this becomes a reality. The M-Wave Trail Rope is an easy and uncomplicated to use tow aid that can be used for children and teenagers as well as adults. The weaker cyclist is simply attached to the bicycle of the stronger rider. No assembly is required

as it is looped around the handlebar/stem and saddle/seat post and secured with snap hooks. Similar to a bungee cord, it stretches slowly when starting and ensures a smooth ride. At the same time, it is enormously resilient due to the nylon sheathing. When not in use, it can be stored in a space-saving bag on the saddle rail. Available in two versions for heavier or lighter loads. Messingschlagler also offers a hip belt accessory, for other uses such as hiking.





www.apro-tek.com

Triogy PRO



- *Reliable design for reducing side play issue and friction.*
- *Modularized structure for easy maintenance.*
- *Use for E-bike / Gravel bike / City bike / Trekking bike.*

Material	Aluminum #6061
Stem	1 1/8" - 1 1/2"
Stem Material	AL
Crown	135mm
Blade	Aluminum #6061
Dropout	Aluminum #6061
Tire Clr	49.6mm
Offset	45mm
Mfg Process	Tig Welded
Weight	1420g

CONTACT US

■ 台中市大甲區幼九路16號
■ Tel : +886-4-26821688

NO.16, You 9th Rd., Dajia Dist., Taichung City 437, Taiwan

■ Fax : +886-4-26821699

■ Email : apro-sales@aprotek.com.tw



SPANNINGA X&O 50 HEADLAMP

Elegant and compact headlamp with a powerful 50 Lux light beam,

70m sight and up to 4000m visibility. Featuring a dimmed Daylight function during the day and an extra bright High Beam function (with ergonomic handlebar switch) during the night, offering a 50 Lux + 50 Lux light output. **DigitalGo**

TAYA CHAIN GST TECHNOLOGY

Disc-brake bikes are becoming mainstream in the market, with TAYA's exclusive GST anti-rust coating technology on disc brakes, you can enjoy your journey without worrying the rust to affect the efficacy of the brake.

K0610



MESSINGSCHLAGER MMC.Y.AL

"E-bikes under your own brand and a market launch in a maximum of 12 months? No problem!" This is the promise made by the importer Messingschlagler from Baunach in Germany. Supported by the development and procurement expertise of the largest European bicycle parts importer, the customer can configure e-bikes from eight different concept platforms or contribute their own concept ideas. The latest kids bike model with Bafang drive is the "MMC.Y.al". Youngsters in particular often lag behind when it comes to mobility, because of lack of strength and lung capacity. With this new children's e-bike, Messingschlagler builds a bridge between fitness and mobility and give the young a fun, fully-fledged

e-bike concept by which today's modern family can experience the mobility of tomorrow. Geometry, seating position, proportions and engine power are adapted to the special needs of children and adolescents and generates a high level of riding pleasure from the very first moment. In order to have enough agility and perfect handling for little ones, the e-bike rolls on 24-inch wheels and weighs a slim 16 kilograms. A 26" version is also in preparation. The compact motor system from Bafang nestles - almost invisibly - in the dynamic silhouette, because the powerful hub motor is hidden in the rear wheel. The compact, fully integrated 360 Wh battery with 21700 cell technology is perfectly concealed in the slim down tube.



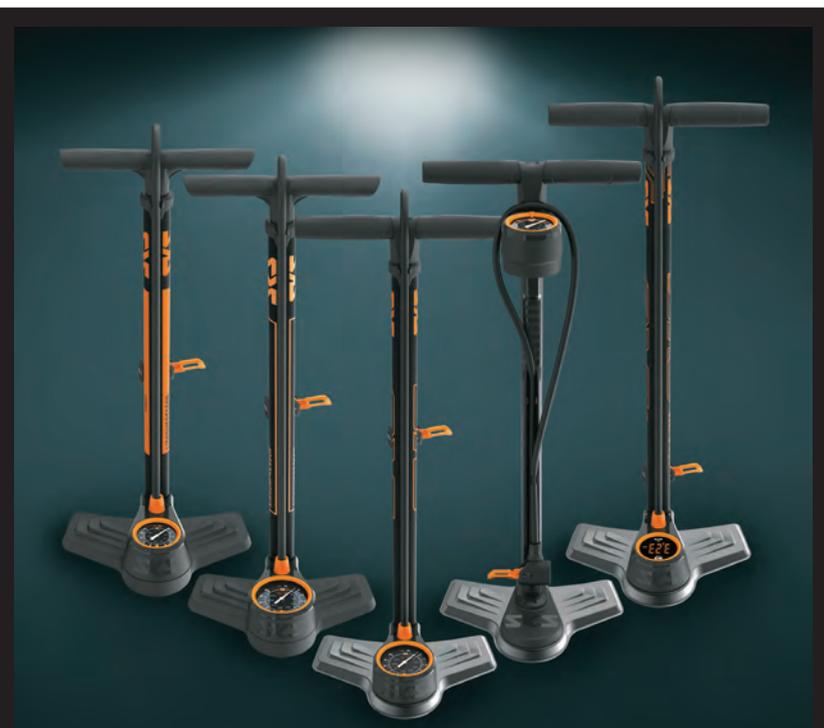
HAFNY WE'VE GOT YOUR BACK! - E-BIKE MIRRORS

The HF-M902L/R-FR01 handlebar bike mirror provides two lenses to meet different needs. The HD automotive grade glass lens is designed with high speed e-bikes in mind, and the anti-glare blue lens for anyone riding on a sunny day. The mirror body is made of durable fiber-reinforced nylon. The new clamp can fit 21-26mm handlebars for MTB handlebars.



The mirror has two pivot joints to adjust any desired angle.

www.hafny.com.tw
10400



SKS GERMANY NO HOT AIR: HERE COME THE "FIVE UPRIGHT" PUMPS

These five new floor pumps from SKS GERMANY inspire recreational cyclists and workshop professionals. All floor pumps are equipped with the improved "MV EASY" MULTI VALVE head. We have ensured that mechanisms can be repaired and all components can be replaced. Many spare parts are still available years after the purchase, ensuring that the floor pumps can be used with pleasure over many generations.

Anyone looking for a solid entry-level pump will be well served with the **AIRKOMPRESSOR COMPACT 10** pump. The robust base made of plastic gives the pump stability and the plastic handle rests comfortably in the hand. This floor pump can be used to inflate bicycle tyres to a pressure of 10 bar without any problems. The **AIRKOMPRESSOR 10.0** is equipped with an 80 mm preci-

sion pressure gauge for optimum readability of the tyre pressure. The long high-pressure hose makes pumping even more comfortable and gentle on the valves. Even high tyre pressures up to 10 bar are no problem for the floor pump.

The **AIR-X-PLOER 10.0** with a sturdy metal base ensures exceptionally high stability. Thanks to the large steel tube, even higher pressures up to 10 bar can be easily pumped into the tyres. Other features include the long high-pressure hose, the large precision pressure gauge and the soft-touch handle.

With its metal base and large steel tube, the **AIRMOTION 12.0** is not just a visual highlight. The precise pressure gauge at the top, the long hose and the soft-touch handle make the **AIRMOTION** a top-class floor pump (up to 12 bar). It is very easy to transport thanks to the recessed grip. The **AIR-X-PLOER DIGI 10.0** guarantees high measuring accuracy. The digital pressure gauge with first-class sensor technology delivers accurate air pressure values up to 10 bar. Other features include the soft-touch handle, the long high-pressure hose, the large steel tube and the solid metal base. **M0514**

OVERVIEW: TYRES

NEW TYRE DESIGNS OFFER THE RIGHT TREAD FOR EVERY NEED

Tyres are an essential part of how a bicycle rides. Manufacturers are reacting to ever-evolving trends, with an eye on rolling resistance, traction, puncture protection - and looks. While tubeless builds are becoming the new standard in sports-oriented applications, there are different ways to go for utility bikes.



Continental's Urban Taraxagum utility tyre

Known for its wide selection of tyres for competitive use, the latest innovations from **Maxxis KO810** reflect some of the larger trends in cycling, with one of the biggest trends being gravel bikes. When low rolling resistance is key and the terrain is moderate, the new tubeless-ready Receptor model comes into its own. The center of this tire features a fast-rolling diamond tread, while the knobs on the shoulders

add crucial traction for cornering on loose surfaces. Available in 700x40c and 650x47b dimensions and with black or tan sidewalls, the Receptor still offers plenty of volume to cope with bumpy sections without risking a flat.

For road cyclists who stick to paved routes the High Road is the go-to performance road tire from Maxxis, offered in 25 mm

and 28 mm widths. Available in clincher and tubeless versions, it has been tweaked to roll faster and smoother while offering better puncture protection. While the Hypr rubber compound remained unchanged, the casing has been revised with the thread count going up from 120 to 170 TPI. To appeal to riders who care about the looks as they do about performance a tan sidewall version was added in late 2021.

First introduced in 2014, the Shorty is popular with downhill and enduro racers, with its short square studs offering plenty of grip in dry conditions without rolling sluggishly. Maxxis has found

ways to improve this tire, including an optimized tread pattern to better shed mud. While the lighter-weight EXO versions come with the 3C Maxx Terra compound, the heavier Double Down and Downhill casings opt for the 3C Maxx Grip compound. Despite the latest iteration of the Shorty being tubeless-ready, it still weighs 5 % less than the original versions.

With the Pinner Pro, another new tyre model for gravity racing can be found at the **Kenda JO610** booth. Developed in close cooperation with American downhill star Aaron Gwin to excel in dry conditions, a special emphasis was

Kenda's new Pinner Pro for gravity racing



The High Road from Maxxis now rolls faster & smoother

New tubeless-ready Maxxis Receptor model

Maxxis has improved its popular Shorty tyre



WTB's Verdict MTB tyre gets a tread update

WTB's Vulpine combines a fast-rolling centerline section with more studs on the shoulders

put on cornering predictability and high puncture protection. For the latter Kenda relies on the weight-conscious Advanced Trail Casing combined with a thread count of 120 TPI. There is a heavier low-budget version where the more sturdy Advanced Gravity Casing is combined with a thread count of 60 TPI. Naturally all of these tyres are tubeless ready. While the Pinner Pro is only available in 2.4 inches width, you get to choose from versions for 29 inch or 27.5 inch wheels.

Combining a fast-rolling centerline section with slightly more studs on the shoulders for added cornering traction, the Vulpine is the latest offering from **WTB L0318** for fast gravel adventures in easy to moderate terrain. Apart from the tread, the width of 36 mm also helps to keep the rolling resistance low. The tire's round profile should make for predictable cornering while the nylon-based SG2 layer stretches from bead to bead for added puncture protection. Unsurprisingly the Vulpine is built to be tubeless-ready, and WTB also offers the choice of black or tan sidewalls so the tires are sure to match the bike.

As for WTB's mountain bike tyres, both the Vigilante and

Verdict models have seen updates to the treads in order to improve both traction and stability and increase the tires' longevity.

And since many riders are constantly looking for ways to lower the weight of their mountain bikes, the TCS Light casing has been revamped as well, featuring a lightweight nylon-based SG2 layer that stretches from bead to bead for added puncture protection at lower weights. If weight is not as much of an issue, WTB still offers both the Vigilante and Verdict models with the super durable TCS Tough casing as well.

Iconic German tyre manufacturer **Continental M0510** may have launched its first tubeless road tyres for the 2019 season, but they were still pretty heavy. In the fall of 2021, the second generation of the Grand Prix 5000S model was presented in a TR version (Tubeless Ready). Offered in four widths ranging from 25 mm to 32 mm, with either black or tan sidewalls and always in foldable versions with a kevlar bead and a Vectran Breaker for added puncture protection. By saving one layer in the carcass, this second generation of road tubeless tires saves about 50 grams in weight, and they proved their viability under the toughest conditions imaginable as these tyres were rolled out at the Paris Roubaix classic. This first outing turned out to be a great success as race winner Sonny Colbrelli of Team Bahrain Victorious relied on the Grand Prix 5000S TR in a full 32 mm width, in a tubeless set-up and with less than 4 bar (or less than 60psi) pressure to maximize grip, puncture protection and comfort on the extremely demanding wet cobblestone sectors.

For the booming segment of SUV-like comfort bicycles for both paved and unpaved roads, Continental has launched the Ruban and the reinforced eRuban models respectively. At widths of 2.1 to 2.6 inches, these tyres add serious volume and thus confidence - and traction in corners thanks to larger studs on the shoulders. Aiming at lowering the carbon footprint and upping the sustainability of its tyre offerings, Continental is replacing latex

Second generation of the Grand Prix 5000S from Continental

For the comfort segment, Continental launches the Ruban and the reinforced eRuban models (pictured) in widths of 2.1 to 2.6 inches.

from rubber trees with the juice of Dandelion roots for some tyres. This also reduces the German tyre manufacturer's dependence on the global latex market with its often volatile pricing. Since the Dandelion flowers are sourced in Russia, there are savings in distances for transport and thus fuel as well. This material is used for a selection of bicycle tyres for the utility segment such as the Urban Taraxagum model.

With its **Obor Tires** brand, Tianjin Wanda Tyre Group **M0202** is looking for a share of the bicycle tyre market. The product range covers all needs of cyclists, from utility to mountain and road bikes and even some fat tires and models with spikes for snow and ice. Many of models are available as wire or foldable versions and in a variety of wheel sizes ranging from 24 to 29 inches. As one of the flagship models of Obor Tires, the gravity-oriented Jumping Hare comes with an aggressive, directional tread that combines fast rolling with proper mud-shedding capabilities. For those looking for an endurance-oriented tyre with low rolling resistance, the Captain Ray with its densely spaced, more shallow studs is a good choice. Its round shape results in predictable cornering, while the square blocks in the center section improve both braking and accelerating. And yes, the Captain Ray is approved for use on e-mountain bikes as well.

With seven production facilities, a work force of 4000 employees and an annual production capacity of more than 30 million tyres and 40 million inner tubes, **Metro Tyres M0902** is a major player on the domestic Indian market and beyond. Apart from tailor made products for OE customers, the company sells its tyres under the Ortem and Zooka brands respectively. The range of these brands covers all kind of applications from reinforced products for e-bikes to value-oriented mountain, city and trekking bike tyres. As an example for a tyre specifically designed and built for e-bikes,

An endurance-oriented tyre from Obor, the Captain Ray is also approved for eMTBs.



Metro Zooka XC & Ortem M1400 from Metro Tyres

Ortem's M-1400 tyre is certified to meet the European E4 standard. The widely spaced tread of Zooka's Cross Country 2 model on the other hand sheds mud well while finding the traction needed to keep going. Last but not least, Metro Tyres also offers a wide selection of colourful tyres for kids' bikes.

A pair of manufacturers of flat proof foam tires also deserve special mention. **Tannus L0918** has expanded its original Airless range of full-foam tyres. The Armour series combines foam and a burly inner tube to avoid 90 percent of flats while offering a more natural riding feel. For all those riding tubeless builds, Tannus also has Armour Tubeless foam inserts to protect the rims from damage when running very low tyre pressures. Aiming at the utility market, **Otrajet K0802** has come up with a unique way to secure a full-foam tyre to a conventional, hooked alloy rim with its Nexo Tire system.

Laurens van Rooijen

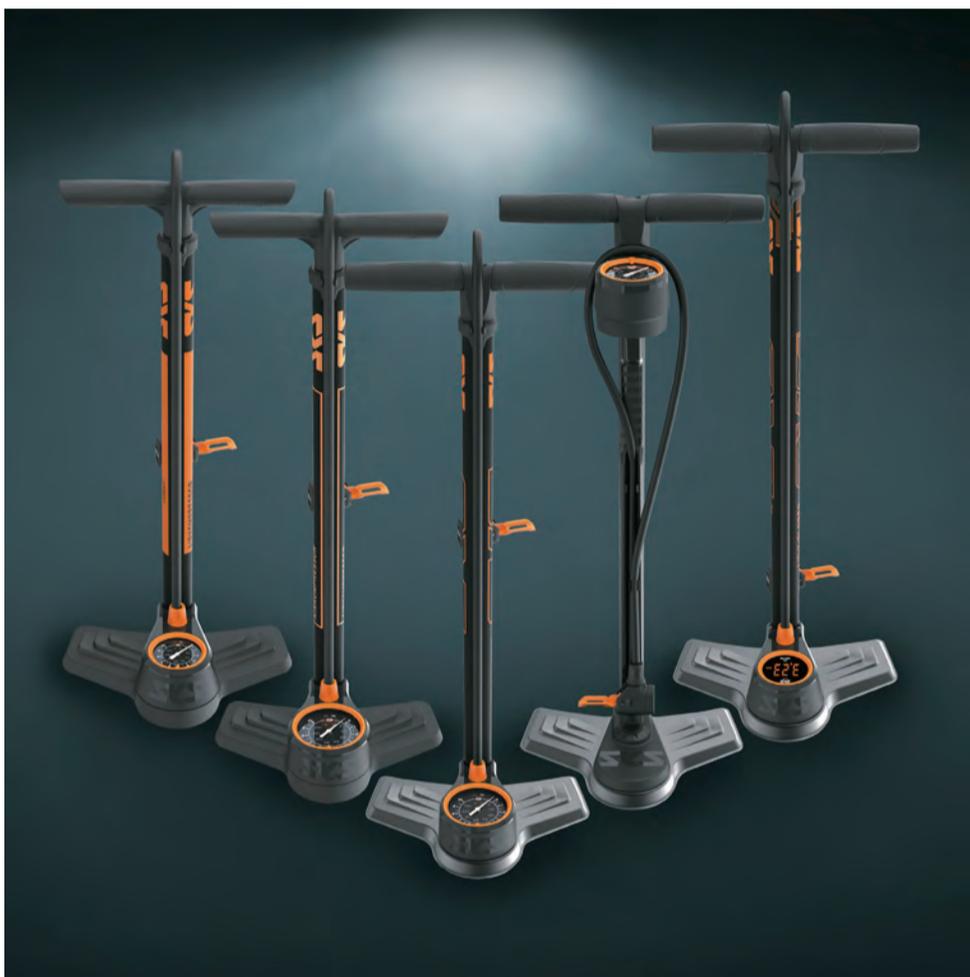
The Armour system of Tannus combines foam and a strong inner tube



新品推介：越來越聰明的打氣筒和工具

工欲善其事，必先利其器

作為一位從業 2、30 年的專業技師，想必你會有一組可以當作傳家寶的維修工具組。然而，隨著自行車科技及規格的進化，自行車所需的維修工具也不斷在改變。例如無內胎系統以及碳纖維輕量化零件，就會需要使用特殊的補胎工具或是扭力扳手等；更別說隨著電子化的導入，更會需要不同於以往的維修工具。



SKS 全新的打氣筒系列搭載經過優化的 MV Easy 多功能聰明嘴

時代不停地在改變，但談到替輪胎打氣這件事，從以前到現在都沒什麼改變。來自德國的 **SKS M0514** 可說是打氣筒的領導品牌之一，今年推出一系列全新的落地式打氣筒。SKS 品牌之所以令人印象深刻，在於其 1966 年推出被重度使用也不易壞的 Renkompessor 落地式打氣筒；時至今日，SKS 共推出 5 款專業落地式打氣筒，每一款都搭載了經過優化的 MV Easy 多功能聰明嘴。在這 5 款中價位最經濟的是 Airkompressor 10.0，本體是由輕量且堅固的塑料製成，擁有較為小巧 Compact 的體積；而更高一階的是 Airkompressor 10.0，這是一款全尺寸的落地型打氣筒，配備一顆大型且易讀的氣壓錶。更上一個級數的是 Air-X-Plorer，透過更強壯扎實的金屬底座以及鋼管汽缸，可以滿足打至 145psi 的需求。再進一級，則是 Airmotion 最高可打至 175psi，並且呈現更細膩的細節及質感，包括提供超長的氣壓軟管以及柔

軟觸感的手柄，讓每一次的打氣體驗更愉快。最後來到壓軸旗艦的 Air-X-Plorer Digi 是一款結合最新科技的打氣筒，搭載了一顆液晶顯示氣壓錶，更能夠精準掌握胎壓數值。

除了打氣筒之外，無內胎系統的逐漸普及化，讓車店技師以及騎士都會需要一套新工具來維持輪胎的最佳狀態。為此，**祥龍工業 K1133** 擴展了自行車修補工具的產品線，為無內胎系統提供一系列體型迷你且配色討喜的隨身工具。其中包括適合隨身攜帶的無內胎修補工具組，以及一組 CO2 高壓打氣筒。這兩款產品都是輕量且小巧的隨身工具，對於使用無內胎系統的車友們，在未來應該會人手一組。

冠佑聯合 K0401 除了提供精悍小巧的無內胎修補工具組之外，還為騎士帶來一個容易上手的解決方案，是一個膠囊型無內胎補修工具，方便放入座墊袋中，每一組都包含一支補胎條工



祥龍工業提供無內胎系統的隨身修補工具



冠佑聯合的攜帶式無內胎補修工具



百旭朋採用FSC認證木材打造的原木工具車



數泓科技的专业電子式扭力扳手

具以及五條補胎條。膠囊的頭部，其功能為方便操作的針頭手柄，分別有3mm或4mm直徑的針頭規格。對於使用無內胎系統的車友，在你發生爆胎時，這款產品就可以派上用場。此外，冠佑聯合還提供其他一系列的自行車維修工具，包括補胎工具維修組，其中包括各種工具、轉接座、打氣筒和修補各種輪胎和內胎的補胎片。

碳纖維複材已經普遍應用於高階自行車和零件，加上近年來自行車的設計結構更為精密，也因此組裝及調整時需要格外注意，必須使用正確的鎖付扭力。數泓科技 僅參加線上展 是一個專精於電子扭力扳手的品牌，其產品

適用於專業技師以及熱愛DIY的車友。其產品線包括專業全尺寸的技師級工具，也適合DIY愛好者在家使用。扳手本體搭載扭力數字顯示器以及蜂鳴式警示音，採用標準的套頭規格可以裝上隨附的各種規格工具。當扭力達到預設的數值，即會發出蜂鳴式警示音提醒，絕不會傷害到你的愛車及零件。

勝圓興茂 K1206 同樣帶來了扭力扳手套筒，不同的是，他們的產品更迷你，適合作為隨車工具。由原廠提供的三種不同套筒顏色的內六角扳手，每一種顏色的套筒可以達到不同預設的扭力值。一旦將扭力鎖到4、5或

6Nm時，就無法再進一步上鎖旋緊，並提供 +/- 5% 的精度。另外，在北展時還推出了Speedy Torque，這是一款體積迷你的扭力扳手，擁有3-10Nm的扭力範圍，並搭載折疊式手柄非常方便攜帶。這款工具標配10個常用的工具並存放於底部，方便維修使用。

作為一位專業技師，自然要替你的維修工具準備一個專業的存放空間。來自台灣的百旭朋企業推出了Hazel品牌 僅參加線上展。他們帶來了個人用的專業工具箱到車店用的維修工具車，採用FSC自然友善認證的木材製作，營造出獨特的樸實美學。其中這款木

製工具車，採用傳統榫接技術結合現代CNC工法，既美觀又實用。另外，抽屜鳩尾採用榫接結構，最高可支撐達400公斤的工具。抽屜可以加鎖，並且可以搭配使用Hazel一系列的泡綿工具儲放格墊，也可以客制化完美滿足你的需求。

最後，在你的維修大功告成後，想必已成為了黑手，東咨實業 K1034 推出RIDOF工業用除油汙濕紙巾，自行車上常見的油垢都能輕鬆清除。提供各種包裝尺寸，包括適用於專業車店的336張紙捲，以及個人用的獨立包裝小袋。通過SGS瑞士安全測試和認證，安全無毒。■JD



勝圓興茂的Speedy Torque是一款體積迷你的扭力扳手



勝圓興茂推出固定式扭力套筒



東咨實業推出RIDOF工業用除油汙濕紙巾

一個提供買主、開發者，快速且有效率找到產品的資料庫平台

Bicycle Cluster

面對瞬息萬變的全球市場與 Covid-19 影響，已經改變既有的商業模式與銷售行為，全球自行車廠商該如何加速數位轉型，讓客戶們第一手掌握新品資訊？進而拓展商機和掌握市場脈動。

我們認為最重要的是：該如何協助買主或開發者，快速又有效率地找到產品或產業供應鏈。Bicycle Cluster 以此為核心，是專注在全球自行車產業的 B2B 數位服務平台：<https://bicyclecluster.com>，夾帶群聚效應與數位優勢，期許成為業界夥伴最實用的自行車資料庫，幫助買主搜尋產品更精準有效率、供應商能更快速找到潛在客戶，並成為全球展會的最佳合作夥伴，目前已有上百家的會員註冊，有數千件的产品已經上傳。

精準搜尋 快速連結

對買主而言，提供最直接的以產品及規格關鍵字精準搜尋，協助買主、採購甚至研發人員尋找適合產品，甚至在同一頁面做到同類產品的詳細規格比較，提升效率與開發能量。

且經由線上即時對談，迅速解決雙向溝通問題，提升執行效率。

供應商方面，Bicycle Cluster 提供每家供應商專屬頁面，展現公司形象與產品意象，新品資訊曝光可以更即時，全球買主掌握最新資訊無時差，供應商還可透過瀏覽數據分析，了解產品的瀏覽量、關注度及潛在客戶，進而直接聯繫，洞悉未來市場發展趨勢與擬定發展策略。

Bicycle Cluster 分為 Standard、Plus 和 Pro 等三種會員等級，以可上傳產品數量及進階功能來劃分會員等級；其中 Standard 會員註冊後即可免費使用，自成立以來便吸引不少廠商註冊使用與上傳產品，希望在未來不缺席數位行銷的領域。

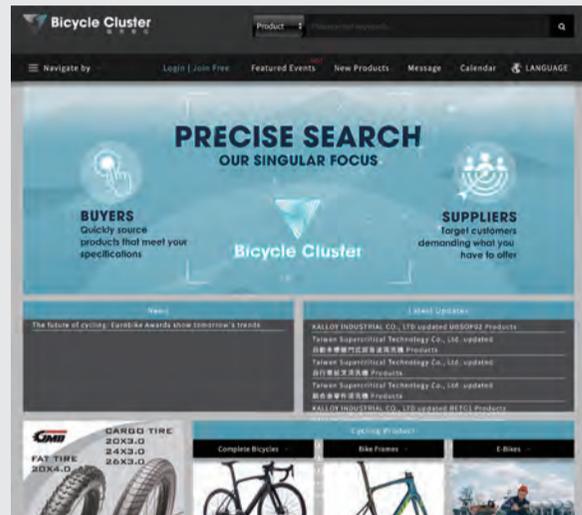
另一方面，從疫情爆發至今，許多全球自行車展會被迫取消，廠商與客戶之間無法面對面互動，Bicycle Cluster 如同是一個全年常態性的線上展會模式，串連整個全球自行車產業，註冊會員希望藉此平台維繫與客戶之間的良好互動，而且隨時都可以發布新品資訊。

虛實整合 空戰行銷

Bicycle Cluster 除了線上宣傳，也希望與實體展會合作，藉由虛實整合的方式，讓全球買主在參加實體展會的同時，搭配平台的產品搜

尋功能，快速對應至展會地圖，並且直接指出該產品的攤位位置，讓觀展變得更有效率。

展望未來，Bicycle Cluster 將持續藉由關鍵優勢，並針對會員的需求開發更多功能，希望成為自行車供應鏈的關鍵資料庫與展會的最佳合作夥伴，透過線上的產業群聚效應，讓自行車產業的數位化再向前邁進。



電池專家論壇攜手 Eurobike 雙強結盟創造新的協同效應

法蘭克福 - 歐洲兩大指標盛會攜手結盟，這會是一加一大於二的協同效應：歐洲自行車展將串聯電池專家論壇，一個是全球最重要的自行車展覽將於 7 月 13 日至 17 日開辦，另一個則是歐洲最大的電池技術會議，其第 17 屆會議將於 7 月 12 日至 14 日舉行，雙強將同場於法蘭克福展覽中心舉行。



「**電**動自行車近幾年之所以蓬勃發展，跟全球電池技術的進步息息相關。歐洲展透過串聯電池專家論壇共同舉辦，兩者將可能為彼此帶來正能量，藉由讓更多的國際專家進行討論激發新靈感，共同在同一時間和同一時間創造更大的動力，」歐洲展董事總經理 Stefan Reisinger 說道。

電池專家論壇是歐洲最大的電池產業會議，2019 年首度於美因河畔的法蘭克福展覽中心舉行，開展當天就盛況空前、座無虛席。並且近年隨著論壇的規模持續擴展，BMZ 集團也將展期延長到了三天的論壇盛會。執行長兼創辦人的 Sven Bauer 說明：「我們希望電池專家論壇在 2022 年進一步發展，並迅速成為全球最大的電池會議。攜手與歐洲展同場舉行，我們正在創造新的協同效應，並促進與其他行業的交流。」7 月 12 日至 14 日（每天

上午 9 點至下午 5 點開放），在會議中心的 7 個演講廳將舉行約 100 場專家講座；另外，也將使用展覽中心的 6 號館，將其會議中心的面積擴大到超過 3,000 坪。BMZ 集團預計將有來自 50 多個國家的 160 家參展廠商以及約 5,000 名參與者。更多資訊請上網 (www.battery-experts-forum.com)。

今年第 30 屆的歐展時間為 7 月 13 日（三）到 7 月 17 日（日），開展時間為上午 9 點到下午 6 點，最後兩天的週六和週日將開放民眾入場。這場全球最受矚目的自行車展，將使用法蘭克福展覽中心的西側，打造一個超過 3 萬坪樓地板面積的大型自行車展覽。其中第 8、9、11、12 號展館各有兩層樓。預計將吸引來自世界各地的 1,400 多家參展商和約 100,000 名參與者。更多資訊請上網 (www.eurobike.com)。

當自行車變得更聰明了

數位轉型無所不在 從訓練台到公共單車全面智慧化

隨著電子化、電動化、智慧化以及 GPS 等通訊技術的推波助瀾，讓自行車產業不再傳統，歡喜迎接這一波數位轉型的浪潮。當自行車與其零配件碰上 3C 電子科技及電動技術，在傳統與科技之間會產生怎樣的轉型及變化？以時下流行的智慧型訓練台來說，可以讓原本枯燥乏味的室內騎乘，透過功率訊號、無線傳感器以及 APP 連網等，模擬出近似於戶外騎乘的感受，達到室內騎乘、線上 PK 的團騎樂趣。以下讓我們跟您介紹幾款頗有創意的智慧型自行車產品。



Noza S 智慧型訓練台



Top Action GA02- 攜帶式電動打氣機



Xplova's X5 GPS 專業車錶

Xplova K0426 是一個聚焦於自行車電子產品的品牌，自從 2016 年被 ACER 收購後，由於能利用更多的集團資源及技術，近幾年也持續推出智慧化自行車產品。其中之一的亮點是 X5 Evo GPS 車錶，這款車錶不僅可以紀錄騎乘數據以及 GPS 軌跡，還結合了攝影機即

時紀錄騎乘的美好時刻，更能將你的騎行動態數據以圖形化方式，疊加在影片上，包括心跳變化、速度多少、踏頻轉速、功率瓦數，用有數據溫度的影片，配上符合場景與心情的音樂，完整地記錄你真實的騎行旅程。此外，你可以啟動數據鏈接的自動錄影，騎

行途中，只要達到你預先設定的時速、心率、轉速、功率等設定值，X5 Evo 將為你啟動自動錄影。讓你專注於騎乘挑戰，也不會錯過騎乘中令人振奮、精彩的影像。

另外，Noza S 智慧型訓練台同樣能夠帶來媲美戶外騎乘的樂趣。通過 ANT+ 和藍牙無線傳輸以及專屬 APP，讓原本一成不變的室內訓練，轉為提供騎士變化多端的路感。

Bion Sport K1110 是一個較為新興的智慧型 GPS 車錶品牌。除了搭載導航功能以及提供專屬 APP 作為搭配使用，這款專業車錶還支援其他高階應

用功能，可以搭配使用包括心率、速度、迴轉速等無線裝置。值得一提的是，Bion Sport 針對時下熱門的功率訓練，還提供包括 F1、F2 和 F3 的功率踏板，可以分別對應使用於公路車或是登山車，同樣搭載雙通道 ANT+ 和 BLE 4.0 的無線傳輸技術。

Top Action K0824 也提供類似功能的 GPS 專業車錶及無線傳感器，為消費者帶來更多元的選擇。邁動科技近期還推出了一款 GA02 攜帶式電動打氣機，這一款小巧易攜的可充電式電動打氣筒，可以為騎士輕鬆解決輪胎打氣的問題。內建 2000mAh 電池，



Bion 自行車功率踏板

方便使用於各種場合，並且可以設定需要的胎壓，不會過度充氣，一但到達該設定充氣值時，立即停止充氣。在本體正面內建 LCD 螢幕，可以即時掌握輪胎胎壓，並且內建手電筒，可以使用於低光昏暗的情況。總體來說，這款攜帶式電動打氣機可以滿足包括自行車、機車、汽車、球類的打氣需求，而最大充氣氣壓可以高達 150 PSI/10.3 BAR。

很多人喜歡自行車騎乘，在於可以暫時遠離塵囂、放鬆身心靈。但不免在某些情況下，我們可能會需要包括接聽電話、聽音樂、或是聽從手機訓練 APP 的教練提示，但在自行車高速騎乘之下還要消化來自於外部的訊息，如果使用耳機可能會影響到我們對於周圍環境的判斷，進而影響到騎乘安全。為此，Thinking Group 提供一系列的無線耳機可以

滿足安全騎行的需求，例如其代理的 Shokz 品牌。這些支援藍牙傳輸的無線耳機，可以連接到各種設備，包括手機、平板等。但是，與傳統耳機不同的是，它們是透過骨傳導技術，在使用時並不需要將耳機塞入耳朵內，而是通過臉頰骨的傳導讓用戶聽到聲音，這意謂著騎士在聽音樂的同時，仍然可以聽到來自周圍世界的環境噪音，且不會妨礙到騎士的正常聽力。

當然，上面介紹的電子化、電動化相關產品，當其電力耗盡時，就會變成無法使用的甜蜜負擔了。為了解決裝置充電的需求，Spin Up N0501 提供了解決方案。這是一款 1,000mA 的單車 USB 發電機，這款改裝品幾乎可適配於各種自行車，裝置提供 IPX4 的防水等級，並且產生的滾動阻力極低，適用於自行車旅行、Bikepacking、無電不歡的騎士等。發電機的重



尚品綠能(Spin Up) 1,000mA的單車USB發電機



思維集團代理的
Shokz藍牙骨傳導運動耳機



智果移動 (Keego Mobility)
提供IoT物聯網的自行車快遞整合方案

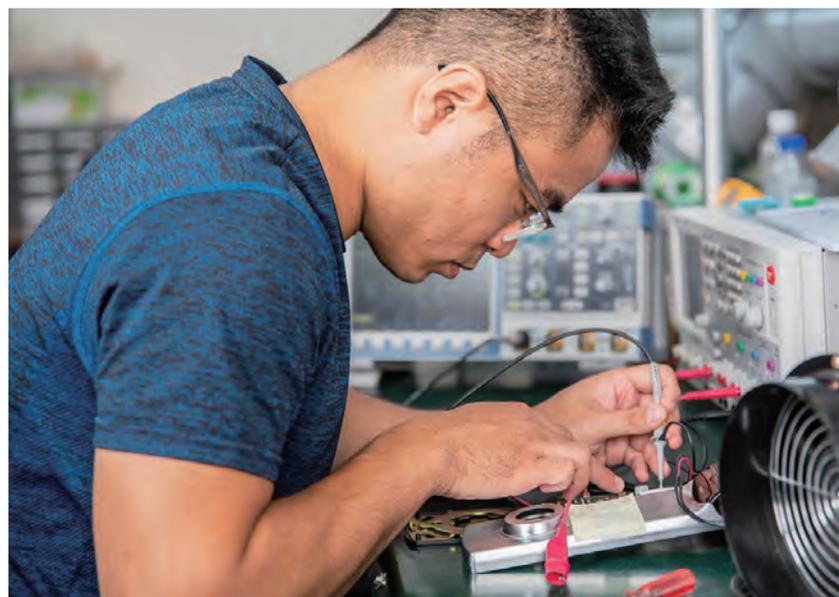
量僅重 380 克，專為設備充電而非為車燈供電設計。在時速 8 km/h 之下，可以產生 6V12W 的最大功率輸出。此外，還搭載了智慧電源管理系統，可穩定輸出 1000mA，確保直充不傷手機。最後一點，當騎乘時速低於 13 公里時，F12W-PRO 會自動切換至低阻力模式，讓阻力只有原本的三分之一，讓爬坡更不費力。

變得越來越聰明的不僅僅是自行車相關配件，連同自行車也智慧化、IoT 物聯網化了。Keego Mobility M0524 就是一間致力於打造智慧自行車軟、硬體整合的公司，他們研發的 e-Bike 是專為貨運而生，適合於城市內的短程快遞，並且還設計專屬的軟體、APP，可以即時監控車輛的移動狀態，掌握行車資訊以及每一件的貨運情況。也就是說智果移動提供了全方案的整合方案，從 e-Bike，到快遞

員 APP、車隊管理應用軟體等，可以幫助想投入節能環保的物流公司，提供全新的綠色運具整合系統。

協助客戶成就智慧方案，Micro Program N1030 提供包括硬體、軟體、諮詢，並且可因應下一世代的自行車及配件提供創新的解決方案。談到微程式可說是無所不在，包括了公共自行車、智慧門禁、無線通訊、遠端管理等領域都是專家。憑藉其在多個領域所累積的技術及實力，微程式在為各種應用開發傳感器和控制器方面也經驗豐富。其令人印象深刻的成功案例，就是 YouBike 公共自行車；在這之後，還協助捷安特開發 e-Bike 維修和檢查流程，透過藍牙傳輸就能診斷車輛情況，這說明了微程式的創新服務確實能為產品增值，並且在未來的應用服務範圍會更加廣泛。

■ JD



微程式資訊在包括智慧門禁、無線通訊、遠端管理等領域都是專家

錢景看好

熱錢湧入自行車產業

從進出口統計數據、廠商的財務報表，都可一窺自行車產業在這幾年有驚人的成長動能。在如此榮景及熱潮下，自然吸引了產業外部的資金湧入，進行了一連串的投资和收購。



Inflexion的執行合夥人Simon Turner(左)和Enviolo執行長David Hancock

近幾年自行車品牌及工廠的收購新聞不斷，包括 Accell 集團以 15.6 億歐元被投資公司收購。另外，作為齒輪領域專家的 Enviolo 宣布，英國私募股權公司 Inflexion 已成為新的大股東，並將其總部從茲沃勒 (Zwolle) 遷到阿姆斯特丹市中心。Enviolo 最近的年營業額增長率超過 20%，可說是 Inflexion 的理想投資標的。憑藉其專利的無段式內變速器，尤其適配於中置電機系統，預期在未來 Enviolo 的營業額將進一步增長。雖然雙方都沒有公佈 Inflexion 投資的確切金額，但荷蘭的財經媒體指出其金額可能落在 2.5 億美元。
<https://enviolo.com/>

印度機車公司 TVS Motor 為了將其業務拓展到電動自行車，斥資 1 億美元購買了瑞士電動汽車集團 (SEMG) 75% 的股份。瑞士電動汽車集團旗下的電動車品牌囊括了 Allegro、Cilo、Simpel 和 Zenith，還開了 Velo Loft 自營門市，更重要的是擁有 M-Way 加盟連鎖門市，完全專注於銷售電動自行車和配件，目前共有 29 家具有設計美學的經銷店，其中許多位於黃金地段。雖然 SEMG 集團最初鎖定的市場是聚焦是在 DACH 地區 (德國、奧地利和瑞士)，但由於 TVS Motor 的收購，後續也將於印度或甚至是其他更遠的地區，開始銷售包括 Allegro、Cilo、Simpel、Zenith 等電動自行車品牌。
www.semg.ch

車品牌的保時捷對自行車產業有著濃厚興趣：保時捷在與 Storck 聯手推出 Cycloer 電動自行車品牌後不久後，更進一步收購了克羅埃西亞電動自行車品牌 Greyp 以及其母公司 Rimac (世界最速電動車，兩秒破百)。此外，保時捷已經收購了德國電機系統製造商 Fazua 20% 的股份 - 也包括認購更多股份的選擇權，從而成為這家創新公司的大股東。Fazua 成立於 2013 年，發展至今已有一百名員工的規模。Fazua 電機系統的特色，就是打造出體積更為精實且輕巧的馬達，讓電動車更像是傳統自行車，成功的在市場上佔有一席之地。



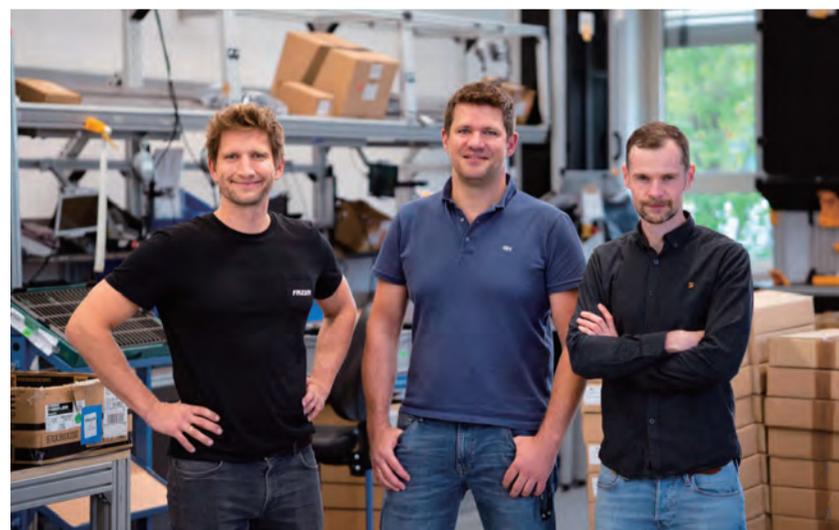
這家總部位於慕尼黑的製造商，目前為超過 40 多家自行車廠提供電機系統。

<https://fazua.com/>

■ LVR



左起：Ralf Speth 爵士 (TVS Motor)、Sudarshan Venu (TVS Motor)、Sharad Mohan Mishra (TVS Motor)、Reto Waeffler (SEMG集團)、Rainer Fröhlich (CONSTELLATION CAPITAL)



Fazua 的三位核心管理層：左起聯合創辦人 Johannes Biechle、董事總經理 Florian von Wurmb-Seibel 和聯合創辦人 Fabian Reuter



You need to be here



All set to break exhibitor and trade visitor records
The Show Daily will be there

Eurobike in Frankfurt will be bigger and better than ever. With up-to-the minute stories from the show floor, the official Eurobike Show Daily carries in-depth company profiles, event guides, market reports and features. Produced by an independent editorial team, the Daily is essential reading for all show visitors.

We're now open for advertising and editorial enquiries:

Taiwan Sales:
Sabina Den

International Sales:
Tom Kavanagh

sabinna@showdaily.net tom@showdaily.net

www.showdaily.net



SHOW DAILY

Credits & Contact Info

PUBLISHER
KB Media Ltd.
D16A275, Ireland
www.showdaily.net
tom@showdaily.net

SENIOR EDITOR
Laurens van Rooijen
LvR@gmx.ch

WRITING TEAM
Laurens van Rooijen
Joe Delves
Dave Atkinson

ART DIRECTOR
Ruth Gunning

TAIWAN LIAISON
Greg Chang

ADVERTISING SALES
www.showdaily.net

WORLDWIDE:
Tom Kavanagh
tom@showdaily.net

TAIWAN:
Sabina Den
sabinna@showdaily.net

ITALY:
EdiConsult Internazionale
sport@ediconsult.com

AUTHORIZED BY

Organizer:



TAITRA LIAISON
Ting-Yu Hsieh

PRINTED BY
Chuen Fung
群鋒企業
Taipei, Taiwan

© 2022 K.B. Media Ltd. All rights reserved.

No part of this publication may be reproduced without specific written permission from the publisher. We check. Neither the publishers nor writers can be held responsible for damage of any kind that may arise as a result of the content herein. Views expressed herein have not been approved by TAITRA and should not be construed as representing the opinions or policies of TAITRA.

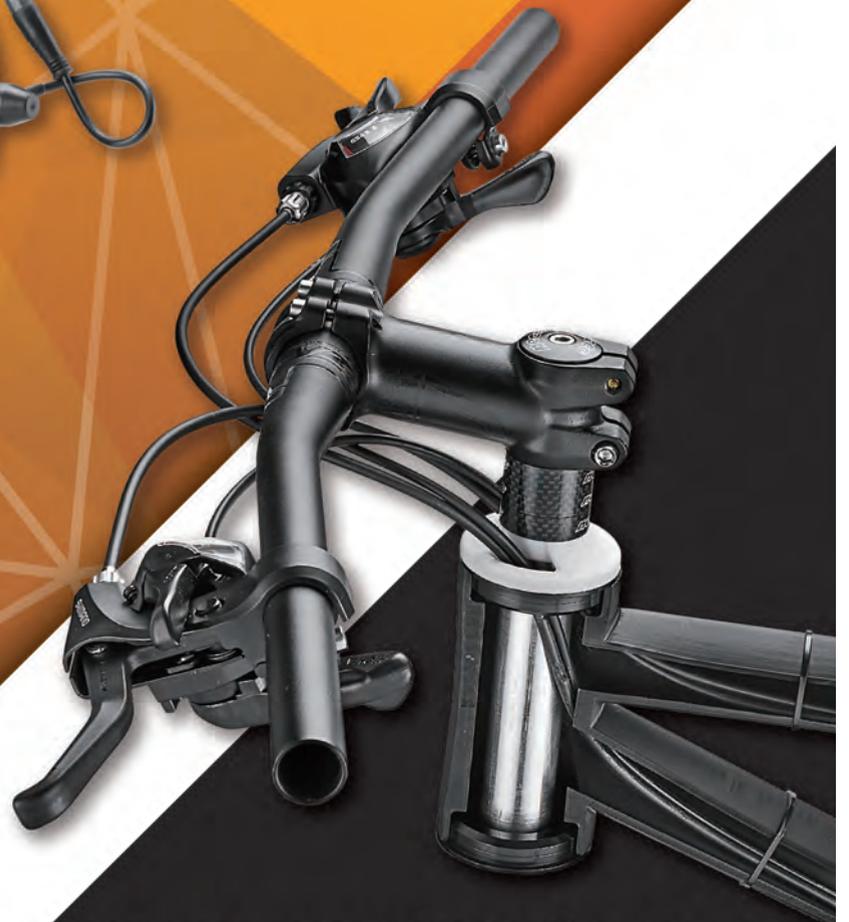
ADVERTISING INDEX

DAY 2: March 10, 2022		Messingschlager	Front Cover
A-Pro Tech	19	Miranda	2
Bafang	Front Cover	Neco	Back Cover
Critical Cluster	11	SKS	15
Hafny	31	Stan's NoTubes	5
Kind Shock	9	Taya Chain	13
KMC	7	Wellgo Pedal's	5



neco

NECO BOOTH NO.
J1218



www.necoparts.com