

TAIPEI CYCLE

SHOW DAILY

FRIDAY



INSIDE:
What's on today
Show highlights

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Overview: Chains
Overview: Folding bike
New products at the show
Bikewear for Asian cyclists

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 SHOWERS



TOMORROW
25°C (77°F)
 MOSTLY CLOUDY



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TaiSPO SHOW DAILYStarts on 39

Guide to booth numbers at Halls 1 and 2, Nangang Exhibition Center: Booth numbers starting with **L, M, N** are on the 4th floor, Hall 1; Booth numbers starting with **P, Q** are on the 1st floor, Hall 2; Booth numbers starting with **R, S, V** are on the 4th floor, Hall 2.

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BETO

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VOX POP

What do you think about the new Hall 2?



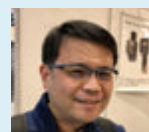
Rolf Kathrein-Lehman Ortlieb
Heilsbronn, Germany



Edward Huang V-Grip
Datong Village, Taiwan

I think this new hall is really great — very convenient. In the European trade shows we have many different halls so we are used to tracking between them. You just need to get your orientation and keep in mind where you are exactly. So, a big thumbs up.

New location or old location is not an issue. Sure, the hall space feels very comfortable, but when it comes down to it, this won't make any difference to business. Your business success depends on your own capabilities. Wildcards like changing locations are all part and parcel of doing business. We're used to it, and it's business as usual.



Kevin Lin Retailer
Toufen, Taiwan

Hall 2 seems a lot wider, bigger, and more comfortable to walk around. Hall 1 just feels more crowded.



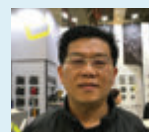
Judy Ho Limotec
Taichung City, Taiwan

It's just a bit of a hassle in that every year, most of your suppliers are in the same place, more or less. But now a lot of them are in the new hall and finding them is a bit tricky. I have to relearn the locations.

The separation of the halls means that customers have to track back and forth between the two. Customers' time is limited and they often have to pack meetings together in a short time. In the past it was just a matter of moving between the first and fourth floors of Hall 1.

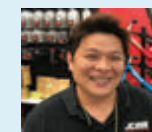
I initially didn't know there was a walkway underneath the road. So I had to find my way across the street on my first visit.

But we certainly appreciate the bigger space over here [in Hall 2]. If, for instance, we had to make a choice between staying here and moving back to Hall 1, we'd have to think about that.



Dollar Cheng Chuan Wei Industrial
Yuanlin City, Taiwan

Hall 1 on the fourth floor is very clearly for complete bikes and foreign exhibitors. In the past, components exhibitors were mainly all together on the first floor.



Jason Chang JCool
Dali City, Taiwan

But the new hall is a bit of a mess in that there is no clear classification system. Exhibitors have been placed at random. In addition, the separation of the halls makes it harder for visitors to organize their time for meetings. From the fourth floor of Hall 1 to the fourth floor of Hall 2 is quite a journey.

The booth layout all looks good and the foreign visitors are liking it. It's more compact than Hall 1, but that's good. You can almost see the full range of exhibitors along the aisles. The better visibility makes it easier to get around and find who you need to find. It's convenient.



Terry Lin Sapience
Shan Pien Township, Taiwan

The information could be clearer. Quite a few people still don't know there is a Hall 2. Another thing is that the total space is smaller, but the walkway is wider. It gives the feeling of fewer visitors. If there was an opportunity to move back to Hall 1 then we would take it.



David Tsai Seiki
Huatan Changhua, Taiwan

Hall 2 is smaller, but the location is good. Visitors and exhibitors are all going through the process of getting used to it. The facilities are very good and the toilets are excellent.

Yesterday [Wednesday, the first show day] was pretty quiet, but today there are many more visitors. I'm thinking visitors probably spent the day over in Hall 1 and now have shifted their attention to Hall 2.

■ Glenn Reeves / Sabinna Den

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GENERAL SHOW INFORMATION

All events are at the Nangang Exhibition Halls unless otherwise noted.

GENERAL SHOW INFORMATION

TAIPEI CYCLE

WEDNESDAY - FRIDAY, MARCH 27-29

Show hours: 9 a.m. - 6 p.m.
March 29 is a public day

SATURDAY, MARCH 30 (PUBLIC DAY)

Show hours: 9 a.m. - 3 p.m.

Venues: Nangang Exhibition Center Hall 1 (4th floor) and Hall 2 (1st and 4th floors)

TAIPEI CYCLE ALL DAY EVENTS

Outdoor Demo

Nangang Hall 1, South outdoor corridor

d&i Golden Awards Gallery
Nangang Hall 2, 4th floor lobby

Theme Pavilions:

EU Pavilion
Italy Pavilion
Japan Pavilion
Korea Pavilion

FRIDAY, MARCH 29 PUBLIC DAY

9 a.m. - 5 p.m.

Taipei Cycle Forum
4F Room 401/Nangang Hall 1

TODAY'S CYCLE FORUM AGENDA:

Session C: E-bike Trends

8:30 - 9 a.m. Registration

9 a.m. - 12 noon: The Most Exciting E-bike Trends

Speakers:

- Marian Baukowitz, research director, 4C Consumer Insight
- Susanne Brusch, CEO, Pedelec Adventures
- Manuel Marsilio, general manager, the Confederation of the European Bicycle Industry (CONEBI)

Session D: Future City

1:30 - 2 p.m. Registration

2 - 5 p.m. Cycling in the Cities of the Future

Speakers:

- Morten Kabbell, CEO, Copenhagenize Design Company
- Shyue-tair Chen, commissioner of the Department of Transportation for the Taipei City Government
- Kevin Mayne, CEO, Cycling Industries Europe

Cost:

NT\$1,000 per session at the door



Marian Baukowitz of 4C Consumer Insight is one of today's speakers at the Taipei Cycle Forum

9:30 a.m. - 5 p.m.

Taipei Cycle Salon

4F/Nangang Hall 1
Smart Cycling Pavilion

Note: Most speeches will be in Chinese without English translation

9:30 a.m. - 12 noon

Morning Session: Bicycle Culture Forum

2:30 - 5 p.m.

Afternoon Session: Bike Travel Talks

SATURDAY, MARCH 30 PUBLIC DAY

9:30 a.m. - 2 p.m.

Taipei Cycle Salon

4F/Nangang Hall 1
Smart Cycling Pavilion

9:30 a.m. - 12 noon

Morning Session: 1 on 1 Sprint Roller Racing

1 - 2 p.m.

Mid-day Session: Rapha Custom Sharing Event

SHUTTLE BUS ROUTES

Hotel Shuttle

(depart from Nangang Exhibition Center, Hall 1)

Service Hours

Mar 27-29: 17:45, 18:00, 18:15, 18:30
Mar 30: 14:45, 15:00, 15:15, 15:30

ROUTE A

Courtyard Marriott (Nangang MRT Station) (台北六福萬怡酒店《捷運南港站》) → Gallery Hotel (麒麟商旅) → Hotel Qoute Taipei (關旅館) → FX Hotel (富驛時尚酒店)

ROUTE B

Shangri-La's Far Eastern Plaza Hotel Taipei (香格里拉台北遠東國際大飯店) → Hotel Éclat Taipei (台北怡亨酒店) → Howard Plaza Hotel Taipei (台北福華大飯店) → Fullon Hotel Taipei (台北福容大飯店)

ROUTE C

amba Taipei Songshan (松山意舍酒店) → Taipei Fullerton Hotel (Nangang MRT Station) (台北魏敦飯店《南京館》) → Sunworld Dynasty Taipei (台北王朝大酒店) → Brother Hotel (兄弟大飯店)

ROUTE D

LA Maison Hotel (宜家商旅) → Grand Victoria Hotel (維多麗亞酒店《大直》) → The Grand Hotel (台北圓山大飯店) → The Imperial Hotel Taipei (near MRT Zhongshan Elementary School Station) (華國大飯店《近捷運中山國小》)

ROUTE E

PALAIS de CHINE (台北君品酒店) → Fortune Hiya Hotel (福君海悅) → CAESAR PARK (MRT Taipei Main Station) (台北凱撒大飯店《捷運台北車站》) → Cosmos Hotel Taipei (台北天成大飯店) → Taipei Garden Hotel (台北花園酒店)

ROUTE F

Miramar Garden Taipei (台北美麗信花園酒店) → The Evergreen Laurel Hotel (長榮桂冠酒店《台北》) → The Ambassador Hotel Taipei (台北國賓大飯店) → Royal Seasons Hotel (Nanjing West) (台北皇家季節酒店《台北南西館》)

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DAY 2 SNAPSHOTS



It's a small world at the velo city stand.



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Mid-motor e-bikes at the Sanfa stand



Pick up your copy of the Show Daily at all entrances to the show.



The 2019 Innova Cup 48h Endurance Race of Taiwan departed from Nangang Hall 2 yesterday morning.



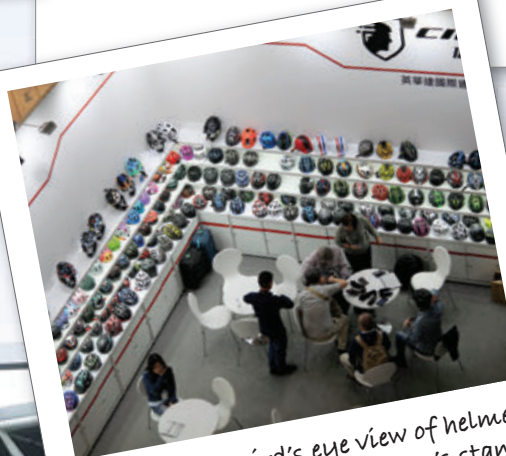
Nothing can puncture Nexo tires.



At the Alligator stand: the Moto Parilla ultra Carbon - a super powerful hybrid bicycle/motorcycle



At the Fairly stand, this eFlow is the Rolls Royce of sharing bikes.



Bird's eye view of helmet supplier Cigna's stand

DON'T KNOCK THIS WOOD

You don't see much wood among the sea of carbon frames and alloy components at Taipei Cycle — especially a product that retails for \$1,200.

But the Wooden Trolley at **Hazel HALL 2/4F/R1210** is no simple hunk of lumber. Intended for professional mechanics, it's constructed from pieces of FSC-certified hazelwood from Taiwan which are then run through CNC machines.

Trays glide open and shut with impressive smoothness, proof of its fine carpentry. Hazel will customize the EVA drawer liners that hold tools in place at the customer's request. The trolley weighs 105kg (231 pounds).

The Wooden Trolley's creator, James Li, also makes foam floor and yoga mats but wanted to do something unique.

The idea came from a request by a bicycle brand that needed special packaging for a limited-edition range of tools. Li made them a toolbox of fine wood with intricately CNC'd inserts. "The feedback was so positive that I decided to take things a few steps further, and founded Hazel."

The Wooden Trolley is too pricey for Taiwan bikeshops, so Li looks for sales abroad. "So far I have sold 50 units of the Wooden Trolley to North America, various countries in Europe, and to Japan and South Korea," he said.

■ **Laurens van Rooijen**



Hazel founder James Li and his Wooden Trolley

EFLOW LOOKS TO MAKE BIKESHARING RESPECTABLE

Thanks to overly aggressive operators, bikesharing has often made headlines for the wrong reasons.

Now, Fairly and its European subsidiary, eFlow, are attempting to clean up the sometimes disreputable image of bikesharing.

Based in New Taipei City — away from the industry's Taichung hub — **Fairly Bike Manufacturing HALL 1/4F/M0519** is entering the bikeshare market step by step, instead of attempting the kind of shock and awe campaigns mounted by such operators as Ofo and Mobike.

It started by supplying 2,000 share bikes to the twin German cities of Mainz and Wiesbaden. Bernd Adamski, CEO of eFlow, said officials wanted to replace their existing fleet of 4,000 share bikes.

"But the two cities could not find any existing sharing bikes that met their needs, so they contacted our offices," Adamski said in an interview Thursday. "Upon analyzing what exactly they wanted, we set off to design a bike to meet their needs."

Instead of looking for bikes that were as cheap as possible, Mainz and Wiesbaden sought vehicles that would be sustainable and vandal-resistant.

"From the sturdy alloy frame with a tough powder coating to the fully integrated cables, the well-protected head light, the closed chain case, Enviolo's internal transmission hub and Pintorx screws, the bike we came up with is easy to use, hard to damage and low on maintenance," Adamski said.

Fairly and eFlow also came up with a modular design so the fleet could mix conventional and electrified bikes.

"Both versions share most spare parts, so fleet operators do not need to store two separate stocks of spare parts, and the handling is more standard-



eFlow CEO Bernd Adamski with the company's sturdy, modular — and expensive — electric share bike

ized as well," he said.

The eFlow sharebike can even accommodate docked or dockless systems with a simple conversion, Adamski said — thus sidestepping one of the most hotly contested issues in today's bikeshare industry.

"The conversion from dockless to dock-based versions is straightforward," he said. It involves a metal safety bar that keeps the headlight out of harm's way. For docked systems, eFlow replaces the bar with a component that fits into the docks.

Docked and dockless bikes use the same smart lock that can be converted to either use by adjusting the software. The sharebikes also are equipped to handle inductive charging.

System operators appreciate the fact that the eFlow sharebike has plenty of space for advertising, which helps underwrite many bikeshare systems.

That's especially welcome

because the eFlow bikes cost roughly six times as much as their Chinese-made rivals. eFlow sells its conventional share bike for about €1,500 (\$2,060), and the electrified version for about €2,500 (\$3,400).

Fairly and eFlow aren't stopping with share bikes, however. They are also working on an electric motor scooter that will provide a longer-range option for share system customers who want to travel considerably longer distances.

"The development of the scooter has reached about 90 percent of completion, but we'd rather not set a fixed date when it will be premiered," Adamski said.

With the scooter, Fairly and eFlow will be able to offer a full e-mobility package for cities that want to introduce bike- and scooter-share systems that aren't based around as-cheap-as-possible vehicles.

■ **Laurens van Rooijen**

ENGLISH

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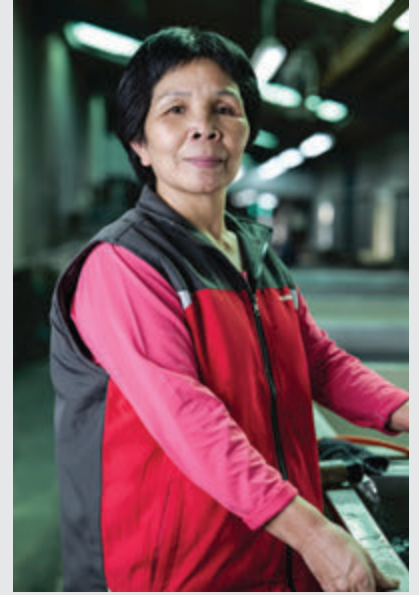
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THE BIKEMAKERS BEHIND THE BIKES

While you're drooling over the hottest new bikes at Taipei Cycle, take a moment to acknowledge the craftsmen and women who made them.



A photography exhibit at the show honors the men and women of Taiwan's bike factories with a series of spare, dignified portraits.

Darryl Carey, a professional photographer based in New Zealand, spent months visiting some of Taiwan's biggest and oldest bicycle factories to produce this

unique exhibition. Factory owners gave him exclusive access.

"Many people believe that only automated machines and robots build the bicycle components along the production chain," Carey said in a narrative that accompanies the exhibit. "However, this is far from the truth as almost all the main factories have a large

human resource workforce."

He adds, "As you can see, most of the workforce are middle-aged and have worked at the factory for most of their working lives and more than one generation. Everyone was dedicated and passionate in their role and valued their importance within the production chain in the manufacturing of the

bicycles we see and purchase today."

Carey said he had been thinking about the project for three years, and started after last year's Taipei Cycle.

The exhibit is on display in the ground floor lobby of Hall 2. ■

Photos courtesy of Darryl Carey



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SANTINI EXPANDS TRIATHLON LINE WITH IRONMAN LICENSING DEAL

Santini is known for its cycling apparel, but the Italian company is expanding its presence in triathlon under a new licensing agreement with Ironman, which operates more than 260 triathlons and other athletic events in 44 countries.

“What we really like to do is to bring into triathlon a lot of the experience and research that we did for cycling,” Monica Santini, chief executive of Santini **HALL 1/4F/LO228** said at the company’s Taipei Cycle booth.

In Taipei, Santini is showing some of the company’s first triathlon pieces under the licensing deal, with the Ironman logo integrated in the design. “The line is really high-end, very technical and very aerodynamic,” she said.

The apparel brand has been involved in triathlon for eight years, and the segment now accounts for about 8 percent of Santini’s overall sales, or €18 million (\$25 million) last year. Santini wants to increase that share to 25 percent without slowing its growth in other categories.

The Ironman relationship should give a boost to Santini’s push into the triathlon market. “We decided that if we wanted really to reach the goal to be visible globally, we needed to have a major sponsorship,” the CEO said.

Santini said the Ironman deal involves a range of merchandise and

exclusive global rights for Ironman-branded triathlon and cycling garments. Ironman’s other partners are Roka for swimming gear and Hoka One One for running footwear.

“Our goal is to be recognized as the triathlon brand,” Santini said, “and once these athletes decide that they want to quit the long distance and stick with bicycle clothing, we are the brand that is going to be there for them.”

The chief executive runs the company with her sister, Paola — an occasional triathlete who is in charge of marketing at Santini.

■ Barbara Smit



Monica Santini displays two of the pieces in her company’s new Ironman triathlon apparel line.

ALPINESTARS BRANCHES INTO CYCLING HELMETS

Enduro and motocross riders already wear Alpinestars protective gear on their knees and elbows. Soon they’ll be able to wear it on their heads, as the Italian brand is branching into cycling helmets.

“We have enlarged our research and development team for helmets in Asolo to cover the enduro and motocross categories,” Francesco Florian, market researcher at Alpinestars, **HALL 1/4F/LO523a** said at the booth. The brand is based in Asolo, Italy.

The helmet division previously focused on motorcycling. The new cycling helmets come in two versions, one of them with MIPS technology. MIPS, which stands for “Multi-Directional Impact Protection System,” was designed to protect against rotational motion in the brain from impacts.

The Taipei Cycle launch marks the Italian company’s return to show after skipping it last year.

Alpinestars also launched a line of distinctive women’s apparel that is on display in Taipei.

“Previously, the women’s products were basically the same as for men,” Florian said. “This is the first time we have garments that are really designed for women

from the start.”

The range consists of about 10 products, including jerseys. The flagship women’s product for fall is the Stella Nalini jacket, which is insulated with Primaloft. A stretch panel at the back allows for more freedom of movement, and the hood is compatible with helmets.

Unlike the men’s versions, the women’s shorts come with integrated padding.

Sante Mazzarolo, an Italian leather craftsman, founded Alpinestars to make motocross boots.

■ Barbara Smit



A new Alpinestars cycling helmet



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OVERVIEW: FOLDING BIKES

THIS NEW CROP OF FOLDING BIKES ARE MIGHTY SMALL BUT MIGHTY POWERFUL

The folding bike is one of cycling's great design challenges. It must balance the need for a compact folded package with the desire for full-sized ride characteristics.

While they are not immune to electrification, adding a motor and battery increases a folder's complexity. While the extra parts needed for electric assist systems can stymie the portability of a folded bike, the miniaturization of battery technology is helping keep e-folders as light as possible.



Jivr

Jivr, **HALL 1/4F/L0130** equipped with electric assist, has one of the quickest folds we've ever seen. Once folded it can still be wheeled easily — especially crucial for an e-folder, to offset the increased weight of the battery and motor.

The rest of its design is no less smart either. By using a unique single-sided chainstay that completely encloses the drivetrain, the Jivr reduces maintenance and keeps a rider's clothes clean and snag-free.

The futuristic-looking Jivr also features digital connectivity so users can control and monitor its features on a smartphone. Having generated serious interest during a recent crowdfunding drive, the production version of the Jivr will feature a 250-watt front hub motor. Its maker says the Jivr can cover 50km (31 miles) on a single charge — more than enough to get around town.



Cosmos Co-Polaris



Tern Vektron D8 folded

Chedech, **HALL 1/4F/L0405a** a bike made that folds in three steps, is light and compact. How light? Choose the Shimano Dura-Ace-equipped Air version, and it weighs a ridiculously light 6.8kg (15 pounds). The somewhat less svelte White and Landmark models use a Sturmey Archer 5-speed internal gear hub.

To keep weight down, every model includes a carbon handlebar, steering assembly, fork, seatpost, and mudguard. The super-light Air



Lekuma E-Go

has a matching wheelset, while the more workhorse 5-speed models feature a tougher multi-spoke construction. The 5-speed models have an integrated carbon fender that covers the rear wheel, and a TPU suspension system for comfort that can be tuned to a rider's weight and preferences.

Components from Schwalbe, Shimano, and Tektro complete the package, and users can choose a dedicated rear rack. The Chedech models use mid-sized 18-inch wheels and fold down to dimen-

sions of 71cm long by 35cm wide by 60cm high (28 inches by 14 inches by 24 inches), making it one of the most portable bikes on the market.

In its quest to accommodate full-sized handling and a compact carry, **Cosmos HALL 1/4F/N1208** uses 20-inch wheels on its Co-Polaris model. To balance out negative effects on the bike's carryability, Cosmos uses a very light carbon fiber construction.

The Co-Polaris manages includes a 22-speed drivetrain and hydraulic disc brakes but weighs 9.5kg. While it's easily small enough for a daily commute, its stiff frame and full-featured groupset make it a good companion for longer journeys.

The flowing lines of the carbon chassis and seatpost also give it a



Zephyr Tromsø

race-oriented look. The Co-Polaris is a good travel companion because it goes just about anywhere — including on most airlines.

At the outdoor demo area, **Sport Mania International** (also exhibiting at **HALL 2/4F/S0602**) is hosting a range of Tern bikes, including the diminutive Vektron D8 e-folder. Folding in 10 seconds flat, this folder, equipped with a Bafang M400 Drive System, is ready for any commute.



KTM Macina Fold

Chunky, puncture-resistant Schwalbe Big Apple tires eat up potholes, broken glass, and whatever else awaits riders on the mean streets. Above them sit mudguards to keep riders dry, while a rear rack takes care of luggage.

The 250-watt Bafang mid-drive motor produces a maximum speed of 25 kph (EU) or 20 mph (US), so it's as fast as a full-sized hybrid but small enough to store in the office or take on the train.

Lekuma **HALL 1/4F/N0824** makes small bikes for traveling around a large planet. Its E-Go electric model is not just tiny, but is air-plane-ready. Its lithium-ion battery is enclosed within the frame and meets airline safety standards so it can fly with its rider. The E-Go's 10-inch wheels — among the smallest found on any folding bike — ensure that its folded size is equally small, and at 13kg the bike won't be a drag.

A 250-watt brushless motor provides assistance, while integrated lights keep riders safe. They can be activated via a multi-function control panel.

Also electric is the Tromsø from **Zephyr HALL 1/4F/M1435** It's hard to tell at first that there is a battery and motor onboard — the lithium-



Onipax R1



Hasa Halo

ion battery is housed in the seat bag.

A 7-speed Shimano Tourney system drives the Tromsø's 20-inch wheels, and with other conventional bike parts including a stiff bar and stem, it rides like a full-sized bike.

The battery is removable, but even when attached the bike weighs 15.5kg. Its 250-watt hub motor and battery offer a range of around 50km.

The chunkier Macina Fold from **KTM HALL 1/4F/M0802** is a monster of an electric folding bike, but still collapses into a compact unit in a few seconds.

At the heart of the 20-inch bike is a smooth, silent Bosch Active Plus motor and a sizeable 500Wh PowerTube battery, integrated into the downtube.

A Shimano Nexus 8-speed hub provides a nice range of gearing, and a belt drive cuts down on maintenance. The Macina Fold rides like a much larger bike, and its step-through frame make it easy to use.

The battery is removable and can be recharged on or off the bike. Hydraulic disc brakes, mudguards, Busch & Müller lights, and a robust rear carrier make the Macina Fold a machine of a folding bike.

Oyama HALL 1/4F/N0506 updated one of its popular models to create the top-of-the-line CX E8D Series II e-folder.

A brawny 350-watt hub drive motor with torque sensor gets riders moving, while hydraulic disc brakes ensure they can stop. With long experience in folding bikes, Oyama builds in sturdiness with a light aluminum frame, Shimano 8-speed gearing, Schwalbe Big Apple tires, and double-wall alloy rims.

Equally tough are the CNC-machined seatpost, folding stem, and safety frame latch, all of which will withstand years of day-in-day-out usage. The bike includes a rear rack, fenders and kickstand — and Oyama even includes a handlebar bell.

Hasa HALL 1/4F/N0416 is expanding its range of folding bikes to accompany its conventional models, and has recently introduced electrified folders.

One is the Halo, which takes its cues from Hasa's established F1 range. The Halo mounts a 36-volt battery on a rack above the rear

wheel, which drives the front hub motor and headlight.

A 9-speed Shimano derailleur works with a sizable Saga Wing-foot 53-teeth chainring. Its 20-inch wheels come wrapped in fast-rolling 1.5-inch-wide Kenda tires, while mechanical Shimano disc brakes are powerful and low maintenance. The Halo weighs 18kg including battery, so riders can carry it as needed.

With more than two decades of bikemaking experience, Taiwan's **Onipax HALL 2/1F/Q0933** has always focused on safety and durability. It uses 3D forging technology to create folding joints that offer superior strength to many cheaper alternatives.

Now, Onipax is developing bikes with electric assistance and belt drives, with options ranging from the J160 with 16-inch wheels to the M27.5, with full-height 27.5-inch wheels.

One standout is the 11kg R1, a 20-inch bike that incorporates a Shimano Tiagra groupset, 6061 aluminum frame and OPX5.1 foldable and extendable stem, which Onipax makes in-house. It's fast enough for roadies who want a bike they can travel with without the hassle of carrying a full-sized bike.

Finally, if you're considering creating a folding bike yourself, **M-Nova HALL 1/4F/M0501** offers a design consultancy service. With services that range from creating a brand identity and designing decals down to the nitty-gritty of choosing components and configuration, the M-Nova team is ready to help guide your idea from dream to reality. Because the M-Nova team attends shows around the world, they can also help with planning launch events for maximum publicity. ■ **Joe Delves**



Oyama CX E8D folded



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OVERVIEW: GRIPS

GRIP 'N GRIN WITH BETTER CONTROL AND COMFORT

Grips and bar tape may seem like afterthoughts, but as one of only three contact points between rider and machine, they play an essential role in how a bike feels.



VP Simo BS11

The industry has put a lot of attention on the other two contact points with such innovations as ergonomic saddles and specialized pedals. But grips and bar tapes have also evolved, from the use of new materials, treads and shapes to the ways they mount on the bike.

Ergonomic grips now are often found on utility and trekking bikes with a more upright position in the saddle. Their articulated wing-shaped extensions offer better support for hands and wrists.

Intricate treads on a grip's surface help riders absorb shocks and vibrations while providing plenty of traction in bad weather.

Some grip makers are trying different materials, such as plastic from recycled PET bottles or a mix of silicone and rubber.

Motorcycle know-how lies behind the new Simo grips from **VP Components**, **HALL 2/1F/Q1018** which are built around a material made of liquid silicone rubber.

VP says this material combines a high friction coefficient in dry and

wet conditions for grip, while its softness and flexibility ease hand and lower arm fatigue.

The material is more durable than grips made of thermoplastic rubber, VP says, because it is more resistant to UV exposure and extreme temperatures.

It does not absorb water, and because it does not stain or bleach easily, the material accommodates a range of colors that resist fading.

VP Components offers two Simo grips. The slim, minimalist, and light BS06 model uses a slip-on installation without clamps. The BS11 has a single aluminum clamp for easy, twist-free mounting. The grips come with four dedicated grip zones with specific patterns.

Ergon, **HALL 1/4F/M0612** whose name is derived from "ergonomics," has been a pioneer in developing new grip shapes and diameters.

The wings of its comfort grips are much more articulated for trekking and utility bikes, while the GA3 model for mountain bikes comes with smaller extensions, combining



Ergon GA3 Single Twist Shift version

additional support for hands and wrists with the necessary freedom of movement for tricky terrain.

For 2019, the GA3 and popular GA2 models will come in Single Twist Shift versions that cater to builds with just one twist shifter on the handlebar — be it internal transmissions from Rohloff and Pinion or a one-by drivetrain from SRAM.

The left grip is full width, while the right is significantly shorter to sit next to a twist shifter.

For better grip, Ergon uses its proprietary Gravity Control Rubber



WTB PadLoc grips

of higher density rubber on the inboard end of the grips — which Spank dubs the Anatomic Thumb Zone — reduces friction when riders shift gears or use a remote dropper post lever.

The last thing a rider wants to feel on a technical section in rough terrain is a grip that unexpectedly twists on the handlebar. **WTB HALL 1/4F/L0826** offers a distinctive solution: Its patented Pad-Loc grips come with a wedge on the outer end that has been designed to exactly fit the ends of a specifically cut or designed handlebar.

WTB says this eliminates rotational movement of the grips on the handlebar. An inboard clamping ring keeps PadLoc grips safely in place.

WTB offers six grip surfaces, ranging from comfort-oriented models with wing-shaped extensions to super-short grips for use with twist shifters.

Since riders may not want special handlebars just to fit a set of grips, WTB also offers the Wafel grip, with extra-sticky rubber and a single inboard locking. Large conforming rubber blocks on the surface are spaced widely enough



Spike Grip from Spank

and intricate directional patterns on the surface. The clamping mechanism is neatly integrated into the grips' outer ends, so riders can use their full width.

Known for its pedals, handlebars, stems, and wheels, **Spank Industries HALL 1/4F/L1001** expands into grips for 2019. The Spike Grip comes in 30mm or 33mm diameters for different hand sizes. Both versions use an inboard aluminum clamp for easy, twist-free mounting and come in several colors.

At a width of 145mm, the Spike Grips make good use of the additional space on modern, extra-wide handlebars. Tapered outer ends resist impacts from

crashes and protect the handlebars.

A pattern of interlocking columns on the contact surface spaced along each fin provide traction and comfort. Large cut-outs in the plastic base of the Spank Grips improve damping. A smooth section made



Herrmans Luna Lock grips

for fit, and provide exit channels for muck and water.

While many of the grips in this roundup are designed for the aftermarket, Finnish manufacturer **Herrmans HALL 1/4F/M0202** targets



T-One Diamond grip

OE manufacturers with its versatile new Luna Lock Grip.

Herrmans uses two compounds of non-toxic materials that it sources from Europe. A harder compound at the core provides a solid foundation, while a softer compound on the surface incorporates gradual, spiraling grooves for grip and comfort, and reduces fingertip pressure.

The aluminum lockring comes in nine colors, and Herrmans can add a personalized logo on the outer edge for OE customization.

T-One, HALL 2/4F/S0232 a subsidiary of Thunder Graphic, introduces the Diamond for 2019, which comes on the heels of its innovative Bricko grip. The grip is segmented so riders can customize the width. An improved locking structure eliminates twisting or play, and the angular diamond shape of the grip's surface adds plenty of traction.

T-One is also launching grips made of transparent rubber that won't conflict with handlebars that incorporate intricate finishes and designs. The company also promises to show two new grips at Taipei Cycle that were not finished at press time.

Known for its brakes, tools and parts, **Clarks HALL 1/4F/L1012** launches an ergonomic grip at Taipei Cycle. The 130mm-wide

C-G242 uses a TÜV-certified thermoplastic rubber compound with wing-shaped extensions for lots of comfort and support. The outer end is closed and padded for safety. An inboard clamp allows for quick mounting.

As one of the world's biggest saddle makers, **Velo Enterprise HALL 2/1F/Q0614** knows a lot about contact points.

Velo applies its proprietary Microtech technology to a full range of grips, made for styles from conventional and electric mountain bikes to trekking and utility bikes. The manufacturing process creates detailed texturing on the surface to boost friction and the rider's grip.

Higher-end models use anodized aluminum clamps for mounting, while other models use clamps made of reinforced plastic.

Sustainability is the focus of **Apex Products HALL 2/4F/S0224** with its PET Bike Grips. The contact surface is made of a woven plastic derived from recycled PET bottles.

The grips come in five colors and are 130mm wide, with a conventional round shape. A slightly wider version uses wing-shaped extensions for support.

■ **Laurens van Rooijen**



Clarks C-G242 grip

EUROBIKE, NEO TEAM UP FOR NEW OCTOBER TRADE SHOW IN BANGKOK

A new bicycle industry trade show for the growing Southeast Asia market will debut Oct. 3-5 in Bangkok, Thailand.



Stefan Reisinger (left), head of Eurobike, and Sakchai Pattarapreechakul, President of N.C.C. Exhibition Organization Co.,Ltd. (NEO), celebrate the signing of a joint venture to produce the new ASEANBIKE show in Bangkok.

It's a 50-50 joint venture between Eurobike and N.C.C. Exhibition Organizer (NEO), a Bangkok company that organizes a June consumer bike show in the Thailand capital. The new show will be called "ASEANBIKE powered by Eurobike."

ASEAN is the acronym for the 10-country Association of Southeast Asian Nations. Eurobike head Stefan Reisinger said the region has been an increasingly important sourcing, production and export market for bikes, electric bikes and parts. It also represents a growing consumer market.

"Traditionally strong, these markets have been important in the fields of sourcing, accessories and apparel for years. Regardless, Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar, and Cambodia are also developing an increasing sports and leisure culture, as well as a growing awareness of sustainable mobility," Reisinger said, listing the 10 member nations of ASEAN.

Organizers say Southeast Asia is an increasingly attractive manufacturing base for Western brands, not least because of punitive tariffs and anti-dumping duties affecting Chinese-made goods.

"Many of the ASEAN market countries see increasing sales and rising potential for the international bicycle and micromobility industry," Reisinger added. "In addition to a number of local manufacturers, brands, import-

ers and wholesalers from Thailand and neighboring countries, ASEANBIKE has received commitments from major OEMs and suppliers in Taiwan and China, as well as prominent Western commitments."

NEO, the local organizer, said the show will have all of the hallmarks of a major trade show.

"ASEANBIKE will offer multiple exhibition and meeting options, from classic trade show booths to OE meetings, importer meetings and retailer meetings, right through to test/demo tracks, group rides and more," NEO president Sakchai Pattarapreechakul said.

NEO will change the name of its June consumer show from International Bangkok Bike to Bicycle Super Sale to reduce confusion between the two.

NEO projects the new show will draw more than 55,000 visitors from around the world, who will transact business worth more than 4,000 million baht (€110 million; \$126 million).

The show is open to OEM manufacturers, brands, importers and distributors as well as retailers and service providers.

ASEANBIKE will take place at the Impact Exhibition and Convention Center in Bangkok, a state-of-the-art trade fair and conference center with excellent infrastructure and transport links.

For more information, visit www.asean-bike.com and www.eurobike-show.com.

■ **Tom Kavanagh**

E-BIKES AND SOPHISTICATED DRIVETRAINS SET OFF A CHAIN REACTION AMONG CHAIN MAKERS

Recent drivetrain developments have touched off a literal chain reaction. Bicycle chains have been significantly redesigned to be compatible with the radical changes that the industry has seen in other drivetrain components.



KMC e12 e-bike chain

To accommodate 11-, 12-, and now 13-speed drivetrains, with cassette cogs of up to 52 teeth, chains have gotten narrower, to accommodate the closer spacing between cassette cogs, while their links have gotten shorter.

Until a few years ago, chains were built for human-powered bikes. Now, with the explosive growth of e-bikes, chain manufacturers have to create solutions that can stand up to bikes that have not only more gears, but more power.

Early in the e-bike revolution, e-bike brands had to rely on traditional bicycle chains because chains made for the rigors of electric motors didn't exist. Now, e-bike brands and riders can choose from a selection of chains that are hefty enough to withstand the higher forces generated by e-bike drivetrains and outlast traditional chains.

You could call these new chains the "missing link," because they ensure that these fancy, sophisticated new drivetrains will keep running smoothly for a long time.

KMC HALL 2/1F/P0114 presents its e12 e-bike chain for 12-speed e-

bikes. KMC developed its e-bike chain series in collaboration with motor manufacturers to fit both mid-drive and hub motor systems.

The new chain fills a demand among cyclists who want a 12-speed setup on their e-bikes. KMC's new patented riveting technology enables the e-bike chain to withstand higher torsional stresses created by mid-drive motors. With a tensile strength of 1,050kgf, KMC said the chain exceeds the international standard by 30 percent.

KMC also offers a series of e-bike sprockets and chains for OEMs. The "Chain Mate" series features gear teeth and chain angles optimally seated with the chain rollers for more efficient power transmission and increased chain life. KMC guarantees that a Chain Mate combo featuring its e101 EPT chain, paired with 3mm sprockets, will last for at least 10,000km (6,200 miles).

Taya Chain HALL 2/1F/Q0302 has alluded to the development of a 12-speed e-bike chain, but its focus at Taipei Cycle is the new El Onze-117 11-speed chain.

The chain is the latest addition to Taya's Onze line, but comes with

notable distinctions. Weighing 230g (8 ounces), the El Onze is 40 percent lighter than rival 11-speed chains, according to Taya.

Taya treats the steel chain with its Diamond Hard Technology to resist fatigue, stretching, and surface wear. A self-lubricating groove design in the plate traps lube at the link joints where it's most effective.

Taya's new Onze attaches the roller to the inner plate for smoother, quieter shifting. While the chain life of previous Onze chains maxed out at about 7,000km, Taya says the El Onze-117 will keep rolling for 8,000km.

When e-bike drivetrains went to

frames equipped with mid-drive motors, starting with the 2020 model year. Gates already supplies belt drives to 100 e-bike brands worldwide.

In collaboration with Shimano, Gates will launch a new series of sprockets, called YMN, that are compatible with Shimano's new Nexus Inter-5E internal gear hub for e-bikes, and with the Shimano Steps mid-drive motor system.

Other e-bike products Gates is debuting at Taipei Cycle include new front sprockets for the Shimano Steps E6100 mid-drive system for city and trekking bikes, and pre-production sprockets for forthcoming



Gates translucent Honey Belt

11 speeds, Taya responded with the e-Onze 111 chain. In an email, Taya's brand marketing manager, Tim Chang, remarked that 12-speed e-bike systems are a key focus in the near future.

If that's the case, perhaps we'll see more 12-speed chains from manufacturers like **Yaban Chain HALL 2/1F/Q0130** and **PYC (Lixing) Chain. HALL 2/4F/R1409**

From the beginning, **Gates Carbon Drive HALL 1/4F/L0717** designed its unprecedented carbon belt drive to sustain heavy loads, making it ideal for e-bikes. For proof, Gates conducted a laboratory test at peak load of its CDX CenterTrack belt. The company says the belt drive survived for 10,000 miles (16,000km), compared with 275 miles for an standard e-bike chain.

Now, Gates adds a new option to its premium CDX and value-oriented CDN belt drives for e-bikes in response to requests from product managers. Its new 137-tooth belt length is designed for larger e-bike

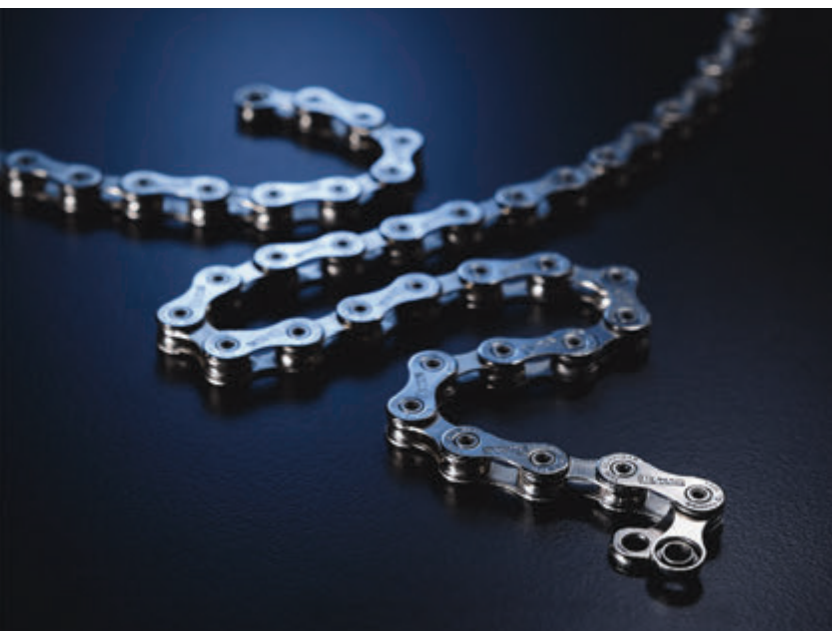
ing Bosch mid-drive motors.

Finally, for anyone curious about the materials science behind the Gates carbon belt drive, the company is showing a special edition honey-colored belt at its both. The translucent Carbon Drive Honey Belt shows the carbon fiber cords inside, providing a unique window into the science and technology behind the Gates Carbon Drive.

The distinction for the most radically reimagined chain goes to **SRAM HALL 1/4F/M0302** for its Red chain, introduced in February as part of its Red eTap AXS 12-speed groupset (See the Wednesday issue of the *Taipei Show Daily* for more on the groupset).

The chain's defining feature is its flat top, a trademarked design exclusive to the Red eTap AXS. SRAM made the chain's plates thinner to be compatible with the system's redesigned cassette, but added material to the top of the chain plates to maintain chain strength.

■ **Wendy Booher**



Taya El Onze-117 11-speed chain



SRAM's unusual flat-top chain for the Red eTap AXS 12-speed groupset

OVERVIEW: ASIAN CYCLING APPAREL

BIKEWEAR BRANDS LEARN TO FIT ASIAN CYCLISTS, ASIAN CLIMATES

Asian manufacturers crank out a lot of cycling hardware. But as the region's cycling market grows, there's increasing need for better "software" — apparel that fits Asian riders and Asian climates.



Ohio Sport One Piece manga-themed jersey

Taiwan's cycling scene provides a good example of some of these differences. From cycling lanes and bikeshare systems in the center of big cities to Taiwan's Cycle Route No. 1 that circumnavigates the island, Taiwan has put a lot of effort into promoting cycling.

Large groups of cyclists riding early in the morning or after work are common sights in Taiwan. And with the KOM Challenge, the country hosts one of the cycling world's toughest sporting events. No wonder Taiwan successfully markets itself as a "bicycle kingdom."

But anyone who's ever ridden a bike in Taiwan knows that its hot, humid climate is a formidable obstacle. It brings out the sweat even without any climbs to conquer.

In the northern reaches of Asia such as Japan and South Korea, the requirements for functional bikewear are similar to those in Europe and North America. Head to the more tropical regions of Taiwan, and especially Southeast Asia, and the climate poses a more serious test.

"The northern parts of Asia have a cooler climate similar to Europe, and therefore product demands in those two regions might not be too different," said Bryan Fanchiang,

general manager of **Frontier Sport** (at **MET HALL 2/4F/S0826**). "But in the more southern parts of Asia, sun protection is a really big factor that we need to consider when developing products. As you know, the weather in Taiwan is hot and humid for most of the year."

By using a generous amount of thin, mesh-like fabric that still offers sun protection of UPF 50+, Frontier Sport's athletically cut Cosmos jersey and Alchemy bib shorts are examples of bikewear that is highly breathable and fast-wicking, but offers plenty of protection from UV rays.

The jersey and bibshorts are made of high-quality Italian fabrics, and the shorts incorporate a Fian-dre chamois from Elastic Interface. Both pieces are highly functional, and the shorts offer some compression.

For riding at dawn or dusk, Frontier Sport adds reflective elements in strategic places.



Shimano Climbers jersey & arm sleeves

Another way to protect skin from the sun without adding unnecessary insulation or bulk is by wearing super-thin arm and leg covers.

Shimano HALL 1/4F/M0814 has expanded its apparel line with these types of arm and leg sleeves, available in black or white.

Shimano's lightweight Evolve jersey staves off heat and humidity with a mesh inner layer that offers full UPF 50+ protection.

Shimano's coolest jersey, the Climbers, is constructed entirely of dual-layer mesh fabric panels, ideal for those hot and humid days.

Climate considerations aside, one of the biggest differences between European and Asian bikewear is sizing.

"A size large in Asia equals a size medium in Europe and a size small in North America, so this is an important differ-

ence to keep in mind," said Jerry Kao of **Ohio Sport HALL 1/4F/N0020** and of Sea Out Wear.

The proportions change when apparel shrinks, adding another wrinkle to the design process.

"For better looks, female cyclists in Asia prefer to wear shorter bibshorts. We have created a model called Deco with a shorter inseam length," said Monica Santini, CEO of the Italian bikewear brand **Santini HALL 1/4F/L0228**.

"We also produce similar bibshorts for men with the Mago series to meet the needs of the Asian market, and we offer some products in double- or even triple-small sizes."

But shorter shorts aren't always acceptable, especially in conservative countries. So Santini also developed the Sfida women's tights for the Middle East and some Southeast Asian countries.

The Sfida covers a female cyclist's entire legs and are made of very thin, fast-wicking Lycra Thunder Bike with built-in UV protection and compression.

It's not just an issue of morality. Many Asians believe a suntan is unhealthy and unfashionable and prefer to cover their skin.

Bikewear brands also have to account for Asian preferences for different patterns and color palates than cyclists in other parts of the world.

"In Asia, many cyclists like bright colors and styles that resemble those of racing teams. In contrast, European artwork design often is simple and elegant, relying on few and dark colors," Kao said.

Ohio Sport offers a racing series with bold, colorful designs and big lettering. Under a licensing agreement with the cult Japanese manga series *One Piece*, Ohio Sport sells manga-themed jerseys with eye-popping colors and designs that remain fully functional pieces of cycling apparel.

Santini has taken a further step toward incorporating local culture in its apparel. Its Taipei representative recently began a cooperation with Sabra Andre, a Taiwan indigenous artist and fashion designer, for a series of cycling jerseys, gloves, caps and socks called Vulun.

Andre references the folklore of the Paiwan tribe of southern Taiwan by applying a distinctive, diamond-shaped pattern based on the skin



Santini Vulun collection

of the hundred-pace pit viper. The Paiwan tribe worships the highly venomous snake as the ancestor and protector of all humans.

Andre created a stir with this folk-oriented approach at the Vancouver Fashion Week in 2017 and is now applying his way of reviving classic folk motives to Santini's bikewear.

Because Europe — and the Flanders region of Belgium in particular — are popular destination for Asian cycling enthusiasts, **Wave One HALL/4F/L0716** has created the Kapelmuur brand.

Wave One is a sportswear brand from Japan. Despite the name, and the generous use of the Flanders lion as a decorative element, the Kapelmuur line is designed in Tokyo and blends function and high quality with a very distinctive style.

The garments are not as thin as some of the other products described above, and built-in sun protection only goes up to UPF 25.

In addition to race-oriented skin-suits and tight-fitting jerseys, the Kapelmuur brand has a big selection of casual wear with built-in functionality, along with urban commuting bags.

■ **Laurens van Rooijen**



Wave One Kapelmuur apparel



Frontier Sports Cosmos jersey

GIANT'S TAICHUNG BIKE STORE IS A GIANT

You'd expect Giant, Taiwan's No. 1 bikemaker, to have an impressive retail store in its home city of Taichung. The Giant Flagship Store Taichung does not disappoint.

It's based in the multi-story Giant Cycling World building, which also houses the headquarters of Giant Taiwan and several other Giant businesses, including its travel agency, Giant Adventure, and a Giant School Training Center.

With a sales space of nearly 600 square meters (6,450 square feet), it is the largest of Giant's five flagship retail stores in Taiwan, three of which concentrate on the company's Liv women's brand. That doesn't include another 300 Giant Stores across Taiwan, most of them owned by franchisees.

Many store owners make their way to the Taichung store at some point, said Phoebe Liu, international chief brand officer for Giant.

HALL 1/4F/M0820

"Not only for training, but also to inspect our flagship store. They like to pick up ideas on how to present our bikes at their best," she said.

Taiwan is still a road bike market, said Alice Cheng, managing direc-

tor of Giant Taiwan. Road bikes account for about 30 percent of the flagship store's sales, while the Liv brand accounts for about 30 percent of its road bike business.

Although the Taichung store has a handful of e-bikes on display, most of them are inexpensive moped-like models like those found in China — not the high-end, European-style pedelecs with mid-drive motors that Giant sells in other parts of the world.

The two women see few alternatives to road bikes in the Taiwan market. The mountain bike market is limited, they say, because many off-road trails are closed to MTBs. That means there is even less potential for electric mountain bikes.

If electric bikes are going to succeed in Taiwan, they will probably be in the city and mobility sector, Liu said. "But even there it will be difficult. Taiwan is a scooter nation, and there are already some good e-scooters on the market," she

added.

The Taichung store is testing a customization program for enthusiasts. It offers two Giant and one Liv road bike model and allows buyers to customize the frame color and some of the bike's parts and components.

The store also has a space for "gamified" road bikes, which pair Giant bikes with virtual reality roller trainers.

Giant continues to improve its core line of sport road and performance bikes, rolling out such continuous upgrades as better electric shifting and frames that are lighter and more aerodynamic.



Giant's giant office building in Taichung houses its largest retail flagship store in Taiwan.

And it is also turning to its sister companies, like Giant Adventure for bike tours, to help promote its business. "With Giant Adventure we are putting more people on bikes," Cheng said. ■

MERIDA'S TAICHUNG STORE IS A WORK OF ART

It's not unusual to find a coffee bar in a bike shop. But a shop that mixes bikes with antiques, furniture and art?

That is what you'll find at the Merida Mulan store in Taichung, one of Merida's flagship outlets in Taiwan. Its owner, a franchisee, decorates the bike shop with antiques and art, and runs an antique store in the same building.

The store also has an outdoor café, which Jimmy Tsao Monghan, the shop's mechanic and spokesman, described as a green oasis in urban Taichung.

"The decorations, the palm trees and the other greenery make our shop so special that Merida and many of its international customers visit us," he said. "They take the opportunity to have a drink in our café and take a break from everyday life."

The two stores are side-by-side, so customers who come to look at Merida bikes often wind up examining the sculptures, furniture and other artworks on display, and vice versa.

Monghan said Merida franchisees have a certain amount of freedom, but 90 percent of the



Antiques and bikes mingle at a Merida flagship store in Taichung.

goods on display must be from Merida. "We may also carry other brands, but only if Merida itself has no products in a certain category," he said.

Like many Taiwan bike shops, Merida Mulan has been affected by a slump in road bike sales. "Generally speaking, 2016 was not only the beginning of a poor year for bike sales nationally, but a bad sports market year overall," he said. "Since then, Taiwan's entire sporting goods and bicycle market has been troubled." ■

TAICHUNG'S MAN OF STEEL

When it comes to bikes, Jerry is old school, and proud of it. He has been in the bicycle industry for nearly 20 years, working in a factory for six of those years and managing a bike shop for nearly 13.

But he prefers old-fashioned steel to the new-fangled bikes that come out of most Taiwan factories these days. Carbon fiber, Jerry said, "is not my world. I'm totally into steel and all of the old classic stuff. I wanted to do something in this direction."

So he opened the Brovo Café three years ago, and has transformed it into a gathering place for like-minded cyclists. Customers can order coffee, made with an authentic Italian espresso machine, or dishes prepared by Jerry or his two employees.

"My customers also prefer steel and maintain their classic bikes. This is where they come together. The Brovo Café has developed into their meeting place."

Food and coffee sales are Jerry's main revenue source, but he also repairs classic road bikes. Between the tables in the restaurant are beautifully restored

classics from Colnago, Eddy Merckx, Masi, and Pinarello.

"I only sell bikes to customers who are into old steel road racing bikes like me," he said. "Within this scene we have made a name for ourselves that allows me to combine my hobbies — classic road racing bikes and a coffee bar. We can live well in this environment. And we are together with our customers, who are also our friends, almost every day. What more do you want?" ■



Jerry, owner of the Brovo Café, focuses on classic steel road bikes — and Italian espresso.

TOURING TAICHUNG BIKE SHOPS BY E-BIKE

Industry journalist Jo Beckendorff led members of the Taiwan bike industry on a recent e-bike tour of Taichung bike shops. These were some of the shops they visited. (Stories and photos by Jo Beckendorff)

‘FROM WISCONSIN TO TAICHUNG’ IS THIS TREK STORE’S MOTTO

You won't find electric bikes on display at the Trek Store Taichung, which occupies a large, well-lit space in the headquarters building of Sport Mania.

On first glance, it's pretty clear that the Trek Store is focused on selling road bikes. In fact, sales director Vincent Hsu said, "We were even able to increase sales of racing bikes" in 2018. "Mountain and children's bike sales were down, however."

"From Wisconsin to Taichung," a wall poster reads, referring to the location of Trek's U.S. headquarters. And with some 1,000 square meters (10,764 square feet) of floor space, there's plenty of room for a range of Trek bikes.

The store also sells bikes and accessories from the Tern and Biologic brands of Taiwan, as well as equipment from Nike Golf. In the basement is a studio for spin classes.

It's an inviting space, and uses concrete slabs for a clean, contemporary look. Concrete ramps connect the store's three levels so bikes can be rolled easily from one floor to another.

Sport Mania HALL 2/4F/S0602 has tried to feature other brands at this store, and at a previous location in Taichung, but turned to Trek in 2017.

Sport Mania's founder, Elsa Huang, has been in the Taiwan bicycle business since 1993. Many will associate her with the Czech brand Author because she represents Author through her sourcing agency, **Asiana International. HALL 1/4F/N0008**

Huang had opened an Author store at Sport Mania's previous headquarters in Taichung, but eventually closed it after moving to the current location.

Sport Mania also tried using the space as a flagship store for Storck and for Pinarello.

Now, Hu said, Trek bikes account for 70 to 80 percent of the store's total sales, with the rest from Tern and Biologic and from Nike Golf.

"People just want premium brands," Hu said. "With Author, we now are only selling frames in Taiwan."

Hu said the Trek Store Taichung intends to do more promotion of

its mountain and gravity bikes, while continuing to keep customers interested in road bikes.

He noted that off-road cycling is not currently that popular in Taiwan.

"First we have to offer training within the off-road sector. Cycling off-road without practice doesn't work. A bit of practice is a must," he said.

Meanwhile, Sport Mania opened a smaller Trek Store in Taipei last November.

Henry Chen, manager of the Taipei store, said it is completely dedicated to Trek bikes — "everything from road to MTB to kids' bikes."



Vincent Hsu (left), manager of the Trek Store Taichung, with Henry Chen, manager of the newer Trek store in Taipei.

APPAREL BRAND FMA OWNS TAIWAN'S ONLY SPECIALIZED CONCEPT STORE

As an indication of how different the Taiwan IBD market is to those in other countries, the Specialized Concept Store in Taichung — the only one in Taiwan — is owned by a big textile supplier to the bikewear industry.

Yu Yuang Textile Co., which owns the apparel brand **FMA, HALL 1/4F/N1413** established the store in 2009. It is the only Taiwan bike shop that is dedicated to Specialized, after the company abandoned another concept store in Taipei.

Because of the decline in the road bike market, store officials say they are counting on Taiwan cyclists to turn to mountain bikes, which has never been a strong category for bike sales.

"We just revived our pump track in the backyard. Even if it's very small, we think we have to offer people something to discover mountain bikes for themselves," said Yu Hsin Hsieh, the store manager. "That's why we want to focus more on this off-road sector in the future."

The store's sales manager, who gave his English name only as Light, said the store did good business selling Specialized road bikes until about 2015 — but road sales fell off the cliff starting in 2016. That's been a big concern for the store, which relied on road bike sales for some 90 percent of its business.

Light said urban and commuting bikes have never been particularly popular, especially given the relatively high prices that a Specialized commuter bike sells for in Taiwan.

Specialized markets a well-re-



Employees of the Specialized Concept Store in Taichung, including manager Yu Hsin Hsieh (middle left) and sales manager Light (middle right)

garded line of electric mountain bikes around the world, but only a handful have been sold in Taiwan. The Taichung store doesn't stock them because of their high retail prices.

"Perhaps 10 units of the Levo have been sold nationwide through specialist dealers," Light said, referring to Specialized Turbo Levo models. "But we weren't among them. We didn't take e-bikes because they are simply too expensive for our market."

As befits its owner, the Specialized store sells mostly FMA bikewear, not Specialized. Light noted that Specialized's apparel

line is tailored mostly to Western cyclists and doesn't fit Asian riders. "That's why we are relying on our own premium brand," Light said.

Covering about 200 square meters (2,150 square feet) on two floors, the Specialized Concept Store is significantly smaller than its Trek counterpart. But it incorporates accents of "Specialized red," along with logos for Specialized and FMA.

Next to the repair shop is a counter with bar stools and a coffee machine, so customers can watch mechanics fix their bikes.



The modern, spacious Trek Store Taichung also sells bikes and accessories from Tern and Biologic and equipment from Nike Golf.

THEY COME FOR LUNCH, AND STAY TO BUY BIKE PARTS

Taichung retailers like to combine bike shops with cafes, and 185 Warehouse is one of the largest in the city.

The 185 Warehouse Bikeshop occupies the same building as the 185 Warehouse Café-Restaurant, which offers a chic roof terrace on the fourth floor.

The businesses are owned by the Wang family, which once owned the Kenton bicycle factory that made Huffly bikes. Kenton no longer exists, but the family has a bicycle factory in China.

"With Kenton behind us, we once sold all over the world. Today we are concentrating more on our home market and some neighboring national markets," managing director Tim Wang said. The family owns the G2C bicycle brand, and its factory specializes in OE and private label production.

Tim and his twin brother, Nick, manage the bike shop, while their sister, Rachel Wang, oversees the café and restaurant. The three are the children of Taster Wang, who owns the building.

The bike shop focuses on road bikes, which did good business until about two years ago. But Taiwan's bike slump has put pressure

on the brothers. "Even if there is still something going on with innovations such as disc brakes, etc., the heydays are definitely in the past," Tim Wang said.

185 Warehouse still sells a lot of parts and accessories, and the restaurant keeps customers coming in the doors.

"Many people come here for lunch, and then they stop by to buy one or another part," Nick Wang said.

Scott is the store's best-selling bike brand. 185 Warehouse carries other premium brands including Cannondale and Cube.

Despite the slump in road bike sales, the Wang brothers see few alternatives in the market.

"Mountain and urban bikes have a hard time in Taiwan. The local bike boom was based on nothing but road racing bikes," Tim Wang said.

Not that they haven't tried other things. The store has stocked pedelecs from BESV and Klever, but sales haven't amounted to much.

"We sold BESV in Taichung be-



Twin brothers Nick (left) and Tim Wang manage the 185 Warehouse Bikeshop.

fore they opened their own mono-brand store not far from here. So we assume that they were not so satisfied," Tim Wang said. "In terms of price, they are in direct competition with e-scooters. And scooters with combustion engines are even cheaper. These are not good sales conditions."

Still, Tim and Nick Wang plan to stick to their current strategy —

selling high-quality bikes and accessories — and hope to ride out the downturn. And they plan to continue enjoying the synergies between the restaurant and the bike shop.

After all, people don't always need a new bike — but they always need to eat. And, sometimes, they need a new part for their bikes.

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W/DYNAMIC DISPLAY
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NEW PRODUCTS

RELIC CLIPLESS PEDAL ADAPTORS

Relic's Clipless Pedal Adaptors solve a problem for riders who need to swap between SPD shoes and trainers without having to change their pedals. They are light and easy to install, and are a far cry from more fragile plastic models thanks to their construction of cast aluminum. The adaptors offer a similar level of grip to the best flat pedals.

HALL 2/4F/S0428



KMC e12 E-BIKE CHAIN

The new e12 not only has all of KMC's 12-speed chain technology but also has increased strength and chain life to withstand the rigors of e-bike systems. It was developed in collaboration with major motor manufacturers to fit all mid-drive and hub motor systems. A new patented riveting technology, KMC Shield Tech, achieves pin power of over 450kgf, so the e-bike chain can withstand higher torsional stress and endure over 1,050kgf of tensile stress generated by mid-motors.

HALL 2/1F/P0114



DAYU ENTERPRISE COMPRESSION GARMENTS

These clever compression garments help sporty bodies. DaYu Enterprise's extensive range of private label sports compression socks, sleeves, shorts, and pants offer medical-grade precision. They are available with variable levels of compression. The seamless pieces run all the way up to size 5XL. With low minimum orders, Dayu lets brands develop their own ranges easily and with low risk.

HALL 1/4F/N1321



ALU-MATE AA6530 E-MOUNTAIN BIKE FRAME

Based around a 27.5-inch wheel, this capable mountain bike frame is compatible with the popular Shimano Steps E8000 and E8020 mid-drive motor systems. Available in three sizes, and with a chunky 150mm of rear wheel travel, it's happy taking on the most taxing trails. Its oversized downtube is capable of neatly and safely accommodating a large-capacity battery for long-range riding.

HALL 2/4F/R0304



SHUZ TUNG 3D LASER XQCUTTING

Fast, clean and efficient, this machine can cut tubing including stainless, titanium alloy, and aluminum. It handles different angles, curves, and irregular shapes, and cuts hollow round, square, and rectangular holes. CAD/CAM software previews cutting results based on a customer's 3D drawings.

HALL 1/4F/M0535



KMC X12 CHAIN

12-speed drivetrains require a narrower chain that can operate at extreme angles. The increasing range of teeth in cassettes and narrower space between sprockets put KMC's precision engineering to the test. Components needed to become thinner and stronger to fit into these new drivetrains. KMC applied its proven X Bridge technology, which creates more space inside each link. Asymmetrical beveled chamfers allow for precise operation, resulting in much smoother shifting performance while maintaining durability.

HALL 2/1F/P0114



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THE BEB004 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 (4) SEALED CARTRIDGE BEARINGS ARE SPACED TO DISTRIBUTE INTERNAL FORCES WHILE MAINTAINING HIGH ROLLING EFFICIENCY. THE BEB004 IS DESIGNED FOR USE EXCLUSIVELY WITH DISC BRAKES USING A TRADITIONAL 6-BOLT ROTOR MOUNTING PATTERN. THE BLACK ANODIZED SHELL WITH SUBTLE LASER ETCHED GRAPHICS ARE DURABLE AND SURE TO COMPLIMENT ANY BIKE.

VISIT ALEXRIMS AT BOOTH Q0714

NEW PRODUCTS

BAFANG ELECTRIC (SUZHOU) M420



The M420 is a clean, compact and dynamic e-bike drive system. Bafang performed a facelift on its well-established M400 (formerly the MAX Drive). The M420 uses the same frame interface. It's rated at 250W and has the same powerful 80Nm of torque and EU-legal speed limit of 25kmh. Compatible with the 450 Wh inTube or various rack type batteries plus a number of new displays, with Bluetooth and USB-out functions, it gives designers ample options for contemporary city and trekking e-bikes. **HALL 1/4F/M0409**

SPANNINGA/ BASIL COMMUTER CARRIER

Basil's new Commuter Carrier includes technology and input from several leading brands, including Spanninga. Its contribution to keeping users safe is an integrated rear light with Contour Lighting Technology. The tight and precise strip design enhances the curved lines of the carrier while enabling a previously unattainable level of light diffusion. **HALL 1/4F/M0310**



ALEXRIMS RECON 3.0 WHEELSET

The Recon 3.0 is an uncompromising enduro and all-mountain wheelset. Its tubeless-ready full-carbon rim is laced to hubs of Alex's own design using bladed straight-pull spokes. Branded under the Bear Pawls label, it features Boost spacing and tool-free serviceability with architecture that's light yet durable. Available in 27.5- or 29-inch diameters, wheelsets weigh 1,604g and 1,706g per pair, respectively. **HALL 2/1F/Q0714**



LEZYNE MACRO DRIVE 1000 E-BIKE LIGHT

The high-spec electric bike light clips straight into batteries from top makers including Bosch, Shimano, and Yamaha so it doesn't need a separate power source. Its durable, CNC-machined aluminum construction dissipates heat. Two high-output LEDs deliver up to 1,000 lumens, while its enhanced maximum optical reflection lens has built-in side visibility. With an intelligent auto day/night dim mode, the light it casts is always tailored to the conditions. **HALL 1/4F/L0315**



FIDLOCK TWIST UNI CONNECTOR + UNI BASE

The Fidlock Twist Uni Connector integrates every bottle into the innovative Twist system, a magnetic-mechanical cageless bottle holder. It's unobtrusive, easily used during rides, and holds the bottle securely under strain. Together with the universal Twist Uni Base, it mounts quickly and easily anywhere on the bike with the use of elastic, reclosable zip ties. **HALL 1/4F/L0417A**



WAHOO KICKR

Building on the success of Wahoo's line of Kickr Smart Trainers, the new edition delivers a virtually silent experience, along with a heavier flywheel to give cyclists the inertia they need to recreate the feeling of riding outdoors. Housed in a carbon steel body for durability, its compatibility expands to include Wahoo's new Kickr Climb indoor grade simulator, and a new Bluetooth and ANT+ powered fan, the Kicker Headwind. **HALL 1/4F/L1102**



CHOSEN ROAD TC HUB

A road-going version of Chosen's Toothed Coupling design hubs, the TC has a reinforced freehub mechanism for excellent power transmission to support those big, out-of-the-saddle efforts. A robust design ensures a long service life, and they accommodate straight-pull spokes for better efficiency. Made of lightweight alloy, the hubs form the heart of a fast and efficient wheelset. **HALL 2/4F/RO114**



CHEDECH AIR MODEL FOLDING BIKE

A folding bike that weighs the same as a Tour de France racer? At 6.8kg, the Chedech Air is the lightest bike the brand produces. Like every model, it uses carbon fiber for all mainframe components. A single-speed drive paired with Shimano Dura-Ace components helps shed even more weight. Because it uses mid-sized 18-inch wheels, the Air balances handling with the need for a compact fold. **HALL 1/4F/L0405A**



GPS TUNER RANGER EMOBILITY APP

Extend the capabilities of an electric bike, e-scooter or e-skateboard with the eMobility app, which includes all important features and makes them accessible through a clean and intuitive interface. Riders can visualize the range of their light electric vehicles and receive routing with turn-by-turn voice guidance. It's able to record trips, while a diagnostics function lets users check the LEV's health status and wirelessly update its firmware. **HALL 1/4F/L1226**



LIH JAW FOLDABLE LOCK

With eight articulating sections, this unique lock is employable across a variety of different angles, yet remains space-efficient and easily folds and stores. Housed in a patented two-way mounting bracket, the lock fixes to bikes with tubes of diameters from 25mm to 38mm. Its hardened alloy steel construction and cylinder design resist theft attempts with saws, drills, cutters, and hammers. **HALL 2/1F/Q1131**



NEW PRODUCTS

MESSINGSCHLAGER ROYALBABY SPACE SHUTTLE

The Space Shuttle from RoyalBaby is not only an eye-catcher with its unique design, but is also very light thanks to the use of magnesium, which makes it comfortable and stable. With front and rear disc brakes, braking is just like on grown-up mountain bikes. **HALL 2/1F/Q0117**



TIOGA EDGE 22 ALL-MOUNTAIN

The Edge 22 upends convention with an open center design that adds cornering edges closer to the middle of the tread, enabling engagement as soon as a turn is initiated, and keeping engaged with the terrain over a wider range of lean angles. It's initially available in a 27.5x2.50-inch size, with a 29x2.50-inch option to follow. **HALL 1/4F/L0725**



ZEFAL ESPION Z56 MIRROR

For leisure cyclists, or speedy e-bikers, this mirror is one of the largest on the market. The high-tech stem boasts anti-vibration properties that aid the mirror's stability and improve the cyclist's vision. Fitted with an unbreakable ABS chrome material, the lens stays safe in case of a fall. **HALL 1/4F/M0301**



ARKIETECH TUBING

Sourcing its raw material from the United States, Arkietech specializes in alloy tubing, including stainless steel and air-hardened chromoly. Precision drawing technology ensures its products always meet necessary tolerances, while exceeding their material's standard mechanical performance. Through drawing, forming, swaging and hydroforming, its aerospace stainless KVA MS3, and military-spec chromoly Velospec products deliver high tensile strength in a light package. **HALL 2/4F/R1323**



FUNKIER WAREHOUSE BIB

Funkier's warehouse bib has many slimline pockets to carry everything a cyclist may need on an adventure. These include four variously sized front side pockets, two rear stash pockets on the hips, and a horizontal back pocket with zipper and reflective inserts designed to store a phone, wallet, or money. On the back is a final, lightly padded storage space that accommodates a 1.5-liter water bladder. **HALL 1/4F/M1413**



HYC TAIWAN LFT

HYC recycles carbon fiber into long carbon fiber thermoplastic composites (LFT), which combine carbon fibers with a thermoplastic resin in a pellet that can be recycled and repeatedly reused. It can form a range of lightweight shapes, and is injection-moldable rather than being laid-up. This speeds up production, reducing the costs and energy, and improving the product's environmental credentials. **HALL 2/4F/R1313**



FULL SPEED AHEAD KFX LIGHT DIRECT MOUNT BB392EVO MODULAR CRANKSET



FSA's new lightweight aluminum modular mountain bike crank is forged and then precision CNC machined. Combined with advanced bonding technology, this reduces weight while increasing stiffness. Available in single and double chainring configurations to meet all gearing needs, it can be paired with FSA's MegaTooth 1x chainrings for maximum performance in extreme conditions. **HALL 1/4F/M1213**

MESSINGSCHLAGER PREMIUM E-BIKE SOLUTIONS

Messingschlager's premium e-bike solutions are a holistic concept with numerous possible variations and combinations - a concept of components that are perfectly in tune with one another. This integrated approach combines two frame and battery concepts with four frame designs, designed in close cooperation with Brose. **HALL 2/1F/Q0117**



BESV JR1 E-ROAD BIKE

BESV's sleek JR1 combines high-end looks with an integrated power system and a rear hub motor. Weighing 15.7kg (34 pounds, 10 ounces), it offers 252 Wh of battery power. Tap the Dynamic Switch to adjust the three-level motor assistance, or cruise and let Smart Mode deliver the power you need. The digital interface displays information such as cadence and pedaling power while the Smart App provides navigation, anti-theft protection, and more. **HALL 1/4F/N0108**



LIMAR AIR PRO CARBON CORETECH

By combining carbon and expanded polystyrene, Limar has created a helmet core with superior impact resistance in minimum thickness. This material is formed into a shape that has two structural wings which merge with the side ribs of the shell, forming a high-performance cage with better safety and aerodynamics. Because less of the structure is taken up by the material, the helmet has improved air circulation. **HALL 1/4F/L0118**



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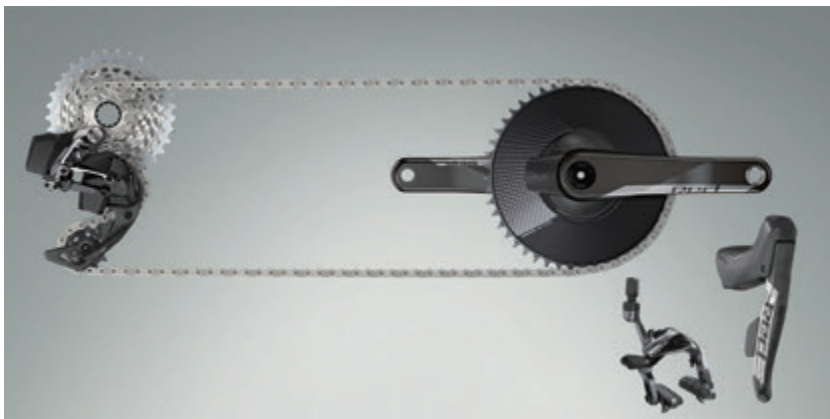
SRAMとROTORが1Xドライブトレイン生産 伝統主義者も無視し難い新機軸



SRAMの42歯チェーンリングRed eTap AXS

幅広タイヤからシングルチェーンリング・グループセットへ伝統的なドロップバーバイクは進化している。残念ながら伝統派のサイクリストは同様の速さで進化していない。

しかし有力コンポーネーターがドロップバーバイクのシンプル化を狙って1Xドライブトレインの新モデルを投入してきたことで事態が変化する可能性が出てきた。



SRAMのエアログループセットRed eTap AXS 1x

SRAM Hall 1 / 4F / LO818 は2月にグループセットRed eTap AXSを上市して脚光を浴びた。新グループセットはカセットとチェーンを再設計することでギアの効率と配列に対する認識を変えさせるほどの新機軸だ。

SRAMではギアの形状を再設計してギアのオーバーラップを減らし、ギアレンジを拡げ、ギアがよりスムーズに進むようにした。その一例がギアレンジを拡げるために新しく創り出された10歯コグ付12速カセットだ。

AXS（アクセスと発音）もiOSやAndroidデバイス用アプリを参照して、ユーザーにバッテリー状況をチェックさせたり、Bluetoothを通じてシステムのファームウェアを更新させたり、メンテリマインダー受け取らせたり、システム設定を微調整させたりしている。

名称はオリジナルのRed eTapとほとんど同じだが類似するのはそのままで、AXSシステムに対してドライブトレインコンポのほぼすべてにわたって再設計がなされている。グループセットはディスクまたはリムブレーキ用を揃えオプションにパワーメーターまたはエアロチェーンリングを加えている。

SRAMは今回の上市でシステムの2xクランクセットに焦点を置いたが1xのバージョンもデビューさせており1xドライブトレインにおけるリーディングポジションを譲り渡すつもりはないことをはっきり示した。

同社は2014年にシクロクロス用Force CX1ドライブトレインを上市し、その翌年にドロップバーライダー用Rival 1、Apex 1および再ラベルのForce 1を注いで以来1x市場をリードしてきた。

これらの初期のバージョン同様にRed eTap AXS 1xシステムはトライアスロン、タイムトライアル、シクロクロスの設計で、シングルリングのドライブトレインがパワー出力の保持や機

能の簡素化、さらにこうしたレース訓練用ならではの需要に応える最適のチョイスになっている。

Red eTap AXSシステムはシクロクロスのフレームの特性に合う短めのチェーンステイと幅広のリアタイヤ用に設計されたものだが、1xドライブトレインを最も支持してきたのはグラベルレーサーやアドベンチャーのサイクリスト達だった。



Rotorの1x13チェーンリング

2月のSRAMの発表から3週間足らずのうちに**Rotor Bike Components Hall 1 / 4F / LO106** がドロップバーバイク用1x13油圧グループセット付新モデルの発表を行った。Rotorはまず昨年Eurobikeで1x13のコンセプトを示したが、その時は新システムをMTB、ロード、シクロクロスおよびグラベル用オプションを付けたロード、オフロード両用のアラカルトモジュラーシステムとして位置づけていた。

以来1x13の豊富なギアレンジやスムーズなギア配列、正確なシフティングに絞ることでその焦点をドロップバーバイクに狭めていった。MTBバージョンが今年うちにリリースされる予定だ。

同社はカセットの設計も再考し10-36、10-39、10-46および10-52の4つの13速バージョンを生み出している。これら13速カセットはカーボンまたは

アルミ製ホイールが宛がわれる同社の特性ハブ専用だが追って他社ブランドのホイールにも対応できるモデルをオプションとして加える考えだ。特別なハブの購入に対してそこまでとは思いう人向きには10速および11速ハブ用12速カセットが用意されている。

Rotorの油圧式リアディレクターはスムーズに作動する1x13ドライブトレインの中心を成すもので、シフトレバーからディレクターに渡す3mmの細管ホースの中にミネラルオイル（鉱油）が使われている。

Rotorは走りのタイプ（レーシング、グランfond、シクロスポーツ、グラベル、クロスなど）に合わせたリコメンデーションを施すことで正しいギア形状を選択する場合の目分量による作業を取り除いている。

Full Speed Ahead Hall 1 / 4F / M1213 は現在のロード用クランクセットVero Pro 1xに最上級のカーボンクランクセットから1xシステムがほとんど加わり、併せてアロイ製モデルとタイムトライアル用クランクセット1xバージョンもラインアップさせる。

Shimano Hall 1 / 4F / MO814 と**Campagnolo Hall 1 / 4F / MO612** からは1xシステムに対する計画については聞けなかった。

レース用としてSRAMの1xシステムが使われる傾向が強まりそうな一方で、ロードレーサーたちはそのコンセプトに抵抗を続けている。それは3Tが昨年Wolf Toothのチェーンリングを装着したカーボンクランク1x Tornoをプロレーサー向けに投入してほとんど失敗に終わったことから見て取れる。

価格リストを見ると3000€（4125ドル）から始まり最上級は4000€を超える。一方Rotorのシステムは2599€から約4500€の価格帯である。

限られた1パーセントに属さないサイクリストに対して他のチェーンリングとクランクのメーカーはコストをもっと下げて既存のグループセットを1xシステムに変換できる方法を差し出していると言う。

例えばWolf Toothは、そのウェブサイトでグラベルとアドベンチャーサイクリングのための理想的な1xギアリングについて、さらにどうしたら自社のチェーンリングDrop-Stopとディレクター・ハンガーエクステンションRoadLinkあるいはケーブルプルコンバーターTanpanをSRAMやShimanoのカセットと合わせて使えるか、を説明している。

Miranda Hall 1 / 4F / L1216 は自社のモジュラークランクセットXMODがロード、グラベル、トラックあるいはフィクシー用の1xクランクセットとして形作ることができることを示している。XMODシステムはライダーにクランクアームとスピンドルおよびチェーンリングをそれぞれに独立して選ばせる。

PraxisはMountain Racing ProductsとのコラボでWave技術を採用入れた1xチェーンリングを開発した。（Waveはチェーンを機能的に保持するための商標登録デザインで、チェーンの保持する力が信頼できる1xドライブトレインを作る上で大きな課題のひとつになっている）。

Praxisは自社のロード用クランクAlba、Zayante、Zayante 4iiiiおよびZayante Carbonと併せて使えるよう直接装着タイプの1xチェーンリングを歯数38、40および42の3サイズで用意している。44~50歯のチェーンリングは開発中である。

これまで1xシステムはもっぱら乗り易さと機能性を求める本格派サイクリストの領域にあるものだった。しかし1xシステムが伝統的ドロップバーバイクでないバイクで人気を高めれば乗りやすくメンテも楽な万能型バイクを求めるライダーにとって



Rotorの1x13グループセット

グループセットの有力各社はドライブトレインは最高の性能を発揮させるためのユニットとして設計されなければならない精巧を極めるシステムであることを強調する。しかしそうして完成させた1xシステムの価格は多くのサイクリストにとって到底手の届かない高さになってしまう。

ちなみにSRAMのRed eTap AXSの

大いに魅力あるものになるだろう。

プロの一部も1xドライブトレインの軽量でエアロダイナミック性に優れた利点が無視できなくなり伝統と決別している。今年これまで、年初のコブルクラシックのレースで1xシステムが少なからず見られた。その自己証明を前に、伝統主義者の間にさえある抵抗は力を失っていくかもしれない。

総括：ドライブトレイン代替モデル ビッグ3を越えてドライブトレインの オプションはあるか？ヒントはここにあり

多くの人が選択の余地があるのがいいことに賛同する。だが、ドライブトレイン市場はわずか3者のプレーヤー — Shimano、SRAM、Campagnoloによって独占されている。サイクリストはどこに代替プレイヤーを求めたらいいのか？



LTWOOのブレーキ&シフトレバー



Lanxi Wheeltopの1xシステム用電動式ディレクターEDS



MicroShiftのクラッチ付XCD11



PinionのギアボックスC-Line

ひとつの意外な答えが中国である。2017年に**LTWOO Hall 2 / 4F / R0904**は台北ショーのデモデーで初の中国製MTB用11速ドライブトレインを発表して業界を驚かせた。

昨年秋の台中バイクウィークでは、創業者Philip Liu（フィリップ・リュウ）氏が別の興味深い新製品：MTB用12速ドライブトレインとドロップバーバイク専用ブレーキ&シフトレバーを携えての復帰となった。

リュウ氏によると、レバーはアジアのライダーの手のサイズを念頭に設計されているのでフードの形状は欧米の人の手にはコンパクトすぎるかもしれないとのことだ。

同社ではもっぱらフードでハンドルバーを握るライダーのためにシフトボタンを置いている。ブレーキ&シフトレバーのほかに2:1レシオで作動するロープロファイルのリアディレクターと直接装着タイプのフロントディレクターも付いている。フロントディレクターは34~50歯のチェーンリングに対応できるのでロードバイク用ドライブトレインが完成する。

同じく中国製として**Lanxi Wheeltop Cycle Industries Hall 2 / 4F / S1133**のワイヤレスリアディレクターがある。クランクおよびチェーンリングの中国トップメーカーの1社として知られるこの会社はMTBとロードバイクに装着する1xシステム用電動ディレクターEDSを密かに開発していた。

EDSの新バージョンはロードバイクの11速とMTBの12速に対応できる。このシリーズ最新モデルに対して同社はタイトなトレランス（許容誤差）とスムーズなシフティング作動を優先させた。

ディレクターのバッテリーは800mAhあり1回の充電で最大1万8000回のギアチェンジが十分できるという。シグナルを送るためだけに必要なシフター中のバッテリーは1回充電すれば1年もつ。

WheeltopのEDSディレクターはロード用が重さ335gだが、MTB用はケーシングが長い分若干重く350gになっている。

Sunraceと**Sturmey Archer Hall 2 / 1F / P1014**は付加価値のある有望なニッチ製品を造り出していることで知

られる。一例がシンプル性と最先端技術を組み合わせたハブの新モデルS2Kである。

138%の内蔵レシオをもつこのハブはギア間を広めにとってあるのが特徴で、仕上げにアナダイズドとポリッシュを用意。コースター用とディスクブレーキ用両モデルを揃えている。

ギアを変換する時ペダルにほんのわずかなキックバックが求められる。ケーブルやシフターが不要なのでコンパクトなS2Kはミニマリスト的な（最小限装備の）アーバンバイク用にぴったりの製品だろう。

Sunraceの2019年に向けた旗艦製品はMTB用ドライブトレインMX12とMZ12で、1xシステム用設計の両モデルは、11~50歯の幅広いレンジのカセットとアルミ製クランク、12速チェーン並びに12速リアディレクターとラジプリー（滑車）およびカーボン製ケーシングのアウタープレートを組み合わせている。

2年前に**MicroShift Hall 2 / 4F / R0714**は電動式ドライブトレインeXCDの洗練されたプロトタイプモデルを出展した。この製品は依然とし同社のウェブサイトにも現れていないが、このほど11速1xシステム用に異なる4種のリアディレクターが発表された。これらのディレクターは最大46歯のコグに対応できる。

比較的上級のXCDモデルは100%アルミ製ケーシングで軽量化を図る一方、付加価値モデルのリアディレクターXLE11はスチール製ケーシングを採用している。両モデルにオプションで付くビルトインクラッチはリアディレクターの小さなスイッチで作動できる。

これまで紹介してきた製品のすべてが標準タイプの自転車に装着できるものだが、さらにエキゾチックなシフティング法を求めるとしたら専用のフレームが必要になる。

そのハイエンドの一例が**Pinion**（Gatesの**Hall 1 / 4F / L0717**）のインターナショナルなトランスミッションで、このコンパクトなギアボックスは自身の会社を始める前にPorscheで働いていた2人のエンジニアの頭から生まれている。

一見するとギアボックスは小さな中央装着型モーターのようだが実際はダウンサイズされた自動車技術とモデルに合わせた6段~18段のギアが収められている。

オリジナルモデルのP-Lineはしっかりした鍛造アルミブロックから精密機械で造り出されるハウジング内部に収めているが、普及タイプのC-Lineは鋳造マグネシウム製ハウジングに据えられている。Pinionのギアボックスを付けた自転車はチェーンでなくベルトドライブを使うケースが多く、同社がGatesのブースで出品している理由もそこにある。

Pinionのギアボックスの主な利点は小さなチェーンリングを前方に据えることによってグランドクリアランスが増したことでシステムのメンテナンスが楽なことで、1万km走るごとにオイルを交換するだけでいい。

一方オーストラリアの**Cape Hall 1 / 4F / L0501a**は価格に敏感なユティリティおよびバイクシェア市場をターゲットにローメンテナンスの伝動システムCBT Transmissionを展開している。

フレームのボトムブラケット周辺に直接取り付けられる設計の自動トランスミッションは3段ギアとケイデンスセンサーが付いている。走行中特定のケイデンスに達するとすぐに変換システムが働いてギアを上げたりあるいは下げたりしてくれる。

動かせる部品はすべてフレームの内部に保護されているのでCBT Transmissionは防犯に優れたローメンテナンスのソリューションとしても輝きを帯びる。



Sunraceの12速システム



KMC

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- ⌘ Diamond-hard surface



Team Dimension Data (Stiehl Photography)



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reddot design award
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Taiwan
Excellence
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KMC (KUEI MENG) International Inc.
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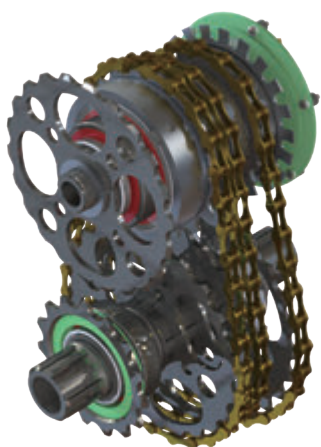
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Cape Bouvardのギアボックス

CBT Transmissionのオリジナルモデルは従来タイプの自転車やリアハブモーター装着のEバイク用に設計されていた。しかしCape Bouvardは現在CBT Mid-Driveと呼ぶ中央装着型モーターシステム用モデルを開発している。自動シフティングシステムと250^{mm}の中央装着型モーターユニットを組み合わせることでCBT Mid-Driveはモーターをギアボックスのケーシングの中に移動させて保護している。同時に中央装着型モーターシステムの最大の欠点のひとつであるカセットとチェーンの摩耗も減らしている。

SRAMとCampagnoloはこのほど12速のグループセットを投入しているが、スペインのRotor Bike Components Hall 1 / 4F / L0106は

1x13ドライブトレインで一步先を進んでいる。

ロード、グラベルおよびシクロクロス用設計のこのドライブトレインは各用途別カセットのセレクションと同ブランドの楕円形シングルチェーンリング（16頁の関連記事参照）が使用されている。

シフターからのコマンドをリアディレクターに伝達させるためにRotorは同社グループセットUno同様に水力学を使って耐久性をもたせるとともに埃や泥にまみれた状況できちんとした機能を発揮させている。



Rotorの1x13リアディレクター

台北ショーで同社はパワーメーターシステム2INのトラックバージョンを出品している。同バージョンは、姉妹バージョン同様に、クランクと見事に一体化させたもので、アプリがライダーにパワーアウトプットとペダルストロークを詳細に分析させる。

当然ながらビッグ3にはビッグであるだけの理由があるわけで、ここに紹介する代替モデルのいずれもがビッグ3の基準に照らして評価されなくてはならない。

実用タイプ用からロード、トライアルの本格レーシング用までShimano Hall 1 / 4F / M0814 は市場のリーダーであり、いかなるメーカーにとってもこの製品カテゴリーに踏み入る上での判断基準となっている。

2019年に向けてのShimanoの旗艦製品はトレイル用新グループセットXTRで、それぞれエンデュランス、クロスカントリー、エンデューロ用に仕立てた形状で投入されている。最後の2バージョンにShimanoとしては初の1xシステムが使われている。

内装トランスミッションハブの生産を打ち切ることでSRAM Hall 1 / 4F / L0818 はユティリティ市場の多くを捨て去ることになった。しかし同社は複雑性と重さを減らした1xドライブトレインを装着するMTB市場で少なからぬ成功を収めている。

SRAMは2019年に向けてAXSを柱にそのワイヤレス技術eTapをロードからマウンテンに移行させている。

今のところ12段グループセットEagle AXS 2モデルの価格はかなり高めだが、先行き下がっていくのは確かだ。

（16頁の関連記事参照）

SRAMではまた幅広いレンジのカセットをロードバイク用に適合させている。そのX-Range技術によってリアは必ずきっちり間を開けた12段ギアになり、チェーンリングも小さくなる。2つのリングが1本のアルミから作られたものである、もしくはただ一つのチェーンリングにする。10~33歯という幅広いレンジをもつRedカセットが1xドライブトレインを念頭に設計されているからである。

ロードバイク市場に専念するCampagnolo Hall 1 / 4F / M0602 はShimanoとSRAMに比べるとディスクブレーキへの対応が遅れているかもしれない。

しかしその最上級の新グループセットRecordとSuper Recordでイタリアを代表するコンポメーカーは先頃のTour Down UnderでのWorld Tourにその12速カセットが初めて使われるのを見たのである。電動EPSとメカニカルバージョンにリムブレーキとディスクブレーキのオプションを付けてCampagnoloは基本要素のすべてを競争の激しいロード市場でカバーさせている。ヨーロッパのみならず世界中でCampagnoloへの忠実な追従が見られることだろう。

Booth P1014



NEW MTB 12-Speed series

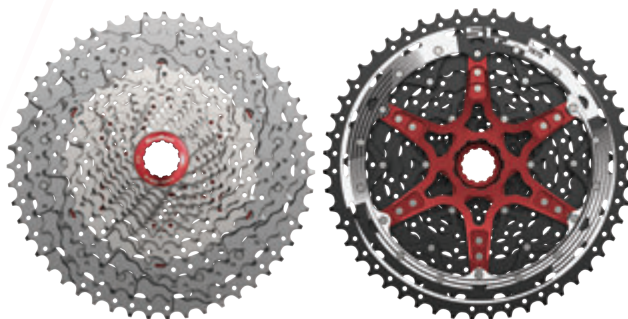
Rear Derailleur



Trigger Shifter



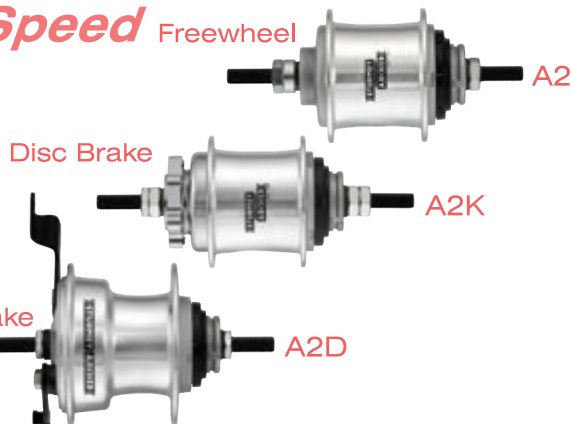
Cassette



Chain



Automatic 2-Speed Freewheel



NEW PRODUCTS

BETO QD MINI PUMP



2018のGolden Pin Design Award受賞のデュアルアクション・アロイミニポンプは優れたクイックダイヤル式バルブ交換システムが特徴で、これにより一つの穴でSchraderとPrestaのバルブに対応できるとともにレバーの下にすっぽり収めたアダプターでDunlopにも対応できる。ポンプのバレルはアロイ製で耐久性があり成型プラスチックハンドルとの組み合わせでグリップ力を高めている。 **HALL 2 / 1F / Q0908**

BIKEWORKX CHAIN STAR MAX WAX

1991年創業のBikeworkxは業界最大手の潤滑油専門メーカーを目指している。同社最新のChain Star Max Waxは独自のワックスと水性素材を用いたユニバーサルタイプの潤滑油で、一度塗ればクリーンですすすの長持ちするフィルムが作られるためチェーンに泥が堆積するのを防げる。スムーズな走りを確実に生分解性100%なので環境配慮のバイカーにはうってつけだ。 **Hall 1 / 4F / M0305**



MERCURY CYCLING A-SERIES WHEELS



Mercury Cyclingはエアロダイナミクスの指導者Paul Lewとのコラボで新ホイール「Aシリーズ」を開発した。新シリーズは特許申請中のKamm Tail 10設計が特徴で、ホイールの実際の深さよりもはるかに深い機能を発揮させて横風で軽快感と安定性を保つ。この設計によりリム中央で空気が通されエアロプッシュが作りだされる。軽量化と剛性を保つ2:1ストレートブル・レーシングパターンを特徴とするMercuryのTempestハブとの組み合わせでディスクあるいはリムブレーキに対応できるモデルを用意している。 **Hall 1 / 4F / L0001**

FLR SHOES REXSTON MOUNTAIN BIKE SHOES

オールトレインツーリング用シューズの最新モデルRexstonは牽引力と耐久性、長寿命化を高めるように設計されたアウトソールが特徴。安心走行に向けてコンタクトと牽引力を最大限に発揮できるように開発されたSTKグリップラバーを採用した特殊設計のクリートプロテクターがアウトソールを摩耗から護り長寿命と信頼性を高めている。現代のトレイルライダーにマッチした控えめなスタイリングでライダーの新たなトレイル発見をサポートする。 **Hall 1 / 4F / M1206**





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FUMPA

Accurate pumping before you ride

Digital pressure display

Weights 380 grams

Pumps to 120psi



mini FUMPA

Take it with you

Fits in your jersey pocket

Weights just 190 grams

Pumps to 120psi

www.fumpapumps.com

Hall 1 / 4F / L1309

NEW PRODUCTS

MESSINGSCHLAGER TANNUS ARMOUR

タイヤとインナーチューブの間に設置されるTannus Armourは画期的なパンク保護ライナー(裏地)で、オールラウンドでパンクを保護できるのでスタンダードのクリンチャータイヤとチューブに使える。カットやピンチフラットによるパンクに対する抵抗力を格段に高めているので低い空圧のタイヤでも乗るのが可能でトラクションと乗り心地もアップさせている。

Hall 2 / 1F / Q0117



KIND SHOCK LEV-CI 272 SEATPOST

あらゆる先端機能を備えるドロップパーシートポストに新たに幅広の27.2サイズが加わった。LEV-CI 272は機械練リアルミ製構造で強化された最適化カーボンマストが特徴で、これにより軽くて強いシャシーを可能にした。内部に収めた性能実証済みのLEVシリーズ空油圧式システムが65mm、100mm、120mmのいずれでもスムーズなトレベルを果たしてくれる。

Hall 2 / 1F / Q0702



RELIC CLIPLESS PEDAL ADAPTORS

ペダルを交換する必要なくSPDシューズとトレーナーを交換したいというライダーのニーズに応えるのがRelic's Clipless Pedal Adaptorsだ。軽量で取り付けが簡単なこのアダプターは人気のShimanoのSPDに対応する。壊れやすいプラスチック製とは異なり、軽量の鋳造アルミ製は最上のフラットペダルと同等のグリップ力を備えている。

Hall 2 / 4F / S0428



SKS GERMANY COMPIT

ニートでクリーンで高度な連結システムを誇るスマホホルダーの次世代を代表するモデルCompitは3つの中核機能をひとつのコンパクトなシステムに組み込んでいる。すなわちスマホホルダー、一体型NFCチップ付Qi認証通信ユニット、フロントライトあるいはアクションカム用アクセサリマウントの3機能。Eバイクの電源に繋がればスマホの誘導的充電も可能だ。

Hall 1 / 4F / L0611a



COSMOS CO-POLARIS FOLDING BIKE

20吋ホイール採用のCo-Polarisはフルサイズのバイクライダーに馴染みのハンドリングが味わえる。小径を感じさせないタイヤサイズはグリップ力、衝撃吸収、ロールオーバー性にも優れる。さらにカーボン製フレームで重量増加を相殺、持ち運びやすい9.5kgに押さえている。ShimanoのディスクブレーキとTiagra 2x11速ドライブトレイン採用で長距離ライドも楽にこなせる。

Hall 1 / 4F / N1208



OTRAJET NEXO 700X40C AIRLESS TIRE



大小のホイールに対応するよう新しく数サイズを用意したNexoのエアレスタイヤの性能はEバイクならではのニーズを満たすよう調整が図られている。構造と素材を強化することで荷重制限を3割アップさせるとともに製品寿命も同様に延ばしている。ストレスの増加に見事に対応しながら同社製品の人気の秘密である耐パンク性能を保持している。

Hall 2 / 4F / S0902

ALU-MATE AA6530 E-MOUNTAIN BIKE FRAME



27.5吋のホイールをベースにしたこの有能MTBフレームは人気のShimano E8000およびE8020モーターシステムに対応。3サイズを用意。リアホイールのトラベル幅は150mmあり最も骨の折れるトレールも難なくこなせる。オーバーサイズのダウンチューブは大容量バッテリーもきれいに安全に収納できて長距離ライドを可能にしている。

HALL 2 / 4F / R0304

WELDTITE TUBELESS CONVERSION SYSTEM



リムテープ、シーラント、バルブシステム、レバーおよび簡単装着の強カタイヤビーズ補強ゲルで構成されるWeldtiteのTubeless Conversion Systemはセットアップを整えるのに必要なものがすべて揃っている。重さを落とシパンクを減らすためチューブを取り払った同システムはできる限りの作業のシンプル化を目指すものだが、これも新たにルーブリカント(潤滑剤)、クリーナー、ツールをラインに加えた拡大路線の一環である。

Hall 1 / 4F / L0330

SPANNINGA X&O FRONT LIGHTS

Philipsの最適システムとのミニチュア版といえるコンパクトなバッテリーヘッドランプはスタイリッシュで頼もしいデザインが魅力でシティやトレッキングバイク用にぴったり。スマート感ある一体型独立タイプのリフレクターが付き、頑丈なステンレススチール製ブラケットを魅力あるマット(艶消し)ブラックに仕上げている。ライトは効率性の高いリバーズビーム(逆光線)技術により電力消費をごく低く抑えながら25ルクスの強カビームを生み出している。

Hall 1 / 4F / M0310



VELO MICROTECH GRIPS

VeloはMicrotech技術を組み込んだグリップをフルレンジで上市した。この新技術はミクロサークルの模様が特徴でライダーは指先でそれを感じ取れる。テクスチャー(生地)を足して表面部分を増やすことでハンドルバーをそれだけしっかり握らなくても一層の安心感が得られる設計だ。雨天や汗をかいている状況にはうってつけで、電動MTBからスポーティーなシティライドまであらゆるセグメントをカバーする。

Hall 2 / 1F / Q0614



NEW PRODUCTS

BAFANG ELECTRIC (SUZHOU) BAFANG M420

モダンなEバイク用のクリーンでコンパクトでダイナミックなドライブシステム。Bafangの定評あるM400 (旧MAX Drive) をマイナーチェンジした新モデルは同じフレームインターフェースを使い、出力250Wで同じく80Nmのパワーを誇りEUの時速25kmの速度制限基準を満たす設計。450Wh inTubeや各種ラックタイプのバッテリーさらに多くの新ディスプレイ (BluetoothおよびUSB充電機能付) と互換性があり、時代にマッチした外観のシティやトレッキングEバイクの設計に大きな力を与えるはずだ。 **M0409**



FUMPA PUMPS FUMPA



FumpaはパワフルなUSB充電式ミニ電動ポンプで、重さわずか380gでミニサイズながら通常のフロアポンプを凌ぐパワーを発揮する。携帯に便利で使いやすく旅行にも家庭での使用にもうってつけ。圧力測定デジタル表示機能付でPrestaとSchraderの両バルブに対応。 **Hall 1 / 4F / L1309**

MESSINGSCHLAGER VELOSOCK

家をきれいに保ちホテルのオーナーを喜ばせる。持っていきたいところがどこであろうとVelosockは自転車を含んで汚れを散らさないで室内の壁やカーペットがきれいなままだに保てる。オフィスでも車の中でも同様に安心して収められる伸縮性抜群の3Dストレッチ素材なので自転車の形にぴったり合わせられる。機械洗いができ26~29寸のすべての自転車に使える耐引裂性にも優れる。 **Hall 2 / 1F / Q0117**



BLOSSUM BLOSSUM-MASK LITE

Blossum-Mask Liteは都市部での汚染防止用マスクで欧州規格を認証。FFP2 NRクラスのこのマスクは塵や大気汚染から護り、花粉や動物の毛、カビによる呼吸アレルギーを抑えてくれる。エルゴノミックデザインによるその効力はサイクリングや徒歩、オートバイ、スクーターによる旅に最適。 **Hall 1 / 4F / L0027**



A-PRO TECH ERDP 6.3CA-R 29 E-MOUNTAIN BIKE FRAME

インテグレーション (一体化) がA-Proの新フレームで最も大事な点だ。モジュール設計コンセプトにより駆動システムは市場のニーズに合わせてBroseでもShimanoでも対応できるため新製品の開発コストも削減できる。極上の外観を備えリアショックはモーターおよびバッテリーコンポとともにフレーム内部に一体化されている。 **Hall 2 / 4F / S0322**



HAFNY HF-MR101 BAR-END MIRROR



ケースでなくレンズを交換する。このバーエンドミラーは交換可能レンズなので簡単に掻き傷を修理したり新しい素材を試すことができる。スクリュー1本で取り付けられスタンダードから、割れないステンレススチール製、HDガラスレンズ、防眩性ブルーレンズまで揃っている。丈夫な繊維強化ナイロンボディなのでロード用バーにもMTB用バーにもフィットする。 **Hall 2 / 4F / R0901a**

CARBON ENDURANCE COMPONENT (CEC) TEXTILE SPOKE CARBON WHEELS - SLD RANGE1 E-ROAD BIKE



世界で最も強く最も耐久性のある素材Ultra-High Molecular weight Polyethylene (UHMwPE) で造られたテクスタイル (織物) スポークはホイールへの衝撃吸収性に優れてしかも軽量。フィールドテストでもライダーにとっての快適性のアップと、とりわけ厳しい路面でのトラクションの向上が示されている。耐衝撃性を高めるためCarbon-HMPPハイブリッドファブリックと組み合わせてクリンチャーチューブレスリム (ディスクブレーキ専用) を仕上げたSLDレンジはもういっしょに傷みにくくする特性を持つ。MTBやグラベル、ロードのエンデュランスライド用に設計されたこの最軽量ホイールセットSLDIは重さわずか1050g。 **HALL 1 / 4F / L1125**

CARDIOSPORT SOLO SPEED AND CADENCE SENSOR

この超軽量コンパクトのバイク用スピード・ケイデンスセンサーに重い磁石は不要。ハブやクランクアームに磁石やケーブルタイを使わずに即装着できて、スピードやRPMを探知するのに加速度計を使う。バイクの外観も流れるようにすっきりで測定の誤りも抑えしかも軽量。BluetoothやANT+に接続できてあらゆる人気のサイクリングアプリとコンピューターとの互換性ももつ。 **Hall 1 / 4F / L0007**



INNOVA RUBBER EL CAMINO GRAVEL TIRE 650B X 47C



グラベルのライダーは路面や走行条件の変化に対応できるタイヤを強く求める。スムーズな路面ではスピードが求められゆるんだ路面ではグリップ力が求められる。その求めに応じるのが正しくEl Caminoのセミスリックトレッドだ。47cのラージボリウムとポピュラーな650bサイズを揃えたこのタイヤはドライなコンディションでのライトトレイルもこなせる。ゴージャスな外観のタンウォールもオプションで揃えている。 **Hall 2 / 4F / S0404**

ALEXRIMS BAXTER 3.0 WHEELSET

Baxterのカーボンリムは適合性を損ねることなく耐久性と長疲労寿命を確実に延ばすためインモールド・アロイインサート (挿入物) を使っている。前後とも幅31mm径リム (内径25mm) と24本ストレートブルスポークで組んだものをBear Pawlsのスターフランジ付ハブにセットしている。700c径サイズを用意。前輪わずか765g、後輪950g。 **Hall 2 / 1F / Q0714**



日本語

只做不用？台灣e-bikes的特殊文化

台中市訊－在過去幾年來，一輛又一輛高價高品質的e-bike出口量持續增加，可說是為台灣的自行車產業注入了一劑強心針。而一直以來作為高階自行車生產重鎮的台灣，在這一波e-bike的崛起更連帶提升了地位，現在包括車架製造、電池、軟體整合、電子組件等廠商也持續增加，儼然成為全球自行車的R&D研發中心。

有趣的是，在台灣e-bike相關的專賣店並不常見，或是說專業的自行車店也很少會展示e-bike。事實上，e-bike的角色處於台灣法律的灰色地帶，尚未有一套完整的政府法規或器材規範。



「在台灣，一輛e-bike的價格往往會高於一輛150cc的摩托車，這也使得民眾偏向購買摩托車。」－ Tony Hung

這樣的情況似乎跟現實脫節，尤其目前台灣的自行車內銷市場正處於低迷期，幾年前很紅的公路車市場也變冷變蕭條。然而，台灣的自行車廠卻在去年報出佳績，在高價值、高利潤的e-bike創下歷史最高的出口總量紀錄。回顧2018年前9個月的銷售數字，e-bike的出口量及總值成長達50%，讓整車的平均出口單價達到1,378美元。

而這個問題出在哪？據某位車界人士表示，問題在於政府相關單位對e-bike發展的態度顯得冷淡，加上機動摩托車在台灣的數量太過龐大。

以電機大廠Bosch為例，這家可說是全球最先進的中置馬達系統的德國領導品牌。每年送來數以千計的電機系統來台灣組裝，卻只是個過客，然後就運往世界各地。Bosch的e-bike電機系統亞太總監David Howard很直白的說，Bosch目前並沒有計畫為台灣內銷市場供應e-bike，「因為這樣的改變需要政府的參與，但這目前還沒有發生。」

相反的，包括Bosch以及其他品牌的電機系統、e-bike零件廠商等，都在台灣擁有專屬的保稅倉庫，他們在這裡完成e-bike的整車組裝，然後運回國外。Howard進一步說明：「在台灣，一方面是沒有e-bike或電動助力車的法律規範，再者也幾乎不存在這個產品的內銷市場。換句話說，就是消費者沒有需求並且前方的困難重重－很明顯的看起來台灣對於e-bike或電動助力車沒甚麼興趣。」也因此Howard總結說：「為此，我們至今尚未有計畫來台導入銷售、提供保修服務等。而我們一直在做

的是將電機系統提供給OEM組車廠，完成組裝後就運往國外了。」

另一個發展阻礙，Howard及一些自行車業界人士表示，摩托車在台灣幾乎是擁有不可動搖的地位。可以這麼說，台灣的機車密度及平均每人擁有率居全球之冠，形成一幅很特別的機車族文化。在台灣政府的電動摩托車的購買補助下，目前台灣的摩托車型態已漸漸的從那吵雜、污染的燃油式機車，轉向以電力作為能源的電動摩托車，例如市佔率快速成長的Gogoro。摩托車在台灣的價格並不算高，尤其是跟風行於歐洲的e-bike相較之下顯得更為親民，並且摩托車還能提供較佳的腿部保護，其載運能力也更好。

太宇工業(Astro Engineering)的工程師Tony Hung表示：「在台灣，一

輛e-bike的價格往往會高於一輛150cc的摩托車，這也使得民眾偏向購買摩托車。」在採訪的這段期間，Tony正參加為期三天的台中自行車專賣店的導覽旅程，他進一步表示：「我希望自行車店可以透過舉辦活動來推廣e-bike，這樣民眾就更能體會到e-bike的功能不僅僅是交通運輸而已。」

混亂及衝突的角色定位。有一些業界人士也表示，目前台灣的政府法規還充斥著混亂及衝突，我們根本不知道要怎麼做，常常令人一頭霧水。例如，台灣的自行車專用道並不允許騎乘e-bike，也不清楚它是否可以騎在一般道路。這種不確定性及衝突還衍生出許多小問題。

Mobility Holding(Tern的母公司)的執行總監Joshua Hon指出，有許多e-

bike的功能搭載著「步行輔助」(walk assist)，就是一個會產生混淆的例子，其步行輔助功能是讓騎士可以在行走時更輕鬆的推動他們的e-bike。

當Mobility將他們旗下的e-bike產品送至相關單位進行標準檢測，卻收到一個非常相互矛盾的回覆。「其中有一間認證機構回覆我們步行輔助這項功能是OK的，但是另一間認證機構則表示這項功能並不符合台灣法規。」Hon說明如果台灣法規不核准這項功能，那很可能包括Bosch、Shimano等電機大廠都會跟台灣市場保持距離。「而如果我們要這些領導品牌的廠商因應台灣市場，來移除掉步行輔助這項功能，他們應該會叫我不要做白日夢了吧！」

2018年，台灣政府相關單位推出新的電池認證規範，要求所有e-bike電池進行昂貴的認證測試。Hon針對此點說明：「我們根本不知道這項認證規範到底是怎麼生出來的？」Hon表示，台灣如果要推廣e-bike騎乘其實一點也不難，最輕鬆的方式就是參照歐盟針對電動助力車的認證規範。而老實說，台灣有很多的e-bike廠商早就依循並通過更為嚴格的歐盟標準進行認證。「這樣可以立即確保高品質的e-bike進入台灣市場。」

Tern的銷售和營銷總監Matthew Davis表示，缺乏e-bike相關法規和台灣e-bike內銷市場的疲軟，這些因素會阻礙台灣在發展e-bike的競爭力。Davis說道：「我們認為缺乏一個健康的e-bike及電動助力車市場是導致台灣錯過e-bike熱潮的原因。」也因為如此，更間接強化了中國大陸和歐洲等地區特別受惠於這一波的e-bike熱潮。」

他補充說，打開台灣的e-bike市場更能夠讓台灣的自行車從業人員「體驗產品的真正使用模式，進而思考如何優化產品。」

測試市場水溫。與此同時，台灣兩大自行車廠－捷安特和美利達，分別率先將高品質的中置馬達e-bike導入台灣市場。然而，這兩大廠似乎很少在推廣行銷e-bike的使用情境及優勢。

巨大集團的全球行銷長劉素娟(Phoebe



台中BESV電動自行車店經理Craig Wang。BESV車店是台灣唯一專賣e-bike的專賣店。(Photo by Jo Beckendorff)

Liu)表示,在台灣要通過e-bike的規範認證成本太高了。劉素娟進一步說明「幾乎沒有人願意花這麼多的時間以及成本去做這樣的認證。」尤其是目前台灣e-bike還處於推廣階段因此銷量非常有限。為此,大多數的品牌是不會考慮推出符合台灣法規的e-bike。

美利達針對台灣市場推出兩款e-MTB,均搭載Shimano中置電機系統。然而,截至目前這兩款e-MTB僅限於網路訂購,而不是透過傳統車店的經銷系統。美利達行銷副總鄭文祥表示:「我們目前開放消費者上網訂購,然後可選擇在美利達的經銷商進行領車。」鄭副總進一步表示:「現在的階段是測試台灣市場的水溫,畢竟以e-MTB這樣的歐洲車款在價格上相對較高,還不能夠貼近台灣市場的需求。」

BESV電動車品牌的母公司是台灣電腦零件的龍頭品牌之一—達方電子,目前在台灣開設了三間BESV電動車專賣店,分別落腳於台北、台中、台南。BESV台中店經理Craig Wang表示,



多位台灣自行車業界人士參與記者Jo Beckendorff發起為期3天的台中e-bike車店導覽之旅,而在這趟旅程中大概只有他們騎乘e-bike,幾乎沒看到其他民眾在騎乘e-bike。在途中,他們還到Brovo Cafe 綠園道單車館喝杯咖啡小聊一番。左起: Paul Lee、(Cheer Sports); Neil Hsieh、Tony Hung(Astro Engineering); Mark Huang、Penny Chen(Bevato International)。

由於e-bike除了交通運輸之外,還可以帶來健身等的好處,因此特別受到年長族群的青睞。

Craig Wang說道:「BESV的電動智能城市車款,加上週邊設備包括兒童座

椅和購物籃等,可以打造出替代摩托車的交通方案。他並進一步表示,「我認為年輕的媽媽們會願意騎乘電動智能城市車款用來取代摩托車,無論是取代燃油式還是電動摩托車。」

全新進化版!電動輔助YouBike E-YouBike新北市登場,讓民眾快速體驗e-bike的魅力。預計在2019年第一季,捷安特將在新北市建置300輛E-YouBike電動助力車,並且有計畫在各個城市遍地開花,推廣這套公共自行車系統。

或許,當更多的民眾體驗e-bike帶來的優勢,會連帶提升購買e-bike的意願。這並不是捷安特第一次改變台灣人對於自行車的角色定位及態度。捷安特作為台灣的本土產業,但在早期自行車運動並不特別受到台灣民眾喜歡;直到2007年,捷安特創辦人劉金標開始以身作則,以自行車環台旅行帶動一波又一波的自行車熱潮,大幅提升自行車的地位。當時已經73歲的劉金標,因為這一趟接近1千公里的自行車環島受到媒體的大篇幅報導,連帶迅速帶動了台灣的自行車熱潮。

而究竟誰會是e-bike的自行車傳教士劉金標呢?我們非常期待!

ASEANBIKE 東南亞單車展 十月曼谷登場

一場專為東南亞新興市場而啟動的自行車展,將於10月3號到5號在泰國曼谷登場。由Eurobike 與N.C.C. 策展組織(NEO)共同合辦,這家公司具有在曼谷舉辦自行車消費展的經驗,而這一場新的業界展覽將定名為「ASEANBIKE」並且由Eurobike做為後盾支持。



Stefan Reisinger (左), Eurobike負責人以及 NEO總裁Sakchai Pattarapreechakul (N.C.C. Exhibition Organization Co.,Ltd.) 歡慶簽約並將於曼谷誕生新的ASEANBIKE單車展。

ASEAN 為東南亞國協的縮寫,這是包含十個東南亞國家所組成的協會。Eurobike的負責人 Stefan Reisinger 表示:「這個區域過去有高速的成長,成為單車產業界重要的供應源,包括了成車、電輔車、以及零件,也代表了這區域有成長中的消費市場。」

「這些市場除了是重要的供應端,在配件與人身部品過往幾年也呈現穩定成長,這包括了印尼、馬來西亞、菲律賓、新加坡、泰國、汶萊、越

南、寮國、緬甸以及柬埔寨,這些國家正在發展運動休閒文化,並且明顯看到穩定的成長。」Reisinger補充到,並且列出了ASEAN的10個成員國。

主辦者表示:「東南亞區域的製造廠增加了對於西方品牌的吸引力,不只是因為中國商品受到懲罰性關稅與反傾銷關稅的影響。」

「許多東南亞國協的國家,明顯增加了國際品牌自行車,以及通勤單車的銷售量,並且顯現出上升潛力。

除了來自泰國和周邊國家的眾多本地製造商、品牌、進口商和批發商外,ASEANBIKE還獲得了台灣和中國主要製造商和供應商,以及國際品牌的參展意願。」

而在地的主辦單位NEO表示:「這場車展將會具有各項國際車展的特點與規格。」

NEO 總裁Sakchai Pattarapreechakul表示:「ASEANBIKE將提供多個展館與會議室,從傳統車展的攤位形式,到OE形式的閉門會議,也將會有進口商、零售商的會議,此外也會有展示試乘區,甚至有騎乘活動可以參加。」

NEO 將把原本六月的消費者展覽

由「International Bangkok Bike」改名為「Bicycle Super Sale」以減少公眾對於兩個自行車展覽的混淆。

ASEANBIKE開放於OEM製造廠、品牌商、進口商、分銷商、零售商,預計吸引來自世界各地的55,000名參訪者,將創造超過40億泰銖的經濟效應。

ASEANBIKE將於泰國曼谷的Impact展覽館與會議廳舉行,這是一個擁有先進基礎設施和交通便利的先進貿易展覽和會議中心。

更多相關資訊可參考官網: www.asean-bike.com 或 www.eurobike-show.com



2019台北車展綜觀全局：打氣筒

灌入的每一口空氣都能換來速度與快感

還有什麼好說的，它就是打氣筒；但隨著時代的進步，它又不僅僅是一支打氣筒。
快來瞧瞧這些隨車打氣筒或是落地式打氣筒有什麼特異功能！



Fumpa電動打氣筒

Airace
i-speed F2
藍牙迷你
落地式打氣筒

Beto EZ Head雙頭氣嘴

Lezyne Digital
Shock Drive
避震前叉打氣筒

Zéfal AirProfil攜帶式打氣筒

Messingschlager M-Wave Elumatik電動打氣筒

隨著時代的進步，現在要為輪胎打氣的方式變的更多種。從電動打氣機到能夠打無內胎專用的儲氣式打氣筒，讓選擇變的更多元。此外，由於有這些產品的誕生，讓消費者不再需要昂貴又笨重的空氣壓縮機；透過這些產品，騎士就可以在家裡安裝Tubeless無內胎系統的車胎。

同樣聰明的是最新導入市場的攜帶式電動打氣筒，其中有些產品有著超迷你的尺寸，可以放入車衣後口袋。這樣的產品結合了CO2氣瓶的方便性，並有著可控式壓力設計，也不像CO2氣瓶是屬於一次性使用的產品，因此可以降低對環境的負擔。

你瞧瞧這玩意像是一支打氣筒嗎？**Fumpa Hall 1 / 4F / L1309**的這款USB可充電式電動打氣筒體型迷你，但功能卻非常強大。甚至說在性能上還強過市面上許多的落地式打氣筒，而在體型上卻是相對嬌小，重量僅為380克。這樣的小體積以及輕量化，要放進背包一點也沒問題。

打氣筒在充飽電後，其續航力可以為六條輪胎打氣，並且只需要20-25秒就能將700c公路車胎打至100 psi，最高胎壓則來到120 psi。原廠在打氣筒出廠前就將電子胎壓錶進行校正，因此所

顯示的胎壓很俱有參考性。而其伸縮式軟管氣嘴的設計可對應於法嘴及美嘴。

還有一款體型更迷你、輕巧的mini-FumpaUSB可充電式電動打氣筒，其體型大約是兩瓶CO2氣瓶的大小，充飽電池即可為兩條公路車胎打到120psi的胎壓。重量僅190克，並且由於採用USB可充電式設計，因此在長期使用下應該會比使用CO2氣瓶來得更經濟。

Messingschlager Hall 2 / 1F / Q0117也展出一款體型迷你的USB可充電式電動打氣筒。這款M-Wave Elumatik可以輕易放進背包，並可為輪胎打到100 psi的胎壓。

打氣壓力可透過電子螢幕進行調整，而氣缸就負責自己的工作，自動將輪胎打至你所設定的胎壓。快扣型的氣嘴頭適用於各種主流的氣嘴，並且隨附的氣嘴配件可以為包括球類和充氣墊等進行充氣。採用伸縮式軟管，足以應付狹窄難纏的氣嘴位置。M-Wave Elumatik為USB可充電式設計，並且可搭配使用於Messingschlager旗下多款的傳統打氣筒，包括幾款級數較高的Air Bullet落地式高壓打氣筒。

Airace Hall 2 / 4F / S0704最新款的打氣筒雖然還是要靠自己的力量來打氣，卻可說是市面上最聰明的打氣

筒。Airace導入i-gauge科技，透過藍牙無線傳輸可與智慧型手機連線，目前旗下多款攜帶式打氣筒已經導入這項功能。

搭載I-gauge功能的打氣筒還包括體型較大的Windpro A落地式打氣筒以及iSpeed F2 G迷你落地式打氣筒，允許使用者即時監控打氣時的胎壓。此外，只要在第一次透過智慧型手機設定胎壓，下次使用時也可以不需要拿出手機，當打氣時的胎壓到達建議值，打氣筒便會發出聲音及震動警示。這一系列的打氣筒可設定三種模式，對應MTB、公路車、避震器等，並且允許使用者設定不同的測量單位。



SKS Airstep腳踏打氣筒

德國配件製造商**SKS Hall 1 / 4F / LO611a**這款Airstep腳踏打氣筒可以好好利用自行車騎士的腿力，可以打到超過100 psi的胎壓。

這款Airstep鋁合金腳踏打氣筒是SKS與知名人體工學品牌SQLab攜手開發的產品，並且在2018年獲得台北自行車展創新設計獎。由於體積輕巧因此很容易儲放，並且可以讓騎士的雙手好好休息，讓打氣這件苦差事同樣由雙腳代勞。完成打氣後，伸縮軟管會自動縮回打氣筒，並且Airstep在收折後可以來到很精實的尺寸。此外，本體還搭載了壁掛架，無論是放在車店或是居家都不會佔用太大的空間。

Beto Hall 2 / 1F / Q0908首創EZ Head，同時擁有美式（紅色）與法式（藍色）氣嘴頭，革命性無扳手八爪專利設計，可單手輕鬆操作鎖固，將正確氣嘴按出插入氣嘴閥，垂直向下按壓即可鎖固，透過按壓上方凸起氣嘴，手臂同步向上抬，即可解除。目前Beto搭載EZ Head的打氣筒包括兩款級數較高的款式：Rapidfill Extreme以及RapidAir T高壓落地式打氣筒，而其他款式的打氣筒也可以透過選購來升級。

而另一款外型較為傳統，但功能同樣強大的是Beto CMP-172SG9落地式

打氣筒，搭載4吋的超大型胎壓錶，並且專利的雙頭三用氣嘴可適用於英式、法式、美式氣嘴。這款26吋打氣筒擁有強大的氣缸，可以快速且輕鬆地完成打氣。

Zéfal Hall 1 / 4F / M0301 展出一系列體型由小到大的Profil打氣筒。適用於公路車的Air Profil FC03由鋁合金製成，可輕鬆打到高胎壓，並且搭載Z-Turn聰明嘴可適用於法式、美式氣嘴，而伸縮軟管可降低氣嘴發生故障的風險。

另一款經典外型的Profil Max FP60是法國製造的頂級之作，採用永續林業的木頭把柄非常有質感。Z-Switch聰明嘴可適用於法式、美式氣嘴。在底嘴的大型胎壓錶還內建放大鏡，即時胎壓讓你一目了然。

Lezyne Hall 1 / 4F / L0315 新推出的幾款打氣筒搭載電子胎壓錶。首先登場的是這款Digital Shock Drive避震器打氣筒，這款體型迷你的打氣筒卻有著驚人的高胎壓輸出，可打到高達350 psi；而電子胎壓錶可確保胎壓的精確度。

不過，如果打氣筒會發生漏氣，那麼電子胎壓錶無論再怎麼準也沒用；為此，Lezyne採用零外洩氣嘴頭設計，

確認在氣閥關之後才脫離避震器連接，這也意謂著幾乎不可能會發生洩氣，達到電子胎壓錶的數據與實際胎壓的一致性。

Lezyne Digital Pressure Over Drive 儲氣式打氣筒不僅體型壯碩，更是非常的聰明，搭載儲氣系統專為無內胎自行車而生。採用鋁合金長行程高效的活塞軸設計，質感與耐用度兼具；透過強大且穩定的出氣量，即便是遇到再難打氣的無內胎車胎，相信都能夠迎刃而解。當然，這款打氣筒也可以作為一般的落地式打氣筒使用，並且藉由使用強壯堅固的鋁、鋼材質，採用能耐高壓的尼龍編織外管以及電子胎壓錶，讓這款打氣筒的功能非常強大。

Topeak Hall 1 / 4F / M0711 推出的這款Tubibooster，也可以幫助使用者安裝無內胎車胎。無內胎、CO2氣瓶大小都適用，獨特設計使用標準家用打氣筒將空氣儲存在1000cc 容量鋁合金儲氣筒中，讓儲氣筒可以使用於無內胎安裝或充氣，並且本體充飽氣的最高儲氣壓力200 psi（視打氣筒壓力）。氣嘴頭相容法嘴以及美嘴，透過一般的落地式打氣筒的軟管連接至氣嘴，即可為鋁合金儲氣筒進行充氣。

一旦釋放儲氣筒的壓力，Tubiboost-

er就像是一般的打氣筒一樣，可以視需求將輪胎打至適當的壓力。另外，Topeak還有一款新品AirBooster，是一款輕便、容易使用的CO2 充氣頭。精密CNC打造L直角氣嘴頭讓你方便對應法式或美式氣嘴使用。

最後，**Lifu 立富 Hall 2 / 1F / P0724** 的自有品牌Icetoolz帶來兩款落地式打氣筒新品。這款A451 Sport 經濟型落地式打氣筒，本體採用鐵製不僅堅固耐用而且經濟實惠。憑藉其快速鎖定的聰明嘴，可以對應於英式、法

式、美式的氣嘴。

而A652 Extreme 車店級鋁合金落地式高壓打氣筒，顧名思義可以滿足超高胎壓的需求，整體結合了鋼琴烤漆的精緻質感處理。最高胎壓可打至260 psi，創新的聰明嘴適用於美式、法式、英式氣嘴。本體搭載3吋大鏡面高精度胎壓錶判讀更清楚更容易，金屬底座加強操作時的穩定性。整體而言，這支專業級的打氣筒可以變成騎士居家的裝飾品，不再需要把打氣筒偷偷藏在陰暗的角落。



Topeak Tubibooster, 氣嘴頭可當成CO2打氣筒使用



Icetoolz A652超高壓落地式打氣筒



TATA

EL-ONZE-117 ^{Evo}Light **45% off**

Brand new 11 speed chain, with none roller design brings not only mute effect but also the most smoothly shifting experience ever.

The lightest weight in the world, got only 150gram, 45% less than other chains.

Self-Lubricant groove design makes the chain life 20% longer.

▶ TAIPEI SHOW No. **Q0302** (Hall 2)

NEW PRODUCTS

VELO 座墊

Velo推出各式各樣符合各種騎乘型態的座墊，包括目前流行的短鼻頭款式，可帶來優化的騎乘體驗以及更佳的性能。此外，由於採用全新的製程，因此在外觀上也俱有更整體的美學設計，並且由於不需要加訂釘讓這一系列的座墊更防水。 **Hall 2 / 1F / Q0614**



CHOSEN BOOST TC花鼓



這款Boost加大花鼓採用齒式聯軸器的設計。經過強化的棘輪結構可以提供非常優越的傳動效率，尤其是可以忠實傳遞動力抽車時的功率輸出。此外，由於花鼓結構打造的十分堅固並使用直拉式幅條編法，同時達到高效率與耐用性，可說是林道越野輪組的理想搭配。 **Hall 2 / 4F / R0114**

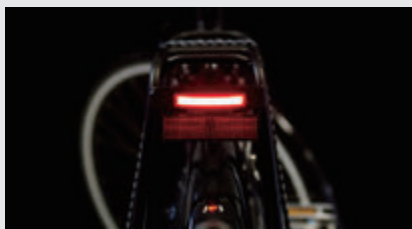
RELIC 龍頭水壺架固定座

如果您的車架沒有設計水壺架孔，透過這款龍頭水壺架固定座，可以為您的自行車增加裝載水壺，並且安裝簡單、結構輕便、價格也非常親民。適用於標準尺寸的水壺，本體採用鋁合金結構可降低水壺彈出的可能性。這種水壺架固定座非常適用於e-bike，因為一般來說e-bike車架都沒有設計水壺架孔。 **Hall 2 / 4F / S0428**



SPANNINGA PIMENTO-BRAKE煞車燈

這款非常熱門的Pimento-Brake新增了煞車燈功能，這個普遍應用於汽機車的功能現在終於導入自行車以及e-bike。透過煞車燈的應用，可以為騎士提升在白天和夜晚的行車安全。標準使用模式為4燭光輸出；而當煞車時，最高的照明效果為40燭光。 **Hall 1 / 4F / M0310**



達豫實業 壓縮服飾

達豫實業提供廣泛的服飾品項可滿足客戶打造自有品牌的需求，包括運動壓縮襪、袖套、短褲、長褲等，更進一步推出專為運動而生的壓縮系統，其產品特色之一在於使用醫療等級的材料及技術來製造。其運動壓縮系統可提供漸進式的壓力設計，加上無縫式的設計，提供最大到5XL的尺碼。這些機能服飾對於MOQ最低訂購量的要求並不算太高，因此可以降低客戶的研發成本，讓打造自有品牌變的簡單又低風險。 **Hall 1 / 4F / N1321**



FSA K-WING AGX 人體工學把



這是一款專為探險、砂礫騎乘、公路越野而生的人體工學把。K-Wing AGX採用碳纖維複材打造，並且在煞變把位以及下把位提供經過優化的人體工學。上把位採用10°前傾角，可允許騎士在爬坡時擁有更自然的騎乘握姿，進一步提升呼吸順暢度。而在下把位採用25mm外擴角設計，讓騎士更有操控自信握著下把位，以高速之姿通過崎嶇路段。 **Hall 1 / 4F / M1212-3**

Hall 1 / 4F / M1212-3

RIDEA SMP2功率盤



Ridea SMP2功率計是一款精準可靠的齒爪式(Spider)功率計，並且可相容於現有的Ridea曲柄及齒盤。SMP2的BCD規格分為三種(110mm、130/94mm、144mm)，可根據您的騎乘需求打造出適合的功率齒盤組。 **HALL 2 / 4F / S0334**

OTRAJET NEXO 26X1.75實心胎



Nexo實心胎為了滿足e-bike車款的需求，推別推出一系列在結構及材料都特別強化的版本，不僅讓整車的載重限制提升了30%，也連帶提升產品的使用壽命。此外，Nexo還進一步推出可以符合多種輪徑及胎寬尺寸，從折疊車到一般成車均可搭配這款防爆、免充氣的實心胎。 **Hall 2 / 4F / S0902**

八方電氣(蘇州) BAFANG BT F07 / F08

這款半整合式的電池適用於輕量化的e-bike車架。八方帶來這兩款BT F07.450C和BT F08.600C擴展其e-bike電池系列，分別提供450Wh或600Wh的容量，裝設位置可半嵌入車架的下半部(側向拆卸)。BT F07和F08採用18650鋰電池，可以在自行車上或是在電池拆卸後進行充電，並且充電器提供兩種規格。在電池的頂部內建電量顯示，方便使用者即時監控電量，並且另可選擇"Keyed Alike"的車架電池鎖。 **M0409**



MESSINGSCHLAGER M-WAVE ELUMATIK

顛覆你對迷你型打氣筒的想像。這款體型輕巧的電動打氣筒可以打到100 psi的胎壓，適用於主流的氣嘴規格。其迷你的身型可以輕鬆放入背包，並且採用USB可充電式。標配球針和充氣床的氣嘴轉接頭，可說是居家旅行的必備好物。 **Hall 2 / 1F / Q0117**



Meet us at Booth S0322

APRO



*We Embrace Innovation
and
Keep Moving Forward.*



LIME BOOM

HOLO BLACK

RACING RED

ERDP6.0CA-S 275+ / E-FULLY ALL MOUNTAIN

The ERDP 6.0CA-S 275+ Fully is design for conquering extreme terrain. The slim, muscular look is reminiscent of an off-road motorcycle. The **carbon fiber chassis** is manufactured utilizing EPS technology and High Modulus Carbon Fiber. EPS Tech is a unique forming technology which provides superior strength and extreme lightweight. Combined with a #6061 Aluminum rear triangle the complete frame is lightweight, stiff and responsive.

The heart of the frame is the power drive, a **SHIMANO E-8000** motor with new in-tube battery.

FEATURES :



* For more details, please contact our representatives.

ALTERNATIVE OPTIONS IN ALUMINUM VERSION AND SYSTEM :

Aluminum Frame with BOSCH



Drive Unit :
BOSCH Gen 2
Battery :
BOSCH PowerTube 500

Aluminum Frame with SHIMANO



Drive Unit :
SHIMANO E8000 / E7000
Battery :
DARFON E4C0C



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NEW PRODUCTS

FLR SHOES F-XX公路車鞋

藉由與頂尖職業選手的攜手合作與測試反饋，打造出這款極為舒適的競賽用公路車鞋。F-XX的特色之一在於支撐性極佳的鞋後跟，可以確保在踩踏時讓足部保持在適當的位置；而在鞋舌部分則採用非常柔軟的材質，讓足部不受到壓迫，降低長途騎乘的不舒適。鞋身設有六個通風口達到極佳的散熱效果，而剛性極佳的碳纖維鞋底可確保最佳的踩踏效率，並且不容易產生腳麻熱點。 **Hall 1 / 4F / M1206**



ROTOR 全球第一套 13速系統

現有主流的公路車變速系統為2×11，其變速理論檔位為22速，但由於齒盤齒數與飛輪齒數



所對應的齒輪比會發生重疊，因此實際上的有效檔位只有14速，並且還需要一定的自行車騎乘經驗，才可以同時駕馭前變與後變的換檔模式。相較之下，Rotor 1x13變速套件提供13速不會發生重疊的齒輪比，並且在操作上更為直覺易用。 **Hall 1 / 4F / L0106**

ITM ITM50一體式車把

這款ITM50碳纖維一體式空力車把，顧名思義是一款頂級的操控座艙。ITM50採用獨特而優雅的設計語言，並且在本體結構直接內建自行車車錶座，可以完美整合車錶。在上把位部分採用防滑抓握紋理，其帶有俯角且符合人體工學的把型，讓騎士可以得到最適化的操控性以及舒適性。 **Hall 1 / 4F / M0318**



八方電氣(蘇州) 八方M800中置電機

這顆體型精實的中置電機適用於公路、砂礫車、城市車等e-bike系列。這款可以整合於車架的電機重量低於2.3公斤，額定輸出功率為200W、最大扭矩為55Nm，並且針對在爬坡以及加速時給予動力優化。全套系統包括顯示螢幕、遙控手把、200Wh的整合式電池，並且全套重量也低於4.4公斤。這樣一套超輕量又可以帶來額外的動力輸出，可說是自行車愛好者與假日騎士的夢幻逸品，從此無論是要長途騎乘或是高山爬坡都不成問題。在限速規範部分符合25km / h (歐盟)、32km / h (美國)、45km / h (S-Pedelec)，而當騎士的踩踏力超過限速，則不會受到限速的影響。 **M0409**



BETO QIKFIX SUPREME工具組

專業技師所需要的工具都差不多整合在Qikfix Supreme工具組。這款18合1多功能工具俱備專利斷鏈器及鏈條固定器，並提供各種尺寸的內六角扳手及螺絲起子，使得這支外型迷你的隨車工具在功能上非常強大，並且用起來非常順手。此外，還搭配CO2氣嘴、10mm扳手、#25/#30星型扳手、幅絲扳手等工具。 **Hall 2 / 1F / Q0908**



HAFNY HF-MR088 自行車後視鏡



隨時監看你的背後。這款HF-MR088自行車後視鏡提供多種鏡片，以滿足不同的騎乘需求。其中耐用的不鏽鋼框體版非常適用於城市通勤車，而HD高清鏡片則適用於騎乘速度較快的e-bike；另外還有防眩藍光鏡片可適用於豔陽高照的騎乘。本體採用耐用的強化玻纖尼龍，可快速鎖付在公路車以及MTB的車把手上。 **Hall 2 / 4F / R0901a**

KMC X12鏈條



當自行車進入12速的時代，後飛輪的最大齒數以及體積也隨之增加；相反的是，齒片之間間距卻隨之縮小。為了應付這樣極端設計的挑戰，KMC重新設計鏈條，採用新式非對稱式智慧導角，將外緣導角由兩處增至四處，特殊排列，巧妙地避免鏈片與齒盤相互干擾，運轉安靜又安全，並且讓變速時上下鏈的動作更加流暢。 **HALL 2 / 1F / P0114**

MERCURY CYCLING X系列輪組



X系列輪組是專為林道越野而生的重口味輪組，不僅耐操好用，而且其耐衝擊係數可允許在相同位置承受高達120焦耳的雙重衝擊。能達到這般的優異性能，歸功於採用Fiber-X的高模係數破纖維，擁有將近兩倍的抗拉強度。輪框俱有經過特殊設計的梯形結構，能有效消除來自路面的衝擊力。輪框內徑提供多種選擇從25-40mm。Mercury專屬的Axis直拉式花鼓搭載三階棘爪，其咬合角度為3.5°。在規格部分支援現有主流的輪徑大小、心軸尺寸、花鼓規格等。 **Hall 1 / 4F / L0001**

SKS SPEEDROCKER

這款擋泥板是專為砂礫車、探險車、公路越野車而生，特別適用於胎寬超過32mm的公路車，並且可在崎嶇地形上提供穩定性，帶來全天候的最佳保護。在前輪擋泥板設計有全新雙層高度擾流板，可以有效避免雨水及泥砂噴到騎士的臉部；而在後輪擋泥板則採用伸縮式設計，提供更廣泛的保護範圍。前、後擋泥板的支架均採用黑色陽極氧化鋁合金，搭配全新的橡膠固定系統。 **Hall 1 / 4F / L0611a**



ALEXRIMS BEAR PAWLS BEB004花鼓

Bear Pawls適用於e-bike所帶來更大的功率輸出以及扭矩。本體採用結合Power Stroke技術的碳化鋼材飛輪底座，搭配較大的Flange花鼓設計，可打造出較大的幅條角度、剛性更佳。煞車系統對應於國際六孔，採用四顆密封的軸承可平均分配內部應力，同時保持高性能的滾動效率。 **Hall 2 / 1F / Q0714**



TAISPO STICKS WITH 3-DAY 2020 SHOW

TaiSPO will continue its three-day schedule for its 2020 edition, which will again be at the Taipei World Trade Center and run concurrently with Taipei Cycle, show organizers announced yesterday.

“Since Cycle has moved back to March, I hope we can have a little bit of synergy benefit for visitors,” said Paul Liu, project manager for TaiSPO.

TaiSPO 2020 will be March 5-7, starting one day after the start of Taipei Cycle. TaiSPO this year downsized the sporting goods trade show to three days, and reduced its footprint to a single hall at the TWTC from two halls. Liu said exhibitors preferred a more compact schedule.

TaiSPO will stick with the TWTC location in the city center. Although it has hosted the show at Nangang, Liu said exhibitors and visitors preferred the familiar TWTC venue, which has been TaiSPO’s traditional home.

TaiSPO organizers also worry

that the growth of Taipei Cycle could consume most of the available space at Nangang.

TAITRA, which organizes TaiSPO and Taipei Cycle, said it would continue to partner with technology and service companies to better align TaiSPO with emerging trends in sports and fitness.

“We want to incorporate more new segments to the show, besides the traditional equipment and fitness machines,” Liu said.

TAITRA teamed up with the Taiwan Smart Textile Association this year to organize a cluster of smart wearable exhibitors at TaiSPO.

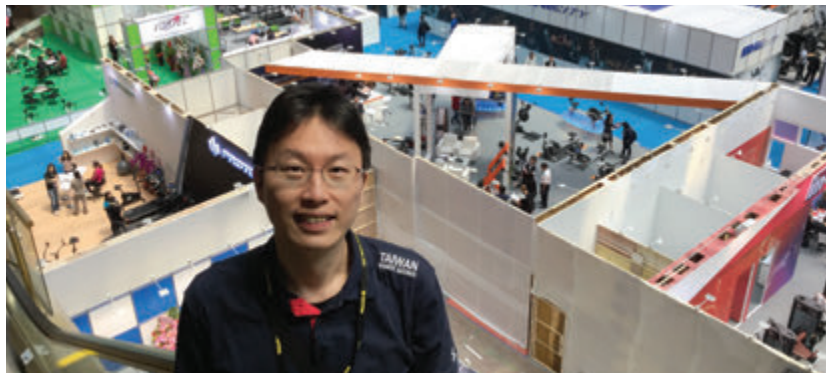
Organizers are also increasing their efforts to attract more gym owners to the show, focusing on fitness services, such as membership management systems and workout

programs, that are increasingly important to gym operators.

As another draw, TaiSPO plans to continue bringing in high-profile executives from Asian fitness clubs for its sports industry management forum.

Show organizers are also hosting

high-energy fitness demonstrations and other events on the TWTC stage to enliven proceedings. Today’s events include the CrossFit Taiwan Uprising Challenge. On Saturday, TaiSPO is featuring the “Fitness Mania” series of fitness class demos. ■ **Barbara Smit**



TaiSPO project manager Paul Liu

SPIKE IN STYLE WITH CONTI'S NEW 'SWIRLED' VOLLEYBALLS

With their bright colors and patented new “swirl design,” the newest balls from Conti cut a dashing figure on volleyball courts.

Instead of the traditional design that uses 18 nearly rectangular panels, the new balls are constructed with 10 curved panels that converge in a swirl pattern.

“It’s a patented design that makes the appearance more dynamic, combined with our sandwich construction to make the ball soft,” said Paul Yang, vice president of **Continental Chemical Industries A0525** and chairman of the Taiwan Sporting Goods Manufacturers Association. The Taiwanese company makes an array of quality balls for team sports, and supplies prominent international brands.

By using fewer panels, he said, Conti can shave the assembly time for a ball by about 20 percent, to 8 or 9 minutes from 10 to 12 minutes.

“We save in labor costs, but the material cost is higher,” Yang said. “We try to absorb the difference, so

that the swirl balls come in at the same price as the traditional balls.”

Balls made with the swirl design now account for about 10 percent of new orders, Yang said. The company is working with customers in countries from the Czech Republic to Colombia to popularize the style.

■ **Barbara Smit**



Conti's Paul Yang with a conventional volleyball (right) and one made with the company's new swirl pattern.

NEW TREADMILL IS 'LIKE A TANK'

DK City encourages runners to give its new Alpha Runner treadmill a beating.

The treadmill’s belt “is like a tank,” Aurelie Wu said yesterday at **DK City D0521**. “The belt is made with a thick rubber that helps to absorb shocks.”

For durability, each rubber slat sits on a base of aluminum instead of wood.

The Alpha Runner has a motor, but runners can turn it off for a self-powered workout — or crank up resistance for a tough “sled push” mode.

The belt inclines, and the machine accommodates an unlimited sprint speed. It’s also quiet and smooth-running.

The AR-22 is available in two ver-

sions and is the newest member of DK City’s Alpha Runner series, which it launched last year.

■ **Barbara Smit**



Aurelie Wu (left) and Tim Huang with the DK City AR-22 treadmill



TAISPO

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EVENT SCHEDULE

All events are in TWTC Exhibition Hall 1.

Thursday - Friday
March 28 - 29

Show Hours:
9 a.m. - 6 p.m.

9 a.m. - 3 p.m.
FitnessMania
Stage

Saturday, March 30
(Public Day)

Show Hours:
9 a.m. - 3 p.m.

Friday, March 29

9 a.m. - 2 p.m.
Smart Textile Seminar
& **Partnering Meeting**
2F/Conference Rooms 3 - 4

All Day Events

TaiSPO Innovation
Award Display Area
C0315

9 a.m. - 6 p.m.
CrossFit Taiwan Uprising Challenge
Stage

Saturday, March 30

Innovative Design Award in Sports
Technology Display Area
C0415

9 a.m. - 3 p.m.
International Seminar for Sports
Nutrition
2F/Conference Rooms 3 - 4

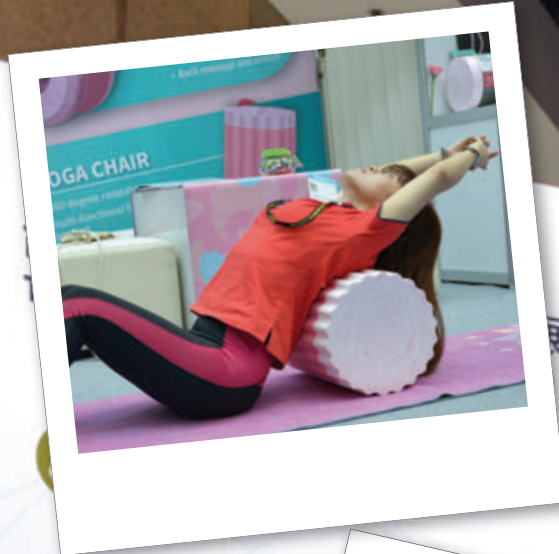
Saturday, March 30

9 a.m. - 3 p.m.
International Seminar
for Sports Nutrition
2F/Conference Rooms 3 - 4

9 a.m. - 3 p.m.
FitnessMania
Stage

TAISPO DAY 1 SNAPSHOTS

TAISPO



A punchy new equipment range with UFC branding is part of Dyaco's offering.



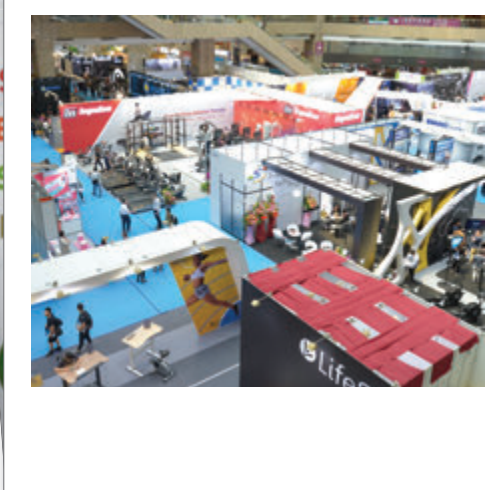
An intense workout on the Escalate stair climber from Intenza



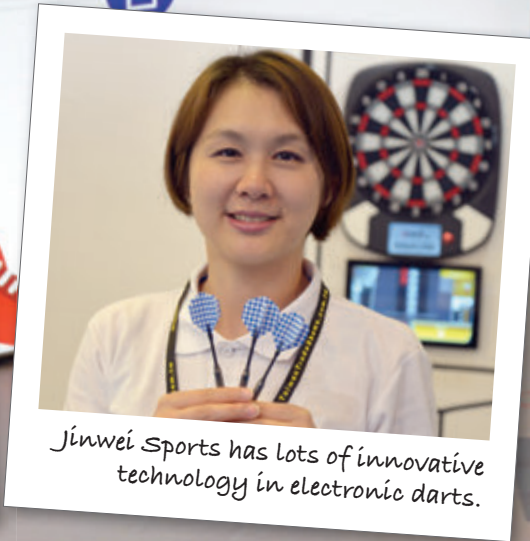
Alexandave builds up strength with resistance bands.



Intenza's weight vest makes workouts even more intense.



Shiny goggles are a highlight for the Saeko brand from First Rank.



Jinwei Sports has lots of innovative technology in electronic darts.



Ready for a dip with goggles from Kingasia International.

INTENZA STEPS UP THE INTENSITY WITH WEIGHT VESTS

Tower running is so trendy that there's now a race circuit, where hundreds of participants rush up the staircases of iconic buildings from Seoul to New York.

Since tower runners can't always train at the Empire State Building or the Taipei 101, Intenza D0723a offers the Escalate climber. With an adjustable incline and step height, it can help them prepare for such grueling runs.

Set to its lowest step height, however, and the Escalate can provide a low-impact workout for gym members who'd rather take the elevator.

This versatility, combined with a slick appearance, has turned the Escalate into a key differentiator for Intenza.

For athletes who want to push themselves to the limit, Intenza now is debuting weight vests that can increase the difficulty of a session on the Escalate.

"The Escalate is very suitable for intense training. Throw in your weight vest and you have yet another level of intensity," said Eleanor-Jayne Browne, vice president of branding and communications. "It could help amp up your exercise regime, or increase your endurance."

Browne said workouts combining the Escalate with weight vests help train firefighters — and prepare hopefuls for the Candidate Physical Ability Test, the standard physical used to test North American firefighter recruits.

The vest comes in two pieces, both with small pockets that can hold weights of up 2.5 pounds. The first vest can carry up to 50



Intenza weight vest

pounds. With the second attachment vest, users can haul a total of 75 extra pounds on the Escalate.

The concept fits with the demand for increasingly intense workouts. Many studios now offer high-intensity interval training (HIIT), as well as equipment intended for functional and athletic training.

That's inspired Intenza to develop a line of functional training gear.

"This is the beginning of many complementary items that could become a full cross-training package," Browne said.

The Taiwan fitness equipment brand also offers a full range of cardio equipment, some equipped with smart consoles.

At its booth, Intenza is hosting group training demos using the latest version of its indoor cycles. A new console is designed to be more ergonomic and use a more intuitive display.

"The riding position changes a lot during a cycling class, so we worked a lot on the placement of the console, to make sure it would be reachable and easy to read in any position," said Johnny Chu, a product designer at Intenza.

The console summarizes the most important information on one page, and more advanced data and functions on two other pages.

The 550 GC3 cycle has a color-coding system that indicates the cyclist's effort. A range of five colors indicates if the user is pedaling hard or taking it easy.

The color indicators can be customized to reflect users' personal abilities by accounting for age and gender when estimating their maximum heart rates.

The Escalate climber, combined with upgrades in Intenza's cardio range, have helped the company expand quickly. It should get another push this year when it opens a European subsidiary in Düsseldorf, Germany, under the leadership of Lars Schmidt.

The Dutchman is a seasoned fitness industry executive. He was previously CEO of MoveToLive and vice president of sales in Eu-

rope, the Middle East and Africa for Freemotion Fitness.

Schmidt has been with Intenza since the beginning of March. He is putting together a team of sales agents in Germany and reinforcing distribution in other European markets. Intenza already has lined up two distributors for France and for Spain and Portugal.

Intenza's European subsidiary complements others in Singapore, Japan, South Korea and the United States. The U.S. subsidiary, based near Seattle, Washington, is under new leadership. Daniel Woods was appointed as managing director earlier this year, replacing Kurt Kenney.

Schmidt said unique features help Intenza's products compete with leading international brands in the commercial market.

One is InCare, an advanced maintenance function for its smart consoles.

"It reports directly to our European service center and the distributor," Schmidt said. "This means we will know in advance when there is going to be a malfunction and we can intervene to prevent disruption."

Intenza is also investing in marketing with Intenza 2.0, an updated visual identity launched last year, and marketing tools for Intenza customers.

For 2019, Intenza is focusing on the hashtags #futureme and #tomorrowtoday to inspire gym users.

"The idea is that decisions made today will have an impact tomorrow, and we want to highlight training suggestions instead of guilt-tripping people," Browne said.

■ Barbara Smit



Intenza 550 GC3 indoor cycle

LEAN MANUFACTURING IS A TONIC FOR TONIC FITNESS

When a supply truck arrives at Tonic Fitness Technology in Tainan, the driver gets precise instructions on where to park. The delivery is arranged like clockwork, with a materials flow chart mapping out exactly where each part from the truck should go.

It's part of a lean manufacturing system at **Tonic D0321** that has led to significant productivity gains. The system has enabled the fitness equipment maker to roughly halve its supplier delivery times to 45 minutes.

"We have detailed sheets for each supplier, telling the driver where to unload and which forklift to use," said Vince Wu, the chief executive of Tonic Fitness. "These are all small things, but they add up to a much more productive flow."

When a key customer experienced surging sales, Tonic Fitness had to boost capacity and improve its productivity.

The results are impressive. Before the company started implementing lean manufacturing four years ago, it produced about 60,000 units a year with 110 workers.

Last year, output soared to 200,000 units with 230 workers. Wu plans to increase production again to about 2,000 units a day in the second half of this year, up from about 500 at the beginning of the year.

Tonic is also building a second factory that should begin production in the second quarter of 2020. That plant occupies about 10,000 square meters (2.5 acres) of land in Tainan's Shin-Ji Industrial Park.

When production is in full swing, Tonic says its combined annual capacity should reach about 1 million units, with strategic outsourcing. Because much of the production will be automated, Tonic will need about 500 employees.

"The most important gains are in the internal delivery," Wu said. "Previously, employees had to move around to fetch parts. Now, the robot will move so the employees can focus on assembly. This is where they add the most value."

Tonic measures efficiency in "takt time," or the time a unit spends at each station. Before implementing lean manufacturing measures, Tonic's takt time was about 120 seconds. It's gradually lowered it to 74 seconds in 2016 and 60 seconds last year.

Tonic makes indoor cycles for the Taiwan market under its i-Shape brand name. The company will host



A rendering of Tonic's new factory in Tainan, scheduled to open in 2020

two indoor cycle demos on 10 bikes today, and another on 33 bikes during the public day on Saturday.

At TaiSPO, Tonic is sharing a booth with the Taiwan Sporting Goods Manufacturers Association (TSMA) and other members of the S-Team, a group of 16 leading Taiwanese sporting goods manufacturers and suppliers.

The S-Team, which Wu has chaired since last year, helps its members share resources to improve their operations.

When the S-Team was created eight years ago, the members tried to work together more efficiently

by standardizing parts. But Wu acknowledged that this proved complicated.

Now, S-Team members focus on learning from one another on such topics as marketing and lean manufacturing.

Twelve participants recently returned from a visit to the United States, where they toured an Olympic training site in Tennessee, the training center for the Texas Rangers professional baseball team near Dallas, and the IHRSA convention and trade fair in San Diego.

■ **Barbara Smit**

LIVE AND IN LIVING COLOR: LIFESPAN FRESHENS BRANDING

With its TaiSPO booth decorated in shades of turquoise and bright orange, LifeSpan is debuting fresh branding to spotlight its technology and design upgrades.

LifeSpan is the fitness equipment brand of Strength Master Fitness Tech, **D0026** one of Taiwan's leading fitness equipment makers.

The brand is long established in the U.S. market, with smart features in cardio and workplace fitness equipment. LifeSpan launches the new brand identity as it expands its global distribution.

Strength Master has also updated digital features on LifeSpan's treadmills, after absorbing a Taiwanese firm last year that specializes in console technology.

"The consoles of all treadmills will have interactive functions and built-in fitness programs," said Kirsty Chen, deputy manager of the Strength Master sales department. The company will update its bikes and ellipticals next year.

The integration of the technology makes it easier for Strength Master to smartly combine its hardware with digital functions. Chen said the focus is on the user experience, with touchscreens that highlight the most relevant functions.

The system has Bluetooth connectivity and is compatible with such apps as Google Fit and Apple Health.

LifeSpan treadmills already include such features as Intelli-Step, which counts a user's steps, and Intelli-Guard, which makes treadmills safer by stopping the

belt when it hasn't been used for more than 20 seconds.

The upgraded treadmills assume pride of place at LifeSpan's colorful TaiSPO booth.

"It's the first time that we are emphasizing the LifeSpan brand here," Chen said. "The decoration is like a runway, with two distinct areas for the fitness and workplace products."

Strength Master is also investing in LifeSpan's sales infrastruc-

ture. It named Herman Bakker as business development manager in Europe, the Middle East and Africa.

Bakker is a seasoned Dutch executive who formerly supervised European distributors for Life Fitness, a leading fitness equipment company. He spent 14 years there, the last six as country manager for the Benelux countries.

LifeSpan is also considering opening a full-fledged European subsidiary to accompany its distribution center in the Netherlands.

Its U.S. subsidiary has helped drive LifeSpan sales there. Based in Salt Lake City, Utah, it is called PCE Fitness.

Along with equipment, PCE sells Interactive Health Partner, an online health management system.

Based in Changhua County, Strength Master also sells the Ampera line of training equipment that replaces free weights with an electrical resistance system.

■ **Barbara Smit**

"IT'S THE FIRST TIME THAT WE ARE EMPHASIZING THE LIFESPAN BRAND HERE. THE DECORATION IS LIKE A RUNWAY, WITH TWO DISTINCT AREAS FOR THE FITNESS AND WORKPLACE PRODUCTS."

— KIRSTY CHEN, STRENGTH MASTER

FUTURE OLYMPIC SKATEBOARDERS MAY GET THEIR START ON A TK CHIN RAMP

For the first time, skateboarders will compete in the Summer Olympics next year.

The decision by organizers of the 2020 Tokyo Games to include skateboarding, along with four other non-traditional Olympic sports, may help make the games relevant to younger and more urban viewers.

It was also an inspiration to Howard Chin, a Taiwanese businessman who has invented many pieces of sports gear and toys in his career.

His Taipei-based company, TK Chin, **A0616** is showing a portable skateboarding ramp at TaiSPO

"It's like a Lego ramp," Chin said. "There is big customer potential because it's compact and easy to assemble. You could take it along for a picnic."

TK Chin has sold portable skateboarding ramps for years, but Chin said the upcoming Olympic Games prompted him to expand the range by adding modules so buyers can customize the ramps.

"You can combine them and change many features. That makes it much more interesting," he said.

TK Chin was originally a trading

company, but changed its focus after opening a factory in Malaysia. The company now handles many types of manufacturing, from injection molding to welding.

Ken Chin, the owner's son, said the Malaysian factory gives TK Chin a competitive advantage because of the country's low oil prices and high labor productivity.

TK Chin now operates two factories in Penang, in northwest Malaysia, that employ about 200 and cover some 24,000 square meters (258,000 square feet). Instead of dispatching Taiwanese managers to supervise production, TK Chin has installed cameras to monitor the factories remotely.

Malaysia's favorable trading relationships have also helped TK Chin develop its international business.

TK Chin now sells active leisure products in all shapes and sizes — most of them made of plastic and mostly, but not exclusively, intended for children or teenagers.

Its wide-ranging catalog features products from swings to boxing

equipment, and from basketball hoops to balance boards.

Chin prides himself on creating many of the products, some of which have garnered recognition for their ingenuity. A portable slide, for example, may be attached to indoor stairs or set up as a standalone slide in the yard.

TK Chin sells to toy stores as well as sporting goods chains, including Intersport and Sport 2000. Chin says the distinction between toys and sporting goods is blurring because parents are increasingly eager to encourage their children to be active — anything to get them away from sitting for hours in front of a TV or a computer screen.

One of Chin's latest inventions is a basketball set that uses a handle to adjust the height of the hoop. "Previously it was a telescopic system. You had to take out the pin and pull, and it was quite heavy," he said. "The new system is much easier and lighter."

Another deceptively simple innovation is an arc-shaped base on TK Chin's basketball sets. Many basket-



Howard Chin, founder of TK Chin, demonstrates his portable, modular skateboarding ramp.

ball sets stand on a heavy square base so they won't keel over. But these types of bases encroach on the playing surface and are so heavy that players could stub their toes or twist their ankles in the heat of the action.

A balance board incorporates a guard on the edge to prevent users from toppling backward. Chin said his product is about half the price of the leading balance trainers on the market. The guard makes the balance trainer more versatile, so users can more easily train abs and legs.

■ Barbara Smit



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SAEKO GOES THE DISTANCE WITH OLYMPIC HOPEFUL CHANG TUAN CHUN

With just over a year to go before the Tokyo Olympics, Chang Tuan Chun is training hard to secure a spot in the triathlon at the Games.



Saeko's Selina Liu poses with three winners — the Falcon and Carina goggles, and Taiwanese triathlete and Olympic hopeful Chang Tuan Chun (in the display photo).

As he raises funds to train in Thailand and New Zealand, the Taiwanese triathlete receives steadfast support from Saeko, a goggle brand that sells products for indoor and outdoor swimming.

The Saeko brand is owned by First Rank **D0110** of Taipei. By sponsoring Tuan Chun, Saeko features on the same garments as much larger sponsors such as Nike.

"We have built up our marketing department for the Taiwanese market in the last two years," said Selina Liu, marketing manager for First Rank. "It has helped to create more activities and to build on the recognition we have obtained for

our goggles."

The brand has supported several water sports and endurance events, such as last year's Urban Aquathlon in Singapore and the Xterra Taiwan race, where Saeko appeared on the arrival gate.

The partnership with Tuan Chun comes in handy as he travels to races around Asia, since Saeko is also looking to widen its reach in the area. It has recently targeted the Philippines, Singapore and Bangladesh, and this year plans to focus on Indonesia, Malaysia and Thailand.

First Rank also supplies retailers and water sports brands in several other markets, thanks to the reputation of its products and technology.

For example, the Ultrafuse technology that First Rank uses to assemble its goggles allows it to produce a wide variety of designs, while ensuring there is no leakage, and the seals won't pop out.

"The two parts are fused. That means we can create many different combinations, and not just round-shaped goggles," Liu said.

First Rank earned a Taiwan Excellence award this year for its Falcon model, named after the shape of the lens. Liu said the goggles are particularly comfortable because of the construction and soft gasket. The design offers panoramic vision with clear frontal and side vision.

A second prize winner, the Carina, offers many of the same features and adds a reflective coating. It comes with patented buckles designed by First Rank, so the goggles are easy to tighten or loosen.

The awards support First Rank's trade activities and provide extra exposure for the brand. The mark is used on point of sale materials for Saeko goggles — along, of course, with Tuan Chun.

■ Barbara Smit

CHARDER'S BODY ANALYZER CAN FATTEN GYM RETENTION RATES

Step onto Charder's analyzer, hold the handles, and within seconds you will get the lowdown on your body composition, fat analysis and muscle quality — all neatly summarized in a few figures and graphs.

Such equipment, which relies on bioelectrical impedance analysis (BIA), has proliferated in recent years as gym operators seek to provide extra services to their members, boost retention rates and even add a few extra dollars to their monthly dues.

Charder **B0625a** has thrown its weight behind body composition analysis by developing its own gear and algorithms, and by using medical-grade technology that delivers accurate results in under a minute.

"It's very useful for gyms and personal trainers, who can explain the results and formulate appropriate training plans for gym members," said Sally Chen, Charder's deputy general manager.

The Charder body analyzer is available in two versions. A larger analyzer, for medical professionals, uses five or six frequencies for detailed data. A smaller machine, which Charder is debuting at TaiSPO, uses three frequencies to provide data that is most relevant for sports and fitness.

By using more frequencies, the company explains, the system can provide more, and more detailed, types of analyses.

For example, a single low-frequency current will bypass a cell membrane instead of penetrating it, which prevents an analysis of cell walls.

The BIA market has long been dominated by Inbody, but the South Korean company is facing a growing number of competitors such as Tanita, Asterasys and Acuniqu. Charder says most gym analyzers operate with two frequencies.

Charder's smaller MA 601 model requires users to remove their shoes, stand on a little platform and hold one handle in each hand. The machine sends barely noticeable electrical currents through the body. It then computes a convenient single-page summary.

A "Muscle Quality Analysis," for example, estimates the user's muscle quality based on muscle strength and adjusted for age and gender.

Charder's more sophisticated model for medical professionals also generates a sometimes unsavory "Abdominal Fat Analysis," which measures the percentages of a user's visceral and subcutaneous fat, as higher percentages of visceral fat can lead to a greater risk of obesity-related diseases. Most analyzers, by comparison, lump both measurements together into a single body fat percentage.

Charder has been developing its BIA system for several years, and said the algorithms it uses have been "repeatedly verified by a large number of clinical experiments."

"The analysis results can be

synced directly with the gym's membership management system," said Chris Cho, brand manager. "Gyms can help users track their progress more effectively and conveniently if they can store and analyze the results directly."

The Charder system uses the gym's WiFi network to connect with its membership management system.

Charder, in Taichung, was founded by Paul Tsai, an electronics engineer. The company started as an OEM manufacturer of consumer scales. In 2005, it launched Charder Medical, targeting customers from hospitals to dialysis centers and veterinary clinics.

Another customer group includes industrial service customers such as food producers and the shipping industry, which use Charder scales.

Charder's customers include such big names as Tefal, Panasonic and Omron, which encouraged Charder to develop a body fat analysis system.

Charder's work on bioelectrical impedance analysis has drawn the attention of Taiwan's ministry of health. The ministry is conducting a three-year national health survey that will be used to guide Taiwan's health policies.

While body measurements typically focus on fat, Cho said the muscle quality analysis could be equally useful for health care providers, especially those who care for elderly patients.

By adding connectivity functions to its body composition analyzers, Charder is positioning itself in the healthcare market. A user's Body Composition Analysis can be quickly added to someone's medical records or shared with his or her health insurance system, Cho said.

Another Charder brand, Oserio, makes equipment for the consumer market through customers such as Watsons, the drugstore chain. Its machines are made by manufacturers in China and Taiwan.

■ Barbara Smit



Bioelectrical Impedance Analysis provides data relevant for workout plans.

TAISPO HONORS 10 PRODUCTS WITH INNOVATION AWARDS

From an energy-packed drumming workout to a tiny bicycle power meter, 10 groundbreaking products won TaiSPO Innovation Awards.



Training with a Parabell board

See the winners on display at booth **C0315**.

The Parabell Training Course, from TFL Fitness Center, is a functional training workout that uses a Parabell board. TFL says the board, with seven grip points, permits more versatile exercises than dumbbells and other weights because it can be held at a wider variety of angles.

The jury also liked the Crazy Hit! group exercise class, where exercisers pound on a Fly Step board with drum sticks (see related story, this page).

The S-Force Performance Trainer from Matrix, a brand of **Johnson Health Tech**, **B0609a** is meant for

athletic performance and high-intensity interval training (HIIT). The low-impact machine helps users work on acceleration, like the drive phase of a sprint, or sports like basketball and football.



McFashion 3D elbow protector

The Sole Stepper from **Dyaco International** **B1109** is made for endurance training or short bursts. An incline feature changes the intensity of the workout. Dyaco says it can be used for circuit training or as a standalone trainer.

The versatile Verso is a stepper



Perseidas noise-reducing exercise mat

that has cycle and elliptical modes as well (see story in yesterday's TaiSPO Show Daily). Verso supplier **Sports Art** **B0309a** offers two self-powered versions.

The 3D elbow protector from **McFashion International** **A0414** is a seamless sleeve with a silicone



Matrix S-Force Performance Trainer

structure to prevent injuries from collisions.

The McSIL Seamless Elbow Protect Sleeve has a patented, four-way super-stretch fabric, which is ultra-thin and light and provides compression for muscle support. It includes a silicone buffer with triangular shapes.

An exercise mat from **Perseidas Enterprise** **D0205** not only protects the floor, but protects the ears of the neighbors. It cuts vibration and noise caused by barbells dropped on the floor. A new cross-lock system makes the mats easy to assemble and disassemble.

The Arofly Link from **TBS Corporation** **D0321** connects the miniature Arofly bicycle power meter and cadence sensor with other bike computers, using Bluetooth or Ant+.

The Fast system from Enford International integrates three steps for making custom insoles into one machine, so a custom insole can be made in less than 30 minutes. ■



Dyaco Sole Stepper

KEDDY LIU POUNDS THE DRUM FOR THE CRAZY HIT! WORKOUT

In a spacious exercise studio in Taoyuan recently, some 20 women were jumping around, cheering — and furiously hitting inflated balance trainers.

Welcome to Crazy Hit!, an exercise class invented in Taiwan that has won plaudits for accessible full-body training routines, done in fun, high-energy classes.

The face behind Crazy Hit is Keddy Liu, an instructor from Taiwan's Fly Fitness and Teaching Union. Liu got his start teaching fitness classes at Les Mills and Radical Fitness. He wanted to create a class that was original and accessible, and had a local touch.

"Drums are part of our culture — we play them at big festivals," Liu said. "The trick was to create equipment and exercise that made it easy and entertaining to train with drum sticks."

Crazy Hit classes use sticks made of wood, not plastic, for

comfort. They are thick and feature anti-slip grooves and are held "like Chinese-style drumming," Liu said.

The other essential component of a Crazy Hit class is the Fly Step, a balance trainer that looks like an oval green Bosu ball. Both were designed specifically for Crazy Hit and are made in Taiwan.

"Drumming on the floor would be too hard and noisy, and too tough for tall people," Liu said. "But if the board is too big there is not enough space to move around and do other exercise like squats."

Workouts consist of 10 musical segments that progress from a warm-up to simple aerobics to high-powered cardio training and balance exercises. The most popular part comes about halfway

through, when participants are encouraged to wildly beat on their Fly Steps — and the instructor makes sure they do so with plenty of cheerful energy.

"In one hour, you get cardio training, you work on your legs, arms and core muscles, and you have plenty of fun," Liu said.

Most of the participants at the Taoyuan class were beginners who had never tried Crazy Hit, but they had no trouble following the moves.

Fly Fitness has publicized Crazy Hit classes for about two years, selling the program to fitness clubs and organizing family-friendly



Keddy Liu leads a Crazy Hit! workout in Taoyuan.

workshops. They've become so popular that Liu has about 20 to 30 bookings per week all over Taiwan — so many that he can't do them all.

Fly Fitness plans to showcase Crazy Hit at international fairs and create a licensing program. ■ **Barbara Smit**

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