

Going 'e'— first check the battery

By ZHAN JI

As China gets to work on a low-carbon economy and the use of new energy vehicles, a Guangdong province company sees nothing but promising development prospects.

The Huizhou Epower Electronics Co Ltd, founded in 2006, is a leading solution provider of battery management system (BMS), a key part in battery production, in China.

Shenzhen-listed Desay Battery Technology Co Ltd is one of its major shareholders.

The BMS is a core component of a vehicle battery system because it monitors the battery charge.

"The development of new energy vehicles in China will speed up since the country is promoting their use and recently issued national standards on that," noted a senior Huizhou Epower executive.

"We will try to develop deeper cooperation with automobile makers as well as battery suppliers in China and abroad to keep

our BMS lead as it is."

He said that Huizhou Epower's technological innovations and breakthroughs, combined with Desay Battery's advantages in R&D, manufacturing and quality control in the area of small and medium-sized portable power supplies have sharpened Epower's competitive edge.

"You may have noticed the special vehicles in operation at the Shanghai World Expo. About 100 of them are equipped with a BMS that

we supplied," the executive exclaimed.

And the buses that commuted between Pudong and Puxi in the tunnel under the Huangpu River speaks volumes for the BMS performance.

Even before the Expo, 100 buses equipped with Epower's BMS were in service in 2008 during the Beijing Olympic Games, and got immediate attention.

According to the Epower executive, they have supplied buses made by Dongfeng, Foton and Xiamen Kinglong with BMS, as well as other special Foton and Zhuzhou CSR Times Electric vehicles, not to mention cars from Chana, Geely, Lifan, JAC and Zotyen.

Epower has also formed a very close relationship with Beijing Jiaotong University,



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Liu Fei (right), president of Huizhou Epower Electronics Co Ltd, at a recent interview with a local TV station during a test drive of the first new energy bus using Epower's system.

which has a strong R&D team and staff members who make up 66 percent of

Epower's employees. The company also has 37 patents, 18 of them its own

inventions. Its products can supply almost all e-vehicles and fit all battery types.

Great Power wins with innovative tech

By LAO ZHAN

Guangzhou's Great Power Battery Co Ltd won a gold prize at the 19th National Invention Exhibition in Xi'an, capital of Shaanxi province, in early September.

What earned Great Power the prize was the company's non-aqueous electrolyte device that limits discharge of lithium-ion batteries without a protection circuit.

The batteries with patented technology have been industrialized at the firm's operations in the Pearl River Delta cities of Guangzhou and Zhuhai. They are used in power tools, electric bicycles, safety lamps and lighting systems.

"The prize marks another achievement from our ceaseless

efforts to enhance independent innovation and R&D," said Xia Xinde, president of Great Power. Founded in 1994, Great Power is now one of the largest battery makers in China and among the nation's few that offer a full range of batteries.

The firm's factories in Guangzhou and Zhuhai, covering a total of 180,000 square meters, can produce more than 700,000 batteries daily.

Its products made in Guangzhou include Ni-Mh, lithium-manganese and lithium-thionyl-chloride batteries as well as chargers, LED lamps and flashlights

The company makes li-ion, polymer li-ion and LiFePO4 batteries in Zhuhai.

Its products have found a ready market in more than 50 countries

and regions worldwide including the United States, Germany, Japan, Canada, Colombia, Turkey, Hong Kong, Macao and Taiwan.

"Great Power believes innovation is the soul of development and the core guideline of management — we boast a strong R&D force and state-of-the-art research facilities," Xia said.

According to the president, the firm has more than 120 senior technicians including professors and doctor's degree holders.

The company has five comprehensive labs in addition to a post-doctoral research station with Tianjin University and a rechargeable battery research center, which is a joint project with the municipal government of Guangzhou.

By using the latest technology in new products, Great Power has strengthened its national leadership of the battery industry. The firm has also joined forces with several universities including Guangzhou-based Sun Yat-sen University and Central South University in Hunan province.

Xia added that an intellectual

property lawsuit in Europe in 2008 that Great Power won taught his firm a valuable lesson. It now emphasizes on patent applications.

The company now has 10 national invention patents and has filed for more than 30 other invention patents and 10 new practical patents.



The LiFePO4 Li-ion battery, a state-of-the-art product made by Great Power.



Great Power headquarters in the city of Guangzhou.



Yang Jiajun (center), president of Guangzhou CLG, receives a sci-tech enterprise award from the Panyu district of Guangzhou.

Guangzhou company goes global with lithium cell production line

By LI SHENG

Guangzhou CLG Electric Equipment Co Ltd recently signed an agreement with counterparts in Japan and Canada to combine foreign technical expertise with its own R&D and human resources experience to become a leading supplier of battery production equipment.

Yang Jiajun, president of Guangzhou CLG, said they will set up an R&D center for automated equipment for battery manufacturing.

The center has already made some breakthroughs on core technology, Yang said. And, their R&D achieve-

ments, as well as production experience, will help them take a lead in that industry.

Guangzhou CLG was founded in 2002 in Guangzhou's Panyu district and is now one of the very few enterprises in China that supply production lines for lithium cells.

Their equipment has been exported to the United States, Canada, Japan, South Korea, Russia, Southeast Asia, and Taiwan and they are at the head of the domestic market.

"We have dedicated ourselves to the application of improved technology and have taken advantage of advanced technology from Japan as

well as design, production and R&D ideas from Taiwan, Canada and the US. Our new-energy battery production equipment is said to be reliable by our clients," Yang said.

He has been particularly encouraged by a remark by President Hu Jintao when he visited a battery factory in Canada in June during his State visit there, Yang added.

He said that Hu advised his entourage to encourage Chinese li-ion battery production equipment suppliers to spend more on R&D to better develop technology-intensive equipment for domestic and foreign markets. The remark came after Hu spotted a label on a lithium battery production line that said "Guangzhou CLG Electric Equipment Co Ltd"

"As an advanced technology company, CLG Electric Equipment will continue to spend more for the development of human resources, as well as for technological renovation and innovation to cut production costs and improve quality and added value," Yang said.

He added that his company aims to be a global, first-rate supplier of equipment for new energy battery production in the near future.



Advanced manufacturing machinery at CLG.

Shantou zone creates buzz in electric vehicle industry

By CAI CAI

The country's first experimental zone for electric vehicles in Shantou is playing a pivotal role in boosting China's green automobile industry.

Founded in 1998, the Shantou zone is a cradle of China's electric vehicle (EV) industry and one of the world's premier centers for development of the sector.

With world's most advanced equipment and technologies, it is a base for research and development, personnel training, demonstration, operation and testing of new-energy transport.

Sino-foreign cooperation along with seminars, conferences and lectures in the zone on development of electric cars have played a pivotal role in development of the industry.

The Shantou zone also offers a favorable environment for big-name foreign carmakers to test newly developed EVs.

The central government has long supported the industry with subsidies for automakers and buy-



The Shantou zone was founded in 1998.

ers, but the price of EVs remained much higher than conventional vehicles.

As a result, some cities also began giving out subsidies this year to make electric cars more attractive to buyers.

In July, the first EV was sold to an individual. Previous sales have mostly come through government taxi procurements.

China is now positioned to be the first nation to truly realize the EV era, insiders said.

Analysts add that China can no longer depend on traditional energy for its rapid growth so EV development is a strategic choice for the country's energy security.

New EVs by private automakers, State-owned enterprises and joint ventures are now frequent.

China's annual production capacity for electric vehicles will surpass a million units by 2020, according to industry forecasts.



Rain test for a vehicle in the experimental zone.