

Editor's note:

New quality productive forces, first put forward by President Xi Jinping in September 2023, refer to advanced productivity that features high-tech, high efficiency and high quality. Driven by revolutionary technological breakthroughs, innovative allocation of production factors, and deep industrial transformation and upgrading, new quality productive forces are playing a vital role in the country's accelerated efforts to foster new arowth drivers. This issue will look at four of Jiading's enterprises that have made successful explorations and remarkable achievements while remaining focused on the new quality productive forces to boost high-quality growth.

Li Huacheng and Yang Yang

digital screen inside an office building in Nanxiang Town, which houses the Shanghai Zall Steel Electronic Commerce Business Co, updates figures relating to the China steel industry every six seconds. The numbers range from real-time transaction volume to data analysis graphs.

About six years ago, the traditional steel industry reached its development ceiling while technologies in the Internet sector started to grow rapidly. In 2018, Zall Steel came into being, and now the company has become a well-known hightech enterprise in China.

"What can we change?" was

the question raised by Pan Fujie, CEO of Zall Steel.

In 2019, the company introduced its first generation of products, which played a pivotal role in breaking down information silos within the steel industry. Increasingly, its businesses are embracing the Internet as a key component.

In the past six years, the company has obtained about 10 patents and more than 40 software copyrights.

"We provide both normal trading and bespoke services. And we compete in the digital economy," Pan added.

"We rely on smart trading and have strengths in supply chain and technology services. We have six service platforms: smart trade, supply

130b yuan

Founded in 2018, Zall Steel has amassed a client base exceeding 70,000, with an accumulated trade volume surpassing 130 billion yuan (US\$17.9 billion) by 2023.

chain service, Software as a Service (SaaS) cloud services, warehouse Internet of Things (IoT), smart logistics, and data management

"Traditional industries combined with the Internet will definitely unleash new vitality," Pan said.

By the end of 2023, Zall Steel

had established 50 service centers around the country, covering over 310 cities in 32 provinces. It has more than 70.000 clients and trade volume in total has exceeded 130 billion vuan (US\$17.9 billion).

"And we would like to expand overseas," Pan said.

Recently, Zall Steel received approval for its first cross-border export business order. The company, which specializes in exporting domestic hot-rolled high-strength steel, plans to ship the goods to Saudi Arabia for the construction of terminal photovoltaic projects.

"We expect that within five years, our international trade volume will account for 30 percent. That will be 10 billion yuan," Pan said.

'Little giant' presses ahead with innovative skills and improved materials



Jinzhida Group is headquartered on Jiashan Road N. in Waigang Town — Yu Chao

Yu Chao and Yang Yang

JINZHIDA, a Shanghai "Technology Little Giant" firm based in Jiading's Waigang Town, has been providing automotive interior solutions, including roof linings, door panels, seats, and headrests, for more than 200 domestic and foreign clients.

"On average, one passenger car produced in China has in it at least 1 meter of composite automotive interior materials produced by Jinzhida," said Zhang Wen, chief executive

officer of Jinzhida (Zhida) Composite Materials Co.

"The industry as a whole offers no high profit now," said Zhang. "To survive, we made innovation on tech skills and improved materials."

The company set up its factory in Waigang Town in Jiading District in 2016. The next year it moved its headquarters from neighboring Baoshan District to Waigang. With an annual composite output of over 40 million meters, it supplies mainstream

car models for not only established brands such as Benz, BMW, Volkswagen and General Motors, but also newenergy brands such as NIO, Li Auto and Xiaomi.

It has set up research libraries including a constant humidity and temperature maintenance room, odor test room and walk-in environment room, as support for product quality control and iteration.

"We have flame lamination lines, advanced adhesive film

and powder lamination lines, as well as hot melt adhesive lamination lines. Additionally, we are equipped with various types of odor improvement ovens and drying boxes, and we own a 2000-liter cubic cabin VOC detection facility," said Wang Chundong, director of Jinzhida's automobile operation center.

"Systemic and digital management helped us save nearly 2 million yuan (US\$276,290) in labor costs last year," Zhang added.

Ecar Tech's driverless vehicle breakthrough

Li Pin and Yang Yang

force."

were being tested.

delivery.



THE first automated exclusive production line in China for lowspeed four-wheel driverless cars has been launched at Shanghai Ecar Tech Co in Jiading District. With an annual capacity of 10,000 driverless vehicles, the new production line will generate what is described by Bai Junbo, founder of Ecar Tech. as a "new quality productive force" in urban service sectors such as sanitation, deliveries and security patrols.

"A service-oriented driverless car could be a 24-hour non-stop 'new quality productive force' to work at different environments and in different weathers," Bai said. "In essence, it is not only a technological breakthrough, but a reshaping of the future labor

In the testing zone, some sanitation vehicles launched in March

"The cars are capable in the entire sanitation process, such as task planning, cleaning, garbage dumping, water refilling and battery recharging. After being fully charged, it can work nonstop for six hours, with a capacity of



cleaning 15,000 square meters per hour, equal to an efficiency of five or six sanitation workers working together," Bai said.

The traditional main engine plant of driverless vehicle relies enormously on a huge supply chain and a serial manufacturing procedure.

In Ecar Tech, however, a standardized and modular manufacturing procedure has been applied, sharpening the company's competitive edges.

"Leveraging standardized and modular production, we are able to design cars in different working

scenarios quickly and cater to the needs of different customers," Bai said.

A production circle of a new car model can be reduced to within four months and that of a tailor-made model within eight months

Ecar Tech has also developed the world's first unmanned vehicle chassis operation system for terminal scenario application. With both its software and hardware flexibly in control, the company is able to quicken its steps in vehicle function iteration.

"In this way Ecar Tech plays

Ecar Tech has launched more than 20 types of driverless vehicles in three main application scenarios: sanitation logistics delivery and security patrols.

the role of an assembler, providing simple, efficient and reliable solutions for its customers from its diverse services and tech," Bai said

"The concept of 'driverless' should be simpler and more applicable in its essence."

Ecar Tech has expanded its footprint to more than 60 cities in China, delivering more than 1,000 driverless vehicles with total mileage surpassing 8 million kilometers. Its sanitation and patrol cars have also been exported to Middle East countries and to South Korea.

Biotech company develops radioprotective hydrogels

Peng Xiaoyan and Yang Yang

SHANGHAI Reunion Biotech Co, a specialized and innovative enterprise based in Jiading District since 2018, has built a world-leading medical hydrogel technology repertoire represented by multiple innovative medical solutions for implantation or intervention, including radioprotective hydrogels, tumor embolization hydrogels, and products related to tissue filling and regeneration, and drug

At the research center of

Reunion Biotech, staff workers can be seen preparing materials, doing chemical purity analysis, bio-safety analysis and sifting through different active drugs.

Each type of hydrogel, after being developed and going through tri-

At Reunion Biotech's cutting-edge laboratory, staff can be seen analyzing various active pharmaceutical ingredients. - Peng Xiaoyan

Practice (GMP)-certified workshop, as well as a range of state-of-theart laboratories for physical, chemical, and microbiological analysis

Among them, the R&D center has several industry-leading liquid and gas chromatography analysis pieces of equipment, and cell culturing and testing facilities.

"Globally speaking, the radioprotective hydrogel is mainly used to target prostate cancer," said Pan Zhen, chairman of Reunion Biotech. "We have developed the world's first radioprotective hydrogel targeting cervical carcinoma. Reunion Biotech is also the first in our country to launch research and development on it and complete its clinical trial tests."

The hydrogel product, through minimally invasive injection into the space between the tumor and the rectum, creates stable spatial isolation room to reduce radiation effects on the rectum and the surrounding healthy tissue.

The cervical carcinoma radioprotective hydrogel from Reunion Biotech is in clinical trials at top national medical institutes such as Peking Union Medical College Hospital, Shanghai Tumor Hospital Affiliated to Fudan University, and Sunyat-Sen University Cancer Center. Having completed its clinical follow-up of trial cases, the developers are applying for a patent and the medical injection will soon be commercialized.

"We kept on innovating our products in recent years, trying to reduce the gap with international products," Pan said. "Our first radioprotective hydrogel product ranks as a national Top One. Our next tumor interventional embolization hydrogel will keep pace with world-leading technologies."

Relying on a founding team with world top bio-material lab working experience, Reunion Biotech has developed a unique and world-first ready-to-use polyethvlene glycol hydrogel culturing platform, which empowers the company to design different types of hydrogels and offer innovative, tailor-made clinical solutions to medical institutes.

Reunion Biotech is now applying its research achievements into prostate cancer treatment to prepare for expansion into the overseas market and plans to launch cooperation with universities, science and research institutes, and top hospitals to better embrace global competition.

als, is mass produced, and then delivered to medical institutes for treatment of cancer patients. The company is noted for its impressive facilities as well. It is equipped with a 4,000-squaremeter research and development center, a Good Manufacturing