

Advanced manufacturers boosting industry sector

By YUAN SHENGGAO

Thanks to the rapid growth of the manufacturing industry, Shanxi's industrial sectors kept a steady increase in the first quarter of this year.

Statistics show that the local industries above designated size — which refer to enterprises with annual sales revenue of more than 20 million yuan (\$2.81 million) — reported an average year-on-year increase of 4.7 percent in the first three months of this year. The rate is 1.7 percentage points higher than the national average.

Driven by the strong performance of advanced manufacturers, the manufacturing industry in Shanxi registered an impressive year-on-year rise of 13.3 percent.

Shanxi has formed a number of manufacturing industry chains in areas such as railway transport equipment, steelmaking and mining machinery. Standing at the top of the chains are advanced manufacturers like CRRC Datong, Taiyuan Iron and Steel Group and Taiyuan Heavy Machinery Group.

Taiyuan Heavy Machinery is one of the fastest-growing companies among Shanxi's manufacturers.

Chen Qing, an executive of the company, said that it had secured orders worth 1 billion yuan for the single product of front-shovel-type mining excavators by May 15. He added that the full-year sales revenue of the product is expected to surpass 2.5 billion yuan.

Founded in the 1950s, Taiyuan Heavy Machinery was one of earliest homegrown heavy machinery builders in the People's Republic of China. It now has one of the most comprehensive product portfolios in the country's coal-mining machinery industry.

In recent decades, it has diversified into the new energy sector, becoming a leading player in the wind power equipment manufacturing industry in Shanxi.

"With our dominance in coal-mining machinery and wind power equipment, our company is now one of the few leading manufacturers in Shanxi in two industries," Chen said. He added that the diversification is in line with Shanxi's economic transformation move, which features upgrading traditional industries toward the directions of efficient and clean operations and

fostering emerging industries as new local growth engines.

Also riding the wave of transformation is CRRC Datong, the branch company of China Railway Rolling Stock Corp in the city of Datong.

The company's new, innovative product is a locomotive driven by a storage battery.

The battery-powered locomotive made by CRRC Datong can save 109 yuan per hour in energy consumption, according to Wang Yufei, deputy general manager of the company.

He added that as the locomotive has zero emissions, it can reduce 339.95 metric tons of carbon dioxide discharge per year.

"Trains with such a locomotive can run on conventional railways, free from electricity grids," the executive said.

The company is also one of the producers of the electrified Hexie bullet train locomotive, which accounts for 35 percent of the domestic market. Over the past seven decades, the company has supplied more than 12,000 locomotives to China's railway industry.

"While meeting China's demands for environmentally friendly railway equipment, our next-stage target is to promote the products to the world," Wang said.

Taiyuan Iron and Steel Group, the leading steelmaker in Shanxi, has also devoted a great deal of energy toward developing products for China's sustainability.

Its new product offering is the special steel for the hydrogen industry. Hydrogen is a source of clean energy recently emerging in China.

In October 2021, it completed the research and development for steel used in the storage of hydrogen.

"Developed and produced to meet the requirements for the super-low-temperature and high-pressure storage of hydrogen, ours is the pacesetter product in the industry," an executive of the company said.

Taiyuan Iron and Steel is a competitive player in China's steel industry. It is among the very few manufacturers in the world that can produce broadsheet stainless steel foil with a thickness of less than 0.02 millimeters. The product is produced for applications in specific industries including aerospace, electronics, petrochemicals and automobiles.

Du Juan contributed to this story.



Excavator components are produced at Taiyuan Heavy Machinery's plant. WANG PEIPEI / FOR CHINA DAILY



Students look at replica wall paintings at Yuncheng Museum. The original paintings, preserved in the city's Yongle Temple, represent the peak of China's Taoist mural art. PHOTOS BY YAN XIN / FOR CHINA DAILY

Museum bringing Shanxi history to life

Local institution presents province's culture, traditions for all to see



By YUAN SHENGGAO

As one of the cradles of the Chinese civilization, the North China province of Shanxi is arousing the interest of researchers and ordinary tourists with its rich wealth of historical and cultural heritage.

A great number of museums in Shanxi, which house an abundance of historical relics and cultural heritage items, are where people develop a stronger understanding of the province's long history and its millennia-long culture and traditions.

Yuncheng Museum in the southwestern Shanxi city of Yuncheng is among these museums.

The museum now has a total of 35,000 exhibits, covering such fields as pottery, porcelain, bronze ware, stone carving, wall paintings and currencies, and reflecting a history dating back to the Paleolithic Period some 1.8 million years ago.

During their visits to the museum, China's central authorities endorsed its crucial role in showcasing China's human history of more than 1 million years, its cultural history of more than 10,000 years and its civilization history of more than 5,000 years.

They noted that the museum should be a vital venue for researchers to make explorations into the long history of China and identify the roots of Chinese civilization.

While calling for efficient preservation of exhibits, the central authorities also required the museum's management to make good use of these cultural legacies, invoking



A sand table in Yuncheng Museum shows the major historical sites in the city.

the general public's interest in and pride of the Chinese civilization by "bringing history to life".

Indeed, the management of Yuncheng Museum has put all their effort into bringing history to life by arranging exhibitions with multiple methods and modern tools.

At the main hall of the museum, for instance, there is a huge wall of sculpted reliefs, with themes relating to the historical stories and legends of Yuncheng.

The figures on the wall include Houji, who is said to have been a pioneer of the farming industry; Leizu, who is believed to have innovated silk production with silkworms; and Dayu, who is said to have led a campaign to curb a severe Yellow River flood some 4,000 years ago.

Wei Long is the head of the Yuncheng Center for Cultural Heritage Protection, an institution responsible for the operation of the museum. He has a deep understanding of the local history and the exhibits.

He said that all the figures on the relief wall are the forefathers of the Chinese nation and they all had associations with Yuncheng.

"Houji, for instance, was born in Yuncheng's Jishan county," Wei said. "His expertise in farming helped his tribe grow stronger and stand out against their rivals, which led to the establishment of the powerful Zhou Dynasty (c.11th century-256 BC)."

But the periods marked by these figures were not the beginning of Yuncheng's history, Wei said.

"In the village of Xihoudu, archaeologists discovered a site with relics identified as being 1.8 million years old, which might be proof of some of the earliest human activity in China.

"But the miraculous thing about it is not that long history. Some animal bones bore evidence of burning, which may signal proof of the earliest intentional use of fire in the world."

The official said the exhibits in Yuncheng Museum have great significance in historical research.

"It's widely known that China has a civilization of more than 5,000 years," Wei said. "However, the existence of the early periods of the civilization is mainly supported by legends."

He said the exhibits at the museum are offering material evidence

for the specific periods, turning legends into real history.

Leizu, the pioneer of China's silk industry, for instance, is a legendary figure with no material proof to support her existence. It is said Yuncheng's Xiaxian county was the birthplace of Leizu.

"One of the exhibits at the museum is the stone-carved silkworm discovered at Xiaxian archaeological site, which was identified as a relic of 6,000 years ago," Wei said. "This indicates Yuncheng might be the source of China's silk industry."

To bring the exhibits to life, Wei said to cultivate a strong force of cultural heritage workers is the key.

He added that the tour guides at the museum are required to improve their competence by carefully studying the history not only relating to the exhibits but also from a comprehensive perspective.

Tour guide Yan Xiaojing, for example, is among the most popular at the museum.

When talking about the exhibits, she said there is something chaining them together. "That's the continuity of the local history," she said.

During a work day in May, she led a group of tourists to the exhibition wall, turning their attention to the reliefs of layers of pottery items.

"There are 10 layers of pottery items, just like where they are on the excavation site," Yan said.

In the bottommost layer are items identified as relics between 7,000 and 5,000 years ago, with styles identical to the Yangshao Culture, a Neolithic culture that existed extensively along the central Yellow River. "Then there are items on the upper layers according to the sequence of periods."

Yan said that the 10 layers correspond to almost every key stage of China's pottery industry development.

In addition to the professionalism of the cultural heritage workers, the museum is also using the latest technologies like virtual reality, augmented reality and holographic displays to present the details and stories of the exhibits, according to Zhou Wenquan, curator of Yuncheng Museum.

Zhang Haiying and Zhou Mingfei contributed to this story.

Traditional village witnesses tourism boom



Relying on its rich historical and cultural resources, the village of Zhangjiata in Fangshan county has developed into an emerging rural tourism destination in Shanxi province in recent years. A village with a history of about 400 years, Zhangjiata's unique selling point is its 36 courtyards with well-preserved ancient cave dwellings. The cave dwellings are a unique type of residence on the Loess Plateau that includes Shanxi and Shaanxi provinces. The village has seen increasing number of tourists and growing tourism revenue since it was included on the list of China's renowned traditional villages. It was recognized as a model village for rural vitalization in Shanxi province in 2022. HOU LIJUN / FOR CHINA DAILY

Freight train service growth on track

By YUAN SHENGGAO

Loaded with automobile components and machines, a train departed from the southern Shanxi city of Houma on May 24 and was scheduled to arrive in the Central Asian country of Uzbekistan 15 days later.

The train is traveling along one of the China-Europe freight train routes, which departs from Chinese territory at the land port of Khorgos in the Xinjiang Uygur autonomous region and goes all the way through Central Asia to Europe.

According to executives at Fangleu Bonded Logistics Center, the operator of the freight train service in Houma, this marked the 46th cargo train bound for Central Asia or Europe from Shanxi province this year.

Shanxi, which has positioned itself as a new hub for opening-up in inland China, has developed the China-Europe freight train service since 2017. There are 10 routes for the service, departing Chinese territory via such land ports as Manzhouli and Erenhot in the Inner Mongolia autonomous region and Alataw and Khorgos in Xinjiang.

To date, Shanxi has seen the departure of 683 cargo trains to 33 cities in Central Asian and European countries. The freight train service has



A freight train bound for Central Asia departs from Houma city on May 24. ZHANG YI / FOR CHINA DAILY

played an important role in facilitating Shanxi's trade with countries and regions involved in the Belt and Road Initiative, according to local officials.

Shanxi's freight train service toward Laos and the rest of Southeast Asia also started in March 2022. The bonded land port in Houma is the starting point of the route.

The international train services have made Shanxi a hub for opening-up in inland China and greatly contributed to promoting international business cooperation, local officials and industry insiders said. They add-

ed that developing international logistics passageways through China's cross-border railway facilities can push the boundaries of the inland province to do international trade.

Shanxi has developed a number of land ports and logistics parks to serve international freight trains. These include Zhongding in Jinzhong and Fangleu in Houma, as well as others in the cities of Datong, Yangquan, Jiexiu and Xiaoyi.

Zhang Yi contributed to this story.