

Striving Towards a Modern Coastal Metropolis

Amazing 'Made in Ningbo' at the Beijing 2022 Winter Olympics

By Gou Wen

At the Beijing 2022 Winter Olympics, which opened as scheduled smoothly, "Made in Ningbo" technology has made a spectacular debut.

Ningbo is a nationally-recognized advanced manufacturing base. Manufacturing is the city's foundational industry and core competitiveness. The "Made in Ningbo" technology deployed at the Winter Olympics is only the tip of the vast iceberg that is Ningbo's manufacturing prowess.

These advanced technology reveals Ningbo's manufacturing strength and its gradual shift towards intelligent manufacturing. The city's AI, digital economy, new materials, high-tech manufacturing, and other emerging fields are steadily gaining momentum.

150 Ningbo-Made Hydrogen-Powered Buses

During the opening ceremony of Beijing 2022 Olympics Winter Games, Gong Xin and his colleagues were busily working in a "closed loop" parking lot at the Yanqing competition zone, inspecting hydrogen-powered buses.

150 hydrogen-powered buses designed and produced by Ningbo were delivered to Beijing, to be used for the Games. The 11-meter green-and-white bus can carry up to 46 passengers. Compared with electric buses, not only are hydrogen-powered buses greener, they also require less time to refuel and can function stably even at -20°C.

The top design speed of these hydrogen-powered buses is 100 km/h; they can travel up to 450 km after each refueling.

So far, the buses have performed well at the Olympics despite the low temperature, steep roads, and other harsh external conditions in the competition



The hydrogen-powered buses.

zones. The Qingteng brand fuel cell system equipping the hydrogen energy buses consumes hydrogen and oxygen to generate power, producing zero carbon emissions and zero pollutants.

In September 2020, Ningbo Green Power Hydrogen Technology Research Institute was established in Jiangbei District, Ningbo, with the mission of developing and producing hydrogen fuel cell power systems.

At Cixi's hydrogen fuel cell power system production base, the production lines are churning out fuel cell products stably, becoming a reliable supplier to many domestic automobile enterprises.

Ningbo's High Tech Lighting Up the Opening Ceremony

On the evening of February

4, the Olympic cauldron was lit. The unprecedented snowflake-shaped cauldron design drew much attention.

"Our base mechanism for the cauldron represents the perfect combination of technology and beauty," said a representative of Zhejiang Dafeng Industrial Company.

Installing the base was challenging, as the floor of National Stadium, being tiled with LED panels, cannot support heavy weights.

The Dafeng team placed a 260-ton crane at the entrance to carefully lift the parts of the base to where the cauldron was to be assembled. After much painstaking effort, a perfectly-installed cauldron made its glowing debut to the world.

The company is also behind the glow sticks installed at two venues for the Games - the

National Stadium and the Wukesong Sports Center. These are not ordinary glow sticks, because they can be controlled to display different designs such as fireworks, snowflakes, or pandas.

75% of the seating systems at the venues for the Games were provided by Dafeng, including all of the seating in the Beijing competition zone.

Even More Ningbo Presence

At the opening ceremony, the brightly-colored uniforms worn by Team China caught the audience's eye.

According to a representative of Ningbo's Consinee Group, the company produced and processed the yarn for the knitted hats, scarves, and sweaters of the Chinese athletes.

70% wool + 30% cashmere was used for red hats, 100% camel cashmere was used for the camel hats and scarves, and 100% pure cashmere was used for the sweaters.

To deliver the garments on time, after receiving the special Olympics order, Consinee worked tirelessly in the period before the Chinese New Year holidays and managed to fulfill the orders ahead of the Games.

Most of the kitchen equipment in the Olympic Village was produced by Xiangying, a company located in Jiangshan, Ningbo. They supplied more than twenty sets of equipment, include unmanned rice steam cooking lines, automatic stir-friers, vegetable cleaning machines, vegetable slicers, and smart food steamers. Each day, they are used to prepare food for 10,000 people.

SPOTLIGHT

Yuyao Shi'ao Site Shortlisted as One of China's Top 10 New Archaeological Discoveries

By Dong Na

On February 8, the preliminary round of selections for 2021's top 10 new archaeological discoveries was launched. In 2021, more than 1,700 archaeological digs were approved in China. The candidate excavations were reviewed by the State Administration of Cultural Heritage, which produced a short list of 32 candidates, including the Yuyao Shi'ao Site.

The initial excavation at Shi'ao, spanning 900,000 m², revealed ancient rice fields farmed by residents of the Hemudu culture and Liangzhu culture.

The expansive paddy remains date back to 4,500-6,700 years ago. Due to the excavation area's limited size, only small patches of rice fields, ridges, and ditches from the Hemudu culture were found. The subsequent Liangzhu culture produced more sophisticated paddies: a grid-shaped network of roads formed by ridges separating the paddies and an irrigation system consisting of rivers, canals and drainage outlets were found. Four plots, with an area of 750, 700, 1,900, and 1,300 m² respectively, were identified.

The remains of rice spikelets, glume husks and common rice-field weeds were unearthed. The density of phytolith at Shi'ao is much higher than the standard for identifying prehistoric rice fields.

The ancient rice field of Shi'ao Site is the largest and oldest rice field ever found in the world, with the most indicative archaeological evidence. The excavation reveals that the Liangzhu culture was able to construct advanced road networks and irrigation systems. Such types of rice fields may have first appeared over 6,500 years ago and was continuously refined throughout the millennia.

The Shi'ao discovery proves that rice farming was an important economic support for the social development of the Hemudu culture and Liangzhu culture, and further deepens the understanding of prehistoric socio-economic development and civilization advancement in the lower reaches of the Yangtze River.

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双语汇 Different Tongues

庆安会馆：宁波海上交通贸易史的“活化石”

By Xu Zhuowei

Qing'an Guild Hall, built in the Qing Dynasty, is located on the east bank of Ningbo's Yong River and was also known as the *Yongdong Tianhou Palace* (East Ningbo's Heavenly Queen Palace). It is one of China's major historical and cultural sites protected at the national level, a landmark of Ningbo, and an important legacy of the Ningbo section of China's Grand Canal.

庆安会馆位于宁波三江口的甬江东岸，又称“甬东天后宫”，是清代古建筑。它被列为全国重点文物保护单位，是宁波港口城市的标志性建筑，也是中国大运河（宁波段）的重要文化遗存。

Qing'an Guild Hall was built with donations from Ningbo ship merchants who did business in the Yellow Sea. It was a hall for merchants and

residents to worship Mazu (the sea god venerated by China's coastal communities), a place for business gatherings, and a performance venue. Now it has been rebuilt into the first museum of maritime folk customs in China.

庆安会馆由清时甬埠北洋船商捐资创建，是商贾、民众祭祀天后妈祖（中国沿海百姓崇拜的海神）的殿堂和行业议事聚会的场所，现已改建为全国首家海事民俗博物馆。

Qing'an Guild Hall witnessed the development of Ningbo's early international trade and shipping; it is also evidence of Mazu worship's presence in Ningbo, a port city with a community of active merchant mariners in the maritime sector. Shipping guild members who worshiped Mazu and wanted to make business connections would take part in the Guild Hall's activities. The



Qing'an Guild Hall. /庆安会馆。

[Photo by Tang Yan] 唐严摄

establishment of the Guild Hall contributed greatly to the development of Ningbo's shipping industry at that time.

庆安会馆见证了宁波早期对外贸易史、海外航运史，也是妈祖文化的物证。在宁波这座港口城市，船商们热衷投入沿海贸易，有妈祖

信仰兼经济目的的的行会成员加盟到会馆这一载体中来。会馆的建立也为当时宁波航运事业的发展作出了重大贡献。