



TECH

Yunnan leads the world in control of iron and steel dust

BY WU JIE

Recently, the Yunnan Provincial Science and Technology Department held a major scientific and technological achievements conference, which exhibited and released a number of breakthroughs that the province has made in the research and development of industrial waste recycling and energy-saving equipment during the "Twelfth Five-Year Plan" period.

Many of these achievements already lead the world. Dust treatment technology used by Honghe GreenNovo Technology Company is one of them. Especially, the company's combined process of iron and steel dust treatment has overtaken German and American technologies. Through this process, harmful dust containing heavy metals can be reclaimed without generating emissions or waste water.

In short, this technology is a combination of hydro- and py-

ro-metallurgical processes that are currently used in iron and steel dust treatment at home and abroad.

Mr. Ma Liyang, Chairman of Honghe GreenNovo introduced the development status of these processes. According to him, Horsehead Holding Corp, the largest EAF dust treater in North America, operates eight pyro-metallurgical plants in the United States and Europe. It began to develop hydro-metallurgical process in 2012, but has not yet known success and is suffering heavy losses. The German company Befesa is the world's third largest zinc-containing dust treater. It operates six pyro-metallurgical plants, but has not yet begun to develop its own hydro-metallurgical process.

Horsehead and Befesa are currently seeking cooperation with GreenNovo. Ma Liyang disclosed that a cooperative project will be launched in Europe this year.

In addition, the world's most

advanced motor energy-saving devices—developed by Yunnan Sun-Arex Energy Technology Inc—were also released. This technology has been patented in Japan, the United States and South Korea.

As part of the national 863 Programme, the lead-acid battery production technology was introduced to Yunnan from Tsinghua University. Compared with traditional technology at home and abroad, this technology can shorten the production cycle by more than 30 percent, and extend battery life by more than 20 percent. On top of these advantages, lead powder does not leak to cause pollution during the production.

Mr. Cao Jianguo of Tsinghua University is responsible for industrialising this technological achievement at Yunnan Jingzheng Energy Technology Company. He said that the Yunnan project is constructed as a national demonstration project.

CULTURE



Show Time

Yi ethnic musical titled "Ashima" was staged at the Yunnan Culture Center. A total of 26 shows were staged free of charge over 12 days. "Ashima" is a household name in the Yi ethnic minority group's epic folklore. It is so popular in Yunnan that the story has been repeatedly adapted for cinema and dance drama.

Photo by Lin Yiguang

Yu Kunyao: combining ethnic embroidery with international brands

BY OUYANG XIAOSHU

During the 2015 New Balance Anglo-American production series tour in Kunming, a pair of track shoes featuring traditional Yi embroidery attracted considerable attention.

The shoes were embroidered by Yu Kunyao, a post-90s Yi ethnic minority girl living in Yunnan's Yongren County. Yu Kunyao has a simple and ambitious dream: to rejuvenate and hand down the declining tradition of Yi embroidery, while introducing it to the outside world.

The Yi ethnic group is China's sixth largest ethnic minority mainly inhabiting the country's southwest provinces of Yunnan, Sichuan and Guizhou. Over thousands of years, Yi embroidery has been handed down from generation to generation.

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Following in my mother's footprints, I know it is a difficult road, but I am not going to give up.”

Yu Kunyao

Yu Kunyao's mother Li Ruxiu is a legendary embroiderer. "Following in my mother's footprints, I know it is a difficult road, but I am not going to give up," said Yu Kunyao. The Yi embroidery has been passed down thousands of years, and Li Ruxiu has embroidered from childhood to old age. Yi women's clothes are embroidered in different patterns and colours and are never the same. If a

piece of clothing is lost or cremated with a deceased woman, the style or pattern can no longer be reproduced. In order to preserve these unique embroidery works, Li Ruxiu goes from door to door to buy and collect them.

"Mother began to collect embroidered articles before I was born. She has spent a lot of money on them," Yu Kunyao says, "Now our house is filled with her collection." Her twenty years' perseverance has finally been rewarded. Li Ruxiu's collection of over 3,000 Yi costumes and embroidery works are now exhibited at the Yongren County Cultural Centre, attracting many researchers and designers.

Li Ruxiu's peers used to find her weird, and now the same thing is happening to her daughter. Yu Kunyao says with a smile, "I think I am luckier than my

mother, because people around me give me support, while my mother was on her own."

"Unlike Suzhou embroidery, Yi embroidery is not restricted by any fixed frame and has more freedom. Today, however, affected by market demand, patterns are basically stereotyped, and creativity and imagination are constantly weakening," says Yu Kunyao.

When New Balance placed an order, Yu Kunyao spent more than a week trying to break through the limitations of traditional thinking. "To interpret ethnic style from a new perspective, you need to fully understand traditional artistic expressions and transform and refine traditional elements. Only then can you integrate them into concepts of modern life to achieve local design with modern characteristics." Yu says.

CONNECTIVITY

Yunnan to launch two HSR lines this year



Kunming HSR South Station will also be put into use in the second half of this year. Photo by Zhang Weiming

BY CAO JIE and HU XIAORONG

Yunnan province is expecting to launch the Kunming-Shanghai HSR line and the Kunming-Nanning HSR line in late 2016. By then, HSR rides from Kunming, capital of Yunnan to Nanning, capital of Guangxi Zhuang Autonomous Region and Shanghai Municipality will take five hours and ten hours, respectively.

On January 6, the Kunming Railway Bureau disclosed that Yunnan section of the Shanghai-Kunming HSR line will include four stations: Kunming South Railway Station, Songming Station, Qijing North Station and Fuyuan North Station. This means that with Shanghai-Kunming HSR line going into operation by the end of this year, the HSR line will also link up Kunming, Songming, Qijing and Fuyuan.

On December 25, 2015, the Yunnan section of Shanghai-Kunming HSR passenger line entered the track-laying stage, which will be completed in the first half of this year. Next integrated commissioning and testing will be conducted before this section goes into operation in late 2016. This section is 184.7 kilometres in length, and its design speed is 250-350 kilometres per hour. Upon going into operation, it will shorten the duration of a Kunming-Shanghai railway trip from more than 40 hours to about ten hours, thus becoming a large-capacity passenger channel connecting Southwest China with Central and East China.

Kunming South HSR Station is currently under construction and will be put into use in the second half of this year. The station is designed with a yearly throughput of 46.93 million passengers (or a daily throughput of 128,000 passengers) and a peak throughput of 12,000 passengers. It will become the largest railway station in Southwest China.

COOPERATION

Joint Mekong patrol completed

BY YANG XI

A joint law enforcement team of over 170 members from China, Laos, Myanmar and Thailand ended their 41st joint patrol enforcement along the Lancang-Mekong River at Guanlei Port, Xishuangbanna Dai Autonomous Prefecture

in China's Yunnan Province. This marked the successful completion of this four-year joint operation since 2011.

The four countries dispatched a law enforcement fleet made up of ten vessels for the joint patrols in Golden Triangle waters. The ships carried out joint investigations,

seizures, visits and anti-drug publicity and cultural exchanges. A multilateral information exchange workshop was held at the Lao liaison site, where information on current security situations along the Mekong were exchanged.

Since the official launch of the multinational joint Me-

kong enforcement patrol on December 10, 2011, 41 joint patrols have been carried out, effectively improving the shipping safety along the Mekong. Currently, joint patrols and law enforcement measures are carried out on a monthly basis.

(China Border Police Press)

DISCOVER YUNNAN

Prehistoric site found under Fuxian Lake

The underwater site consists of 30 stone structures, covering an area of 2.4 square kilometres.

BY YANG ZHIGAO

Fuxian Lake is located in Yuxi City, Yunnan. It not only features clear water and beautiful scenery, but is home to many unsolved mysteries as well. In recent years, the Yunnan

Chinese Civilization Research Society (YCCRS) conducted a series of underwater scientific surveys in Fuxian Lake, and found stone cultural structures once carved with metal tools. YCCRS scholars believe that these discoveries forms a prehistoric site under the lake.

The underwater site consists of 30 stone structures, covering an area of 2.4 square kilometres. One of the structures is a pyramid-like building that is more

than 20 metres tall, equivalent to the height of a ten-storey building. Another huge structure sits on a 63-metre-wide foundation and stands 21 metres high, resembling the Roman Colosseum. Some buildings could have served for sacrificial purposes. A 300-metre-long and seven-metre-wide paved section runs through the complex, and the flagstones are carved with exquisite patterns.

According to Huang Yilu,

vice president of the Yunnan Chinese Civilization Research Society, the remnants of these stone cultural structures are mostly on the fourth layer, and many triangular patterns carved with "sun god faces" are seen on these structures. Some patterns could be labeled "seat of sacrificial priest or tribal chief" and "heaven-reaching tree."

The scientific survey crew also cleared a path leading to the fifth layer, where the wa-

ter is 6-6.5 metres deep. The n-shaped path includes two sections, the north section and the south section. Both sections directly lead to the top of tower. The south section is 51 metres long, seven metres wide and sits under six metres of water. The red sandstone surface is covered with relief carvings. The north section is 46 metres long, 7.1 metres wide and sits 6.5 metres under water, while its surface is evenly paved with flat blocks.

There are also human-built stone walls arranged in an orderly manner.

YCCRS also found a group of patterns carved with metal tools on one of the stone cultural structures, including depictions of the sun and the moon, male and female genitalia, odd and even numbers, triangles. YCCRS scholars believe that the then social and cultural community worshiped these symbols.



Human-built wall. Provided by YCCRS