

A Century-Old Water Plant Embraces the "Digital New Life"



By Tang Shunjia

On August 1, 1883, the Yangshupu Water Plant was completed and officially started supplying water to the public, marking China's first modern water plant and bringing tap water into urban life. Today, this old factory celebrates its 140th anniversary and embarks on a new journey.

Located on the southern bank of the Huangpu River, the Yangshupu Water Plant covers an area of 129,000 square meters, and its largest footprint was once as large as 259,000

square meters, making it the earliest and largest modern water plant in Shanghai.

With the birth of New China, starting from 1949, the Shanghai Municipal Government merged five separate water supply enterprises into the Shanghai Water Company through acquisitions, requisitions, management, and consolidation, achieving unified operation of the city's water supply enterprises in 1955. To improve water conditions for the people and alleviate the frequent occurrence of waterborne infections, the city government allo-

cated funds to build water supply stations in shantytowns, charging half the price for water. By 1956, there were 1,865 water supply stations across the city, providing tap water to 1.3 million residents in shantytowns.

In the late 1980s, the water plant initiated self-renewal, conducting in-depth renovations and equipment expansion for sedimentation tanks, upgrading to an automatic sludge drainage system, and entering the realm of automation system transformation. These improvements ensured safer equipment, more reliable

operation, and better water quality. Beyond the physical infrastructure, the water plant's industrial facilities, equipment, and processes were preserved and showcased. Within the plant, the Shanghai Tap Water Science and Technology Museum used informative methods to offer a more direct understanding of the production story behind the heritage-protected architecture, revealing lesser-known aspects of urban water supply endeavors.

Today, strolling along the Yangpu riverside, the well-preserved and distinctive Gothic-style castle architecture of the Yangshupu Water Plant stands as a unique landmark. Designed by British engineer J.W. Hart, the main building of the water plant takes the form of a traditional British castle, with a rust-red hue and twin castle-like wings flanking the main structure's east and west sides. Load-bearing walls are made of plain bricks adorned with red brick belts, and crenellations crown the top of the surrounding walls. Cement lines accentuate the crenellations, window frames, and belts. The intersections of the walls are shaped like cement cornerstones, reminiscent of a medieval castle.

As Yangpu Riverside transitions from an "industrial rust belt" to a "showcase of life," integrating the concept of a "people's city" into water production becomes a question for the Yangshupu Water Plant.

Through collaborative and coordinated efforts, the water plant

has established a city water supply system that prioritizes water conservation, safety, quality, intelligence, and efficiency, aiming to match the water quality standards of developed countries worldwide. The deep treatment and renovation projects are carried out in stages, preserving the appearance of the national heritage-protected site while incorporating modern engineering. This approach preserves the distinctive elements of industrial civilization and serves as a model case for the repair and modernization of industrial heritage in the municipal water sector.

In the digital age, the Yangshupu Water Plant embraced a data-driven mindset, utilizing digital technology to accelerate the creation of a new water management ecosystem characterized by real-time sensing, scientific decision-making, proactive service, and intelligent supervision. From automation to digitalization, the foundation of a digital twin water plant is taking shape, driving the acceleration of intelligent water applications.

"We are currently undergoing a new round of plant upgrades to enhance deep treatment processes, with the completion expected by the end of 2024. By then, water quality will be significantly improved once again, with a smoother taste," said the current plant manager, Song Yu, to the reporter. "Providing better water for the people remains our unchanging mission and purpose."

When Credit Benefits Businesses as a "One-stop Solution"

By Mao Xinhui

Credit serves as the "passport" for the survival and development of businesses. Facing the possibility of administrative penalties due to unintentional errors, businesses may encounter awkward situations such as being unable to bid, obtain loans, or apply for policies. There is an urgent need to repair and reshape their credit, rekindling vitality.

The gathering of innovative businesses in the Yangpu district, characterized by small scale, early stages, light assets, new models, and rapid iterations, serves as a source of vitality for innovative development. Given the asymmetry of information between banks and enterprises and the mismatch of product supply and demand, the challenges of difficult and expensive financing are particularly prominent. Thus, there is a pressing demand for a comprehensive credit service platform led by the government.

Presently, the Yangpu District's Xinyidai Comprehensive Service Platform has been launched in Changyang Campus. This platform integrates multiple functions such as

corporate credit profiling, integrated credit services, policy navigation for business benefits, financing match-making, and business information dissemination.

Many businesses often need to provide compliance certificates and reports from various regulatory fields such as market supervision, taxation, social insurance, and ecological environmental protection during processes like bidding, listing financing, and policy applications. They require an integrated platform that offers a comprehensive set of services to reduce multi-point connections' costs for businesses.

From a business perspective, Yangpu integrates various related aspects such as online credit repair, one-click issuance of compliance certificates, and easy access to credit reports. The platform integrates application access, policy interpretation, and guidance, providing businesses with convenient services and facilitating smooth processes in scenarios like bidding, listing financing, and policy applications.

In conjunction with the platform launch, an interactive area named "Credit Empowerment in Innovation

Valley, Smooth Sailing Ahead" was established within Changyang Campus. Enterprises were invited to log in to the Xinyidai comprehensive service platform using QR codes, experiencing the distinct features of credit-empowered services, policy service "toolbox," and financial product "cloud supermarket." Promotional materials were distributed and business queries were addressed, advancing credit-empowered services into the industrial park.

Innovation is Yangpu's most prominent characteristic. The district is home to nearly 7,000 digital economy enterprises, 23 national-level "specialized, sophisticated, unique, and novel" (known as "SSUN") companies, 342 city-level SSUN enterprises, 1,223 high-tech enterprises, and 88 corporate technology centers. These numbers rank among the highest in the central urban area of the city.

Yangpu is actively expanding the policy service functions of the Xinyidai platform. They have structured and categorized over 160 enterprise-benefiting policies related to stable growth promotion, industrial development, technological in-

novation, talent services, financing services, green and low-carbon initiatives, and comprehensive planning. They provide policy documents, interpretation, application guidelines, training information, and more, streamlining policy implementation. This system offers a convenient policy service experience for businesses, enhancing efficiency and accessibility.

Furthermore, while meticulously mapping out the "panorama" and "navigation" of policies, Yangpu is incorporating credit commitments and verification mechanisms into the entire process of policy application, review, implementation, and tracking management. This promotes the establishment of a joint incentive mechanism for maintaining good credit, reducing steps, time, and effort for credit-worthy enterprises. For "white-listed" enterprises with good credit, such as SSUN companies, a dedicated webpage for Yangpu enterprises, online platforms, and offline thematic events are used to precisely promote Xinyidai platform's special services, enhancing the effectiveness of policy implementation through credit empowerment.

Additionally, at the "STE·Tech Loan" themed section, Yangpu collaborates with the first national-level technology transfer institution, the Shanghai Technology Exchange, to introduce two distinctive intellectual property products: Tech Loan and Tech Asset Loan, with a maximum limit of 50 million RMB and a term of up to 5 years. These products can enjoy multiple policy benefits such as risk compensation for intellectual property financing and interest subsidies in Yangpu District. Through the combination of "credit data empowerment" and policy support incentives, these measures help accelerate the development of core technologies and the transformation of technological achievements for science and innovation enterprises.

Next steps for Yangpu involve constructing an integrated online and offline credit service "ecosystem," bringing together various parties to establish a "service team" for credit-driven enterprise support. The district will strongly promote Xinyidai services for businesses within the industrial park, bridging the gap to provide the "last mile" of credit services.