# Company Brochure



# Contents



Main Partners

## About MSTN

MSTN TECHNOLOGIES CO., LTD. (MSTN) is a national high-tech enterprise that has been committed to environmental protection since 2004. We have obtained certificates of Beijing Technologically Advanced Small and Medium-sized Enterprises, Beijing Gazelle Enterprises, etc. With advanced technologies such as flue gas desulfurization and De-NOx, slurry filtration, water pollution treatment, CCUS, etc., we have gradually become a professional environmental protection company integrating R&D, process design, equipment manufacturing, system integration and EPC, and have nearly 60 patented technologies with independent intellectual property rights. Up to now, we have successfully completed more than 300 projects of flue gas treatment, and more than 50 projects of wastewater treatment, including BT, BOT, EPC and other models.

Now, we have several branches/subsidiaries, 4 production bases and 2 R&D centers, conduct businesses not only in China, also in America, Europe, the Middle East, Southeast Asia and other regions, and have marketed our products all over the world. Adhering to the core values of Proactiveness, Innovation, Service, Respect and Responsibility and in order to realize our vision of "Development and Protection, Earth Life Better", we will keep going in the field of market segmentation, environmental protection, continuous innovation to provide customers with more professional, premium and advanced products and services.

> 2 B&D Centers



Manufacturing Plants



150+ Intellectual Property Rights 300+

Completed Projects In Total

# Milestones

#### In 2002, MSTN was established to start business consulting on petroleum industry.

2002

In 2005, MSTN got the first flue gas purification project in refining and chemical industry and successfully applied to a CFB boiler of SINOPEC.

In 2004, MSTN introduced advanced foreign technologies to start flue gas treatment business in domestic refining and chemical field.

2004 2005

In 2012, MSTN obtained the National High-tech Enterprise Certificate and passed the ISO 9001 quality management system and ISO14001 environmental management system certification.

In 2007, MSTN got the 3,000,000 t/a catalytic unit flue gas purification project of CN-PC and 2,000,000 t/a catalytic unit flue gas purification project of SINOPEC.

2007 2012

In 2015, MSTN started the development of intelligent environmental protection technology and Bishuilantian Environmental Protection e-commerce platform.

In 2013, MSTN signed the flue gas purification framework agreement with SIN-OPEC and CNPC respectively.

2013 2015

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#### 2016 2017

#### 2018 2019

#### In 2017, MSTN undertook the flue gas desulfurization, denitrification and dust removal BT project of CNOOC and successfully handed over to the user.

In 2016, MSTN established a R&D center.

Initiative" development strategy and made the enterprise "Go Global" development stratede- gy, and got a flue gas denitrification project of a metallurgic enterprise in Korea, which has

> In 2018, MSTN completed the high-salt wastewater biochemical treatment device with the tolerance of salinity up to 7.8%; got the sintering and pelletizing device flue gas denitrification project in metallurgical industry, formally promoting our environmental protection technology to metallurgical industry.

In 2019, MSTN followed the "Belt and Road

been successfully put into operation.

In 2021, MSTN continued to make progress in scientific research innovation and was recognized as the "Specialized and Special New" middle and small-sized enterprise and awarded the "Municipal Enterprise R&D and Development Institution of Beijing".

2022

2021

In 2022, MSTN actively promoted the integration of scientific and technological innovation and factories and established 6 production/ manufacturing bases, which has become a strong support for the transformation and application of innovative technologies.

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# About MSTN 7 2 R&D Centers

#### **Beijing R&D Center**





• Workshop of the R&D Center • Chemicals Showcase

Beijing R&D Center was established in 2016. It is one of the two R&D Centers of MSTN. Beijing R&D Center is a municipal enterprise technical research and development organization. It is located in Liando U Valley, Tongzhou District, Beijing, covering an area of about 1,500 m2. It has 28 full-time R&D personnel, including 3 of senior titles, 12 of mid-level titles and 8 of master's degree or above, the rest of which are of bachelor degree or above, forming a multi-disciplinarity R&D team of reasonable specialty collocation.

Beijing R&D Center focuses on the development of the Three Wastes (flue gas, sewage and solid waste) treatment process and reagents, new energy and new materials. Beijing R&D Center is fully equipped with good basic conditions. It has 4 independent small test sites, 1 public test site, 1 aseptic laboratory, 1 3D printing mechanics laboratory, 1 large-scale pilot plant test site, office area and warehouse.

Beijing R&D Center has successfully developed a number of innovative technological achievements and has obtained dozens of proprietary intellectual property rights since its establishment. In response to the national "30-60 carbon peak and neutrality" goals, MSTN has developed the carbon dioxide capture and storage technology of high absorptivity, high purity, low energy consumption and low investment based on years of experience on acid gas treatment, which can meet the requirements for decarburization of various flue gases.

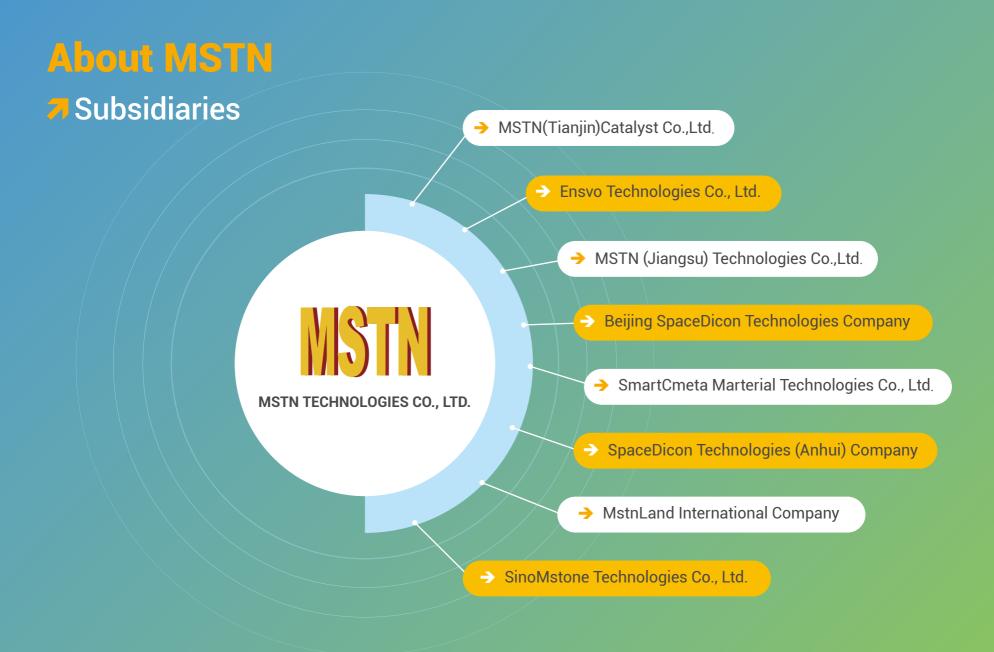
#### Shenyang R&D Center

Shenyang R&D Center, the big data intelligent R&D Center of MSTN, was established in 2018. It is located in Shenyang International Software Park, Hunan District, Shenyang. It has a professional R&D team of 16 experts. Shenyang R&D Center is committed to accelerating digital transformation of the Company and digital empowerment of the traditional technologies, supporting the construction of intelligent data application, improving the operational efficiency and helping the Company to efficiently utilize data. The main directions of the research and development are the IoT communication technology, location technology, intelligent field system and Bishuilantian Environmental Protection Platform. Up to now, Shenyang R&D Center has developed the wireless gateway, communication module, PLC remote monitoring module, intelligent sewage biochemical treatment system, intelligent field and environmental protection craftsman APP, and has obtained 6 patents for the invention of communication technology, the invention of utility model and appearance.









#### Official Website http://www.sinomstone.com/

#### SinoMstone Technologies Co., Ltd.

SinoMstone Technologies Co., Ltd. was established in 2013. It specializes in the R&D, manufacturing and sales of the environment-friendly products in the field of industrial environmental protection and personal environmental health. It has a number of achievements in scientific research and patented technologies. The Company is committed to provide professional, healthy and intelligent environment-friendly products for enterprises and individuals.

In the field of industrial environmental protection, the Company focuses on technical service and environmental protection equipment research and development and sales, and keeps optimizing products based on the customer demands, providing professional solutions for clients. In the field of personal environmental health, the Company sticks to the cultural concept of " Close to Nature and Merge into Nature" and develops new personal environmental health products to let more people enhance the environmental awareness and protect the homeland, aiming to make everyone have a healthy body, a healthy lifestyle and a healthy mentality to embrace the nature.

#### Be close to nature and blend in with nature



#### MSTN (Jiangsu) Technologies Co.,Ltd.

MSTN (Jiangsu) Technologies Co.,Ltd. was founded in March 2020 and located in Gaocheng Town, Yixing City, Jiangsu Province. It is the equipment production base of one of the four major bases of MSTN Group. Its main business includes the R&D, production and sales of environmental protection equipment such as wet desulfurization equipment, denitration equipment, skid-mounted equipment, drainage treatment equipment, small and refined equipment, Moreover, the MCO2 CO2 capture technology developed by the base was successfully selected in the Recommended Catalogue of Innovative Green Technologies in Beijing in 2022.

The base covers an area of 6500 square meters, a production workshop area of 4000 square meters, and a storage area of 2000 square meters. It has 34 sets of special production equipment such as overhead cranes, various welding machines, rolling machines, drilling machines, test presses, sandblasting machines, laser blanking machines, etc. The annual output value of the base reached 30 million in 2022. The base has a professional service team of 25 people, providing 7 \* 24 hours of service to ensure the requirements of delivery quality and delivery time.

With "innovation and environmental protection" as the driving force for development and "industrial ingenuity" as the enterprise spirit, the company provides fast, efficient and authoritative high-quality environmental protection equipment for Chinese industrial enterprises.



innovation and environmental protection, industrial ingenuity

MSTN TECHNOLOGIES CO., LTD.

#### Official Website http://spacedicon.com/Home

#### Beijing SpaceDicon Technologies Company

Beijing SpaceDicon Technologies Company is a high-tech enterprise specializing in architectural 3D printing. Since its establishment, it has developed the robot architectural 3D printer, tails architectural 3D printing material and architectural 3D printing model library jointly with the academic institutions including Tsinghua University and China University of Mining and Technology (Beijing). The Company has obtained over 20 proprietary intellectual property rights, domestic leading scientific and technological achievements and certificates of new technologies and products.

The Company pays attention to the practical application of the achievements and has accomplished a number of printing cases, including the snowflakes in 2022 Beijing Winter Olympics, the flower wall construction of Beijing Tongzhou Sub-center and the fan solid waste treatment of GOLDWIND. Currently, the mechanical property, endurance quality, environmental protection and safety performance of the Company's architectural 3D printing products stand in the forefront of the industry.

The Company aims to absorb the advanced architectural 3D printing technologies at home and abroad and build a technical team capable of continuous innovation to meet the market demand and customer's satisfaction with the optimized architectural 3D printing technology and to open a new architectural concept and residence culture with architectural 3D printing.





#### **SpaceDicon Technologies (Anhui) Company**



SpaceDicon Technologies (Anhui) Company was established on September 19, 2022, located in the Tustar Park, No. 86, Nanjing North Road, Langya District, Chuzhou City, Anhui Province. It is subordinate to SpaceDicon Technologies (Anhui) Company and is the architecture 3D printing production base of one of the four major production bases of MSTN Group. The company focuses on the R&D and production of architecture 3D printing robots, 3D printing structures and low-carbon 3D materials and other products with advanced production processes and equipment, and implements the product concept of "technology guidance, precision manufacturing, and sincere service" to provide customers with high-quality architecture 3D printing products.

The company has long insisted on vigorously introducing high-end talents, combining independent innovation with introduction, giving full play to its advantages in R&D and product promotion in the direction of 3D printing in domestic architecture, and relying on the good investment environment in Chuzhou, forming an innovative high-tech enterprise integrating product R&D, production and sales.



technology guidance, precision manufacturing, and sincere service



Official Website http://www.ensvo.com/

#### **6** Ensvo Technologies Co., Ltd.







Ensvo Technologies Co., Ltd. was established in 2016. The Company specializes in the restoration of ecological environment, with the main business in the restoration of oily soil, production of oil microbial agents, restoration of ecological environment in mines and manufacturing of tails architectural 3D printing materials. It has a number of patented technologies and proprietary intellectual property rights, and has established strategic cooperation relations with many domestic research institutions. The Company has gradually become a professional ecological environment restoration enterprise integrating technology research and development and application and materials manufacturing and sales.







#### Smartcmeta Marterial Technologies Co., Ltd.

Smartcmeta Marterial Technologies Co., Ltd. is one of the four major bases of MSTN Group as graphene material production base. It is located in the Torch Graphene New Material Industrial Park in Tong'an District, Xiamen. Its main businesses include graphene oxide powder/slurry, graphene powder/slurry, graphene modified sponge, graphene-based oil-water separator, carbon fiber high-performance heat transfer gasket, as well as flocculants, defoamers, amine liquid, etc. for environmental protection.

Xiamen Base has laboratories, warehouses and five production lines with advanced production technology and high-quality raw materials, has an independent high-level R&D team, a professional production team, and an efficient service team, adhering to the concept of "new materials, new world, and new life", advocating the spirit of scientific and technological innovation, relying on the profound technical background of Xiamen University and the strong comprehensive strength of MSTN Group, we are committed to becoming a high-tech company integrating R&D, production and sales in the field of new materials.







Official Website www.mstnland.com

#### MstnLand International Company



MstnLand International Company is a wholly-owned subsidiary of MSTN Group. As the international trade window of MSTN Group,"going out" is an important part of MSTN Group's business strategy. MstnLand has a team in four professional fields covering material procurement, international trade, e-commerce operation, technical services. Relying on MSTN Group's hundreds of independent intellectual property technology, four production bases, two R&D centers and hundreds of engineering experiences MstnLand actively explore the international market and we are committed to providing advanced and reliable environmental protection technology, prying equipment, industrial valves and pipe fittings, chemical products and services for global oil, gas and petrochemical industry customers.



#### MSTN (Tianjin) Catalyst Co.,Ltd.



MSTN (Tianjin) Catalyst Co.,Ltd. was registered and established in Nangang Industrial Zone, Tianjin Economic and Technological Development Zone, a national economic and technological development zone in October 2022. It is one of the four bases of MSTN Group as denitration catalyst production base, which covers an area of 5000 square meters and has a capacity of 3000 cubic meters per year. Based on the experience of MSTN Group in hundreds of desulfurization and denitration cases in the field of environmental protection for 20 years and its professional R&D team, the company has established an exclusive strategic partnership with fixed source denitration of Umicore, a leading global recycling material technology enterprise, mainly engaged in the design, R&D, production, sales and related after-sales services of denitration process technology, Umicore patented corrugated plate SCR catalyst and denitration equipment.

Denitration catalyst production Plant

## Honors

- ★ ISO Certificate
  - Certificate of new technologies and product
  - Graphene-based oil-wate separator

- ★ High-tech Enterprise Certificate
- ★ Specialized and Special New Enterprise
- Municipal Enterprise Research Institution of Beijing
- ★ Zhongguancun High Technology Enterprise

- ★ Patents
- ★ Trademark certificates
- Software copyright certificates
- Certificate of new technologies and products

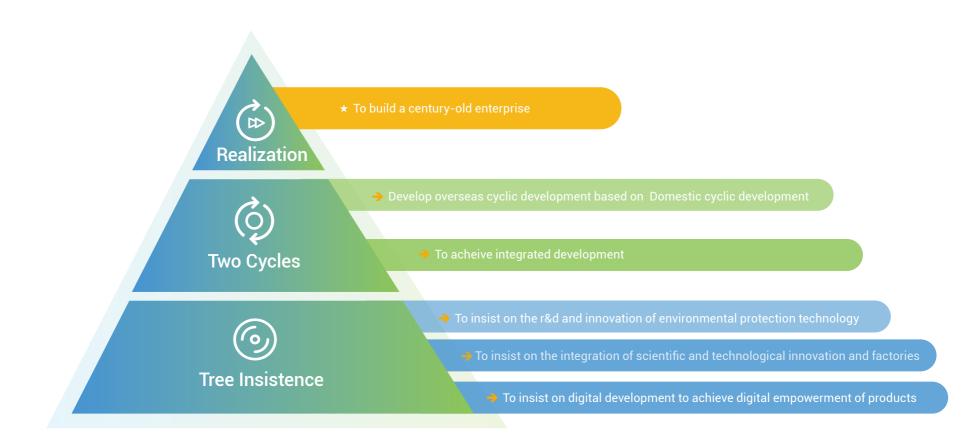


# Corporate Culture





# Development Strategy



## Talents



## Talent Cultivation And Promotion



#### **Talent Cultivation**

Cultivation of specialized technical personnel and comprehensive management personnel.



#### Promotion

Vertical post promotion and horizontal skill promotion.





## Our Team





# Performance Distribution



## Main Partners



#### Developing and Protecting, Earth Life Better

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