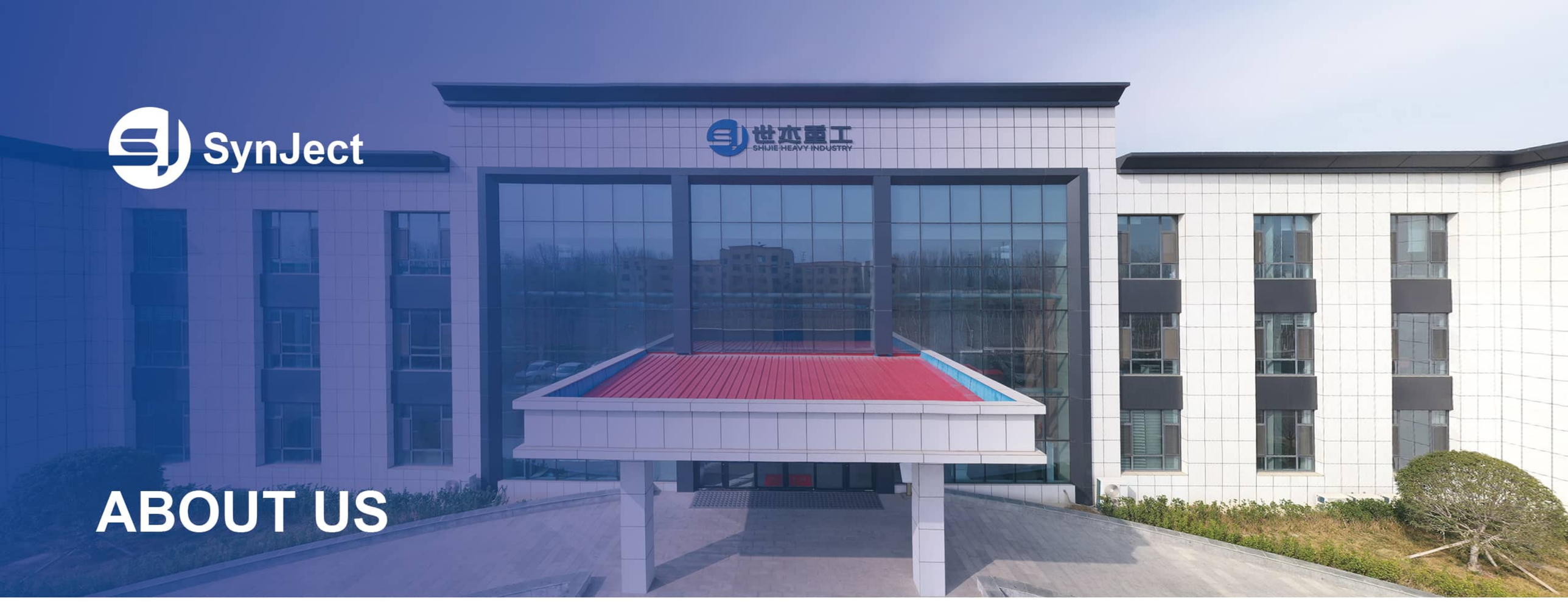
SynJect

https://www.shijievt.com/
https://sdshijie.com/

ENGINEERING SOLUTIONS FOR PASSIVE PROTECTION OF TANKS AND FUEL STORAGE FACILITIES



COMPANY PROFILE

SYNJECT is your ideal partner for integrated heavy-duty steel structures and industrial warehousing solutions. With an 80,000-square-meter production facility and a team of over 600 technical, R&D, production, and engineering professionals, we are dedicated to minimizing your project risks.

We understand that interface management is one of the biggest challenges in global EPC projects. By designing and manufacturing petrochemical storage tanks and pressure pipelines in a single facility, we eliminate on-site conflicts and interface delays. Leveraging advanced BIM technology and rigorous non-destructive testing quality control, SYNJECT provides turnkey solutions that ensure traceable compliance, rapid installation, and zero safety hazards.

COMPLIANCE

We strictly adhere to API 650, ASME, and EN codes. From seismic to wind load analysis, we ensure your tanks seamlessly pass the most rigorous global audits.

INTEGRITY

Utilizing automated SAW and 100% NDT (UT, RT, PT) on critical seams, we ensure flawless joint penetration for absolute leak-proof performance under extreme pressures.

CONTAINMENT

We specialize in custom IFR/EFR tanks with premium primary and secondary seals. Our designs drastically reduce vapor loss, ensuring strict global emission compliance.

RESILIENCE

From chemical epoxy linings to C5-M marine-grade external coatings, and SF/FF double-wall designs, we extend your asset lifespan in the most aggressive environments.

CAPACITY

Backed by an 80,000 sqm heavy fabrication facility, we possess the immense scale to handle massive tank farm EPC projects, guaranteeing on-time multi-vessel delivery.

PRECISION

Shell plates are precision-rolled and edge-beveled in our factory. This "Ready-to-Weld" approach ensures seamless fit-up, significantly accelerating on-site erection.

SynJect

PROJECT STRENGTHS

QUALIFICATION CERTIFICATE

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

CERTIFICATION PROGRAM

PROUDLY RECOGNIZE THAT

Shandong Shijie Heavy Industry Co.,

2019-05-08-000547F

MAINTAINS OPERATIONS LOCATED AT

11th Industrial Park, Huangtun Street, High-tech Zone, Jining
Shandong Province, 272000, P. R. China

THAT SUCCESSFULLY MEET THE QUALITY CERTIFICATION REQUIREMENTS FO

Building Fabricator

CERTIFICATION NUMBER C-00028603

ISSUED February 12, 2026

VALID THROUGH May 31, 2027

ORGANIZATION FOR TECHNICAL CONFORMITY

FACTORY PRODUCTION CONTROL CERTIFICATION BODY

CE 2787

CERTIFICATE

OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL

2787 - CPR – …

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

STEEL STRUCTURES AND COMPONENTS

according to EN 1090-2, executive class EXC2,

with performance and test methods as provided in the manufacturer's declaration of performance

placed on the market & produced in the manufacturing plant of

Shandong Shijie Heavy Industry Co., Ltd.

11th Industrial Park, Huangtun Street, High tech Zone, Jining City, Shandong Province, China

- method of declaration 3a) and 3b) according to table A1 of EN 1090-1:2009+A1:2011;
- execution of manufacturing processes: cutting, drilling, welding, NDT, assembly, corrosion protection

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 1090-1:2009+A1:2011

under system 2+ are applied and that the factory production control is assessed to be in conformity with the applicable requirements

This certificate was first issued on ….02.2026 and will remain valid to ...02.2029, provided that the harmonised standard, the construction product, the AVCP methods and the manufacturing conditions in the plant are not modified significantly, unless this certificate was not suspended or withdrawn by the notified production control certification body.

This Certificate contains an Annex from one page and as an inseparable Part.
This Certificate is valid only with a Document of validity, which is an inseparable part of this Certificate.

Department Head:
Vera Tsvetkova

Sofia, February .., 2026

OTC Bulgaria Ltd.
OTC, Notified Body Number 2787 from the Register of the European Commission
12 Hristo Belchev Str., 1000 Sofia, Bulgaria

FACTORY PRODUCTION CONTROL

ORGANIZATION FOR TECHNICAL CONFORMITY

DOCUMENT 1
OF CERTIFICATE VALIDITY

No 2787 - CPR – 01627

Date: February 06, 2026

Based on the requirements of the standards EN 1090-1:2009+A1:2011, applicable regulations and rules, OTC Bulgaria Ltd. in its capacity of a NOTIFIED BODY with identification number № 2787 for conformity assessment of construction products certifies the status of the issued Certificates to **Shandong Shijie Heavy Industry Co., Ltd** with management address: 11th Industrial Park, Huangtun Street, High tech Zone, Jining City, Shandong Province, China, as follows:

Certificate number	Date of issue	Standard	Construction product	Status	Valid until
No 2787 - CPR – 01627	06.02.2026	EN 1090-1:2009+A1:2011	Structural components for steel structures	valid	05.02.2027

Head of Department CACP
Vera Tsvetkova

OTC BULGARIA Ltd.

OF 01.01:01 1/1

CERTIFICATE OF ENVIRONMENTAL MANAGEMENT SYSTE

Certificate Registration No：128224E0234R0S

Hereby certify that

Shandong Shijie Heavy Industry Co., Ltd

Unified social credit code：91370800MA3PD15Y92

management system in line with

GB/T24001-2016 idt ISO14001：2015

Scope of Certification

Environmental management activities related to construction engineering,steel structure engine
petrochemical engineering, and electromechanical engineering within the scope of qualificati

Registration Address :ShandongProvince, jining city, High-tech Zone, Huangtun Street, The 11th Industrial Park

Audit Address :ShandongProvince, jining city, High-tech Zone, Huangtun Street, The 11th Industrial Park

Date of first issuance: 2024-10-08 Date of current issuance: 2024-10-08 Certificate is valid until: 2027-10-07

Zhongheng Brilliant Certification Service (Beijing) Co., LTD

Post code：10010 Tel：010-67579795 Web：www.iszhzy.org.cn

11F 1110B, Building 1, Fengzhuyuan 2 District, No. 18 Jiaomen, Fengtai District, Beijing

CERTIFICATE OF OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

Certificate Registration No：128224S0217R0S

Hereby certify that

Shandong Shijie Heavy Industry Co., Ltd

Unified social credit code：91370800MA3PD15Y92

management system in line with

GB/T45001-2020 idt ISO45001：2018

Scope of Certification

Occupational Health and Safety Management Activities Related to Construction Engineering, Steel Structure Engineering, Petrochemical Engineering, and Mechanical and Electrical Engineering within the Qualification Scope

Registration Address : ShandongProvince, jining city, High-tech Zone, Huangtun Street, The 11th Industrial Park

Audit Address : ShandongProvince, jining city, High-tech Zone, Huangtun Street, The 11th Industrial Park

Date of first issuance: 2024-10-08 Date of current issuance: 2024-10-08 Certificate is valid until: 2027-10-07

Zhongheng Brilliant Certification Service (Beijing) Co., LTD

Post code：10010 Tel：010-67579795 Web：www.iszhzy.org.cn

11F 1110B, Building 1, Fengzhuyuan 2 District, No. 18 Jiaomen, Fengtai District, Beijing

CERTIFICATE OF QUALITY MANAGEMENT SYSTEM

Certificate Registration No：128224QJ0034R0S

Hereby certify that

Shandong Shijie Heavy Industry Co., Ltd

Unified social credit code：91370800MA3PD15Y92

Engineering construction enterprise quality management System in line with

GB/T19001-2016/ISO9001:2015;GB/T50430-2017 standard

Scope of Certification

Construction of building engineering, steel structure engineering,
ochemical engineering, and electromechanical engineering within the scope of qualifications

Registration Address : ShandongProvince, jining city, High-tech Zone, Huangtun Street, The 11th Industrial Park

Audit address : ShandongProvince, jining city, High-tech Zone, Huangtun Street, The 11th Industrial Park

Date of first issuance: 2024-10-08 Date of current issuance: 2024-10-08 Certificate is valid until: 2027-10-07

Zhongheng Brilliant Certification Service (Beijing) Co., LTD

Post code：10010 Tel：010-67579795 Web：www.iszhzy.org.cn

11F 1110B, Building 1, Fengzhuyuan 2 District, No. 18 Jiaomen, Fengtai District, Beijing

SynJect

Global Standards | Custom Sizing

Media Adaptive | Anti-Corrosion

Extreme Resilience | Strict Quality

OIL TANK AND FUEL DEPOT PROTECTION AGAINST UAVS

Fuel and energy infrastructure, including storage tanks, are highly vulnerable to drone threats. We specialize in designing protective enclosing structures (PES) to provide passive defense against UAVs. Our solutions comply with SP 542 standards and are customized to your specific site and operational conditions.

STANDARD TRUSS-NET SHIELD

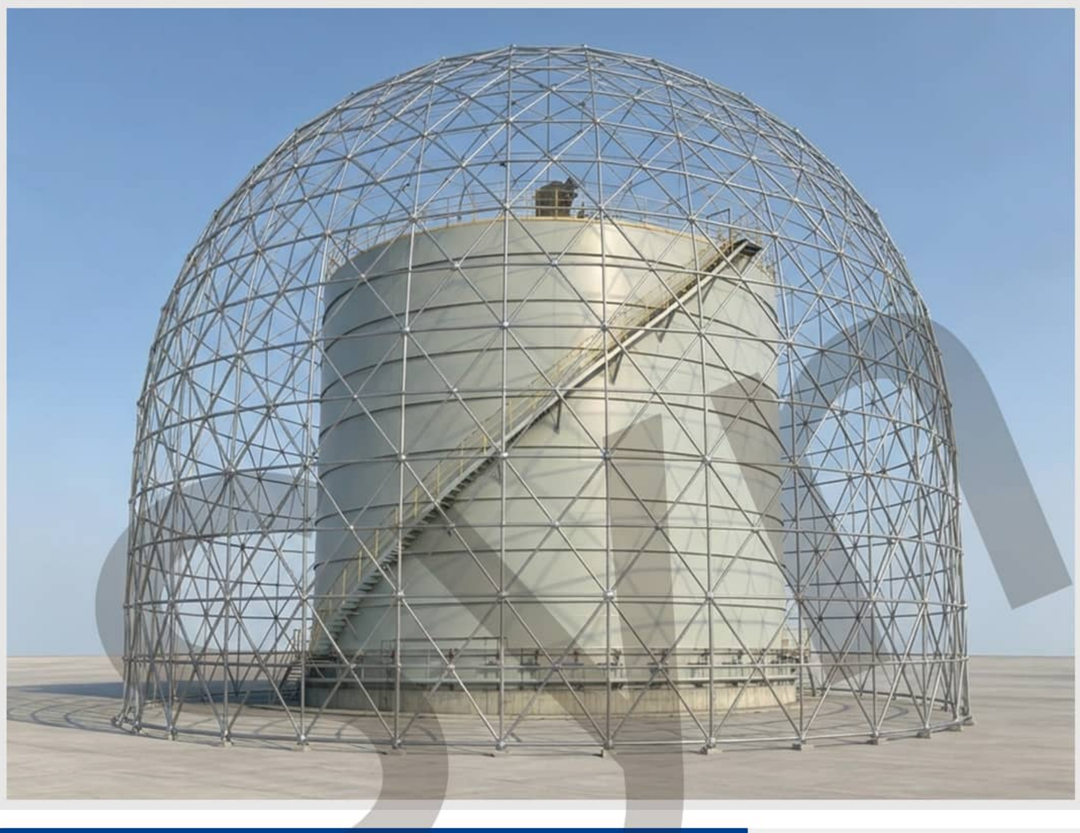






Positioning	Highly cost-effective and rapidly deployable. Suitable for small to medium-sized bullet tanks, skid-mounted stations, and remote gas stations
Design Logic	Utilizes a "rigid rectangular truss + high-tension flexible protective net" structure
System Architecture	Modular Heavy-Duty Rectangular Truss with High-Tensile Catch Mesh
Primary Structure	Hot-dip galvanized tubular steel trusses (S355/ASTM A500)
Protection Medium	High-tensile stainless steel wire rope mesh / Ultra-high molecular weight polyethylene (UHMWPE) netting
Pre-Detonation Standoff	Minimum 3.0 meters clear distance from tank shell
Threat Defeat Capability	Defeats Group 1 & 2 FPV Drones (<25kg payload) Premature detonation of standard RPG-7 impact fuzes
Energy Dissipation	Net deformation up to 1.5m to absorb kinetic impact
Wind Load Capacity	Designed for up to 35 m/s (126 km/h)
Installation Method	Bolted connections, zero on-site welding required

PREMIUM GEODESIC DOME SHIELD











Positioning	Ultimate protection and the standard configuration for strategic-level assets. Designed for large vertical API 650 storage tanks (crude oil and LNG tanks) and national strategic reserve facilities
Design Logic	Perfectly leverages our core advantages in space frame technology. The spherical structure not only delivers exceptional wind and seismic resistance, but also ensures a 360-degree, omnidirectional standoff distance for pre-detonation
System Architecture	Geodesic Space Frame Dome with Integrated Anti-Blast Nodes
Primary Structure	High-strength seamless steel tubes with forged spherical nodes (EN 1090/AISC compliant)
Protection Medium	Pre-tensioned multi-layered composite anti-drone armor mesh
Pre-Detonation Standoff	Omni-directional 5.0 - 8.0 meters standoff
Threat Defeat Capability	Defeats Loitering Munitions & Heavy Payload Drones,Multi-hit survivability
Structural Redundancy	High degree of static indeterminacy; destruction of up to 15% of nodes will not cause progressive collapse
Aerodynamic Coefficient	Near-perfect aerodynamic shape, minimizing wind drag and vortex shedding
Environmental Resilience	Wind: Up to 60 m/s (Category 5 Hurricane) Snow: Up to 2.5 kN/m² roof load

DIFFERENT EFFECT DEMONSTRATIONS



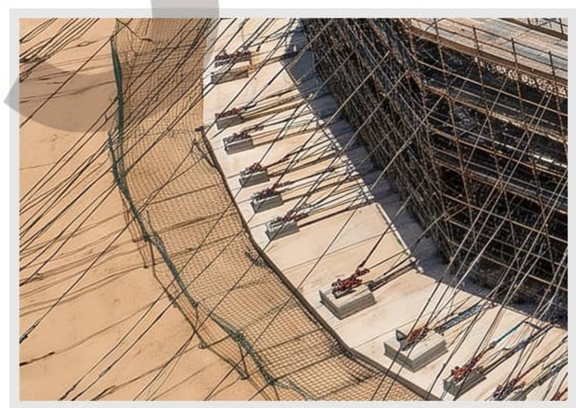


HYBRID RADIAL FRAMEWORK SHIELD







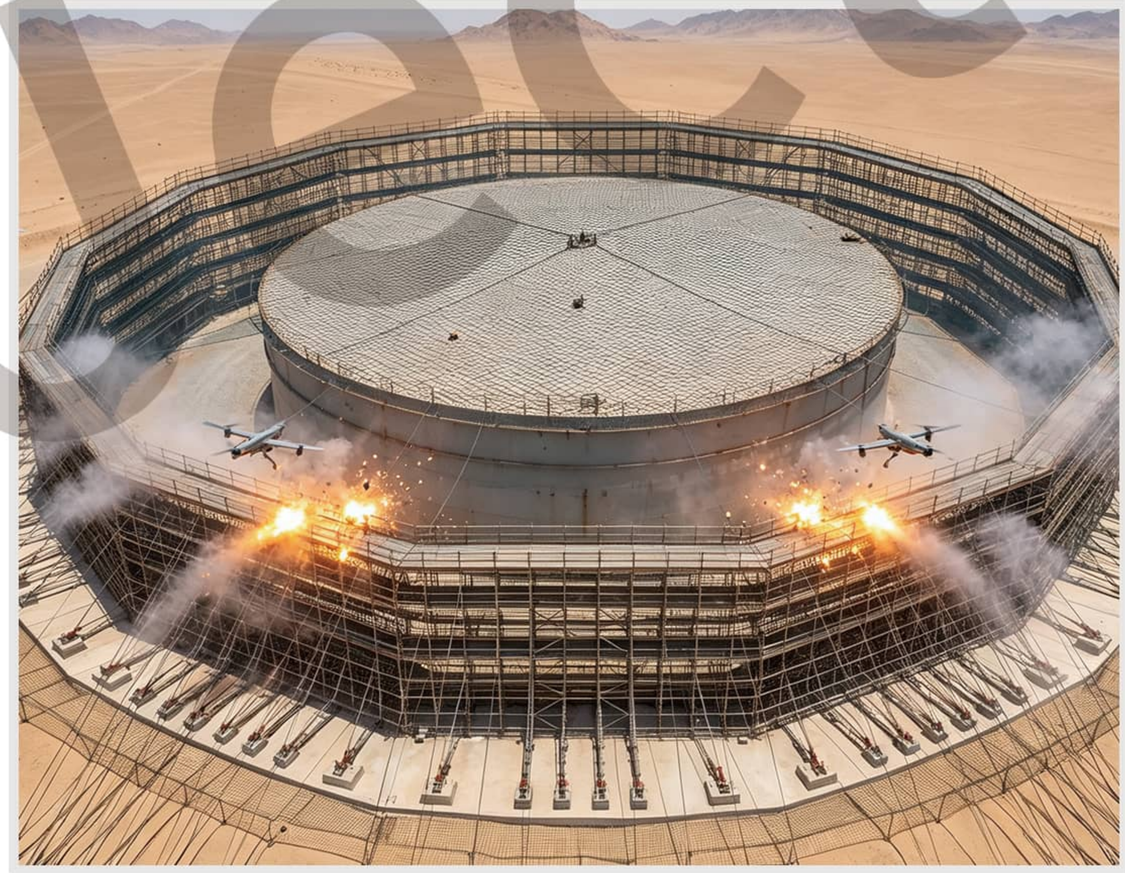




Positioning	Advanced hybrid protection configuration for critical mid-tier and strategic assets. Offers an excellent cost-performance balance between standard truss nets and premium domes.
Design Logic	Fuses a heavy-duty polygonal vertical perimeter with a top radial (umbrella-like) converging framework. This hybrid structure effectively distributes top loads and utilizes three outer concentric cable rings for anchoring, ensuring a strict 5-meter standoff.
System Architecture	Polygonal truss base + semi-arched radial canopy + 3-layer independent net system.
Primary Structure	Reinforced steel scaffolding with converging radial beams, anchored by 3 concentric ground cable arrays.
Protection Medium	3-layer radial canopy: inner flexible safety net, middle and outer high-density steel wire ropes.
Pre-Detonation Standoff	Omni-directional 5.0 - 8.0 meters standoff
Threat Defeat Capability	Defeats Loitering Munitions & Heavy Payload Drones,Multi-hit survivability
Structural Redundancy	Loads distribute radially; outer wind anchors prevent progressive collapse against localized damage.
Aerodynamic Coefficient	Semi-arched profile lowers drag; outer cable systems suppress wind vibration.
Environmental Resilience	Wind: Up to 50 m/s; Snow: Up to 2.0 kN/m².

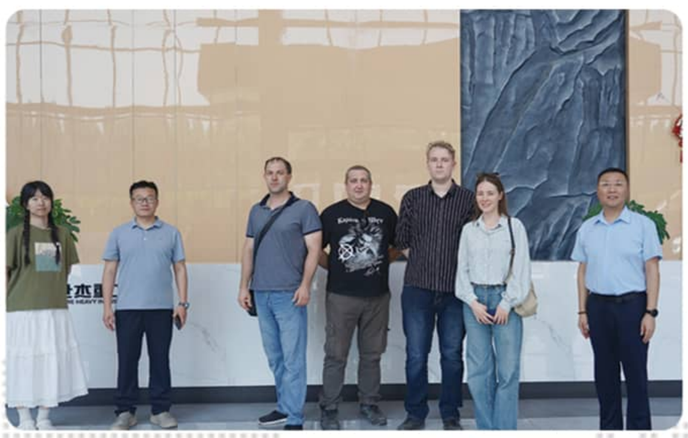
PROTECTION EFFECT DIAGRAM



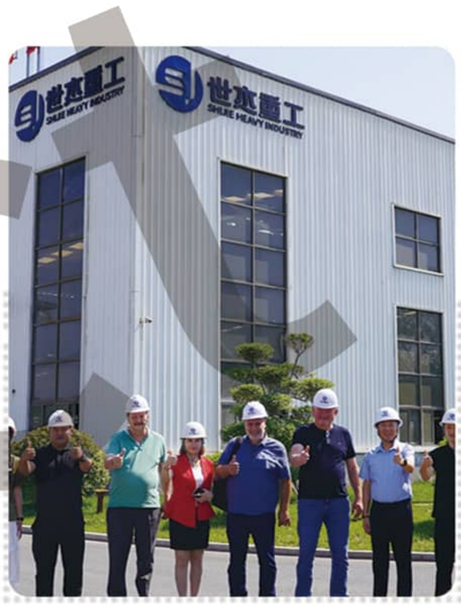
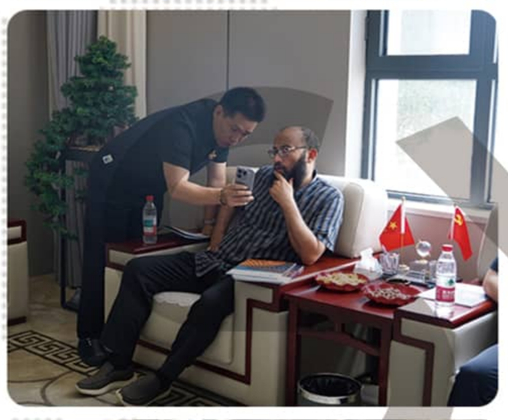




AUDITED & APPROVED BY GLOBAL LEADERS



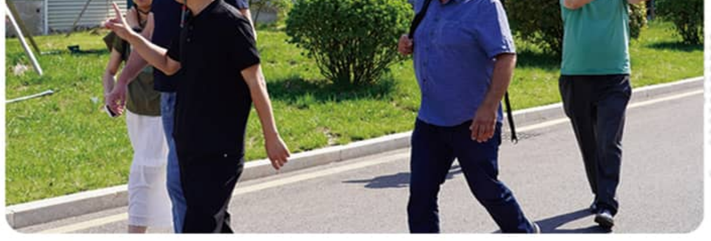










SynJect

THE GLOBAL TRACK RECORD













Shandong Shijie actively expands its domestic and international markets, establishing long-term strategic partnerships with well-known enterprises such as PetroChina, Sinopec, Huaneng, and Geely. Its engineering projects cover more than 300 cities in 23 provinces in China, and its international engineering operations have reached nearly 30 countries and regions in the Middle East, CentralAsia, Southeast Asia, Europe, and America, receiving widespread praise from domestic and foreign merchants. In the future, Shijie people will warmly welcome domestic and foreign merchants to create brilliant careers together!

SynJect

SHANDONG SYNJECT HEAVY INDUSTRY CO., LTD.

Address:11th Industrial Park, Huangtun Street, High-tech Zone, Jining City, Shandong Province

Processing Base:Jining, Shandong Anyang, Henan

Landline:+86-537-2793777

Email:admin@shandongshijie.com

URL:https://www.shijievt.com/