

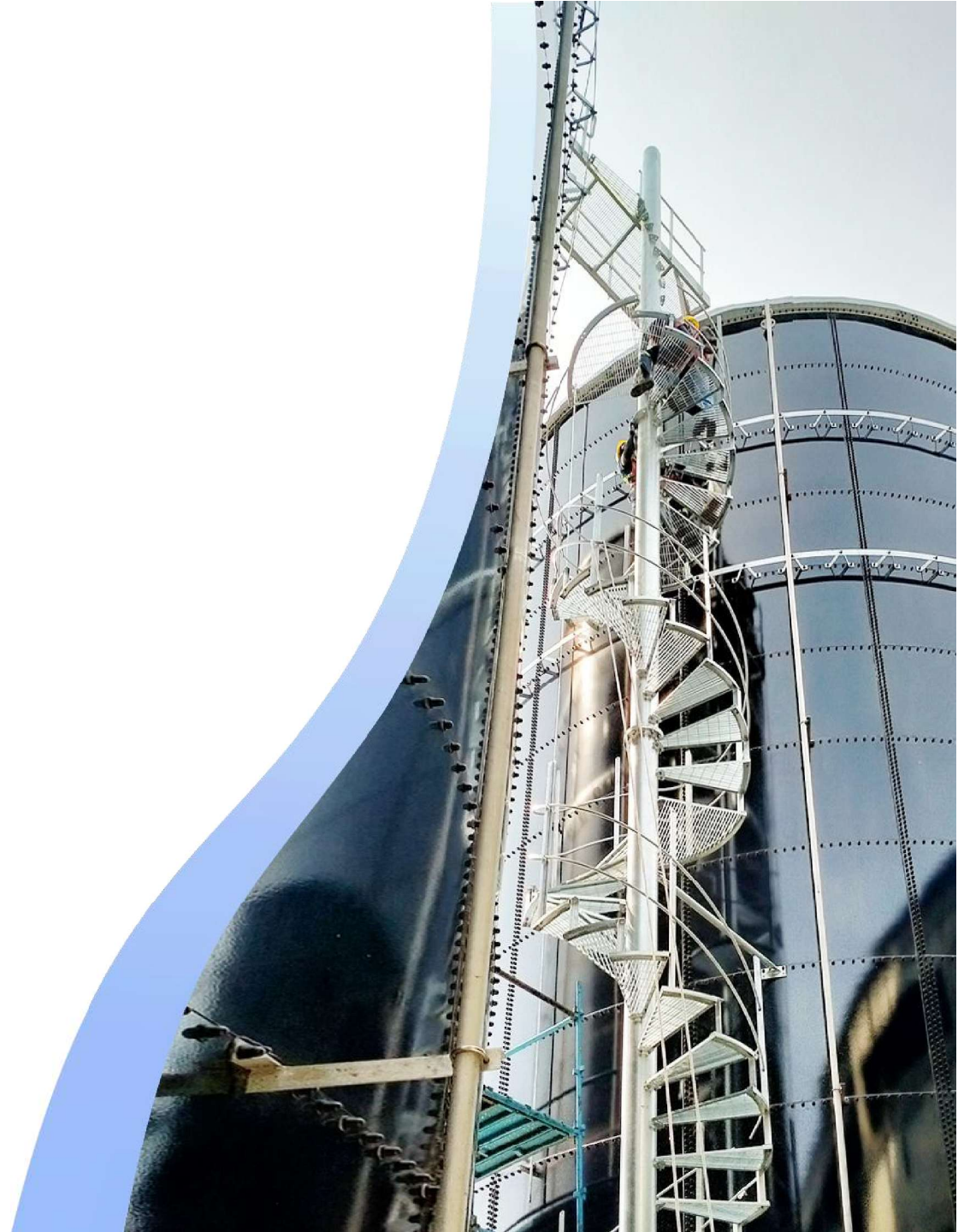


GFS Tanks | Epoxy Tanks | SS Tanks | Aluminum Dome Roofs

Storage solutions

More info at www.proxico.eu

office@proxico.eu





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▶ About Company



- Professional manufacturer dedicated to the design and fabrication of enameled products since 1989.
- We begin with: enamel frit | enameled cookware
Glass-Fused-to-Steel (GFS) tanks
- Now we can also provide various types of bolted tanks:
**Epoxy tanks | Stainless Steel Tanks | HDG tanks
Aluminum Geodesic Dome Roofs**
- **Old factory area** : 50,000m²
- **Old production ability** : 150,000 pc of sheets/year
- **Design Standard**: AWWA D103, OSHA, EN28765, EuroCode

Center Enamel is not only the first manufacturer in China which produces Glass Fused to Steel Tanks, but also the most experienced professional bolted tanks manufacturer in Asia.



▶ Our New Production Base

Finished CONSTRUCTION!~

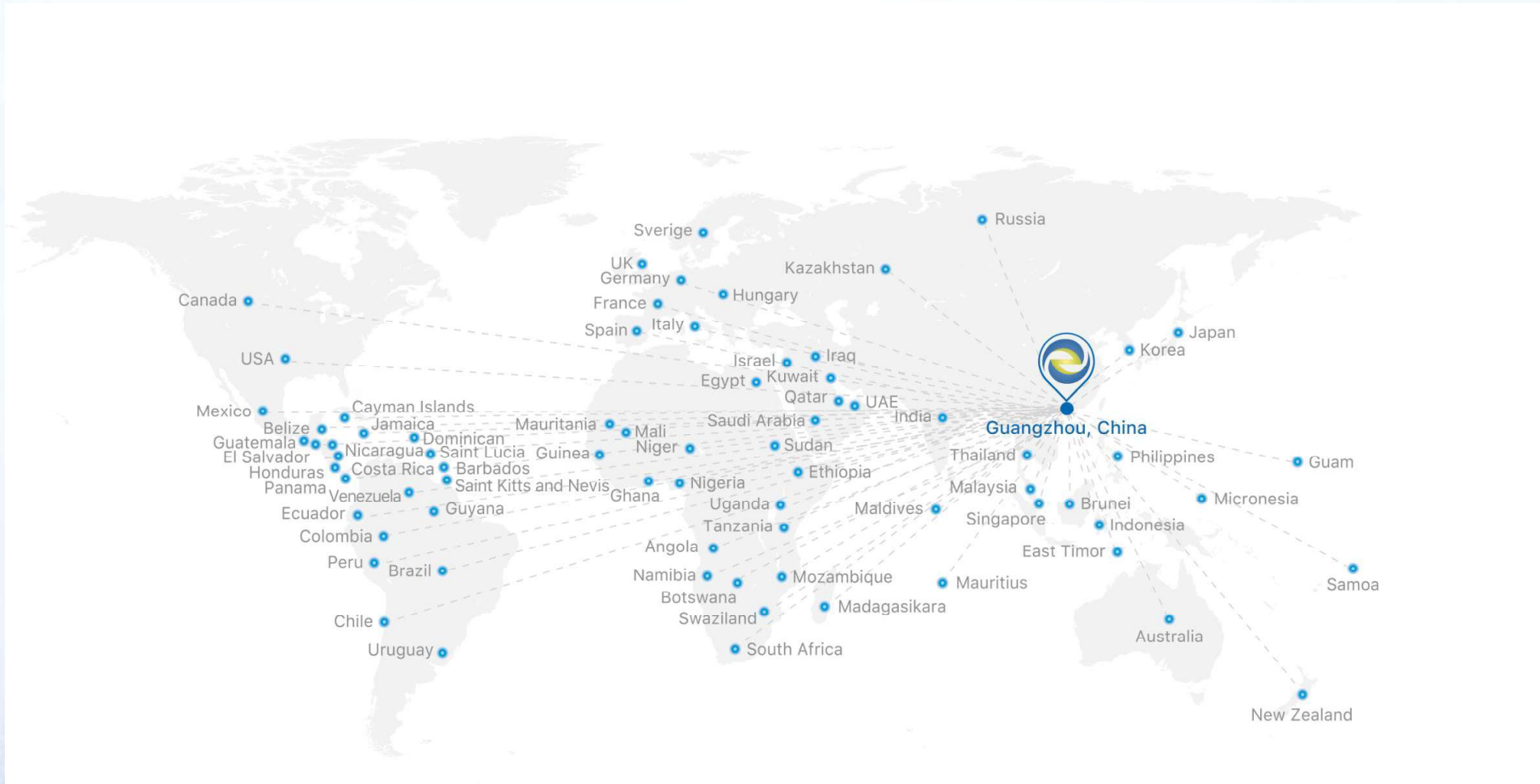
- Plant area: 100,000m²
- Production ability: 250,000 pc sheets/year

- Trial production: Dec. 2023
- Formal production: Jan. 2024



► Successful Projects Worldwide

- **Center Enamel** has shipped its products to more than 100 countries around the world, and it is still reaching out to the world today.



▶ Our Advantages



Laboratory Room

● ● ● ● ●
Quality control

WHY Choose Center Enamel Tanks :

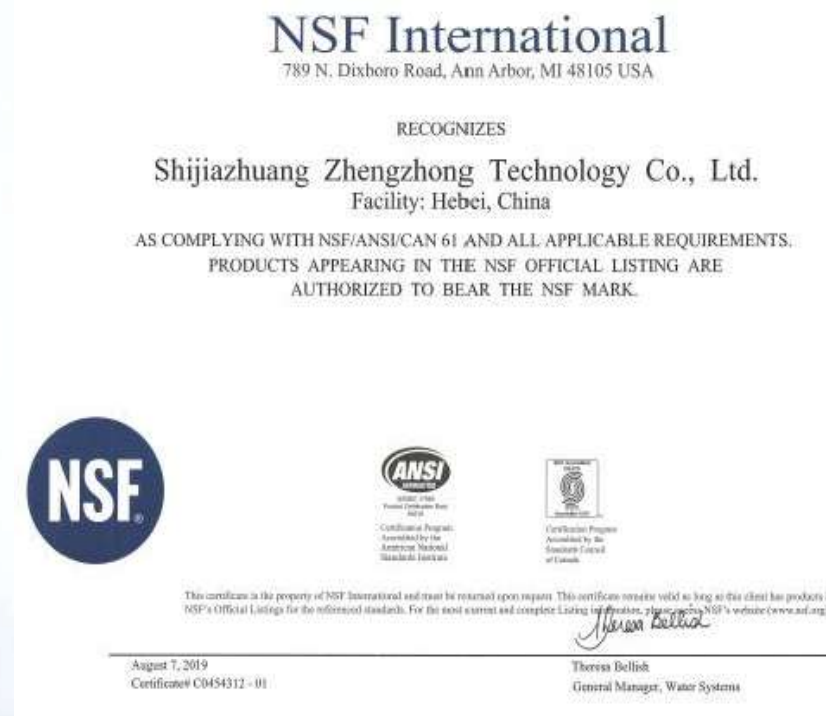
- 01 More than 30 years experience in Enameling industry**
The only GFS tanks manufacturer which can produce enamel frit as well
- 02 Engineering Design Standards- AWWA D103, OSHA, ISO28765, EUROCODE**
The only Asian GFS tanks manufacture which can be widely accepted in US market
- 03 Professional Experience with international Market**
Successful GFS tanks projects in more than 100 countries worldwide
- 04 Cooperate with Well-known international Corporations**
Veolia, Coca-Cola, Aciona, Paques, China Power, Sinopec, Wilmar, Porsche, CNNC etc.

▶ International Certifications

ISO9001 Certificate



NSF/ ANSI 61 Certificate



FDA Certificate



International Certifications

ISO/EN 28765

ISO/EN 28765

SIRIM QAS INTERNATIONAL
 No. 1, Pangsaran Datar Mentari, P.O. BOX 7035, Section 2,
 40700 Shah Alam, Selangor Darul Ehsan, Malaysia
 Tel: 03-55445199
 Fax: 03-55445688
 www.sirim-qas.com.my

TEST REPORT
 REPORT NO : 2019CE0555-S1 PAGE : 1 OF 4

This Test Report refers only to samples submitted by the applicant to SIRIM QAS International Sdn. Bhd. and tested by SIRIM QAS International Sdn. Bhd. This Test Report shall not be reproduced, except in full and shall not be used for any purpose by any means or forms (including but not limited to advertising purposes) without written approval from the Managing Director, SIRIM QAS International Sdn. Bhd. Please refer the last page for Conditions Relating to the Use of Test Report.

THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant
 [Redacted]

Manufacturer
 [Redacted]

Product
 Manufacturer: SHIJIAZHANG ZHENGZHONGTECHNOLOGY CO. LTD.
 Huanan East Road 81#, Zhengding, Shi Jiazhuang, 050800 Shijiazhuang City, Hebei Province, China.
 : Vitreous and Porcelain Enamels Bolted Steel Tanks for the Storage or Treatment of Water

Reference Standard / Method of Test
 : ISO 28765 : 2016 – Title: Vitreous and porcelain enamels- Design bolted steel tanks for the storage or treatment of water or municipal or industrial effluents and sludges

Description of sample / Description of Test Specimen
 : Received one (1) sample of Vitreous and Porcelain Enamels Bolted Steel Tanks for the Storage or Treatment of Water for testing which was identified as:
 Brand : Center Enamel

Date Received of Complete Application
 : 21 February 2019

Job No.
 : J20191400219

Description of Test Results / Overall Test Result
 : The submitted test sample as described in this test report complied with all the requirements of the above Reference Standard.

Issued Date
 : 14 May 2019

Approved Signatories:

(MUHAMMAD RIZAL BIN ABDUL) (HAHNAS BINTI MAHBUT)
 Testing Executive Head
 Chemical & Consumer Section
 Testing Services Department

WRAS

Approval Number 2211553
 Test Report: MA772Y

WRAS APPROVED MATERIAL

Water Regulations Approval Scheme Ltd.
 Unit 13,
 Willow Road,
 Pen y Fan Industrial Estate,
 Crumlin,
 Gwent,
 NP11 4EG

8th December 2022
 Shijiazhuang Zhengzhong Technology Co., Ltd.
 Huanan East Road 81#,
 Zhengding,
 Shijiazhuang City,
 Hebei Province,
 China

WATER REGULATIONS APPROVAL SCHEME LTD. (WRAS) MATERIAL APPROVAL

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS6920-1:2000 and/or 2014 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

COATINGS, PAINTS & LININGS- FACTORY APPLIED PIPE & FITTINGS COATINGS. 5030

CEC-GFS Enamel, Black Blue RAL5004'. Factory applied, blue/black (appears black) coloured, enamel coating.
 Apply as per manufacturer's instructions 'ZZ-Ins001', dated 2021.01.01'.
 GFS-G base glaze: dry for 15 Minutes at 200°C then fire for 12 minutes at 870°C.
 GFS-S surface glaze: dry for 15 Minutes at 200°C then fire for 10 minutes at 830°C.
 For use with water up to 85°C.

This material is only approved for the drying and firing conditions that appear on the approval. If the drying and/or firing are varied from those specified on the approval then the material is not covered by the scope of the approval.

APPROVAL NUMBER: 2211553
APPROVAL HOLDER: SHIJIAZHANG ZHENGZHONG TECHNOLOGY CO., LTD.

The Scheme reserves the right to review approval.
 Approval 2211553 is valid between November 2022 and November 2027

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, 'Materials which have passed full tests of effect on water quality'.

The Directory may be found at: www.wrasapprovals.co.uk/approvals-directory/

Yours Faithfully

 Ian Hughes
 WRAS Approvals Manager

The Water Regulations Approval Scheme Ltd. Registered in England No. 1302384 Registered office: 8D Lovell Close, Hazel Grove, Stockport, SK7 9ED.
 WRAS Appn-20251 ver 2.0 Tel: +44(0)1495 244 666 Fax: +44(0)1495 244 688 Email: info@wrasapprovals.co.uk website: www.wrasapprovals.co.uk Page 1 of 6

CE Certificate/EN1090

BUREAU VERITAS
 EN ISO/IEC 17065
 S1-355

Notified body No 1697
Bureau Veritas Latvia
 17a Dumes street, Riga, LV-1005, Latvia

CERTIFICATE OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL
 1697 – CPR – 23/082

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

design and manufacturing of steel and aluminum alloy structure components, steel structure with vitreous enameling coating
 (characteristics are detailed in the attached annex)
 placed on the market under the name or trade mark of
Shijiazhuang Zhengzhong Technology Co., Ltd.
 No.81 Huanan East Rd, Zhengding, Shijiazhuang City, Hebei province, China
 and produced in the manufacturing plant
 No.81 Huanan East Rd, Zhengding, Shijiazhuang City, Hebei province, China

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 Execution of steel structures and aluminium structures - Part 1: Requirements for conformity assessment of structural components
 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 15/12/2023 and will remain valid until 14/12/2026 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

To check the validity date of this certificate, please call +371 67323246.
 Annex to certificate on 1 (one) page is integral part of this certificate.

Further clarification regarding the scope of this certificate and the applicability of the system requirements may be obtained by consulting to Bureau Veritas Latvia.

Certificate issued: Riga, 15/12/2023 Version: 1
 Certificate validity: 14/12/2026

Bureau Veritas Latvia Ltd
 Member of the board
 Iveta Lazdina

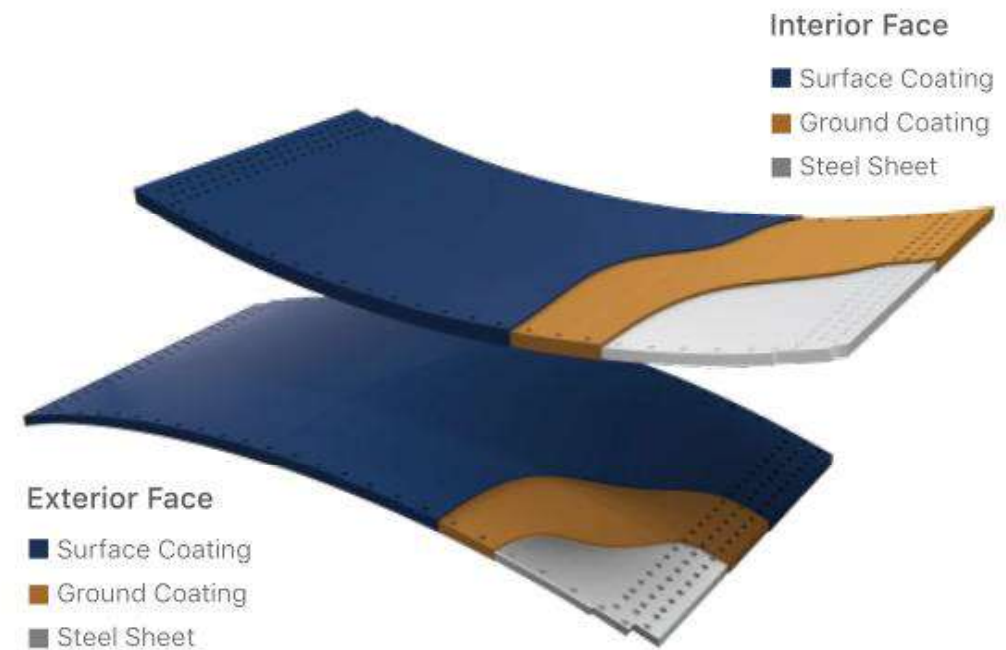
SIA Bureau Veritas Latvia Product Certification Body. Certificate F_S/BI_2+_eng
 Page: 1 of 2 – Rev 07, 19.10.2021.

▶ What is Glass-Fused-to-Steel ?

After firing at 820 ° C-930 ° C high temperature, the molten glass reacts with the steel plate surface to form an inert and inorganic bond, which combines the strength & flexibility of steel and outstanding corrosion resistance of glass, therefore GFS tanks can provide many advantages over standard epoxy or welded painted storage tanks. Glass-Fused-to-Steel technology is the premium coating technology in the storage tanks market, and GFS tanks are widely used in bio-energy, potable water storage, municipal sewage, landfill leachate, industrial wastewater treatment and other applications.

Enameling Technologies: 2C1F, 2C2F, 3C3F

Double Coating Layer Structure (2C2F)



▶ Comparison of 3 enameling technologies

Enamel Coating	2C1F (2 coating 1 firing)	2C2F (2 coating 2 firing)	3C3F (3 coating 3 firing)
Application	Agriculture water Fire water storage Drinking water storage Sludge tank AD tank (liquid area) Filter tank, dry bulk storage Temporary storage (open roof)	Industrial wastewater Treatment Sea water Landfill leachate AD tank (gas area) Municipal sludge treatment (with roof)	Special application Irritant waste water treatment Chemical industrial wastewater High temperature application
PH	3-10	2-10	2-11
Coating thickness	210-430um	240-460um	270-480um
Test method	Holiday test	holiday test	Holiday test
Testing voltage	900V	1500V	1500V
Tank color	Black blue	Black blue, Dark green Other customized colors	Black blue, Dark green Other customized colors

▶ Properties of Center Enamel GFS Tanks

Coating Color	Black blue, Grey olive, Forest green, Cobalt blue, Desert tan etc.
Coating thickness	10- 18 mils, 230-480 microns
Acid and alkalinity proof	Standard PH: 3~11, Special PH:1~14
Adhesion	5,000 psi
Hardness	6.0 (Mohs)
Service life	≥30 Years
Holiday test	> 900V / 1500V
Permeability	Gas liquid impermeable
Easy to clean	Smooth, glossy, inert, anti-adhesion
Corrosion resistance	Excellent, suitable for wastewater, salt water, sea water, high sulfur crude oil, salt fog organic and inorganic compounds



Light Blue



Light Grey



Dark Green



Tan



Dark Blue



Forest Green



White



Cobalt Blue

▶ Why choose Glass-Fused-to-Steel ?

GFS Tanks Advantages :

- **Short Installation Time**: prefabricated, rapid and simple
- **Low Capital Investment**: very low maintenance cost
- **30 Years Service Life**: superior corrosion resistance
- **Attractive Appearance**: color can be customized
- **Quality Control**: according to international standards
- **Flexibility**: re-model, extend, dismantle and relocate



▶ Main Production Steps of GFS Tanks



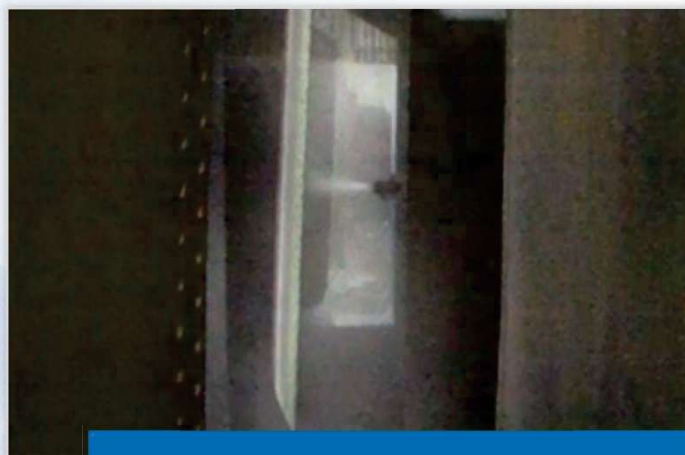
01 CNC Laser Cutting



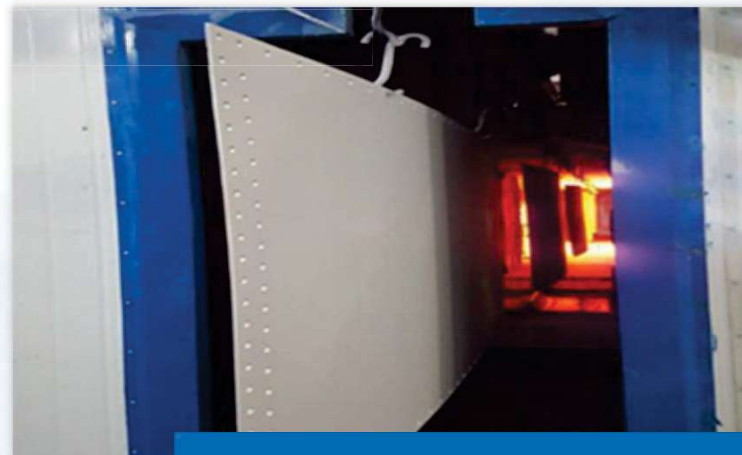
02 Steel Pre-treatment



03 Arc Bending



04 Automatic Enamel Spraying



05 High Temperature Tunnel Oven



06 Product Inspection

▶ Main Accessories of Tanks



Vertical Ladder

HDG / Stainless steel / Epoxy
Monkey ladder/ Spiral staircase



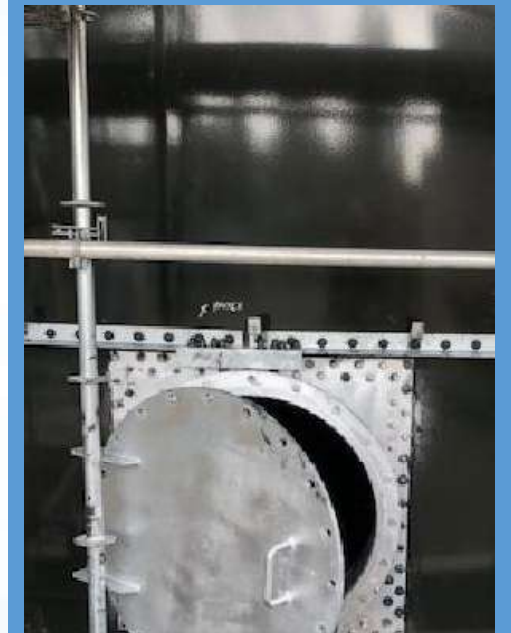
Roof handrails

Partial guardrail/ perimeter guardrail



Top Platform

With handrail & kickboard



Manway & Nozzles

HDG/ SS/ Epoxy Coating

► Quality Control

Raw Material Test: raw materials ingredient analysis, impurity test etc.

Enamel Formula Test: enamel fluidity test, acid and alkali resistance test, adherence / impact test

Inspection During Production: magnify experiment simulated operation environment

Final Quality Test: impact test, 1500V/1100V holiday test, coating thickness, color difference test

**Acid and Alkali
Resistance Test**



1500V Holiday Test



Adherence Test



Enamel Thickness Test



▶ Packages and Container Loading



Small items

Small items such as bolts, nuts are packaged in wood pallet, then wrapped with plastic film



Enamel sheet

Enamel sheets are well packaged in wood pallet with max. weight limitation 4T



Container Loading

Enamel sheet pallet in the middle, long items such as rafters at left/right sides, light items on top of wood pallet



► GFS Tanks Installation

GFS Tanks Foundation Types:

- ① Embedded bottom ring
- ② Starter ring
- ③ Above floor
- ④ Enamel floor

Main Installation Tools:

- Jacks or Steel Poles



①



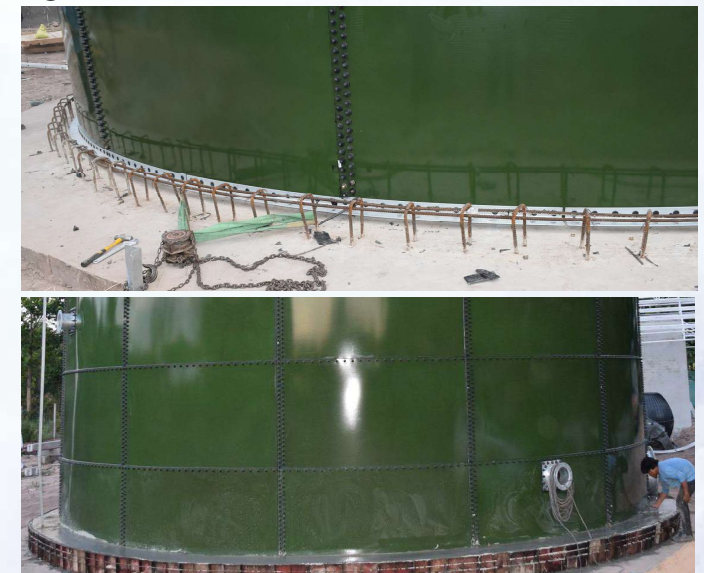
②



④



③



▶ GFS Tanks Installation



Apply the Sealant



Install the top ring



Lifting up top ring

▶ GFS Tanks Installation



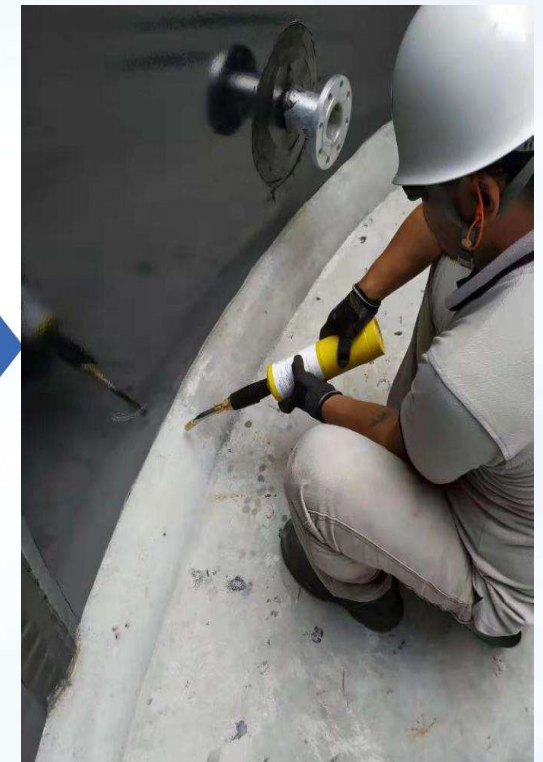
Install the base angles



Water-expanding sealant



Waterproof sealant



C28/35 Protective Layer

