



For

FRCE[®]

The Green Future

Mar. 2024



FRCE
FOR THE GREEN FUTURE

01

Profile

Company, Group, Team, Industry Chain, Milestone

02

CAPABILITY

Position Advantage, Hardware, Software, Certificate

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SYSTEM

Quality, Health, Safety, Environment, Manpower

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R&D

Liquid Hydrogen & Ammonia

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Business LINE

Skid, Tank, Semi-trailer, Station, etc.

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MAIN REFERENCE

Products Introduction

OUR COMPANY

Zhangjiagang Furui Special Equipment Co., Ltd. (Hereafter called "Furui Group") was founded in August 2003. The company occupies 560,000 square meters and is a public listed company in Shenzhen Stock Exchange Market.

Zhangjiagang Furui CIT Co., Ltd. (Hereafter called "Furui CIT") is a fully owned subsidiary company of Furui Group, which is a high-tech enterprise specialized in the designing and manufacturing the one-stop integrated solution equipment of natural gas liquefaction, storage, transportation, loading and unloading as well as terminal application, liquid hydrogen equipment, liquid ammonia equipment, module skid, dewar bottle of industry gas, speed tank, regional intelligent gas supply system and has lots of successful experience in onshore and offshore for domestic & global projects.





Furui CIT Organization Chart



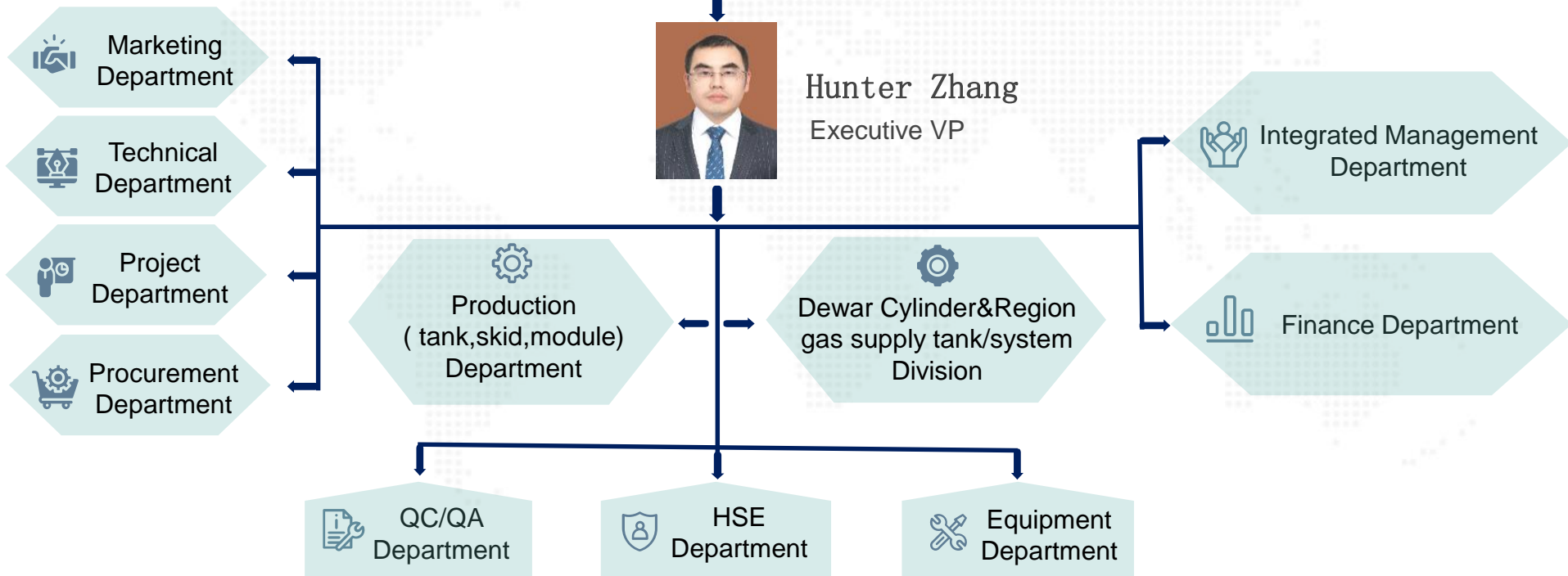
DK Huang

Chairman of Furui Group & President of Furui CIT



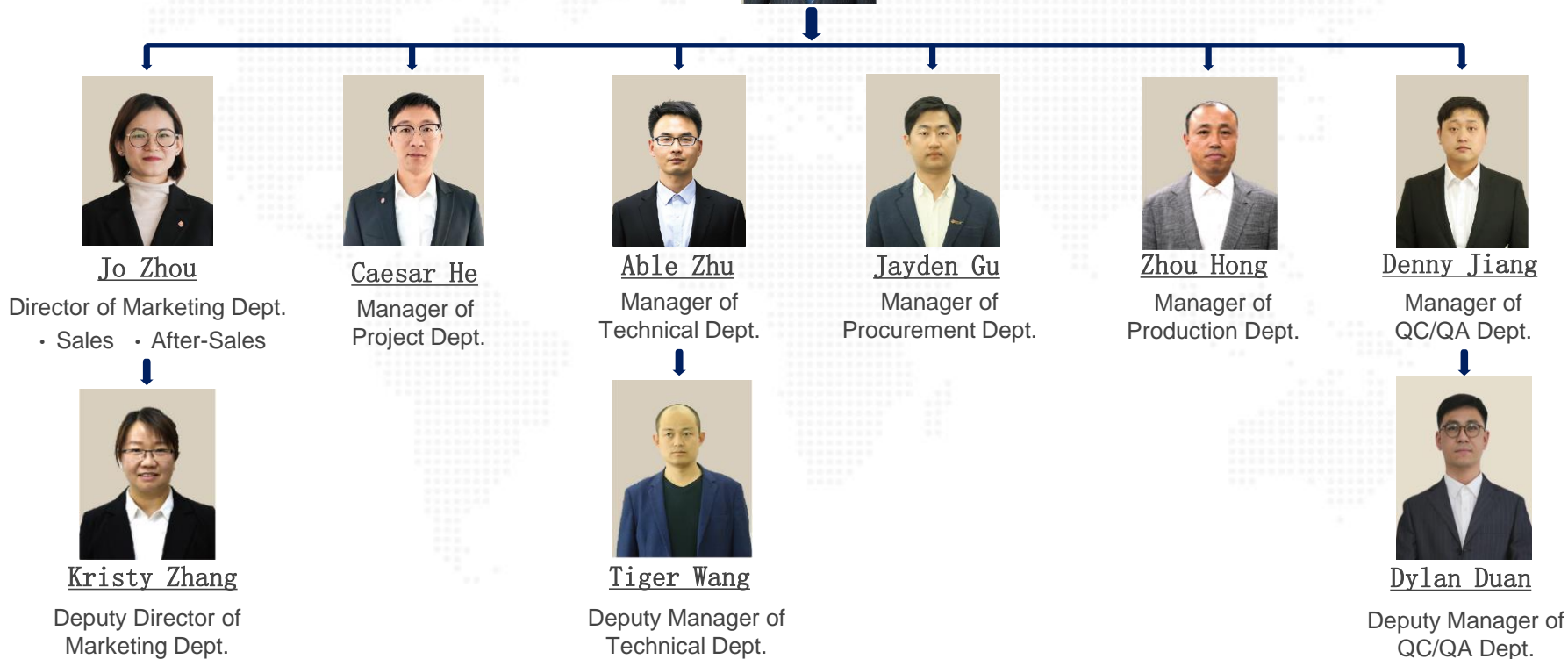
Hunter Zhang

Executive VP

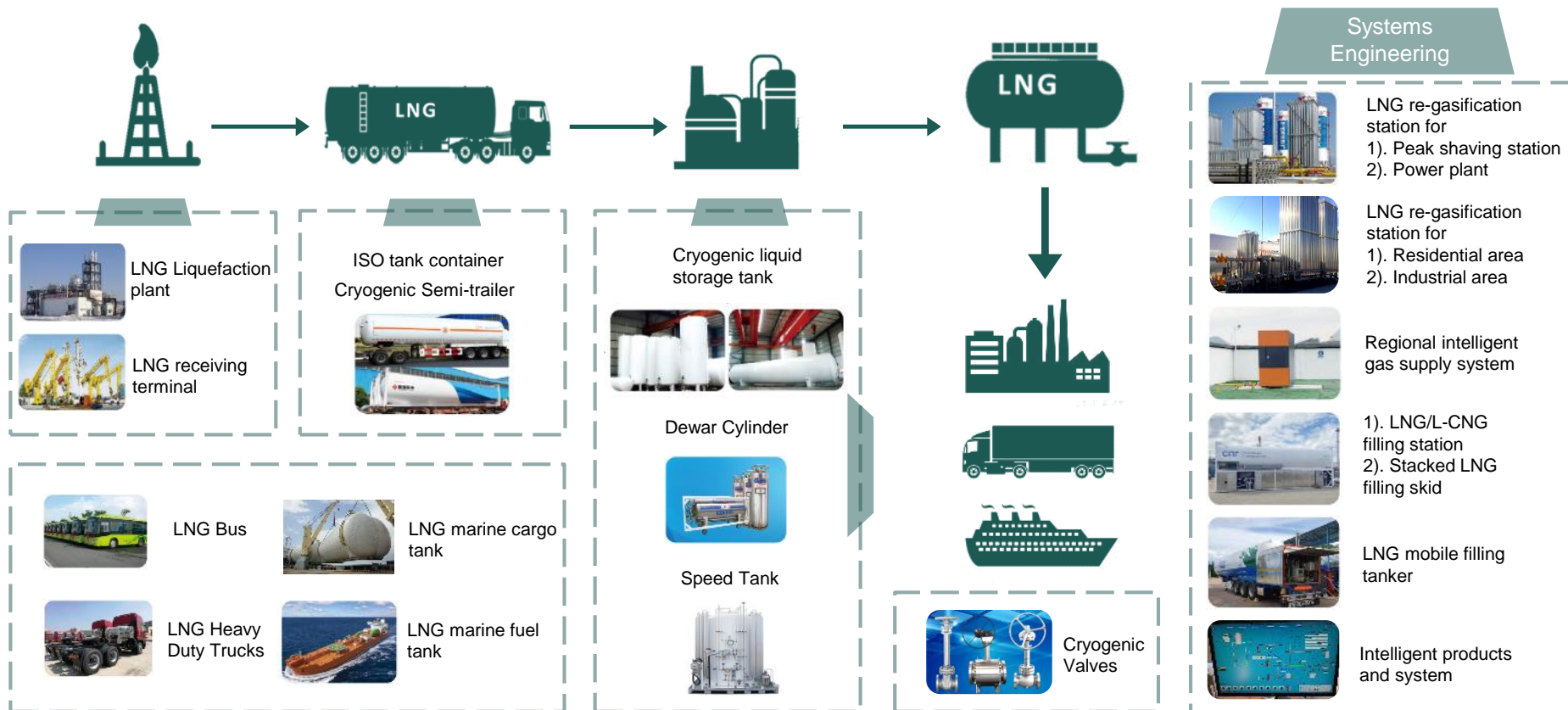




Hunter Zhang
Executive Vice President



LNG Whole Industry Chain Solution Provider



Milestone



CIT Company Established



Delivery of world's first Marine LNG Fuel Tank



Delivery of large Regasification Station to Ghana, Africa



Delivery of LNG Fuel Tanks for Largest Eco-friendly Cruise Ship

2005

2007

2009

2011

2017

2019

2020

2022 & 2023

Delivery of First LNG Semi-trailer



Being a public listed company in Shenzhen stock exchange Market



Delivery of 240 units of ISO tank containers to Brazil



Delivery of hundreds of ISO tank containers and semi-trailers



International Shipping Ports



➤ Gangxin Port:

5000T RORO port which is equipped with 2 x 800T fixed lifting cranes also can berth Heavy lift ship , floating crane etc.

➤ Win Hanverky

Container Terminal and other Ports : Storage and loading for ISO containers and semi-trailer on ships.

Workshop Overview & Capacity



ECONOMIC DEVELOPMENT ZONE PLANT (Head quarter)

- ▷ Area = 400,000 m²
- ▷ Capacity: 1800 sets/Y
- ▷ Max. Diameter $\Phi \leq 6\text{m}$
- ▷ Max. Length $L \leq 60\text{m}$
- ▷ Max. Weight $W \leq 200\text{T}$

BONDED AREA ZONE PLANT

- ▷ Area = 110,000 m²
- ▷ Capacity: 25000 t/Y
- ▷ Max. Diameter $\Phi \leq 20\text{m}$
- ▷ Max. Length $L \leq 200\text{m}$
- ▷ Max. Volume $V \leq 5000\text{m}^3$
- ▷ 300m away from 5000T RORO Port

NEW PLANT ON BUILDING NEAR PORT

- ▷ Area = 53,000 m²
- ▷ 30,000 m² for assembly site
- ▷ 2x500 ton cranes
- ▷ 10,000 ton pressure test platform
- ▷ Mobile weather sheds
- ▷ 100m away from 5000T RORO Port

Workshop Facilities - Hardware



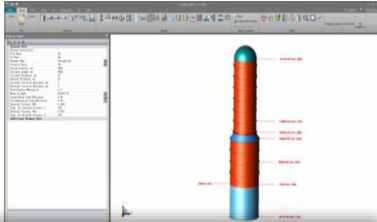
Description	Equipment Name	Capacity
Preparing	Digital cutting machine	Configuration of flame , plasma and laser cutting system (Thickness 1~50mm)
	Beveling machine	Several sets with working length of 12000mm
Rolling	Rolling machine	Several sets with working thickness 3~50mm
Welding	Welding platform	Max welding cylinder diameter of 6000mm
	Tank welding machine	Deep penetration welding technology with high efficiency and quality (3~10mm)
	Ring welding machine	Automatic and intelligent welding technology with high efficiency and quality

Workshop Facilities - Hardware

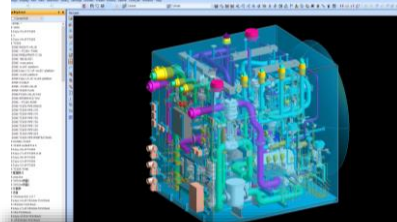


Description	Equipment Name	Capacity
Testing	#1 RT room	36.6m(L)×12m(W)×13.5m(H), Source type: X ray
	#2 RT room	15m(L)×9.6m(W)×11.5m(H), Source type: X ray
Others	Vacuum heating room	Ten rooms with 14.5m(L)×3.5m(W)×3.5m(H) ,could heat 20 sets of tanks at the same time
	Multi-layer Insulation room	One 35m(L)×11.5m(W)×14m(H) + Two 17m(L)×4m(W)×4.5m(H)
	Cold strengthening room	Monitoring the cold strengthening process
	Vacuum building system	Each system can treat 6 units of tank at the same time
	Heat treatment furnace	35m(L)×12m(W)×12m(H) + 35m(L)×11.5m(W)×14m(H)
	Sandblasting room	One 28m(L)×9m(W)×8m(H) +Two 30m(L)×9m(W)×11m(H)
	Painting room	One 28m(L)×9m(W)×8m(H) + One 30m(L)×9m(W)×11m(H) + Two 20m(L)×8m(W)×8.2m(H)
	Pickling and passivation	Two 30m(L)×23.5m(W)×9.5m(H) + One 33m(L)×24.5m(W)×9m(H)

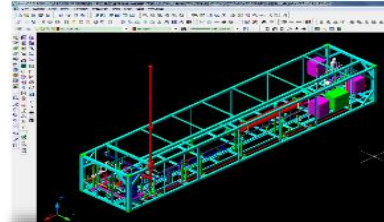
Engineering - Software



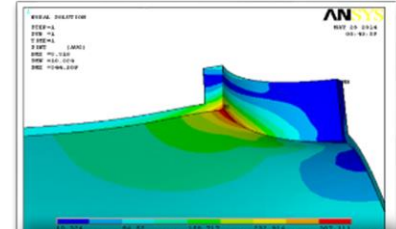
PV-ELITE(ASME)



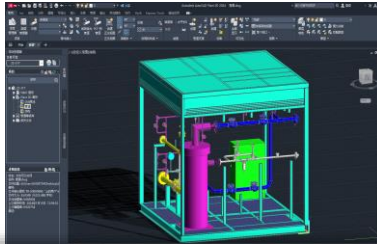
PDMS (3D Design)



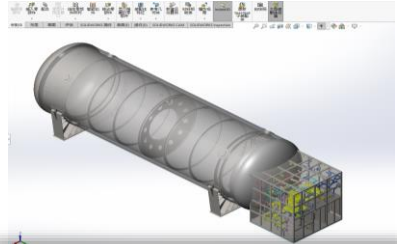
PD Soft (Pipe Design)



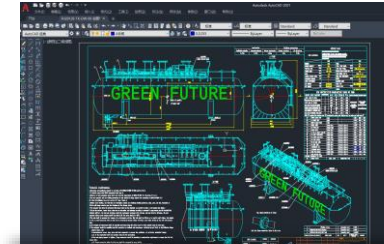
ANSYS (FEA)



PLANT 3D(3D MODEL)



SOLID WORKS(3D MODEL)



AUTOCAD (DWG)



SAP (ERP)

Others: SW6, COMPRESS, CEASER II, etc.

Certificates



ISO&HSE

ISO9001, ISO14001,
ISO45001



GB

B4, C2, GB1, GC2
Pressure components



Ship Class

BV, LR, NK, CCS,
DNV, ABS, RINA, RS



ASME

U, NB



PED & EN

MODULE G DIRECTIVE



Others

CUTR, KGS, CRN,
DOSH, AS, METI



Quality Management System



Qualified Personnel & Process

- ISO 9001 Certified
- ASME Quality Control Manual
- Qualified Welders & NDE Personnel



Perfect Products



Qualified & Reliable Suppliers

- Inspection and Test Plan
- Document control and expedition
- Top Level Supplier in China & Global

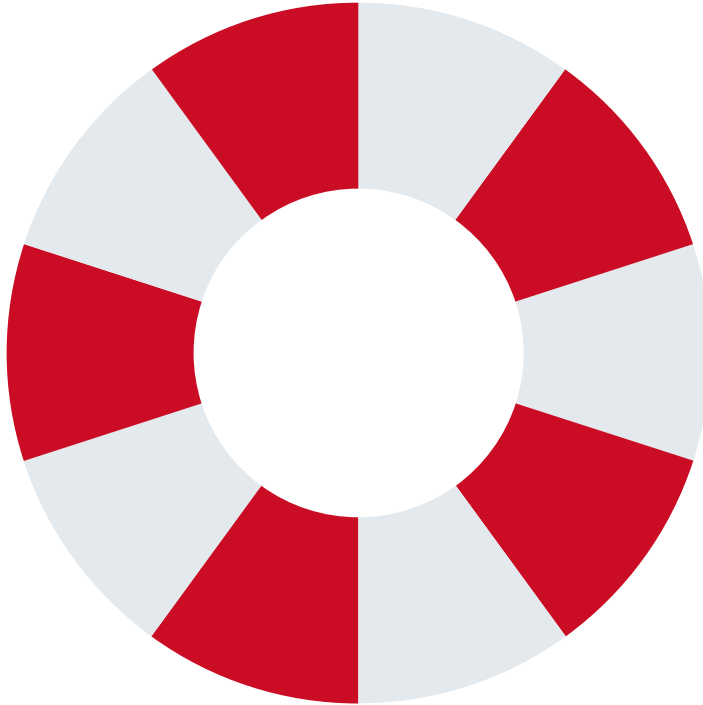


Global Inspection Network

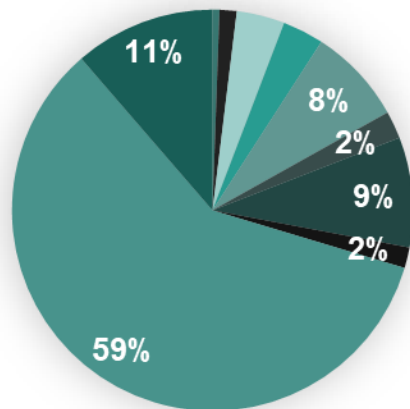
- Authorized Inspector
- Ship Class certified body
- Third Party Inspection Body

SAFETY FIRST

HSE target is Zero Pollution and Zero Accident



Manpower Structure (Furui CIT only)



- Top Management
- Finance
- Marketing & Sales, After-sales
- Project Management
- Engineering
- Procurement
- Quality Assurance
- HSE
- Worker
- Others

Top Management	2
Finance	5
Marketing & Sales,After-sales	14
Project Management	12
Engineering	28
Procurement	8
Quality Assurance	32
HSE	6
Worker	213
Others	41
Total	358

Furui Group has more than 1800 staffs in total.

Research and Development - Ammonia



Furui obtained AiP from RINA class in 2021



Furui delivery world first ammonia marine tanks in 2022

Research and Development -Hydrogen



H₂ Marine Tanks



H₂ ISO Container



P22-136

Ref: DA-SAFE/2022/003074 rev. 01
21 December 2022



Furui CIT obtained world first AiP from BV class for Marine Hydrogen fuel gas tank on 2023-02-08.

Detail design work has finished.
Production of pilot project for 40 feet ISO container is ongoing.

Line of Business



Modular energy equipment



Cryogenic storage tank



Cryogenic ISO tank container



Cryogenic semi-trailer



LNG re-gasification station



Regional intelligent gas supply system



LNG portable skid-mounted refueling station



LNG road tanker with pump



Dewar industrial cylinder



Marine cryogenic tank

Main References for Modular Energy Equipment



Product	Modular Energy Equipment
Application	Process industry skid for LNG liquefaction plant and other onshore, marine and offshore business
Advantages	Integrated design, small footprint, convenient installation

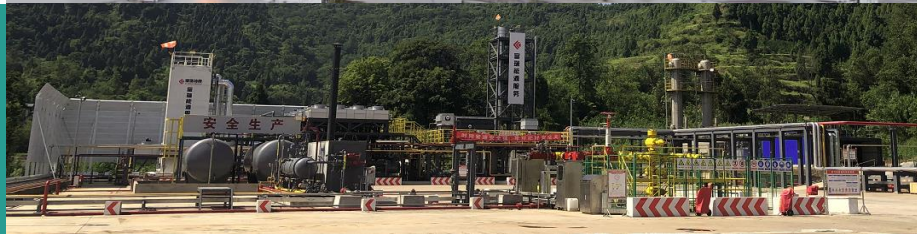


Main References for Modular Energy Equipment

- LNG Liquefaction Plant



Capacity	LNG Liquefaction Plant
10,000~20,000 Nm ³ /d	Mobilizable LNG Recovery Plant
30,000~100,000 Nm ³ /d	Natural Gas Wellhead Integrated Plant
100,000~400,000 Nm ³ /d	Oilfield Associated Gas Skid-mounted Plant



Main References for Modular Energy Equipment

- Storage Tank Skids



Equipment	Skids for Storage Tank
Application	LNG liquefaction plant, marine engineering module, gasification skid, pump skid
Advantages	Integrated design, small footprint, convenient installation

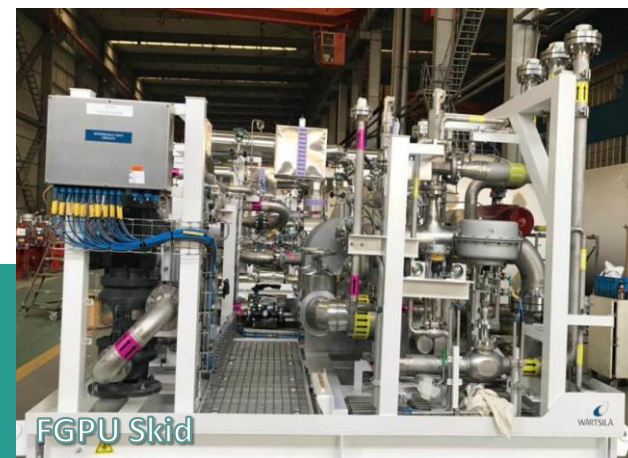


Main References for Modular Energy Equipment

- Skids for Marine



Equipment	Bunkering,Vapour Return,HSM and FGPU Skids
Client/End user	Wartsila
Project	FGSS Project
Material	Stainless Steel



Main References for Cryogenic Storage Tank



Insulation	Perlite and High Vacuum Multilayer (Double Wall)
Volume	1m ³ —1000m ³
Working Pressure	0.2MPa—4.0 MPa
Medium	LOX, LIN, LAR, LNG, LCO ₂ , LC ₂ H ₄
Design Standard	GB , EN(PED), ASME(U stamp), AS



Main References for Cryogenic Storage Tank



LNG

Main References for Cryogenic Storage Tank



LOX, LIN, AR

Main References for Cryogenic Storage Tank



CO₂

Main References for Cryogenic ISO Tank Container



Insulation

High Vacuum Multilayer

Type

20ft, 40ft, 45ft

Volume

18 m³ - 52 m³

Medium

LOX, LIN, LAr, LCO₂, LNG

Working Pressure

0.5 Mpa-2.2 MPa

Design Code

ASME, EN, AS, GB
(with ship class approvals - BV, LR, CCS)



Main References for ISO Tank Container with Pump



Insulation

High Vacuum Multilayer

Type

20ft, 40ft, 45ft

Volume

18 m³- 50 m³

Medium

LNG

Working Pressure

0.7 Mpa-1.3 MPa

Design Code

ASME, EN, AS, GB
(with ship class approvals – BV, LR, CCS)



Main References for Cryogenic Semi-trailer



Insulation	High Vacuum Multilayer
Volume	10 m ³ - 60 m ³
Pressure	0.3 Mpa-1.7 Mpa
Design Standard	ASME, GB, EN, AS



Main References for LNG Re-gasification Station



Product	LNG Re-gasification Station
Advantage	Reasonable layout , convenient maintenance
Application	Peak-shaving station in town, unloading pressurization skid, etc
Miniaturization	Speed gas



Main References for Small LNG Re-gasification Station



Product	LNG Re-gasification Station
Advantage	Reasonable layout , convenient maintenance
Application	Peak-shaving station in town, unloading pressurization skid, etc
Miniaturization	Speed tank system



Main References for Speed Gas Supply System

- Regional intelligent gas supply system



Insulation	High Vacuum Multilayer
Capacity	1~5m ³
Pressure	1.6Mpa-3.55 Mpa
Medium	LNG, LO2 , LN2 , LAr
Design Standard	ASME , GB , EN



Main References for Speed Gas Supply System

- Regional intelligent gas supply system



Functions and Features

Set small storage tank, supercharger, gasifier, pressure regulator, measuring system (including C card controller), deodorizing system, leakage alarm system, remote monitoring system in one complete set of gas supply system.

It has compact structure, small size, simple system installation and could be fast, simple and high efficiency.

Application Introduction

Mainly applicable to where natural gas is daily used , such as residential areas, hotels, commercial or small boiler animal husbandry heating where the natural gas pipeline is not laid, with uninterrupted product gas supply, high gas purity and real-time monitoring to allocate resource efficiently, reduce the distribution cost of each site.

Wide range of uses



Main References for LNG Mobile Refueling Station



Insulation	High Vacuum Multilayer
Capacity	18~60m ³
Pressure	0.7 Mpa-1.3 Mpa
Medium	LNG
Design Standard	ASME , GB , EN , AS
Additional function	Refuelling with pump, flow meter, refuelling and gas return nozzle, etc



Main References for LNG Mobile Refueling Tank



Insulation	High Vacuum Multilayer
Capacity	15~44m ³
Pressure	0.7 Mpa-1.3 Mpa
Medium	LNG
Design Standard	ASME , GB , EN, AS
Additional function	Refueling: with pump, flow meter, refuelling nozzle, gas return nozzle, etc



Main References for Dewar Industrial Cylinder



Insulation	High Vacuum Multilayer
Capacity:	110~1000L (Vertical / Horizontal)
Pressure	1.15Mpa-3.2 Mpa
Medium	LNG, LO2 , LN2 , LAr , LCO2
Design Standard	ASME , GB , EN



Main References for Dewar Industrial Cylinder



Functions and Features

This high vacuum multi-layer insulated small mobile cryogenic liquid container is used to transport, store and supply industrial gases such as LOX, LIN, LAR and LNG. It has the characteristics of safe, reliable, easy to use, high loading and cutting rate, repeatable filling and so on. At the same time, the cylinder is all stainless steel container, high cleanliness, no filling pollution, greatly improving the purity of gas.

Application Introduction

Due to its relatively small size and convenient use, it is widely applied in various fields of national economy such as machinery, shipbuilding, medical chemical industry, electronics, biology, food, materials, energy and scientific research.

Wide range of uses



Main References for Dewar Industrial Cylinder



Model	Spec.	Nominal Capacity (L)	Effective Capacity (L)	BOG (%d)	Empty Weight (Kg)	Max. filling weight (Kg)					Nominal working pressure (MPa)	Cylinder Dimension without support (mm)	Overall Dimension (mm)	Level gauge
						LOX	LIN	LAR	LNG	LCO2				
DPL450-110-2.6	DLG110M	110	104.5	≤2.74	97	119	84	146	/	115	2.6	Φ506×1120	Φ506×1120	Float/Capacitive
DPL450-175-2.3 I	DP175A	175	160	≤2.1	132	183	130	224	/	177	2.3	Φ506×1535	Φ506×1535	Float/Capacitive
DPL450-195-2.3 I	DP195	195	180	≤2.02	141	205	145	252	/	197	2.3	Φ506×1650	Φ506×1650	Float/Capacitive
DPL450-210-3.2	DP210D	210	195	≤1.99	171	222	158	273	/	212	3.2	Φ506×1745	Φ506×1745	Float/Capacitive
DPL450-237-1.5	DLG237L	237	225	≤1.96	135	256	182	315	/	/	1.5	Φ506×1895	Φ506×1895	Float/Capacitive
DPL700-450-3.2	DP450B	450	414	≤1.8	402	472	335	584	/	455	3.2	Φ768×1617	808×800×1770	Float/Capacitive
DPL700-500-3.2	DP500D	500	460	≤1.7	422	524	372	644	/	506	3.2	Φ768×1756	808×800×1878	Capacitive
DPL900-1000-2.5	DP1000A	1000	900	≤1.4	678	1026	729	1260	/	990	2.5	Φ1008×2078	1150×1150×2205	Capacitive
DPW650-500-3.2	DP500C	500	450	≤1.7	410	512	363	634	/	495	3.2	1950×760×760	2050×800×1000	Capacitive
DPL450-210-1.37II	DP210L	210	195	≤1.99	126	/	/	/	82	/	1.37	Φ506×1745	Φ506×1745	Float/Capacitive
DPL700-450-1.6	DP450LL	450	414	≤1.8	330	/	/	/	176	/	1.6	Φ768×1617	808×800×1770	Capacitive
DPL900-1000-1.15	DP1000	1000	900	≤1.4	519	/	/	/	384	/	1.15	Φ1008×2078	1150×1150×2205	Capacitive
DPW650-410-1.59II	DP410AL	410	369	≤1.83	338	/	/	/	157	/	1.59	2050×760×1000	2050×760×1000	Capacitive
DPW650-480-1.59 I	DP480AL	480	432	≤1.7	356	/	/	/	191	/	1.59	1950×760×760	2050×800×1001	Capacitive

Main References for Marine Tanks- LNG Bunker



**2 * 3250m³
LNG Cargo Tank**

Yard: STX Korea
Class: LRs
Client: SHELL
Delivery: Jun. 2016

Ship Name: CARDISS



**3300m³ & 2500m³
LNG Cargo Tank**

Yard: Royal Bodewes
Class: BV
Client: GUSAM
Delivery: Jul. 2016

Ship Name: CORALIUS

Main References for Marine Tanks- Luxury Cruise



**2 * 2320m³
LNG Fuel Tank**

Yard: CdA - France
Class: BV
Client: MSC
Delivery: Aug. 2020

Ship Name: MSC-Europa



**2 * 1800m³
LNG Fuel Tank**

Yard: CdA - France
Class: BV
Client: MSC
Delivery: Jul. 2021

Ship Name: MSC - Euribia

Main References for Marine Tanks- Ferry



2 * 95m³
LNG Fuel Tank

Yard: Armon - Spain
Class: BV
Client: Balearia
Delivery: Aug. 2019

Ship Name: ELEANOR ROOSEVELT



2 * 370m³
LNG Fuel Tank

Yard: WEIHAI - China
Class: DNV
Client: Stena Line
Delivery: Jul. 2021

Ship Name: SALAMANCA

Main References for Marine Tanks- Special Ship



2010m³ LNG Fuel Tank

Yard: IHC - Netherlands
Class: BV
Client: DEME
Delivery: Aug. 2018

Ship Name: Spartacus



2 * 1000m³ LNG Fuel Tank

Yard: COSCO - China
Class: DNV
Client: DEME
Delivery: Jul. 2018

Ship Name: Orion

Main References for Marine Tanks- Japan Market



**2 * 1500m³
LNG Fuel Tank**

Yard: Shin Kurushima
Class: NK
Client: NYK
Delivery: Nov. 2019

Ship Name: Sakura Leader



**2 * 260m³
LNG Fuel Tank**

Yard: MSB Shimonoseki
Class: NK
Client: MOL
Delivery: Jan. 2022

Ship Name: Sunflower Kurenai

Main References for Marine Tanks- Korea Market



**2 * 1700m³
LNG Fuel Tank**

Yard: SAMSUNG
Class: DNV
Client: AET
Delivery: Mar. 2019

Ship Name: EAGLE – BLANE



**2 * 3000m³
LNG Fuel Tank**

Yard: DSME
Class: DNV
Client: KNOT
Delivery: Dec. 2021

Ship Name: Sindre Knutsen

Global Project Location



EUROPE

Germany	Holland
France	Russia
Spain	Bulgaria
Finland	
Norway	

AMERICA

USA	Mexico
Canada	Peru
Chile	Ecuador
Brazil	Colombia
Argentina	

AFRICA

Egypt	South Africa
Sudan	Nigeria
Algeria	
Ghana	
Angola	

ASIA & Pacific

China	Indonesia	India	Oman
Japan	Malaysia	Pakistan	Kuwait
Korea	Singapore	Türkiye	Bahrain
Vietnam	Australia	Uzbekistan	Qatar
Philippine	Thailand	UAE	Saudi Arabia
			Cambodia

OFFICE

FURUI Headquarter (Zhangjiagang)
FURUI Shanghai office
FURUI Europe office
FURUI Singapore office
FURUI Brazil office



THANKS

Any questions?
Please contact us without hesitation !

sales@frcit.cn
+86 0512-80616278
<https://en.frcit.cn/>



🔍 Furui CIT