CIMC ENRIC 中集安瑞科

CRYOGENIC ISO TANK BROCHURE

低温罐箱产品手册



CRYOGENIC ISO TANK MANUFACTURING BASE 四大低温罐箱制造基地

- 南通中集能源装备有限公司
- Nantong CIMC Energy Equipment Co., Ltd.
 - 张家港中集圣达因低温装备有限公司
- Zhangjiagang CIMC Sanctum Cryogenic Equipment Co., Ltd.
 - 荆门宏图特种飞行器制造有限公司
- CIMC ENRIC · Jingmen Hongtu Special Aircraft Manufacturing Co., Ltd.
 - 石家庄安瑞科气体机械有限公司
 - Shijiazhuang Enric Gas Equipment Co., Ltd.

CIMC ENRIC HOLDINGS LIMITED

中集安瑞科控股有限公司

Company Profile

▎公司概况

CIMC中集

中国国际海运集装箱(集团)股份有限公司(简称:中集集团)(股票代码:000039. SZ),是世界领先的物流装备和能源装备供应商,总部位于中国深圳。公司致力于在 如下主要业务领域: 集装箱、道路运输车辆、能源化工及食品装备、海洋工程、物流服 务、空港设备等,为全球客户提供高品质与可信赖的装备和服务。作为一家为全球市场 服务的多元化跨国产业集团,中集在亚洲、北美、欧洲、澳洲等地区拥有300余家成员 企业.5万多名员工及3家上市公司、客户和销售网络分布在全球100多个国家和地区。

China International Marine Containers (Group) Ltd. (CIMC), (000039.SZ) is a world leading supplier of logistics and energy equipment, headquartered in Shenzhen of China. CIMC is dedicated to supplying high-quality and reliable equipment and services, including containers, vehicles, energy, chemical and food equipment, offshore, logistics services, airport facilities, etc. As a diversified multinational operation group that shoulders the mission of serving the world market, CIMC has over 300 member enterprises, more than 50 thousand employees and 3 listed companies in Asia, North America, Europe and Australia, and an extensive sales network that covers more than 100 countries and regions.

-CIMC ENRIC 中集安瑞科 CIMC FNRIC

中集"能源化工食品装备板块"隶属中集集团,该板块以香港主板上市、《财富》中国 500强企业——中集安瑞科控股有限公司(股票代码: 3899.HK)为领军企业,立足能 源、化工、食品装备行业,为客户提供运输、储存、加工的关键装备、工程服务及系统 解决方案。

CIMC ENRIC Holdings Limited (Stock code: 3899.HK) is one of the companies listed on the Main Board of the Hong Kong Stock Exchange in the energy, chemical and liquid food equipment industry segment. It is a subsidiary of CIMC Group. The company is engaged in the design, development, manufacturing, engineering and sales, as well as provision of technical maintenance services for, a wide range of transportation, storage and processing equipment used in the energy, chemical and liquid food industries.

CIMC ENRIC

中集安瑞科能源装备(苏州)有限公司 CIMC ENRIC Energy Equipment (Suzhou) Co., Ltd.

中集安瑞科能源装备(苏州)有限公司经营范围主要包括:安瑞科能源装备国际业务统 一管控(产品及技术的进出口)、能源装备产品营销管理、核心技术研发及咨询等。目 前,能源装备业务中心拥有近5500名员工。

The business scope of CIMC ENRIC Energy Equipment (Suzhou) Co., Ltd. mainly includes: the unified management and control (import and export of products and technologies), energy equipment product marketing management, core technology research and development and consultation, etc. At present, the energy equipment business center has nearly 5500 employees.

统一技术 设计规范 Inified Technica Specification

统一质量 控制标准 **Unified Ouality** Control Standa

统一工艺 制造标准 Inified Fabrication Process Standa

同一种标 准化T75 罐箱产品

The Same Standardized T75 ISO Tank

量产产能



CIMC中华

南通中集能源装备有限公司 Nantong CIMC Energy Equipment Co., Ltd.

南通中集能源装备有限公司是中集安瑞科控股有限公司的下属专业生产能源装备 的骨干企业。公司立足干能源装备业务,专业从事低温储运装备、高安全核电装 备、船用脱硫装置、光伏产业链配套设备等系列产品的设计、制造、销售,不断 为客户提供个性化、系统化的解决方案和全生命周期的售后服务保障,力争成为 能源装备行业的世界级企业。

Nantong CIMC Energy Equipment Co., Ltd. is the wholly owned subsidiary of CIMC Enric Holdings Limited. As the large-scale professional and comprehensive manufacture base for energy equipment, CIMC Nantong dedicates herself to providing cryogenic transportation & storage equipment. nuclear power equipment, marine desulfuration equipment, and photovoltaic supply chain equipment to her customers.CIMC continues to provide customized, systematic solutions and full life cycle after-sales service and strives to become a world leading enterprise in energy equipment industry.





张家港中集圣达因低温装备有限公司 Zhangiiagang CIMC Sanctum Cryogenic Equipment Co., Ltd.

张家港中集圣达因低温装备有限公司专业研发制造低温贮运装备,并承接LNG 加气站、LNG气化站、工程大罐、LNG船用装备等低温工程应用业务。公司已 获多项国内外设计制造资质认定,累计获得自主专利126项,并通过ISO9001、 ISO14001认证, 荣获江苏省著名商标、江苏省高新技术企业等荣誉称号。

Zhangjiagang CIMC Sanctum Cryogenic Equipment Co., Ltd. specializes in the development and manufacture of cryogenic equipment of storage and transportation, also undertakes the business of cryogenic engineering application such as LNG refueling station. LNG vaporizing station, large-sized storage tank and LNG marine equipment. The company has been certified as a number of design and manufacturing qualifications at home and abroad, and has obtained 126 independent patents in total. It has passed ISO9001 and ISO14001 certifications and won the honorary titles of Famous Trademark of Jiangsu Province and High-tech Enterprise of Jiangsu Province.



荆门宏图特种飞行器制造有限公司 CIMC ENRIC · Jingmen Hongtu Special Aircraft Manufacturing Co., Ltd.

荆门宏图特种飞行器制造有限公司成立于1971年,公司在危化品储运、城镇气 化、车/船加气站等领域为客户提供个性化、全方位整体解决方案,始终站在引领 行业发展的前列,产品远销中东、南美、东南亚、东北亚、非洲。

CIMC ENRIC · Jingmen Hongtu Special Aircraft Manufacturing Co., Ltd. has established in 1971. HONTO has entered into the dangerous chemical goods storing and transportation equipment industry and is specialized in R&D, and to promote the individualized and comprehensive solutions to the fields of the storing and transportation of dangerous chemical goods, cities and towns gasification, automobile gas stations, etc. HONTO sold the products all over China and exports and exported to Middle East, South America, Southeast Asia, Northeast East Asia and Africa.



Enric 安瑞科

石家庄安瑞科气体机械有限公司 Shijiazhuang Enric Gas Equipment Co., Ltd. 石家庄安瑞科气体机械有限公司始建于1970年,主要生产制造压缩天然气 (CNG)、液化天然气(LNG)、工业及特种气体、液化气体及化工物料系列储 运设备。提供橇装式CNG加气站、LNG/LCNG加气站、氢气加气站等集成解决 方案。提供CNG船舶运输、天然气工程项目等多项系统集成服务和交钥匙工程。

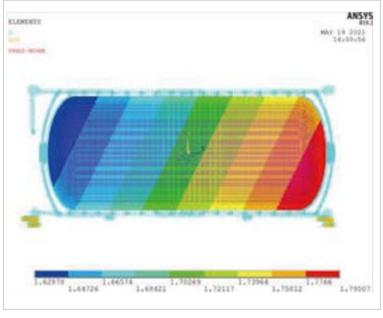
Shijiazhuang Enric Gas Equipment Co., Ltd. (briefly called Enric) was founded in 1970s, Enric mainly manufactures storage and transportation equipment for compressed natural gas (CNG), liquefied natural gas (LNG), industrial and specialty gas, liquefied gas and chemicals. Enric is capable to provide pioneer integrated solution of skid -mounted CNG filling station, LNG/LCNG filling station and hydrogen filling station, etc, and also the systematic integration services and turnkey projects such as CNG marine transportation, natural gas engineering project.

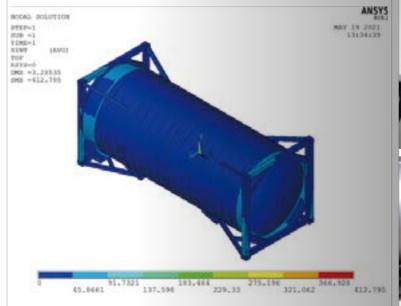


前途中型能夠發音有限公司 国家級专精特新 "小巨人"企业

江苏省 工业设计中心 [[集合工业和信息使17 二〇一九年十二月 江苏省 高端清洁能源储运装备 工程研究中心 江苏省发展和改革委员会 二〇二〇年十二月











Brand service

品牌服务

Depot & Life-cycle Service

全生命周期/全球售后服务





全时段服务,7×24×365 Full time service,7×24×365



200+专业服务人员,300+专业服务 网点,1小时响应,24小时到达现场 200 + professional service personnel, 300 + professional service outlets,1 hour response,24 hours arrival at the site



服务网点覆盖:中国,欧洲,北美,东南亚 Service network coverage: China, Europe, North America, Southeast Asia

5年真空维护,十年真空保障

5 years of vacuum maintenance

and 10 years of vacuum guarantee



全用户免费培训 Free training for all users



不定期巡检+预防性维修 Irregular patrol inspection + preventive maintenance



专用品牌备件 Special brand spare parts



提供应急罐箱保供 Provide emergency tank guarantee



可贴身定制的服务 Customized services



十年服务总包细则 Ten year service general contracting rules



全生命周期管家式服务 Full life cycle housekeeper service

Accreditations

质量保证及资质认证













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40英尺液氢罐箱

40ft Liquid Hydrogen Cryogenic Tank Container

液氢罐箱能够实现氢能源的长距离运输,与高压氢运输方案相比,具有更安全、更高效、运价更低等优点。液氢罐箱高效的绝热方式、主动和被动的管路系统设计,可实现液氢罐箱在长距离运输无氢气排放。我司牵头起草全国首个《移动液氢容器专项技术要求》标准,使移动式液氢容器的设计和制造有标可依,为保障液氢储存和运输的安全性和可靠性、进一步驱动液氢产业发展提供了有力的支持和依据。

Compared to the traditional high pressure hydrogen transportation method, 40ft Lh2 tank container, can easily make the long-distance transportation more safely, with higher efficiency and lower freight rate. Efficient insulation, active and passive piping system design, can also help the long-distance transport of liquid hydrogen tank without hydrogen emission.

Nantong CIMC Energy, as the main leader, drafted the Chinese regulation" Special technical requirements for transportable vacuum-insulated liquid hydrogen pressure vessels". With this regulation, we have the standards to design and manufacture portable liquid hydrogen containers, and we can ensure the safety and reliability of liquid hydrogen storage and transportation. This regulation is also a strong support and basis for the development of liquid hydrogen industry.

| 型号 Type | 设计标准 Design Code | 工作压力 MAWP(MPa) | 几何容积 Capacity(m³) | 自重 Tare Weight(kg) | 装载质量 Load weight(kg) | 维持时间 HoldingTime |
|--------------|---------------------|-------------------|----------------------|-----------------------|-------------------------|----------------------|
| CASIS-40-1.2 | ASME | 1.2 | 40.4 | 16160 | 2550 | ≥9days |
| CASIS-40-1.2 | ASME | 1.2 | 40 | 18850 | 4500(LHe) 2550(LH2) | ≥43 days ≥70 days |

注:可根据客户要求设计制造不同压力(0.4-1.2MPa)不同规格(20ft、30ft、40ft、45ft、swapbody etc.)的产品。 Note: We can design and manufacture products with different pressures (0.4-1.2MPa) and specifications (20ft, 30ft, 40ft, 45ft, swapbody, etc.) according to customer requirements.





40英尺液氮罐箱

40ft Liquid Helium Cryogenic Tank Container

40 英尺液氦罐箱主要用于液氦的储存运输和贸易,能够在充装、陆运、海运、存储、分销之间无缝衔接,实现液氦的无损运输,是世界上使用最广泛、最为主要的液氦储运载体。中集安瑞科自主研发的新一代 40 英尺液氦罐箱,对标美国和德国领先的技术指标,产品性能达到国际领先水平,具备优异的可靠性和超长的使用寿命。

40ft Lhe ISO tank container, independently developed by CIMC, is used for the storge, transportation and trade of liquid helium and is the most widely used and most important mode of Lhe transportation in the world. With the excellent reliability, long service life and performance, the container is also the most economical way to transport the Lhe by road or by sea.

Recently, CIMC Enric succeeds in the design and manufacturing of the first generation of LHe tank container, our second generation reaches the international leading level.

| 型号 | 设计标准 | 工作压力 | 几何容积 | 自重 | 装载质量 | 维持时间 |
|--------------|-------------|-----------|--------------|-----------------|-----------------|-------------|
| Type | Design Code | MAWP(MPa) | Capacity(m³) | Tare Weight(kg) | Load weight(kg) | HoldingTime |
| CASIS-40-1.2 | ASME | 1.2 | 40.5 | 18850 | 4550 | |

注: 可根据客户要求设计制造不同压力 (0.6-1.2MPa) 不同规格 (20ft、40ft) 的产品。
Note: We can design and manufacture products with different pressures (0.6-1.2MPa) and specifications (20ft, 40ft) according to customer requirements.

联 系 我 们 Contact Us 邮箱 (E-mail): NCEE@CIMC.com 电话 (Tel): 400-828-6969

网址 (Web): http://www.cimcenric.com

LATEST DESIGN

BIGGEST CAPACITY & LOWEST TARE WEIGHT

新型40英尺冷冻 液化气体罐式集装箱

40ft Tank Container for Refrigerated Liquefied Gases-New Type



| | 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|----|---------|-------------------------------|--------------|--------------|-----------------|
| | WP(MPa) | Sealing−off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0. | .48-1.0 | 0.08 | 0.235 | 46.5 | 10200-12900 |



40英尺冷冻液化气体 罐式集装箱

40ft Tank Container for Refrigerated Liquefied Gases



超宽 Wide Body

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing−off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-1.0 | 0.08 | 0.22 | 52-52.5 | |

法规: TSG R0005-2011 移动式压力容器安全技术监察规 | Code:TSG R0005-2011 Supervision Regulation on Safety Technology for 程、国际海运危险货物规则(IMDG)、危险货物国际道路运 输欧洲公约(ADR)、国际铁路运输公约(RID)、国际集装箱 安全公约(CSC)、国际货物运输海关公约(TIR)

标准: NB/T 47059-2017 冷冻液化气体罐式集装箱、 ASME锅炉及压力容器规范₩第一册压力容器建造规格、 EN13530低温容器.大型移动式真空绝热容器、ISO1496-3 系列1集装箱技术要求和试验方法-第3部分:液体、气体及 加压干散货罐式集装箱

认证: 澳洲设计注册、新西兰设计注册、美国DOT、欧洲 CE、俄罗斯CUTR、日本高压气体安全协会KHK、马来西

外形尺寸: 12192mm(长)x2550mm(宽)x2745mm(高) 介质:液氧、液氮、液化天然气、液态乙烯、液态乙烷等 保温方式: 高真空多层绝热

Transportable Pressure Vessel, International Maritime Dangerous Goods Code(IMDG), European Agreement Concerning the Internation Carriage of Dangerous Goods by Road(ADR), Convention concerning International Carriage by Rail(RID), Convention for Safe Containers (CSC), Transport International Router (TIR)

Standard: NB/T 47059-2017 Tank containers for refrigerated liquefied gas, ASME Boiler & Pressure Vessel Code VI Division 1, EN13530 Cryogenic vessel-Large transportable vacuum insulated vessels, ISO1496-3 Series 1 freight containers Specification and testing-Part3 Tank containers for liquids, gases and pressurized dry bulk

Approve: Australian Design Verification and Registration, New Zealand Design Verification and Registration, USDOT, CE, CUTR, KHK, DOSH **Dimension:** 12192mm (L) x2550mm (W) x2745mm (H)

Medium: LO2,LN2,LNG,LC2H4,LC2H6, etc **Insulation:** high vacuum multilayer insulation









40英尺冷冻液化气体 罐式集装箱

40ft Tank Container for Refrigerated Liquefied Gases

侧开门 Side Cabinet

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing-off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-1.0 | 0.08 | 0.235 | 45.5 | 10200-12900 |

后开门 Rear Cabinet

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing−off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-1.0 | 0.08 | 0.24 | 43-44.8 | 10000-12700 |

法规: TSG R0005-2011 移动式压力容器安全技术监察规 程、国际海运危险货物规则(IMDG)、危险货物国际道路运 输欧洲公约(ADR)、国际铁路运输公约(RID)、国际集装箱 安全公约(CSC)、国际货物运输海关公约(TIR)

标准: NB/T 47059-2017 冷冻液化气体罐式集装箱: ASME锅炉及压力容器规范划第一册压力容器建造规格、 EN13530低温容器.大型移动式真空绝热容器、ISO1496-3 系列1集装箱技术要求和试验方法-第3部分:液体、气体及 加压干散货罐式集装箱、IRS 50592-2019 适用于汽车垂直 转运的多式联运单元(半挂车除外)

认证: 澳洲设计注册、新西兰设计注册、美国DOT、欧洲 CE、俄罗斯CUTR、日本高压气体安全协会KHK、马来西

外形尺寸: 12192mm(长)x2438mm(宽)x2591mm(高) 介质:液氧、液氮、液化天然气、液态乙烯、液态乙烷等

保温方式: 高真空多层绝热

Code:TSG R0005-2011 Supervision Regulation on Safety Technology for Transportable Pressure Vessel, International Maritime Dangerous Goods Code(IMDG), European Agreement Concerning the Internation Carriage of Dangerous Goods by Road(ADR), Convention concerning International Carriage by Rail(RID), Convention for Safe Containers (CSC), Transport International Router (TIR)

Standard: NB/T 47059-2017 Tank containers for refrigerated liquefied gas, ASME Boiler & Pressure Vessel Code **Ⅶ** Division 1, EN13530 Cryogenic vessel-Large transportable vacuum insulated vessels, ISO1496-3 Series 1 freight containers Specification and testing-Part3 Tank containers for liquids, gases and pressurized dry bulk, IRS 50592-2019 Intermodal Transport Units (other than semi-trailers) for vertical transhipment and suitable for carriage on wagons- Minimum requirements

Approve: Australian Design Verification and Registration, New Zealand Design Verification and Registration、USDOT、CE、CUTR、KHK、DOSH **Dimension:** 12192mm (L) x2438mm (W) x2591mm (H)

Medium: LO2,LN2,LNG,LC2H4,LC2H6, etc Insulation: high vacuum multilayer insulation

邮箱(E-mail): NCEE@CIMC.com 电话(Tel): 400-828-6969

网址(Web): http://www.cimcenric.com







45英尺冷冻液化气体 罐式集装箱

45ft Tank Container for Refrigerated Liquefied Gases

后开门 Rear Cabinet

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing-off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-1.0 | 0.08 | 0.22 | 52.5 | 11400-13000 |

超宽 Super Wide

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing−off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-1.0 | 0.08 | 0.22 | 56.7 | 13600-14800 |

法规:国际海运危险货物规则(IMDG)、危险货物国际道路运输欧洲公约(ADR)、国际铁路运输公约(RID)、国际集装箱安全公约(CSC)、国际货物运输海关公约(TIR)

标准: ASME锅炉及压力容器规范\\(\mathbb{n}\) 第一册压力容器建造规格、EN13530低温容器.大型移动式真空绝热容器、ISO1496-3系列1集装箱技术要求和试验方法-第3部分:液体、气体及加压干散货罐式集装箱、IRS 50592-2019 适用于汽车垂直转运的多式联运单元(半挂车除外)

认证: 澳洲设计注册、新西兰设计注册、美国DOT、欧洲CE、俄罗斯CUTR、日本高压气体安全协会KHK、马来西亚DOSH

介质: 液化天然气、液态乙烯、液态乙烷等

保温方式: 高真空多层绝热

Code: International Maritime Dangerous Goods Code(IMDG), European Agreement Concerning the Internation Carriage of Dangerous Goods by Road(ADR), Convention concerning International Carriage by Rail(RID), Convention for Safe Containers(CSC), Transport International Router (TIR)

Standard: ASME Boiler & Pressure Vessel Code VI Division 1, EN13530 Cryogenic vessel-Large transportable vacuum insulated vessels, ISO1496-3 Series 1 freight containers Specification and testing-Part3 Tank containers for liquids, gases and pressurized dry bulk, IRS 50592-2019 Intermodal Transport Units (other than semi-trailers) for vertical transhipment and suitable for carriage on wagons- Minimum requirements

Approve: Australian Design Verification and Registration, New Zealand Design Verification and Registration, USDOT, CE, CUTR, KHK, DOSH

Medium: LNG,LC2H4,LC2H6, etc

Insulation: high vacuum multilayer insulation





53英尺冷冻液化气体罐式集装箱

53ft Tank Container for Refrigerated Liquefied Gases

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing−off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-1.0 | 0.08 | 0.21 | 65.7 | 15500-17000 |

法规: 国际海运危险货物规则(IMDG)、危险货物国际道路运输欧洲公约(ADR)、国际铁路运输公约(RID)、国际集装箱安全公约(CSC)、国际货物运输海关公约(TIR)

标准: ASME锅炉及压力容器规范划第一册压力容器建造规格、EN13530低温容器.大型移动式真空绝热容器、ISO1496-3系列1集装箱技术要求和试验方法-第3部分:液体、气体及加压干散货罐式集装箱、IRS 50592-2019 适用于汽车垂直转运的多式联运单元(半挂车除外)

认证: 澳洲设计注册、新西兰设计注册、美国DOT、欧洲CE、俄罗斯CUTR、日本高压气体安全协会KHK、马来西亚DOSH

介质:液化天然气、液态乙烯、液态乙烷等

保温方式: 高真空多层绝热

Code: International Maritime Dangerous Goods Code(IMDG), European Agreement Concerning the Internation Carriage of Dangerous Goods by Road(ADR), Convention concerning International Carriage by Rail(RID), Convention for Safe Containers(CSC), Transport International Router (TIR)

Standard: ASME Boiler & Pressure Vessel Code VII Division 1, EN13530 Cryogenic vessel-Large transportable vacuum insulated vessels, ISO1496-3 Series 1 freight containers Specification and testing-Part3 Tank containers for liquids, gases and pressurized dry bulk, IRS 50592-2019 Intermodal Transport Units (other than semi-trailers) for vertical transhipment and suitable for carriage on wagons- Minimum requirements

Approve: Australian Design Verification and Registration, New Zealand Design Verification and Registration, USDOT, CE, CUTR, KHK, DOSH

Medium: LNG,LC2H4,LC2H6, etc

Insulation: high vacuum multilayer insulation



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网址 (Web): http://www.cimcenric.com

Latest Development 新产品 新发展



20英尺冷冻液化气体 罐式集装箱

20ft Tank Container for Refrigerated Liquefied Gases

大容积 Big Volume





该产品广泛用于半导体芯片保护气运输行业 Widely used in electronic gas transportation industry

20英尺高纯冷冻液化 气体罐式集装箱

20ft High Purity Tank Container for Refrigerated Liquefied Gases

高纯 High Purity

| 工作压 MAWP(N | | 封结真空度 Sealing-off vacuum degree(Pa) | | |
|------------------------------------|--------------------|--|---------------------|--|
| 0.48-4 | 4.0 | 0.08 | | |
| 静态蒸发率 NER(%/d LN ²) | 容积 Capacity(m³) | 自重 Tare weight(kg) | 抛光度 Polishing(μ) | |
| 0.34 | 21.1 | 7000-11750 | 0.5 | |

程、国际海运危险货物规则(IMDG)、危险货物国际道路运输欧 洲公约(ADR)、国际铁路运输公约(RID)、国际集装箱安全公约 (CSC)、国际货物运输海关公约(TIR)

标准: NB/T 47059-2017 冷冻液化气体罐式集装箱、ASME 锅炉及压力容器规范**Ⅷ**第一册压力容器建造规格、EN13530低 温容器.大型移动式真空绝热容器、ISO1496-3系列1集装箱技 术要求和试验方法-第3部分:液体、气体及加压干散货罐式集 装箱、IRS 50592-2019 适用于汽车垂直转运的多式联运单元 (半挂车除外)

认证:澳洲设计注册、新西兰设计注册、美国DOT、欧洲CE、 俄罗斯CUTR、日本高压气体安全协会KHK、马来西亚DOSH **外形尺寸:** 6058mm(长) x2438mm(宽) x2591mm(高) 介质:液氧、液氮、液氩、液态二氧化碳、液态氧化二氮、液化

天然气、液态乙烯、液态乙烷等

保温方式: 高真空多层绝热

法规: TSG R0005-2011 移动式压力容器安全技术监察规 | Code:TSG R0005-2011 Supervision Regulation on Safety Technology for Transportable Pressure Vessel, International Maritime Dangerous Goods Code(IMDG), European Agreement Concerning the Internation Carriage of Dangerous Goods by Road(ADR), Convention concerning International Carriage by Rail(RID), Convention for Safe Containers (CSC), Transport International Router (TIR)

Standard: NB/T 47059-2017 Tank containers for refrigerated liquefied gas, ASME Boiler & Pressure Vessel Code VI Division 1, EN13530 Cryogenic vessel-Large transportable vacuum insulated vessels, ISO1496-3 Series 1 freight containers Specification and testing-Part3 Tank containers for liquids, gases and pressurized dry bulk, IRS 50592-2019 Intermodal Transport Units (other than semi-trailers) for vertical transhipment and suitable for carriage on wagons- Minimum requirements

Approve: Australian Design Verification and Registration, New Zealand Design Verification and Registration, USDOT, CE, CUTR, KHK, DOSH

Dimension: 6058mm (L) x2438mm (W) x2591mm (H) Medium: LO2,LN2,LAr,LCO2,LN2O,LNG,LC2H4,LC2H6, etc

Insulation: high vacuum multilayer insulation



20英尺冷冻液化 气体罐式集装箱

20ft Tank Container for Refrigerated Liquefied Gases

侧开门 Side Cabinet

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing−off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-4.0 | 0.08 | 0.34 | 21.1 | 7000-11750 |



后开门 Rear Cabinet

| 工作压力 | 封结真空度 | 静态蒸发率 | 容积 | 自重 |
|-----------|-------------------------------|--------------|--------------|-----------------|
| MAWP(MPa) | Sealing-off vacuum degree(Pa) | NER(%/d LN²) | Capacity(m³) | Tare weight(kg) |
| 0.48-4.0 | 0.08 | 0.34 | 20.2 | 6800-11550 |

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CCUS – CO2 Storage & Transportation 碳捕捉 之二氧化碳 存储和运输

20英尺Swapbody 二氧化碳罐箱

20ft Swapbody PU Foamed T75 Iso Tank For LCO₂

| 适用标准 | 工作压力 | 日升压速率 | 容积 | 自重 |
|----------|-----------|-------------------------------|--------------|-----------------|
| Standard | MAWP(MPa) | Daily pressure rise rate(kPa) | Capacity(m³) | Tare weight(kg) |
| | 2.2 | <80 | 27 | 7900 |

30英尺二氧化碳罐箱

30ft PU Foamed T75 Iso Tank For LCO₂



侧开门 Side Cabinet

| 适用标准 Standard | 工作压力 MAWP(MPa) | 日升压速率 Daily pressure rise rate(kPa) | 容积 Capacity(m³) | 自重 Tare weight(kg) |
|------------------|-------------------|--|--------------------|-----------------------|
| GB | 3.5 | <80 | 25.5 | 16000 |
| ASME | 2.2 | <80 | 28.5 | 8300 |



10英尺近海冷冻液化气体罐式集装箱

10ft Offshore Tank Container for Refrigerated Liquefied Gases

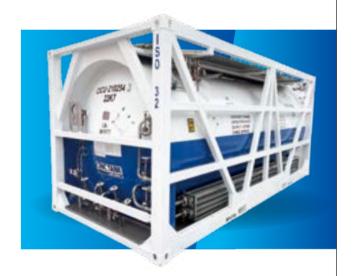
| 工作压力 MAWP(MPa) | 封结真§ Sealing−off vacuu | |
|------------------------------------|---------------------------|-----------------------|
| 0.6-2.2 | 0.08 | |
| 静态蒸发率 NER(%/d LN ²) | 容积 Capacity(m³) | 自重 Tare weight(kg) |
| 0.54 | 8 | 5300-7200 |



20英尺近海冷冻液化气体罐式集装箱

20ft Offshore Tank Container for Refrigerated Liquefied Gases

| 工作压力 MAWP(MPa) | 封结真空度 Sealing-off vacuum degree(Pa) | |
|------------------------------------|--|-----------------------|
| 0.6-2.2 | 0.08 | |
| 静态蒸发率 NER(%/d LN ²) | 容积 Capacity(m³) | 自重 Tare weight(kg) |
| 0.34 | 15.5 | 8800-11000 |



法规: TSG R0005-2011 移动式压力容器安全技术监察规程、国际海运危险货物规则(IMDG)、危险货物国际道路运输欧洲公约(ADR)、国际铁路运输公约(RID)、国际集装箱安全公约(CSC)、国际货物运输海关公约(TIR)

标准: NB/T 47059-2017 冷冻液化气体罐式集装箱、ASME锅炉及压力容器规范划第一册压力容器建造规格、EN13530低温容器.大型移动式真空绝热容器、ISO1496-3系列1集装箱技术要求和试验方法-第3部分:液体、气体及加压干散货罐式集装箱、IRS 50592-2019 适用于汽车垂直转运的多式联运单元(半挂车除外)、ISO 10855 近海集装箱和相关提升设备、DNV2.7-1 近海集装箱

认证: 澳洲设计注册、新西兰设计注册、美国DOT、欧洲CE、俄罗斯CUTR、日本高压气体安全协会KHK、马来西亚DOSH

外形尺寸: 6058mm/2991mm(长)x2438mm(宽)x2591mm(高)

介质: 液氧、液氮、液氩、液态二氧化碳、液态氧化二氮、液化天然气、液态乙烯、液态乙烷等

保温方式:高真空多层绝热

Code:TSG R0005-2011 Supervision Regulation on Safety Technology for Transportable Pressure Vessel, International Maritime Dangerous Goods Code(IMDG), European Agreement Concerning the Internation Carriage of Dangerous Goods by Road(ADR),Convention concerning International Carriage by Rail(RID),Convention for Safe Containers(CSC), Transport International Router (TIR)

Standard: NB/T 47059-2017 Tank containers for refrigerated liquefied gas, ASME Boiler & Pressure Vessel Code V Division 1, EN13530 Cryogenic vessel-Large transportable vacuum insulated vessels, ISO1496-3 Series 1 freight containers Specification and testing-Part3 Tank containers for liquids, gases and pressurized dry bulk, IRS 50592-2019 Intermodal Transport Units (other than semi-trailers) for vertical transhipment and suitable for carriage on wagons- Minimum requirements, ISO10855 Offshore containers and associated lifting sets, DNV2.7-1 Offshore Containers

Approve: Australian Design Verification and Registration、New Zealand Design Verification and Registration、USDOT、CE、CUTR、KHK、DOSH

Dimension: 6058mm/2991mm (L) x2438mm (W) x2591mm (H) Medium: LO2,LN2,LAr,LCO2,LN2O,LNG,LC2H4,LC2H6, etc

Insulation: high vacuum multilayer insulation

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网址 (Web): http://www.cimcenric.com



AJH Energy Online Intelligence Collector 能源在线 智汇管家

安捷汇物联信息技术(苏州) 有限公司是中集安瑞科旗下科 技创新型企业,能源化工装备 一体化物联网解决方案供应 商,提供设备远程监控、远程 诊断、故障报警、设备维修保 养、零配件更换,车罐站运营 管理外包等服务,为能源化工 企业运营管理提供高效、智 能、安全的产品服务。





AJH: ANJIEHUI (AJH) IOT Information Technology (Suzhou) Co., Ltd.

AJH is a technological innovation enterprise under CIMC Group. It is an "Internet of Things" solution provider of integrated energy and chemical equipment. It provides remote monitoring, remote diagnosis, fault alarm, equipment maintenance, spare parts replacement, and operation management outsourcing service for energy and chemical enterprises. It provides efficient and intelligent services for the operation and management of energy and chemical enterprises, safe product service, and etc.



罐箱智能远传终端优势

Advantages of Intelligent Telemetry Terminal for ISO Tank Container

◆通过对温度监控,可实时准确监测罐箱内LNG的状态

temperature monitoring enables real-time and accurate status monitoring of LNG inside ISO Tank Container. ◆可设置不同维度的报警,包括液 位高低报警、压力高低报警、温度 高低报警

Alarm can be set in different dimensions including liquid level(high and low), pressure(high and low), temperature(high and low), etc.

路线,设置电子围栏做 到及时提醒。 It can monitor the

◆可实时监测罐箱运行

running route of tank in real time and set up electronic fence to remind in time.

◆灵活运营物流计划,采用高 德货车版地图,形成高效物流 管理体系

Flexible operation of logistics plan, the use of Golden Freight Car Map, the formation of an efficient logistics management system

◆安全阀、液位计、压力表等安全附件维护并设置校验提醒,提高安全系数。

Safety valves, level gauges, pressure gauges and other safety accessories are maintained and checked to improve safety factor.

◆南气北运、江海联运,在海上在陆地上实时通讯,保障罐箱运行安全。 ISO tank container could receive global signal through Beidou or marine satellite, signal transmission can be carried out at home, abroad, and at sea, so as to achieve the whole route of asset management. AJH telemetry were successfully used in LNG tank containers transportation from South Sea to Bo Sea and from Yellow Sea to Yangtze River.



智能远传终端(罐箱型)

Intelligent Telemetry Terminal (ISO Tank Container type)

安捷汇罐箱智能管理系统,采用物联网技术将安捷汇智能设备安装在罐箱上,实时采集罐箱的液位、压力、温度、GPS位置等信息发送至云服务器。区别于贮罐和槽车智能远传终端,罐箱智能远传终端通过北斗和海事卫星功能可以进行全球信号接收,在国内外、海上皆可进行信号传输,做到全程资产运行管理。

The intelligent management system of AJH ISO Tank Container adopts the "Internet of things" technology to install AJH intelligent equipment on the tank, real-time collection of tank level, pressure, temperature, GPS location and other information which



were sent to the cloud server. Unlike the intelligent remote transmission terminal of tank or tanker, ISO Tank Container Type can receive global signal through Beidou or marine satellite function, signal transmission can be carried out at home, abroad, and at sea, so as to achieve the whole route of asset operation management.

| 产品主要技术参数 Main Technio | cal Parameters of Products |
|---|---|
| 供电power supply | 3.6V锂亚电池Lithium battery |
| 差压传感器精度 Accuracy of Differential Pressure Sensor | ±0.5%FS; |
| 差压传感器测量范围 Measurement Range of Differential Pressure Sensor | 0-50Kpa |
| 压力传感器精度 Pressure Sensor Accuracy | ±0.5%FS |
| 压力传感器测量范围 Measurement Range of Pressure Sensor | 0-4Mpa |
| 温度传感器精度 Precision of temperature sensor | ±1℃ |
| 温度传感器测量范围 Measurement range of temperature sensor | -200°C~+80°C |
| 环境温度ambient temperature | -40℃~+60℃ |
| 储藏温度Storage temperature | -40℃~+70℃ |
| 输出信号 output signal | 2G/3G/4G/5G/北斗Beidou/ 海卫信号/Marine Satellite Signal |
| 具有GPS/北斗、基站定位功能 With GPS/Beidou and Base Station | on Positioning Function |

>

设备现场应用展示

On-site application demonstration of equipment



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中集安瑞科能源装备(苏州)有限公司 CIMC Enric Energy Equipment(Suzhou) Co.,ltd.

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