

LNG(清洁能源)产业整体解决方案专家
领先的一站式服务供应商

LNG (clean energy) Industry Overall Solution Experts
Leading One-stop Service Suppliers

富瑞特装综合宣传册 2015 年 第一版



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Furui Special Equipment

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科技创新·品质至上·我们每天都在超越

Scientific and technological innovation with quality
Every day we are beyond

LNG(清洁能源)产业整体解决方案专家
领先的一站式服务供应商
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Leading One-stop Service Suppliers

汇聚资源·贡献价值 Gathering Resources · Contributing Value

立志成为世界最具竞争力的LNG能源装备企业
We are aspired to become one of the most competitive enterprises
in the world LNG energy equipment industry.

凭借品牌和服务的优势, 有效整合各种资源, 创造价值, 回报社会
我们致力于成为受人尊敬的伟大公司
推动社会和谐、健康发展

With the brand and service advantages, we are committed to become a great and respectable
company by means of integrating social resources to create values, return to society
that can be developed harmoniously and healthily.



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Scientific and technological innovation with quality,
Every day we are beyond

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再制造“油改气”发动机
Remanufacturing “Oil to Gas” Engine



LNG车用瓶
LNG Vehicle Cylinder



回收焦炉气、煤层气边际气的LNG液化装置
LNG Liquefied Equipment for Recycle Coke Oven Gas & CBM



分布式能源站
Distributed Energy Station



LNG城市公交
LNG City Bus

LNG重型卡车
LNG Heavy Truck



LNG运输
LNG Transportation

低温液体泵运输车
Cryogenic Liquid Pump Transportation Truck



LNG储存
LNG Storage



LNG工业应用
LNG Industry and Livelihood Application



海船/内河船舶燃料供气系统
Marine/Inland Vessel & Tank Fuel Gas Supply System



格林斯凯供气系统
CLEANSKY Air Supply System

LNG、L-CNG加气站
LNG, L-CNG Refueling Station



“速必达”供气系统应用
“SPEED” Gas Supply System Applications



COMPANY PROFILE 公司简介



张家港富瑞特种装备股份有限公司(股票代码300228),地处江苏省张家港经济技术开发区,是一家专业从事液化天然气(LNG)的液化、储存、运输及终端应用全产业链一站式整体解决方案的高新技术企业,并于2010年开始涉足汽车发动机再制造油改气领域。主导产品有再制造油改气汽车发动机、LNG液化成套装置、LNG、LNG/L-CNG汽车加气站、LNG车用供气系统、LNG船用供气系统、LNG储罐、低温液体运输车、低温液体罐式集装箱、系列低温阀门、真空绝热管、加气枪及海水淡化、气体分离液化等高端能源装备。

公司成立于2003年,注册资本13524.8万元,占地面积42万平方米,下设6大事业部(重工事业部(富瑞重装)、工程事业部、韩轸事业部、气瓶事业部、阀门事业部、动力事业部)和韩中深冷、云顶科技、江苏氢能能源、江苏长隆石化、分布式能源研究院、特安捷等子公司),现有员工2400余名。

公司建有省级企业技术中心,并建有江苏省液化天然气应用装备工程技术研究中心、江苏省企业院士工作站、江苏省企业研究生工作站、江苏省博士后创新实践基地等研发平台,拥有各类研发人员400余名,拥有中高级技术职称人员60余名。并通过与上海交通大学、东南大学、兰州理工大学、装备再制造技术国防科技重点实验室等科研院所开展产学研合作,不断提升公司的科技创新能力,截止到目前为止,公司累计获得授权专利93件、承担包括国家863计划在内的各类省级以上科技项目9项。

公司通过与国内重卡生产企业(中国重汽、中国一汽、东风二汽等)、客车生产企业(宇通、金龙、中通、安凯、黄海等)及国内三大汽车发动机制造企业(玉柴、潍柴、上柴)建立战略合作,为其提供LNG车用供气系统,至2014年底,已为我国LNG重卡、客车制造企业提供了约150000余套LNG车用供气系统,产品遍布中国各大城市;同时为国内主要能源企业提供了500余套LNG、LNG/L-CNG汽车加气站成套装备,并在全国主要区域设立了24小时全天候服务点,为产品提供保障服务,共同推进我国LNG汽车产业的蓬勃发展。

为了有效治理大气污染,响应国家推进节能减排、发展循环经济的号召,公司于2010年开始开展汽车发动机再制造油改气关键技术研发及产业化建设工作,2013年2月,公司被国家发改委列为第二批汽车零部件再制造试点单位,同年10月,公司的汽车发动机再制造油改气项目被国家工信部《内燃机再制造推进计划》列为重点示范工程。目前,公司年产10000台再制造发动机的项目已经开工建设。

公司秉承励精图治,艰苦创业,开拓进取的企业精神,以科技创新、管理创新、服务创新为核心,不断提高企业综合实力和核心竞争力,目标成为世界高端能源装备领军企业,为推进我国LNG清洁能源及再制造产业发展、实现节能环保的战略目标作出更大的贡献!

Zhangjiagang Furui Special Equipment Co.,Ltd (stock code 300228), located in Zhangjiagang Economic Development Zone, Jiangsu Province, is a new high-tech enterprise specialized in developing LNG one-stop integrated solution including the liquefaction, storage, transportation and terminal utilization of liquid natural gas. Besides, the first step into automobile engine remanufacturing which is so called oil changed to gas industry started in 2010. The leading products in the advanced energy equipments field range from remanufactured automobile engine, LNG liquefaction plant, LNG, LNG/L-CNG vehicle fueling station, LNG vehicle supply system, LNG marine fueling system, to LNG storage tank, cryogenic liquid lorry tanker, cryogenic tank container, serials of cryogenic valves, vacuum insulated pipe, gas filling nozzles, seawater desalination plant, as well as gas separation and liquefaction.

The company was established in 2003, now with a registered capital of 135.248 million Yuan. The company was divided into 6 divisions (heavy industry division (Furui Heavy Industry), engineering division, skid-mounted and hanjung cryogenic division, cylinders division, valve division, power division) and Hanjung CIT, LNGTOP Technology Jiangsu Co., Ltd, Jiangsu Qingyang Energy Company, Jiangsu Changlong Petrochemical Equipment Co., Ltd, distributed energy institute, Teanjie (jiangsu) New Energy Technology Co., Ltd, and other subsidiaries. Now there are more than 2400 staffs.

Built with provincial-level technology center as well as research and development platforms, Furui has more than 400 research and development personnel among whom over 60 hold middle-level and senior technical titles working in its LNG application and

equipment technology research center of Jiangsu Province, academician workstation of Enterprise in Jiangsu Province, postgraduate workstation of Enterprise in Jiangsu Province, post-doctorate innovation practice base of Jiangsu Province and etc. Furui keeps improving its technological and innovative capabilities through the cooperation of production and research with Shanghai Jiaotong University, Southeast University, Lanzhou University of Technology, Equipment remanufacturing Technology Key lab of State Defense and other scientific institutions as well. By now, Furui has awarded a total of 93 authorized patents and undertaken 9 scientific projects over provincial level including projects of State 863 Plan.

Through the cooperation with domestic heavy-duty truck manufacturers (CNHTC, FAW, DMFC, etc), and passenger bus manufacturers (Yutong, Kinglong, Zhongtong, Ankai, Huanghaibus, etc), as well as by setting up strategic cooperation with three major domestic automobile engine manufacturers (Yuchai, Weichai, and SDEC), Furui has provided more 150,000 sets of LNG vehicle gas supply system for home LNG heavy-duty truck and passenger bus manufacturers by the end of 2014 with its products spreading over big cities around China. Meanwhile, there have been more than 500 sets of LNG, LNG/L-CNG vehicle fueling stations built by Furui for domestic major energy companies served by 24-hour service stations located in various major areas around China which can cooperatively boost the development of LNG automobile industry in China.

In order to control the air pollution effectively and respond to the appeal of national energy-saving, emission reduction and development of cycling

economy, Furui launched its construction work of core technology research and development and industrialization of oil changed to gas system for automobile engine remanufacturing in 2010. Feb.2013, Furui was listed as a test unit for the second batch by the National Development and Reform Commission for the automobile parts and components remanufacturing while in Oct the same year, the oil to gas project of automobile engine remanufacturing was ranked as a key pilot project in the <Promotion Plan of Internal Combustion Engine Remanufacturing> by the Ministry of Industry and Information Technology of the People's Republic of China. Currently, the automobile engine remanufacturing project with the annual production capacity of 10,000 is under construction.

Inherited the enterprise spirit of hard-working, struggling and pioneering, Furui is improving its comprehensive strength and core competitiveness constantly by sticking to the core of science and technology, administration and service innovation. Targeting to become the leading enterprise in the world top energy equipment industry, Furui will make more contribution to the strategic target of achieving energy-saving and environmental protection by boosting the development of LNG clean energy and remanufacturing industry.

GATHER THE GLOBAL WISDOM, ACCELERATE THE INNOVATION

汇聚全球智慧，加速创新引擎

10 years of struggling makes Furui keep its continuous steps in research, development and innovation by means of integrating the global LNG industrial resources, strengthening the domestic and international technology communication and cooperation, which not only gives strong support to the sustainable development of LNG industry chain solution but also brings with predominance.

10年风雨创业，富瑞通过不断的研发和创新，整合全球LNG产业资源，加强国内、国际间的技术交流合作，为创造可持续发展的LNG产业链系统解决方案提供强有力的支持，形成了自己卓越的优势。



获得 **93** 项国家专利 承担国家科技项目 **9** 项

科技创新, 品质至上, 倾力打造百年企业

Scientific and technological innovation with quality, Make Enterprise in One Hundred



立志成为
世界最具竞争力的
LNG能源装备企业

We are aspired to become one of the most competitive enterprises in the world LNG energy equipment industry.

COMPANY PREPONDERANCE

公司优势

01 强大的研发机构 STRONG R&D INSTITUTION

公司建有省级企业技术中心、江苏省液化天然气应用装备工程技术研究中心、江苏省企业院士工作站、江苏省企业研究生工作站、江苏省博士后创新实践基地等研发平台。

02 顶尖的专家团队 TOP EXPERTS TEAM

上海交通大学、东南大学、兰州理工大学、装备再制造技术国防科技重点实验室等科研院所和公司400余名研发人员，60余名中高级技术职称人员。

03 雄厚的生产实力 CONSIDERABLE PRODUCTION CAPACITY

第一条具有国际先进、国内领先的低温气瓶生产流水线，年生产10万余套LNG供气系统，市场占有率每年10%的递增。成批LNG汽车加气站的投放应用，为中国LNG产业做出巨大贡献，带来更安全、环保、节能的LNG产业系统解决方案。

04 完整的LNG产品线 INTEGRATED LNG PRODUCT LINE

LNG液化、储存、运输及终端应用全产业链一站式整体解决方案，并涉足汽车发动机再制造油改气领域。主导产品有再制造油改气汽车发动机、LNG液化成套装置、LNG、LNG/L-CNG汽车加气站、LNG车船用供气系统、LNG储罐、低温液体运输车、低温液体罐式集装箱、系列低温阀门、真空绝热管、加气枪及海水淡化，气体分离液化等高端能源装备。

05 科学严谨的管理 SCIENTIFIC AND STRICT MANAGEMENT

导入信息管理网络平台C6系统，实现信息资源共享。通过了ISO9001质量管理体系、ISO14001环境管理体系和OHSAS18001职业健康安全管理体系认证，实施生产现场“6S”管理。通过持续改进，实现了富瑞信息、质量、制造现场人员的全方位立体式管理。

06 快捷高效的服务 FAST AND EFFICIENT SERVICE

在全国主要区域设立了24小时全天候服务点。对客户负责，让客户满意是我们永恒的追求，我们将成为您解决LNG能源装备问题的专家，为LNG客户提供全方位全天候的优质售后服务。

☎ 24小时服务热线: 4001-300228 4009-300228

07 众多客户的认可 CUSTOMERS' RECOGNITION

富瑞特装研发的LNG车用供气系统技术处于国际先进，是国内最为成熟的技术产品，目前与国内重卡生产企业（中国重汽、中国一汽、东风二汽等）、客车生产企业（宇通、金龙、中通、安凯、黄海等）及国内三大汽车发动机制造企业（玉柴、潍柴、上柴）建立战略合作，为其提供LNG车用供气系统，共同推进我国LNG汽车产业的发展。目前已在内蒙古、陕西、山西、深圳、云南、贵阳、杭州、海南、珠海、昆明、山东、张家港等地批量投入LNG重型卡车、LNG公交客车，至2014年底，已为我国LNG重卡、客车制造企业提供了15万余套LNG车用供气系统。





中国国内第一台日本OTC智能化焊接机器人
CHINA's first Japan OTC intelligent welding robot



气瓶生产流水线1
Cylinders production line 1



气瓶生产流水线2
Cylinders production line 2

100,000 套

第一条具有国际先进、国内领先的低温气瓶生产流水线，年生产10万余套LNG供气系统，市场占有率10%的递增。

The first cryogenic cylinder production streamline with advanced international and domestic leading technology yields to the output capacity of over 100,000 sets of LNG supply systems which obtains an annual increase of 10% of market shares.

成批LNG汽车加气站的投放应用，为中国LNG产业做出巨大贡献，带来更安全、环保、节能的LNG产业系统解决方案。

The vast application of LNG fueling station brings a safer, more environmental and energy-saving systematic LNG chain solution which makes great contributions to the LNG industry in China.

圆满完成国家 **863** 高科技项目-移动式LNG橇装加气站研究开发

编制LNG装备产品技术规范 LNG产业革命性突破
首创汽车LNG燃料供气系统自增压系统



01 LNG液化工厂(装置) LNG LIQUEFACTION PLANT

富瑞特装主要致力于5-50万方/天模块化、橇装化的天然气液化工厂的工程设计、采购、制造、现场安装及调试培训服务等工作。目前已取得石油天然气（海洋石油）行业乙级设计资质。

公司在模块化设计和制造方面具有领先优势。我们在这方面的经验证明橇装化设备能够有效地降低项目整体费用，加快项目进度以及在受控环境下实现设备质量的控制。

公司同时提供EPC和交钥匙工程服务。交钥匙工程需要在整个工厂的设计、采购、制造、施工和启动环节中与客户保持密切协调，以保证按时提供优质的工程。

Furuse is committed to the development of engineering design, procurement, fabrication, field-site installation and commissioning, training and service as well as other work of 5 to 500,000 m³ module and skid type of LNG liquefaction plants. Currently, Furuse has obtained the Grade B design certificate of petro and gas (ocean oil) industry.

Furuse has the leading predominance of module design and fabrication. It is proved that the skid-mounted equipment can effectively reduce the overall cost and improve the progress of the project as well as control the quality of the equipment in the limited circumstance.

Meanwhile, Furuse is able to provide EPC and turn-key project service which require the close coordination among every links of design, procurement, fabrication, construction and launch to ensure a time-delivered project of good quality.



运行中的LNG液化工厂 LNG liquefaction plant in operation



液化装置 LNG liquefaction equipments

部分液化工厂业绩 Part of the Performance of Liquefaction Plant



吉林天富5万方/天天然气液化工厂
Jilin Tianfu 50,000Nm³/d LNG Plant



兴县华盛10万方/天煤层气液化工厂
Xingxian Huasheng 100,000Nm³/d CBM Liquefaction Plant



陕西澄城40万方/天煤层气液化工厂
Shaanxi Chengcheng 400,000Nm³/day Coal Bed Methane Liquefaction Plant

模块化设计的示范，集成了原料气压缩机和制冷压缩机，项目位于中国东北吉林省，按照环境温度最低-39摄氏度考虑。为国内小气井，煤层气及页岩气制LNG的前期市场开发提供解决方案。

The demonstration of module design, combined with raw material compressor and refrigerant compressor, located in Jilin Province, Northeast China, was designed on the basis of ambient minus 39 degree to provide a solution to the earlier market development of domestic small-scale gas well, coal bed gas and shield gas liquefaction.

EPC总包煤层气液化项目，整个项目工期为8个月。主要工艺模块由醇胺脱酸、分子筛脱水、氨预冷、混合制冷及冷箱组成，采用空冷器布置于模块顶层的结构设计，使设备布置更加紧凑占地面积更小。

The main technical modules of the EPC contracted coal bed gas liquefaction plant, which was completed in 8 months, are PRY alkanolamine deacidification skid, molecular sieve de-water skid, ammonia pre-cooling skid, complex refrigerant skid and cooling box. The design applied the structure of placing the air cooler into the top layer of the skid which makes the arrangement more compact with less area coverage.

40万方/天模块化煤层气液化工厂，采用SMR工艺，同时包含原料气增压系统，脱酸脱水系统，MR循环压缩系统和冷箱换热系统。MR循环压缩系统以电机驱动离心压缩机为核心，冷箱及配套制冷循环设备为辅助，为低能耗及高效液化提供充足的保障。工厂也匹配了一座5000m³储罐及一座3万方/天BOG再液化装置来储存和提高能源的利用率。

400,000 Nm³/d Coal Bed Methane Liquefaction plant selects SMR process package which includes: Feed Gas Compression System, Acid gas/Water Removal System, MR Compression System and Cold Box Heat Exchanging System. Electrical motor powered Centrifugal Compressor and Complete Set of Refrigeration Cycle Unit guaranteed higher liquefaction rate and lower power consumption rate. This plant also matched up with a 5,000m³ storage tank and a set of 30,000Nm³/d BOG Re-liquefaction System which increases the availability for the final client.

02 低温计量装卸装备 CRYOGENIC MEASURING, LOADING & UNLOADING EQUIPMENT

江苏长隆石化装备有限公司，工厂地处张家港，在上海设有研发中心，专注于液体化工输送技术的高端研发和制造，力争成为高端液体化工输送设备的国际品牌。公司目前拥有输油臂、鹤管、装卸控制系统、登船梯和脱缆钩几大系列产品，满足从普通油品到低温LNG的产品输送要求。

公司相继通过了ISO9001、ISO14001、OHSAS18001等管理体系认证并严格遵守国际行业标准OCIMF、BSI1474，达到多家国际知名EPC及石油公司的审核验厂要求，成为合格供应商。产品销售覆盖中国及海外东南亚、欧洲、非洲等十几个国家。从广东大鹏公司的LNG装车鹤管到中石油唐山LNG装车橇重大国产化项目，我们逐步赶超当今流体装卸的最新技术，积极主持参与国家863重点研发项目，形成了一系列独特的专利技术。

Jiangsu Changlong Petrochemical Equipment Co., Ltd. is located at Zhangjiagang city. we have a R&D center at Shanghai, focused at R&D and manufacturing of high-end Petrochemical liquid delivery products, and strive to become an international brand of Petrochemical liquid handling equipment.

Products: Our company currently has Five series products; Marine Loading Arm, Truck Loading Arm, Loading and Unloading Control System, Gangway, Quick Release Hook, meet various requirements of transporting products from oil to cryogenic LNG.

Certificate: Our company have won the ISO9001, ISO14001, OHSAS18001 management system certification and strictly comply with international industry standards OCIMF, BSI1471, has become qualified supplies of internationally renowned EPC companies.

Market: Our products has been exported to dozens of countries in Asia, Europe, Africa and so on, From the Guangdong Dapeng LNG project to CNPC's Tangshan LNG project, we have gradually catch up with the latest technology of fluid handling, and actively participate National 863 Key R&D projects, forming a series of unique patented technology.

从航天到低温科技，姗姗来迟的技术，我们站的更高
From Space Dream To Cryogenic Technology ,We Come Late We Aim Higher



主要产品 Main Products

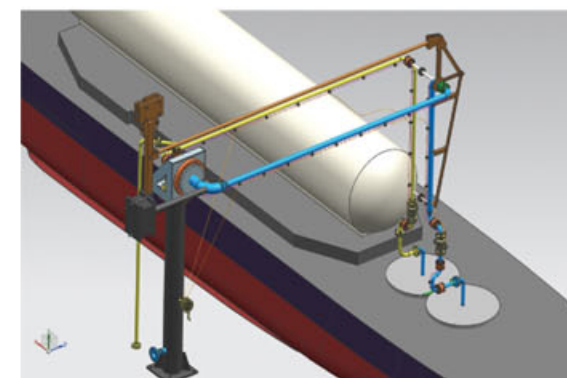
低温臂 Cryogenic Arm



橇装计量系统 Skid-mounted Measuring System



加注臂 Charging Arm



输油臂 Oil Transfer Arm



登船梯 Boarding Ladder



脱缆钩 Release Hook





LNG带泵运输车 LNG transportation lorry tanker with pump



低温液体罐式集装箱 Cryogenic liquid tank container

低温运输和存储主要产品 MAIN PRODUCTS OF CRYOGENIC TRANSPORTATION AND STORAGE



低温液体储罐 Cryogenic liquid storage tank



低温液体储罐 Cryogenic liquid storage tank

03 低温运输和存储 CRYOGENIC TRANSPORTATION AND STORAGE

低温液体储罐、低温集装箱、槽车（整车及半挂车）、大型储罐、带泵运输车、船用燃料罐、速必达低温液体产品的设计、制造和销售。

2008年底研发成功全球首套船用LNG燃料系统并通过挪威船级社的认证，为公司拓展船用LNG燃料罐奠定了基础。

Design, manufacturing and selling of cryogenic liquid storage tank, cryogenic tank container, trailer and semi-trailer, large-scale storage tank, transportation lorry tanker with pump, marine fueling tank, speed tank as well as other cryogenic products.

At the end of 2008, the first LNG fueling system in the world was successfully developed and approved by DET NORSKE VERITAS which was recognized as the basis for Furui to extend the development of LNG marine fuel tank.



目前国内容积最大56m³ LNG低温液体运输车
The present largest volume of 56m³ LNG cryogenic liquid transportation tanker in China



常规介质低温液体运输车 Cryogenic Liquid Lorry Tanker



液态二氧化碳运输车 LCO₂ Cryogenic Liquid Tanker



大型低温液体储罐 Large-scale cryogenic liquid storage tank



低温液体储罐 Cryogenic liquid storage tank

04 LNG动力船罐燃料供气系统 LNG POWER DRIVEN VESSEL & TANK FUEL GAS SUPPLY SYSTEM

为了保护海洋水资源，减少环境污染，2008年初，我司子公司韩中深冷合作挪威汉姆沃斯公司、挪威船级社等开展了LNG燃料在船舶应用方面的研发工作。同年6月，我公司与挪威汉姆沃斯公司合作开发船用LNG燃料储存供气系统，2009年2月，由我司设计制造的228m³燃料罐通过了挪威船级社（DNV）的检验和认证，顺利交付客户使用，成为行业内全球首套船用LNG燃料储存供气系统。

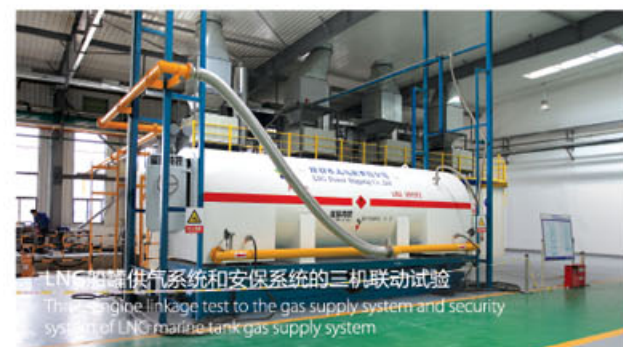
目前，我公司LNG船罐产品已成功出口海外市场，已为汉姆沃斯公司(Hamworthy)和瓦锡兰公司(Warsila)提供了一系列船用LNG燃料罐，我们还成功为国内“海川3号”等项目配套LNG船用燃料罐供气系统，系国内首艘通过CCS认证的新建双燃料动力散货船。通过和国内外各大船级社技术交流，积累了丰富的船用产品设计经验。

我们并成功为绿动水运公司的200艘LNG船配套提供LNG船用燃料罐供气系统。2015年2月，我们已顺利完成了针对该批船供气系统和安保系统的三机联动试验。

In order to protect sea water resources and reduce environmental pollution, in early 2008, our sub-company, Zhangjiagang Hanjun CIT Co., Ltd. cooperated with Norway Hamworthy Company and Norway Classification Society for the R&D of the application of LNG fuel in vessels. In June of the same year, our company cooperated with Norway Hamworthy Company in developing marine LNG fuel gas storage and supply system. In February of 2009, the 228m³ fuel tank designed and manufactured by our company passed the inspection and verification by Norway Classification Society (DNV) and desirably delivered to the customer for use and it became the first marine LNG fuel storage & supply system in the same trade of the world.

At present, our company's LNG vessel & tank products have been successfully exported to overseas market and we have supplied Hamworthy and Warsila with a series of marine LNG fuel tanks. We have also successfully supplied LNG marine fuel tank gas supply system to the domestic project such as Project Hai Chuan III, which is the first newly built domestic dual fuel powered bulk carrier obtaining the certification by CCS. Through the technical exchange with major domestic and overseas classification societies, we have accumulated rich experience in designing marine products.

We have successfully supplied the Green Power Water Transportation Co., Ltd. with the LNG marine fuel tank gas supply system for their 200 LNG vessels. By February of 2015, we had smoothly completed the three-engine linkage test to the gas supply system and security system of this group of ships (vessels).



05 LNG“速必达”成套供气系统 LNG“SPEED”COMPLETE SUPPLY SYSTEM

LNG速必达功能：集小型贮罐、增压器、气化器、调压、计量系统（含IC卡控制器）、加臭系统、泄漏报警系统、远程监控系统于一体的成套供气系统。

LNG速必达特点：结构紧凑，占用空间小，系统安装简单，可享受连续不间断的气体供应，提高业务效率。而且速必达服务的气体纯度高，使成品质量好。结合IC卡系统、远程控制系统使用(GPRS)，可在控制室内对所有范围内的速必达产品进行剩余量、用气情况、压力变化进行实时监控与防范安全隐患，同时可以根据每个站点的使用情况合理调配补液，降低配送成本。速必达小型低温液体供气系统符合快捷、简易且工作效率高的要求，正在快速的得到市场的认同。

LNG速必达用途：主要适用于管道天然气未铺设的小区、宾馆、商业或小型锅炉、畜牧养殖取暖等用天然气行业。

LNG Speed Function: Set of small tank, the supercharger, evaporator, pressure regulating and metering system (including the IC card controller), add smelly system, leakage alarm system, remote monitoring system in the integration of complete sets of gas supply system.

LNG Speed Features: Compact structure, small footprint, the system is easy to install, you will enjoy continuous uninterrupted gas supply, improve business efficiency. And the speed will be of service, high purity gases make finished products are of good quality. Combined with IC card system, remote control system use (GPRS), can be in the control room for all speed will reach within the scope of product capacity and gas situation changes, pressure real-time monitoring and guard against potential safety hazard, and may, according to the usage of each site He Li deployment of rehydration line such as reduce the cost. Speed will reach small cryogenic liquid gas supply system meets the requirement of fast, simple and high efficiency, get the market is fast.

LNG Speed Application: Is suitable for pipeline gas not laid the village, hotel, business, or small boiler, animal husbandry and aquaculture heating with natural gas industry, etc.



立式 Vertical



卧式 Horizontal



LOX、LIN、LAR“速必达”产品 LOX, LIN, LAR“Speed”Tank





06 LNG汽车加气站 LNG VEHICLE REFUELING STATION

公司圆满完成国家科技部863项目 《橇装式液化天然气(LNG)汽车加气站技术规范》 上升为国家标准

863 National High-tech Project (LNG Vehicle Refueling Station)

随着LNG站制造安装技术的发展和革新，并依据LNG站工艺流程及控制要求，将一些设备控制元件集成安装在一块底座上，组成可移动的特定功能设备已成为趋势，其优点是结构紧凑，工厂制造安装，质量容易得到保证，节约大量土地，减少劳动强度，且利于操作和维护。

With the development and innovation of manufacturing and installation technology of LNG refueling stations, a mobile equipment with special functions assembled with some controlling components fixed on one foundation has become a trend, making the whole structure more compact and easy to be manufactured in the workshop for which the quality can be guaranteed, and the area used for installation can be saved, work labor can be reduced, operation and maintenance can be easily done.

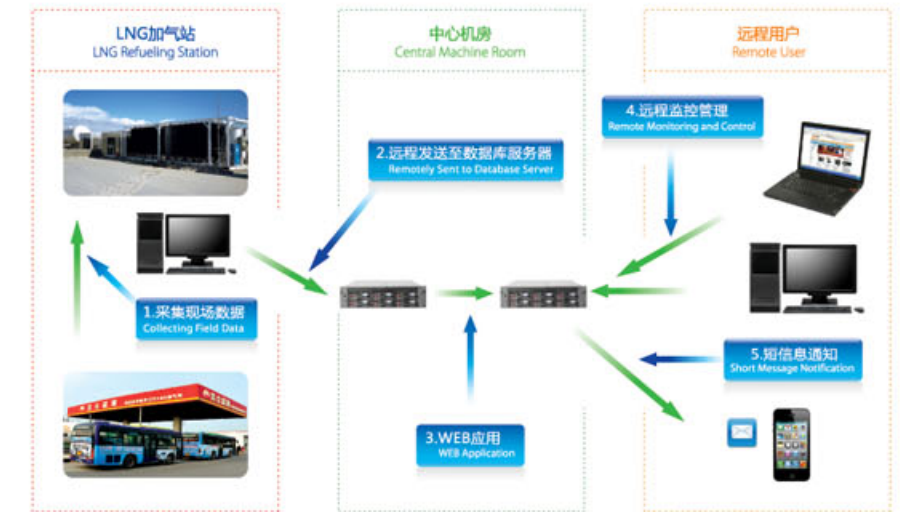


LNG加气站远程监控系统

LNG Refueling Station Remote Monitoring System

远程监控系统：基于B/S架构设计的一套跨平台的远程监控系统，不同的用户可以通过PC或者移动终端等设备登录该系统，随时随地实时监测到所管辖的各加气站运行状况，包括设备运行状态、加气情况、报警信息等，同时可对相关信息进行历史查询并生成相应的数据报表、图形报表供用户参考分析；用户或者富瑞特装专业技术人员可以通过该系统所提供的实时数据、短信服务、预警、报警等信息及时发现问题，并解决问题，提高加气站的整体自动化运营效率和安全等级。

Remote monitoring system: this is a set of remote monitoring system designed on the basis of B/S and different users can log onto this system through PC or mobile terminals who can monitor the operation status of each station at any time including the operation status of the equipments, filling status, warning information, etc., meanwhile, they can also search the history information record and get data report, diagram report for reference and analysis. Besides, users or professional technical personnel from Furui can detect and solve problems through the information of real-time data, text message service, pre-warning and warning provided by this system to improve the automatic operation efficiency and safety grade of the gas filling station.



综合优点 Comprehensive Advantages

使用方便 Easy to use

- 远程功能基于浏览器，无需安装任何软件，只要能上网的电脑即可使用。
- 提供GPRS模块，无线网络接入，同样可以部署在LNG加液车上。
- The remote features are based on the browser and no software installation is needed. Any computer with access to the Internet will do.
- With GPRS module and wireless network access, the same can be deployed in the LNG mobile lorry tanker.

安全可靠 Secure and Reliable

- 本地缓存功能，断网后仍能正常工作。网络恢复后自动同步数据。
- 提供VPN设备，使用虚拟私有链路，使网络通信更加安全。
- 专业机房，高性能服务器组，支持上千个LNG加气站接入。
- The buffer memory enables normal work off network and after the network is restored the data can be automatically synchronized.
- Equipped with VPN device and a virtual private link, the network communication is more secure.
- The specialized machine room and high-performance server group support access by thousands of LNG refueling stations.

低成本 Low Cost

- 远程在线监控系统由富瑞特装免费提供，提高LNG加气站运营效率，降低客户运营成本。
- 原有站点升级部署无需其他额外硬件，仅作软件升级。
- 系统由富瑞特装总部专人维护，出现问题由富瑞特装工作人员指导解决。
- FURUI Special Equipment provides the remote online monitoring system free of charge so as to improve the operational efficiency of the LNG refueling station and lower the customer's operational cost.
- The upgrading deployment of the original refueling stations need no additional hardware, and only software upgrading is required.
- The system will be maintained by the specialized person from the headquarter of FURUI Special Equipment and any problem will be solved under the guidance from the installation worker of FURUI Special Equipment.

前瞻性 Forward-looking

- 定制开发，根据用户需求提供更多服务。
- 预留接口，为将来提供更多功能(如GPS车辆定位，远程视频监控等功能)。
- With custom development, more services can be provided according to the user's needs.
- Extra interfaces are provided, allowing for future further functions (such as GPS vehicle locating, remote video monitoring, etc.)

成功案例 Successful Cases

一泵一机撬载 1B1J Skid



新疆863项目LNG示范加气站
Xinjiang 863 Item Demonstration Refueling Station



山东博兴LNG加气站
Shandong Boxing LNG Refueling Station



乌海华气LNG加气站
Wuhai Huaqi LNG Refueling Station



广东佛山LNG示范加气站
Guangdong Foshan LNG Demonstration Refueling Station



乌海西来峰LNG加气站
Wuhai Xilaifeng LNG Refueling Station



中石油台山LNG加气站
CNPC Taishang LNG Refueling Station

一泵两机撬载 1B2J Skid



LNG加气机
LNG Filling Dispenser



郑州天伦LNG加气站
Zhengzhou Tianlun LNG Refueling Station

一泵一机加气岛 1B1J Island



福建中闵LNG加气站
Fujian Zhongmin LNG Refueling Station



中海油仙游LNG加气站
CNOOC Xianyou LNG Refueling Station

“格林斯凯”供气系统 “CLEANSKY” Supply System



一泵两机加气岛 1B2J Island



张家港市城北LNG加气站
Zhangjiagang city north LNG Refueling Station



江门LNG加气站
Jiangmen LNG Refueling Station



河北唐山LNG加气站
Hebei Tangshan LNG Refueling Station



广东惠东LNG加气站
Guangdong Huidong LNG Refueling Station



华港集团南通客运站LNG加气站
Huangang Group Nantong Passenger Depot LNG Refueling Station



湖州新奥LNG加气站
Huzhou ENN LNG Refueling Station

两泵两机加气岛 2B2J Island



山东龙口LNG加气站
Shandong Longkou LNG Refueling Station

两泵四机加气岛 2B4J Island



昆仑能源辽宁盘锦LNG加气站
Kunlun Energy Liaoning Panjin LNG Refueling Station

LNG、L-CNG加气站 LNG、L-CNG Refueling Station



张家港保税区加气站
Zhangjiagang Free Trade Zone Refueling Station



玉门顺兴加气站
Yumen Shunxin Refueling Station



吉林延吉北大加气站
Jilin Yanji Beida Refueling Station

07 加气机 GAS DISPENSER

张家港富耐特新能源智能系统有限公司是张家港富瑞特种装备股份有限公司与美国Bennett Overseas Ventures在张家港市共同投资建立的中外合资经营企业，公司于2014年4月成立，位于张家港经济技术开发区。

富耐特公司总投资额为1200万美元，注册资本为500万美元，是一家专业从事新能源行业智能化系统设计及制造的公司。

Zhangjiagang Funnett New Energy Intelligent System Integration Co., Ltd. is a China-US joint venture by Zhangjiagang Furui Special Equipment Co., Ltd. and Bennett Overseas Ventures U.S., was founded in April 2014, located in Zhangjiagang Economical and Development Zone.

Funnett, with the total investment 12 million US dollars, and the registered capital 5 million US dollars, is specializing in design and manufacturing of intelligent systems for the new energy industry.



致力成为拥有行业先进研发技术及智能产品竞争能力的企业

Striving toward becoming an enterprise of advanced R&D technology and intelligent products in the same industry



Bennett系列产品
Bennett Series of Products



办公环境
Office Environment



车间现场图(一)
Workshop Scene Graph



车间现场图(二)
Workshop Scene Graph

富耐特使用创新技术，为用户投资现代燃料市场提供更低成本、更高的回报。

简单 更好

我们的设计理念是：尽量减少液压连接；减少电子线路板和相关配线、电缆和连接器的数量；为便于制造和任何形式的跟进服务而设计。

Funnett uses innovative technology to provide lower cost and higher returns for the users to invest the modern fuel market.

Simply Better

Our design philosophy is: minimize hydraulic connections; reduce the number of electronic circuit boards and related wiring, cables, and connectors; design for ease of manufacturing and any follow up service.

加气机产品 Gas Dispenser Products



- 电脑控制，电子计控装置能自动显示加气量和加气金额；具有定金额、定加气量的预置加气功能。
- 采用美国爱默生公司超低温质量流量计。
- 断电后数据长期保存，并具有停电复显功能。
- 具有自动检测故障功能，能自动显示故障代码。
- 具有与其他设备通讯的能力，通讯方式有多种可选。
- 可以配备后台管理系统及IC卡操作系统，使加气站实现自动化管理。
- 具有拉断保护功能，保证汽车意外拖走加气枪时安全脱离并密封。
- 超细过滤，保证加气机重要部件使用寿命。
- 整机结构合理，方便安装及维修。
- 键盘操作，功能丰富，可完成多种程序的设置及查询。

公司拥有强大的研发团队和研发能力，本科及以上学历占比超过62%。

There is a strong research and development in total among which there are over 62% hold bachelor's degree and above.

- Computer controlled, electronic meter control device can automatically display the amount and sum of the filled gas. With the function of presetting of desired amount and sum of gas.
- Adopting U.S. Emerson's ultra-low temperature mass flow meter
- With the function of long-term preservation of data after power-off and re-display after power-cut.
- With the function of automatic fault detection and automatically displaying fault code.
- Capable of communication with other equipment, with a variety of optional communication modes.
- It can be equipped with background management systems and IC card operating system that allows stations to automate management.
- With the breakage protection function to ensure the safe separation and sealing in case the gas gun should be dragged away by the vehicle.
- Super-fine filtration ensures the service life of the major parts of the filling machine.
- Reasonable structure of the whole machine facilitates installation and maintenance.
- Keyboard operating with rich features can complete a variety of program settings and consulting.

项目展示

Project

新奥改造项目
ENN Reconstruction Project





首创汽车LNG燃料供气系统自增压系统
致力于为LNG汽车产业提供最安全、最先进、最可靠的供气系统

First turbo charging system of automobile LNG fuel supply system
Furuise is committed to provide the safest, most advanced and reliable gas supply system for LNG automobile industry.

08 LNG车载瓶 工业瓶 LNG VEHICLE MOUNTED CYLINDER, INDUSTRIAL GAS CYLINDER



主要区域设立了24小时全天候服务点，为各城市公交公司LNG车辆运行提供保障服务。

公司研发的LNG汽车供气系统技术处于国际先进，是国内最为成熟的技术产品。目前与重卡整车生产企业（陕西重卡、中国重汽、一汽、东风等）、客车整车生产企业（宇通、金龙、中通、安凯、五洲龙、黄海等）及国内三大汽车发动机制造企业（玉柴、潍柴、上柴、中国汽车工程研究院）建立了战略合作，为他们提供匹配的汽车LNG燃料供应系统，共同推进我国LNG汽车产业。

现已在新疆、内蒙、陕西、山西、深圳、云南、贵阳、杭州、海南、珠海、昆明、山东、张家港等地批量投入LNG重型卡车、LNG大型客车、LNG公交客车。

The LNG automobile fuel supply system developed by Furuise is the most mature technical product in China in line with the international advance level. Currently, Furuise has set up strategic cooperation with heavy-duty truck manufacturers (Shanxi Automobile, CNHTC, FAW, Dongfeng, etc) passenger car manufacturer (Yutong, Jinlong, Zhongtong, Ankai, Wuzhoulong, Huanghai) and 3 main domestic automobile engine manufacturers (Yuchai, Weichai, Shangchai Diesel, and China Automobile Engineering Research Institute) to provide automobile LNG fueling system and promote the LNG automobile industry together.

Now we have put it into application like LNG heavy truck, LNG motorbus, LNG passenger car in xinjiang, neimeng, shanxi, shanxi, Shenzhen, yunnan, Guiyang, Hangzhou, Hainan, Zhuhai, Kunming, Shandong, zhangjiagang.

LNG气瓶规格:
50L、60L、120L、150L、175L、
200L、240L、275L、280L、330L、
335L、375L、450L、500L

LNG气瓶应用 LNG Cylinders Application



LNG气瓶市场占有率遥遥领先
The market share of LNG gas cylinder for Furuise is in a command leading position over the other competitors



09 低温阀门 CRYOGENIC VALVE



低温阀门系列, 值得您信赖的低温专家

Furuse Is Your Reliable Cryogenic Expert for
the Cryogenic Valves Serials.



富瑞特装一直致力于阀门的制造和研发，以生产具有世界先进水平的低温系列阀门为己任，为各类终端客户提供全套阀门整体解决方案。

Furuse has always been dedicated in the manufacturing, research and development of valves. Aiming at manufacturing the cryogenic valve serials in the world leading standards, Furuse is providing integrated valve solutions to all kinds of terminal customers.

低温阀门应用 Cryogenic Valve Application



国内低温阀门的领军者 Leader of Domestic Cryogenic Valves



取得国家质量技术监督检验检疫总局颁发的A级低温阀门制造许可证；中国船级社船用及罐式冷箱用系列阀门资质认证；质量保证体系通过了ISO9001：2008体系认证，并在低温系列产品的研发制造方面获得了六十多项国家专利。

Furuse has acquired Manufacturing License of A level Cryogenic Valves issued by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and Certificate of Approval for Marine and tank cooler valve serials issued by China Classification Society, besides, company is also in conformity with ISO9001:2008 qualified by the Certificate of Quality Management System Certification and has obtained more than 60 national patents in the research, development and manufacturing of serials of cryogenic products.

10 LNG车用气瓶在线检测服务 LNG VEHICLE GAS CYLINDER ONLINE TESTING SERVICE

特安捷（江苏）新能源技术有限公司是富瑞特装投资控股的子公司，具有独立法人资格。成立于2014年8月，公司从事新能源技术的开发、气瓶的检测、维修及技术服务，是焊接绝热气瓶及车用天然气焊接绝热气瓶的专业检测评定机构。

公司现拥有全国首台LNG车用气瓶在线检测的专用检测车，取得了工业和信息化部车辆目录公告。车内配置了全套从事LNG车用气瓶的检测设备和装置。

公司制定了LNG车辆气瓶检测的企业标准，已经得到了全国气瓶标准化技术委员会批准，并与中国特种设备检测研究院开展战略合作。



TEANJIE (JIANGSU) NEW ENERGY TECHNOLOGY CO., LTD. is holding subsidiary of Furui Special Equipment Co., Ltd., and is an independent legal entity. Founded in August, 2014, this company engages in developing new energy technology as well as gas cylinder testing, maintaining and technical service and is a specialized testing and rating agency for welded heat-insulation cylinders and vehicle natural gas welded heat-insulation cylinders.

The company now possesses the first special test & inspection car of the country for LNG vehicle gas cylinder online testing and the car is listed in the vehicle catalogue of the Ministry of Industry and Information Technology. The car is equipped with a complete set of equipment and device for the test & inspection of LNG vehicle gas cylinders.

The company has worked out the enterprise standards for the test & inspection of LNG vehicle gas cylinders and the standards have been approved by the National Gas Cylinder Standardization Commission. The company has carried out strategic cooperation with the Special Equipment Test & Inspection Research Institute of China.

检测现场

Detection Field



张家港苏汽长途客运有限公司检测现场
Test & Inspection Scene at Zhangjiagang SuQi Long-distance Passenger Transport Co., Ltd.

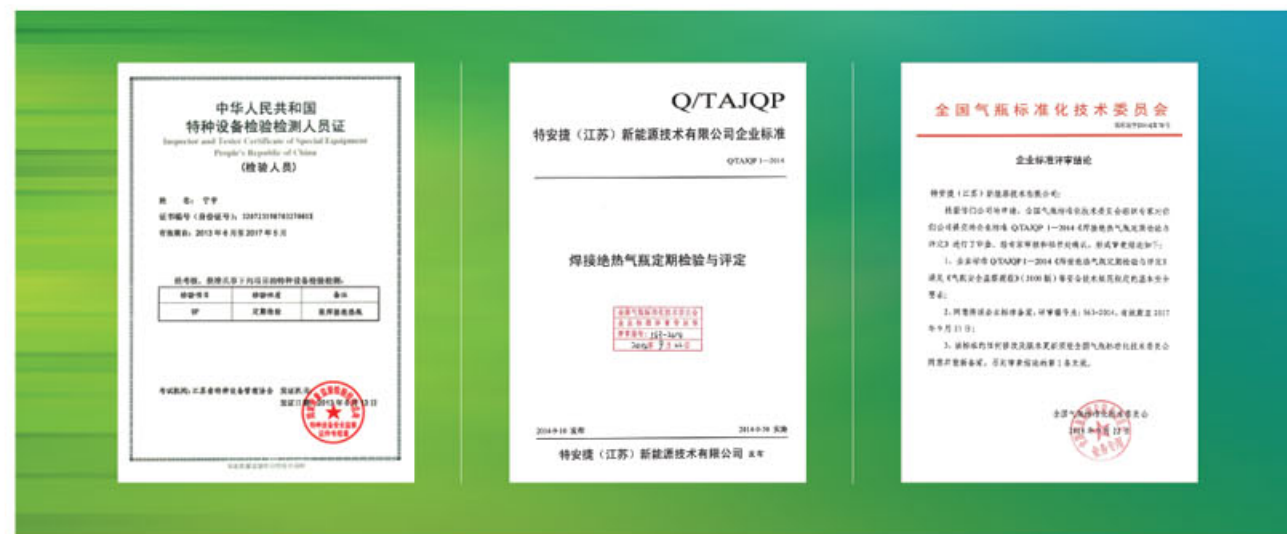


宝应汽车运输总公司检测现场
Test & Inspection Scene at Baoying Motor Transportation Corporation General



焊接绝热气瓶（含车用焊接绝热气瓶）每三年检测一次。检测或者使用过程中发现存在影响绝热性能等问题时，应当送到具有相应资质的制造单位或者原制造单位委托的单位进行维护或者修理。

The welded heat-insulation cylinders (including welded heat-insulation cylinders used by vehicles) are expected to be tested once every three years. In case any problem affecting the insulation property should be found during the testing or in the process of use, the cylinder should be sent to a manufacturer of corresponding qualification or to a unit entrusted by the original manufacturer of the cylinder for maintenance or repair.



绿色动力典范
循环经济先锋
2013年九月
何建波

11 发动机再制造油改气 ENGINE REMANUFACTURING OIL TO GAS



由国家发改委批复的富瑞特装发动机再制造项目位于张家港国家级再制造基地。富瑞特装再制造以装备再制造技术国防科技重点实验室为技术支撑，遵循再制造产业化经营、体系化建设、规模化生产的发展模式，一期建设年产1万台再制造发动机；二期达到年产5万台再制造发动机的能力。

整个再制造过程包括旧发动机拆解、清洗、检测、机加、装配、测试、涂装等多个环节。为了达到统一的再制造标准，公司引进了先进的设备、精密的检测仪器；同时制定了严格的零件再利用标准和程序，并取得了ISO9001和TS16949质量管理体系认证。

富瑞特装能够保证向消费者提供和新发动机质量相同的再制造产品，为广大消费者带来更放心、更安全和持久的产品使用体验。

The engine remanufacturing project of Furui, approved by National Development & Reform Commission, is located in the state-level remanufacturing base in Zhangjiagang. Supported by the remanufacturing technology of the key lab of State Defense, Science and Technology, following the developing modes of management industrialization, construction systematization as well as scale production, Furui's annual remanufacturing capacity will achieve 10,000 sets with the completion of the 1st stage construction and 50,000 sets of the 2nd stage.

There are multiple processes of engine remanufacturing including old engine disassembling, cleaning, inspecting, machining, assembling, testing, coating and etc, for which, Furui has introduced advance equipments and sophisticated detective instruments to get qualified with the remanufacturing standards. Meanwhile, the strict recycling standard and process for parts have been formulated and qualified by the ISO9001 and TS16949 quality control system.

FURUISE promises to provide remanufacturing products with the same quality as new engines to customers which can bring them more confidence and better experience in using our products.

FR4E/FR6D



- 排量: 4-8L
- 功率: 90-240马力
- 适用车型: 轻卡、环卫车、公交车、客运车
- Displacement: 4-8L
- Power: 90-240 Horsepower
- Applied Vehicle Mode: Light-duty truck, Sanitation truck, Bus, Passenger coach

FR6C



- 排量: 7.1L
- 功率: 190-230马力
- 适用车型: 轻卡、环卫车、公交车、客运车
- Displacement: 7.1L
- Power: 190-230 Horsepower
- Applied Vehicle Mode: Light-duty truck, Sanitation truck, Bus, Passenger coach

FR6A



- 排量: 10L
- 功率: 280-340马力
- 适用车型: 水泥搅拌车、工程机械、公交车、客运车、重卡
- Displacement: 10L
- Power: 280-340 Horsepower
- Applied Vehicle Mode: Cement mixer truck, Engineering & mechanical truck, Bus, Passenger coach, Heavy truck

FR6B



- 排量: 12L
- 功率: 360-380马力
- 适用车型: 矿卡、牵引车、装载机、空调客车、铰接车、重卡
- Displacement: 12L
- Power: 360-380 Horsepower
- Applied Vehicle Mode: Mining truck, Traction truck, Loading truck, Air-conditioned buses, Articulated truck, Heavy truck

12 油改气服务 OIL TO GAS SERVICE

油改气服务是为落实张家港成为国家级再制造产业示范基地而配套成立的，专项经营清洁能源汽车再制造和柴油燃气汽车的“油改气”项目，是富瑞特装公司LNG液化天然气清洁能源产业链上的重要组成部分。

油改气服务一直致力于做中国的LNG液化天然气“油改气”汽车综合服务提供商、领先的一站式“油改气”汽车设备供应商。除能够进行整体的汽车“油改气”业务外，也能够提供给合作伙伴汽车“油改气”的技术工艺、质量控制、厂房建设、人员培训等方案，并提供政策咨询、资质申报解决方案。

Oil to gas service is set to make Zhangjiagang as national remanufacturing industry demonstration base. It specializes in clean energy automobile remanufacturing and diesel fuel "oil to gas" project, which is an important part of FURUISE's LNG natural gas clean industry chain.

Oil to gas service has always been committed to become a comprehensive technical service supplier of LNG oil to gas motor vehicles and a leading one-stop "oil to gas" automobile equipment supplier as well. Besides, Furuse will also be capable of providing cooperative partners with the plans of "oil to gas" technology and process, quality control, workshop construction, personnel training, policy advisory as well as solutions for qualification declaration.

目前油改气服务已经与国内主流能源供应商、地方有影响力的物流企业进行紧密的合作，在内蒙古、山西、吉林、辽宁、陕西、四川、安徽、新疆、河北、宁夏及江苏发展了战略性的合作伙伴。

Currently, Furuse has established close cooperation in oil to gas service field with major domestic energy suppliers and local influential logistic companies, and meanwhile, we have also developed strategic partners in regions and provinces of Inner Mongol, Shanxi, Jilin, Liaoning, Shaanxi, Sichuan, Anhui, Xinjiang, Hebei, Ningxia and Jiangsu.



“油改气”适用车型 "OIL TO GAS" APPLICABLE MODELS



LNG液化天然气
“油改气”车综合技术服务提供商
领先的一站式“油改气”车设备供应商

LNG "oil to gas" comprehensive technology service supplier
Leading one stop "oil to gas" equipment supplier



“油改气”竞争优势
“Oil to Gas” Competitive Advantage

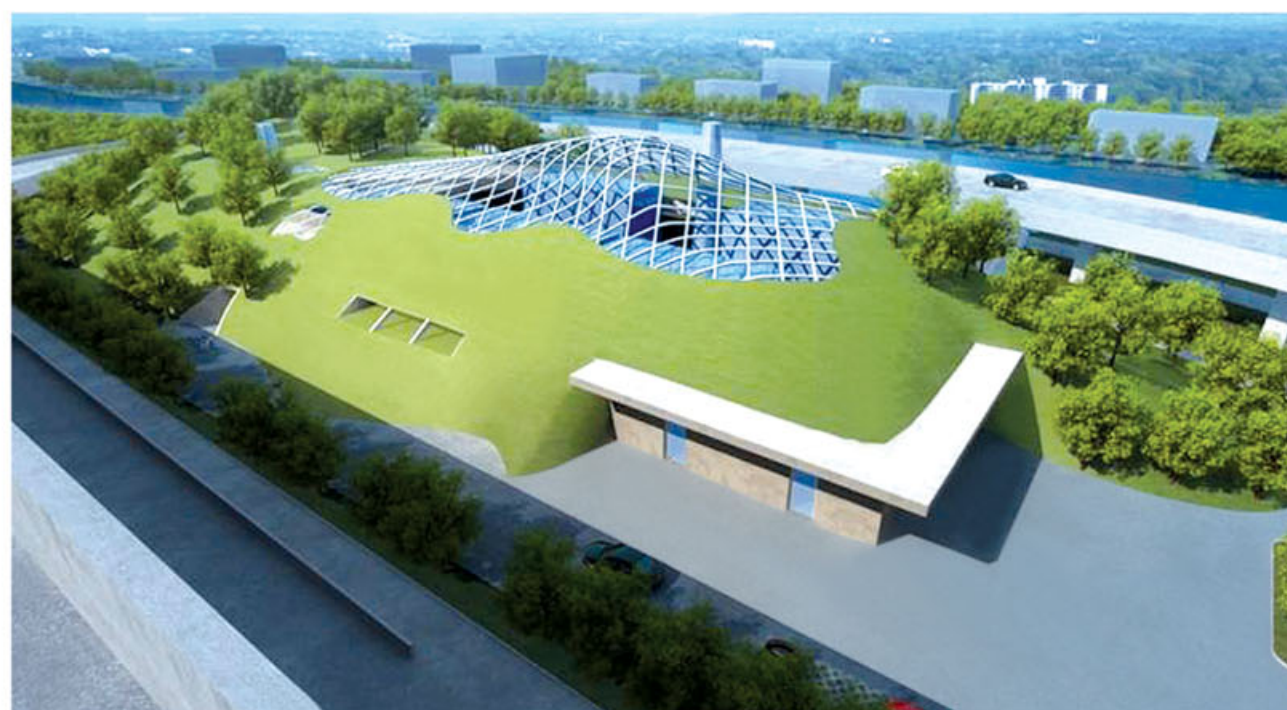
安全性更高、环保性更优、经济性更好
Safer, More Environmental and More Economical

13 分布式能源 DISTRIBUTED ENERGY



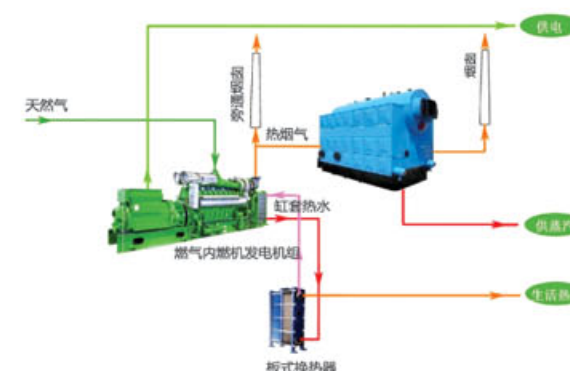
研究院计划用三年时间，到“十二五规划”期末建成一支分布式能源工程领域技术研发、设备制造、工程建设管理的“专业化”队伍，抢占天然气分布式能源领域制高点，为分布式能源装备国产化做技术储备，同时拓展富瑞特装天然气产业链，并致力于生物质清洁能源的开发利用，使分布式能源成长为“百亿富瑞”中坚实的一个板块。

Furui's research institution plans to spend three years to complete a specialized team in charge of the technology research and development in distribution energy engineering, equipment manufacturing, and project construction management, which will stand at the top of the natural gas distribution energy field and accumulate technology for the home-made distribution energy equipments. Meanwhile, Furui will also expand its LNG industry chain and be dedicated to the development and utilization of biomass clean energy by which, Furui can achieve its annual turnout target of 10 billion RMB.



部分工程案例 Part of the Engineering Case

- 张家港第一人民医院天然气分布式能源项目
Natural gas distributed energy project in the first People's Hospital of Zhangjiagang



- 富瑞特装6MPWP屋顶分布式光伏发电项目
FURUISE 6MPWP roof distributed photovoltaic power generation project

本光伏发电项目为张家港富瑞分布式能源研究院有限公司和张家港中康电力开发有限公司合作开发项目，充分利用富瑞车间屋顶空间资源，建设太阳能光伏分布式能源站总装机容量6MWp。该项目的建成既满足了企业自身的用电需求，又可以向电网输送多余电力。该工程于2013年12月正式运行发电。

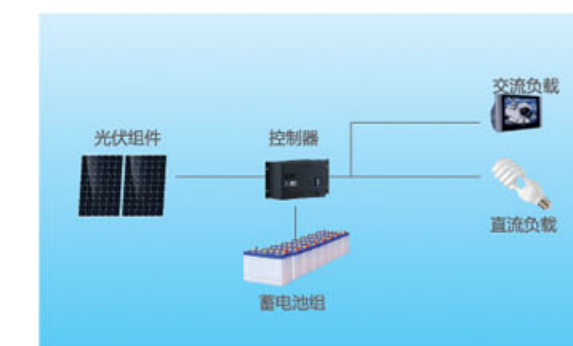
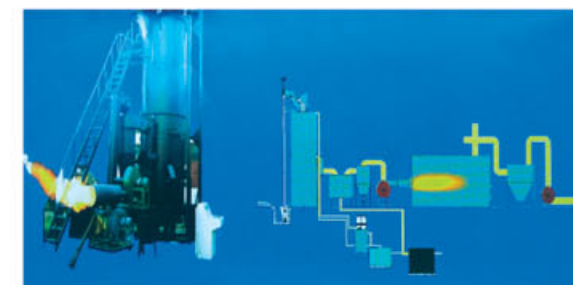
This photovoltaic power generation project is co-developed by Zhangjiagang Furui distributed energy research institute Co.,Ltd and Zhangjiagang Zhongkang electric power development Co.,Ltd., to build a solar photovoltaic distributed energy station with a total capacity of 6MWp through the full use of roof space source of the workshops in Furui. The completion of this project which is scheduled to be operated for power generation in Dec 2013, can meet the demands of electricity of Furui itself but can also transfer surplus power to the state grid.



- 吉林敦化无焦油型生物质气化炉项目
No-tar biomass gasification furnace project in Dunhua, Jiling Province

回收利用延边地区废弃木耳段及农村秸秆，通过气化炉产生可燃性气体替代原煤燃烧，解决废弃木耳段白色污染的同时，又降低了生产成本。

By means of recycling wasted edible tree fungus and straw in rural areas in Yanbian city which is burned by the combustible gas produced by gasifier, a substitution of coal, we can solve the problem of while pollution as well as save the cost.



14 LNG/再制造产业物联网 THE INTERNET OF THINGS OF LNG/REMANUFACTURING INDUSTRY

云顶科技（江苏）有限公司成立于2014年5月，注册资金3000万，由张家港富瑞特种装备股份有限公司、上海中旻新能源投资有限公司与管理团队共同出资组建，总部位于江苏省张家港市，在北京市海淀区设有研发中心。

公司致力于液化天然气产业物联网大数据平台的研发与运营，并积极探索能源B2B电子商务平台、互联网金融（融资租赁、电子结算）等领域的业务创新，立足于国内市场，开发国际市场，携手合作伙伴实现产业升级与转型。

LNGTOP TECH (Jiangsu) Co., Ltd., founded in May, 2014 with the registered capital being RMB30 million, is formed by joint capital contribution by Zhangjiagang Furui Special Equipment Co., Ltd. and Shanghai ZhongYi New Energy Investment Company & Management Team, with the head office located in Zhangjiagang City of Jiangsu Province and with its R&D Center set up in HaiDing District of Beijing.

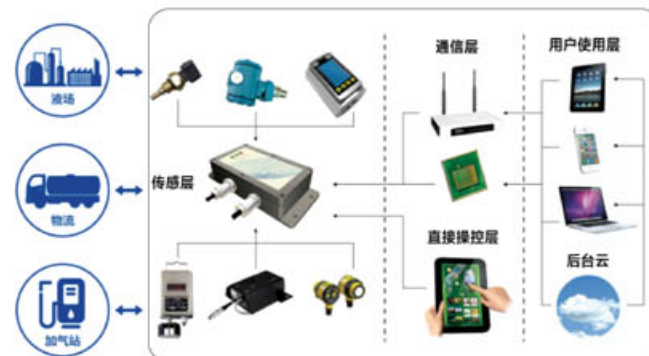
The company is devoted to the development and operation of the IOT Integrated Platform for LNG industry as well as active exploration of the business innovation in such fields as energy, B2B electronic business platform, internet financing (financial leasing, electronic clearing), etc. Based on domestic market and developing international market, the company cooperates with partners to achieve industrial upgrading and transformation.



物联网与大数据平台 IOT and Integrated Data Platform

云顶科技（江苏）有限公司物联网与大数据平台，借助富瑞特装在液化天然气行业的市场优势，并利用IBM在物联网与大数据行业先进的解决方案和技术资源，力求实现液化天然气行业工业装备向智能化装备的产业升级，优化产业链资源配置，指导行业发展方向，为产业链转型提供有力的依据。

The IOT and Integrated Data Platform of LNGTOP TECH (Jiangsu) Co., Ltd., by making full use of the market advantages of Furui Special Equipment Co., Ltd. in LNG industry and taking advantage of the advanced solution and technical resources of IBM in IOT and Integrated Data Platform industry, is seek to realize the industrial upgrading of LNG industry from industrial equipment to intelligent equipment, to optimize the industry chain resource allocation, guide the direction of the development of the trade and provide a strong basis for the transformation of industrial chain.



15 氢能源开发与利用 DEVELOPMENT AND UTILIZATION OF HYDROGEN ENERGY



江苏氢阳能源有限公司创建于2014年7月，注册资金3500万，由张家港富瑞特种装备股份有限公司、程寒松博士、张家港氢力新能源有限公司共同出资组建。

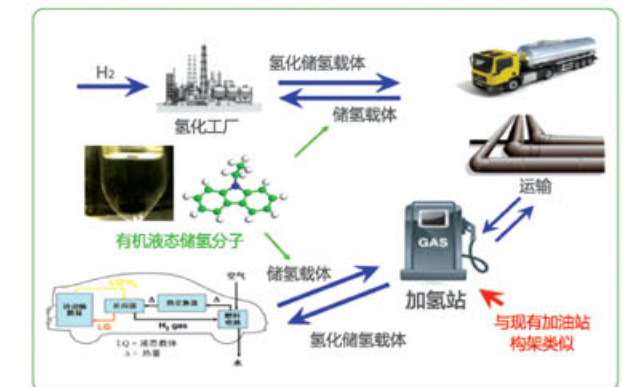
江苏氢阳能源有限公司主要从事氢能源的开发与利用，将推出一种全新的基于常温常压下液态储氢技术并制造与之相应的配套系统装备作为进入市场的第一类产品。公司以国家“千人计划”学者、中国地质大学特聘教授程寒松博士为首席专家的技术团队为依托，采用该团队处于国际领先水平的常温常压有机液态储氢技术，为市场提供安全、高质量的氢源及配套装备的供应。本公司开发并工业化生产的常温常压液态有机储氢材料储氢量高、毒性低、安全性好、价廉易得；介质可在较温和条件下批量加氢；循环性能好；释放的氢气纯度高。与当前使用的汽油类似，在推广使用时可沿用现有的基础设施，最大限度地降低投资成本，这是其它储氢方式所无法比拟的。

Jiangsu QingYang Energy Co., Ltd. is founded in July of 2014, with the registered capital being RMB35 million, jointly invested by Zhangjiagang Furui Special Equipment Co., Ltd., Dr. Cheng Han-song and Zhangjiagang Hydrogen New Energy Co., Ltd.

Jiangsu QingYang Energy Co., Ltd. mainly engages in the development and utilization of hydrogen energy and is going to manufacture a complete set of whole-new system equipment, based on ambient temperature and atmospheric pressure hydrogen storage technology, and launch it to the market as the first type product. The company relies on the technical team with Distinguished Professor Cheng Han-song of China University of Geosciences (also one of the "Thousand People Plan" scholars) as its chief expert and adopts the team's internationally leading, ambient temperature and atmospheric pressure liquid organic hydrogen storage technology to provide the market with safe and high-quality hydrogen supply as well as auxiliary equipment. The company develops and produces medium material for ambient temperature and atmospheric pressure liquid organic hydrogen storage, with high hydrogen storage capacity, low toxicity, high security and low price. The medium allows batch hydrogen charging under mild condition and is of good cycling performance and enables high purity of released hydrogen gas. Similar to the gasoline used at present, the medium can make use of the existing infrastructure in use for its popularization, which minimizes the cost of investment and cannot be matched by any other means of hydrogen storage.

常温常压液态有机储氢技术

Ambient Temperature and Atmospheric Pressure Liquid Organic Hydrogen Storage Technology





售前服务:

依据客户要求, 富瑞凭借丰富的实践经验及对优质产品的动向把握, 为客户提供专业的、合理的建议, 为客户规划工艺流程。

售中服务:

运用先进技术, 为客户提供最佳解决方案。

售后服务:

用先进、一流的技术保障, 确保客户及时得到富瑞完善、优质的服务。

BEFORE-SALES SERVICE:

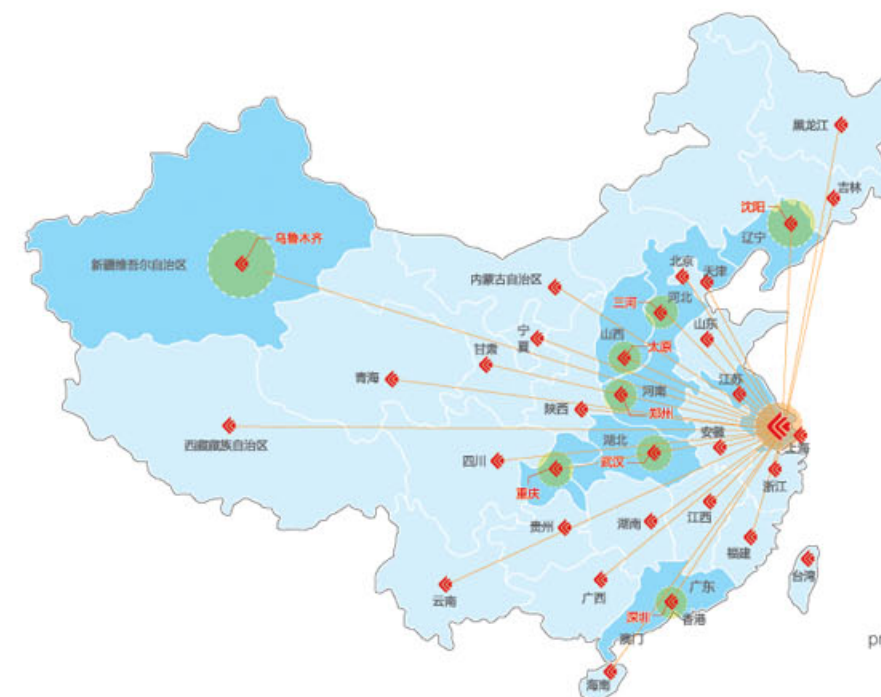
Upon customers' requirements and based on rich practical experience and mastery of the pulse of quality products, FURUI provides customers with professional and rational suggestions and plans process flow for customers.

SALES SERVICE:

Using advanced technology, supplying customers the best solution.

AFTER-SALES SERVICE:

Perfect technology support ensures that the customers can get FURUI'S whole progress and more and more perfect service.



■ 全国八大配件库分布图(乌鲁木齐、郑州、沈阳、深圳、太原、三河、重庆、武汉) ■ 总部 ■ 服务商全国网络布局

服务目标:
服务响应高效及时
服务过程全面监控
服务质量行业第一

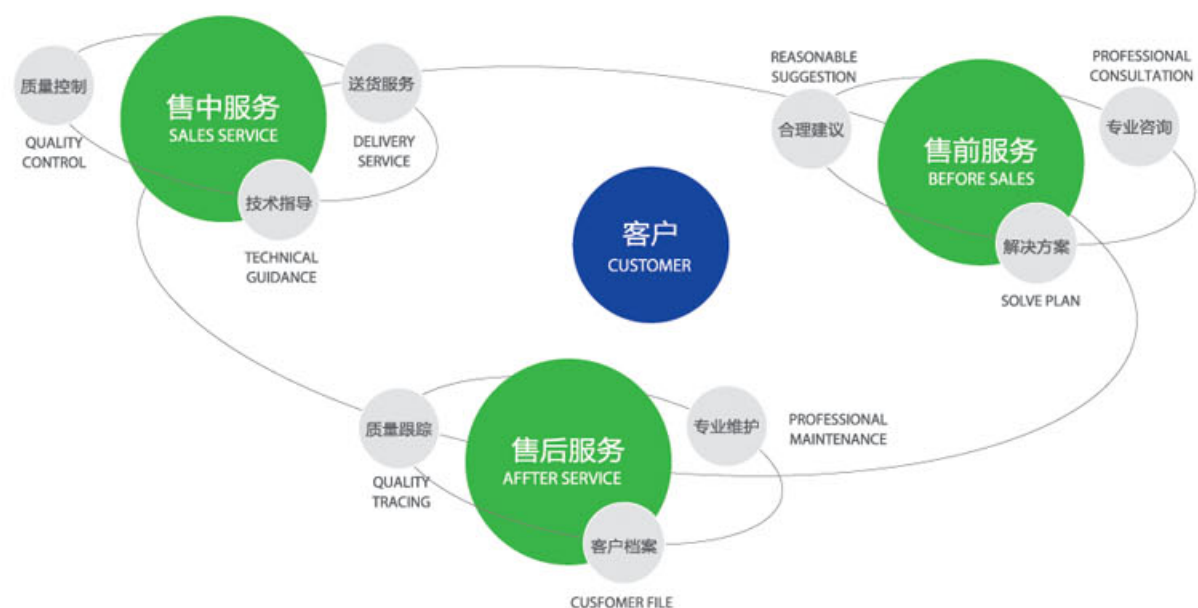
Service Target:
Highly efficient and prompt response
Overall control of process
Top quality

对客户负责, 让客户满意是我们永恒的追求, 我们将成为您解决LNG能源装备问题的专家, 为您提供全方位、全天候的优质服务。

In pursuit of customers' satisfaction, we are your professional problem-solver in LNG energy equipment field and we will provide you with full quality services of 24-hour stand-by.

SERVICE 服务

☎ 24小时服务热线: 4001-300228 4009-300228



国内唯一的LNG产品服务全覆盖的呼叫中心
The Unique Home Service Calling Center for All LNG Products.



LNG产品线的跟踪服务、全过程监控和预警、客户的系统培训、全国九大LNG产品配送基地、24小时快速及时的一站式服务供应商!
We are a one-stop service supplier providing 24-hour services of LNG product line tracking, overall control of processes and warning, systematic customer training, as well as LNG product distribution for 9 domestic bases.

YOUR RELIABLE FRIEND BY COOPERATE SINCERELY

真诚合作·可信赖的朋友

LEADERSHIP CARE 领导关怀



与一汽解放LNG汽车产业战略合作签约
Strategic cooperation with faw LNG industry



与北奔重汽LNG汽车产业战略合作签约
Strategic cooperation with beiben LNG industry



滇、黔、桂LNG产业战略合作签约仪式
Signing ceremony of strategic cooperation with Yunnan, Guizhou & Guangxi LNG industry



增资控股江苏长隆石化装备签约
Signing ceremony of increase of capital holding to Jiangsu Changlong Petrochemical Equipment



旅游汽车公司业务座谈会
Tourist automobile company business forum



绿色制造国际论坛会议
Green building international forum conference



内燃机再制造联盟成立大会
Internal combustion engine remanufacturing alliance founding conference



内燃机和工程机械再制造产业对接会议
Internal combustion engine & engineering machinery remanufacturing industry coordinating meeting



45m³ LNG船用燃料罐交付仪式
45m³ LNG marine fuel tank delivery ceremony



国外客户参观考察
Foreign customers to visit



ENTROPIE蒸发器委内瑞拉项目交付仪式
ENTROPIE Venezuela Project Evaporator Delivery Ceremony



张家港清研再制造产业研究院揭牌典礼
Zhangjiagang Qing Yan Rebuilding Industry Research Institute opening ceremony



江苏南京长途汽车客运集团莅临考察
A visit and exploration by Jiangsu Nanjing Long-distance Bus Passenger Transport Group



与上海交大产学研合作签约
Cooperation agreement signed with Shanghai Jiaotong University



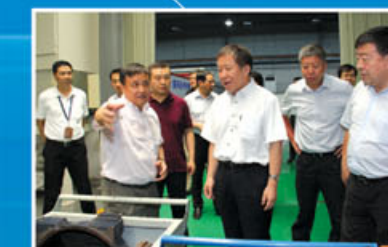
与美国BENNRIT合资签约
Joint Venture co-founded with BENNRIT, U.S.



国家工信部部长苗圩莅临参观
Visit and guidance by Miao Wei, Minister of Ministry of Industry and Information Technology of the People's Republic of China



国家发展和改革委员会副主任解振华莅临参观
Visit and guidance by Xie Zhenhua, Vice President of National Development and Reform Commission



科技部副部长曹部长莅临参观
Visit and guidance by Vice Minister Cao of Ministry of Science and Technology of the People's Republic of China



江苏省委书记罗志军来我司考察
A visit to our company by Mr. Luo Zhijun, Secretary of CPC Jiangsu Provincial Party Committee



江苏省省长一行来访考察
A visit and inspection by the governor of the People's Government of Jiangsu Province



省委第五巡视组（组长 顾一行）莅临参观
A visit by the fifth inspection team, led by Mr. Gu Xin, of the Provincial Party's Committee



省领导徐南平莅临参观考察
A visit and inspection by the provincial-level leader, Mr. Xu Nanping



江苏省商务厅副厅长莅临参观考察
A visit and inspection by Deputy Director of Business Dept. of Jiangsu Province



省经信委李强副主任莅临参观考察
A visit and inspection by Deputy Chairman of Provincial Economic and Information Technology Committee

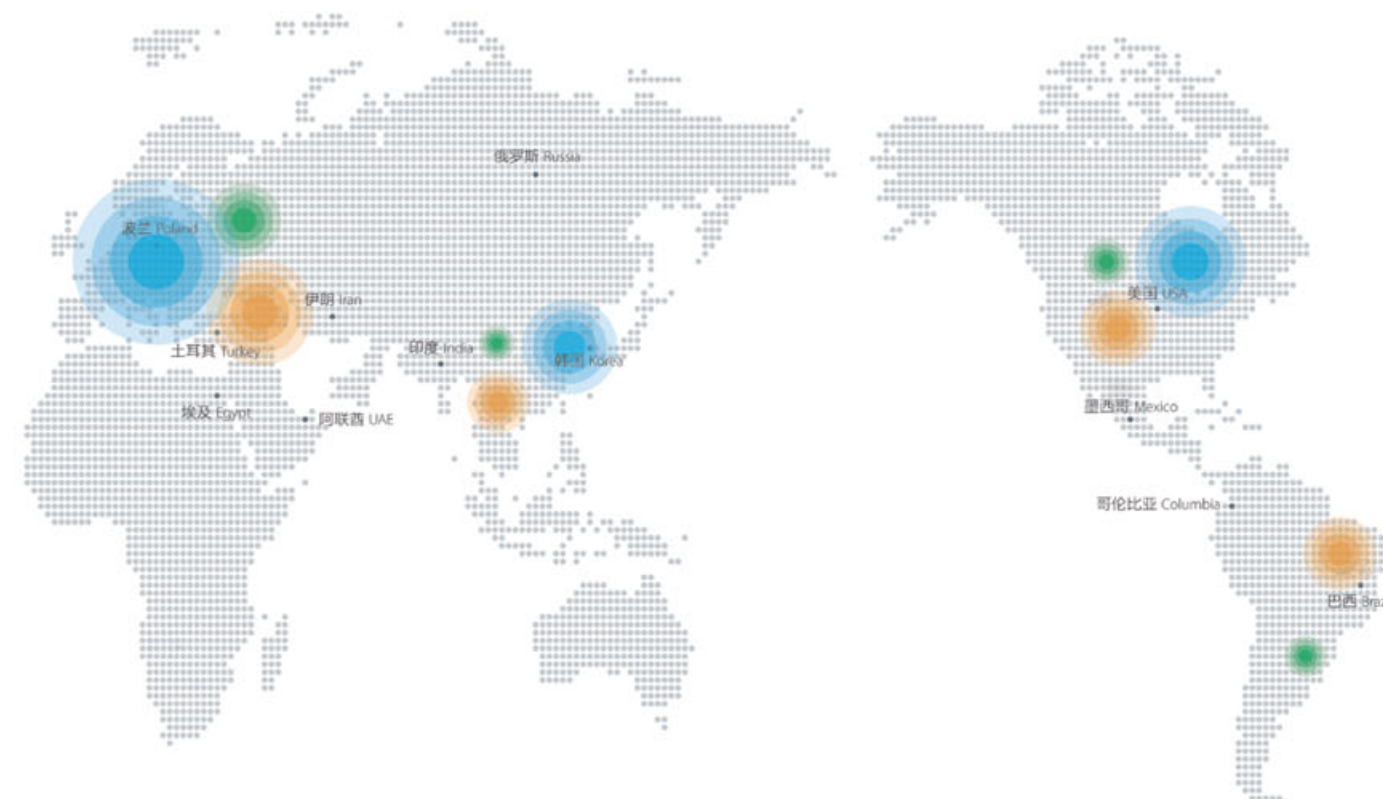
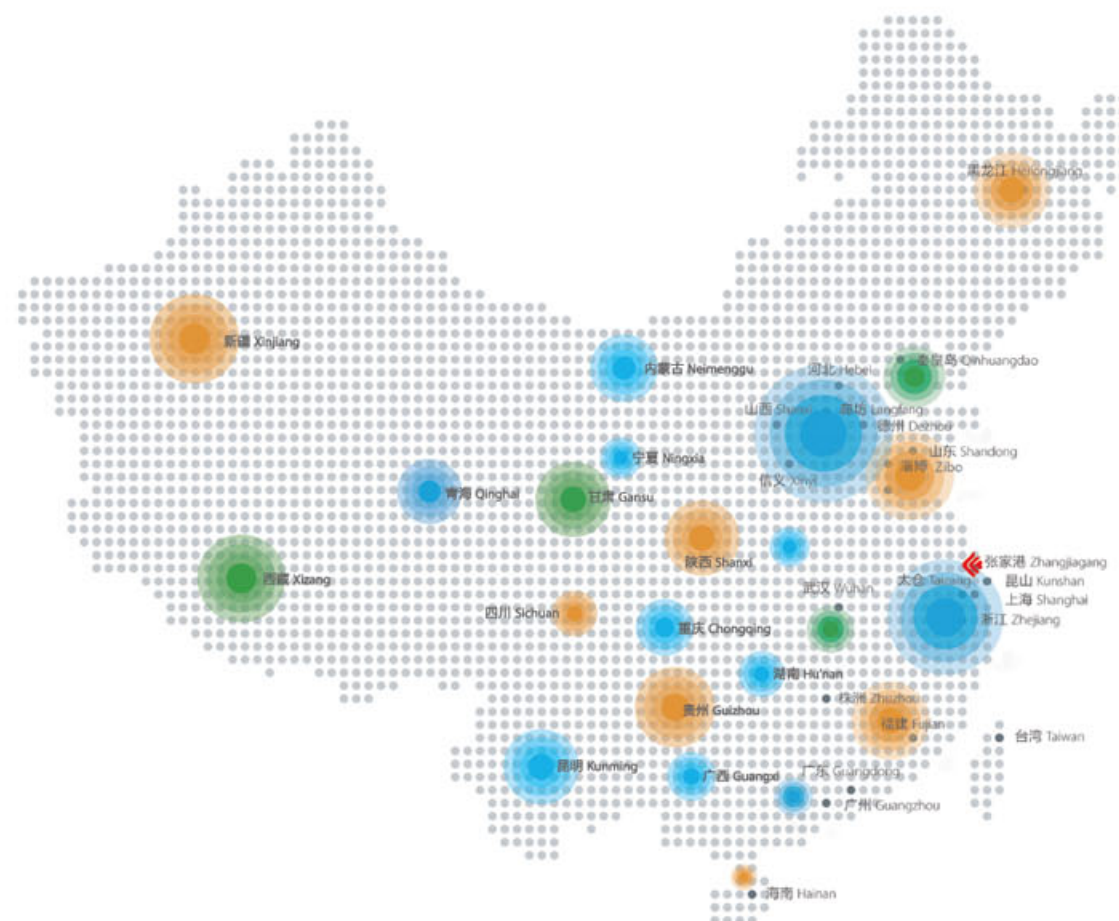
可靠的伙伴，演绎合作双赢的时代主旋律，十一年风雨搏击，感恩一路有您，您的肯定是对我们最大的激励！

You are our reliable cooperative partners with whom we are playing a time theme of win-win cooperation. Thanks to 11 years of struggling with your accompany and your recognition is the greatest motivation to us.

MARKETING NETWORK

营销网络

在科技引领未来的时代，将专业和技术发挥到极致是我们努力的方向，凭借强大而先进的国际生产工艺和技术装备，全面诠释对LNG(清洁能源)产业的独特见解，并以此营造和谐的环境，提升人类的工作和生活品质。富瑞深信，通过持续不断的努力，为广大国内外客户提供完善的整体解决方案，努力成为业内最专业的服务供应商，成为广大客户最可信赖的合作伙伴，服务全球不只是梦想！



In the era led by science and technology, we are working hard to develop our professional and technological skills to the limit extent, by use of the strong and advanced international production processing and technology equipments, we are redefining the LNG clean energy industry by which we are creating a harmonious environment to improve the working and life quality for human. We believe, our dream of being the most professional service supplier and reliable cooperative partner providing integrated solutions and global services to vast customers will not be a dream through our continuous efforts.

RESPONSIBILITY AND FUTURE

责任与未来

以感恩之心擎起企业的社会责任

Lift up the Social Responsibility of the Enterprise
with a Grateful Heart

创造利润不是富瑞唯一使命和责任

我们认为，企业的成功与社会的健康、和谐有着密切关联。

成长中的富瑞在关注商业利益的同时，更加重视企业的社会责任。我们所追求的目标，是与社会、环境的和谐发展，我们所肩负的使命，是把富瑞缔造成为受人尊敬的上市公司。富瑞致力于对所有利益相关者负起责任，我们将通过准确把握股东、员工、客户、社区、供应商和自然环境在各自层面的不同诉求，实现企业整体价值的最大化。

Creating Profit is not the Only Mission and Responsibility of Furui.

We believe the success of an enterprise has close connection with the healthy and harmony of the society.

The growing-up Furui concerns not only about its commercial interest but also the social responsibility as an enterprise. In pursuit of the harmony development with society and environment, we are undertaking the mission of making Furui a respectable listed company. Furui is dedicated to be responsible for all relative parties involved and will make the overall corporate value maximized by grasping the various appealing in different levels from shareholders, staff, customers, social communities, suppliers and natural environment.

安全、健康与环境保护

保障人的安全、健康，是现代企业公民的基本责任，我们在企业内全面落实安全、健康、环境责任制，并将其作为一项关键管理要素，融入生产经营活动之中。

我们追求企业的可持续发展，在涉及的所有业务领域，富瑞严格执行国家及行业的环保法规、标准，向社会提供安全可靠、质量优良的产品和服务。

Safety, Health & Environmental Protection

As a citizen in a modern enterprise, we are responsible to guarantee the safety and health of human beings. We are implementing the responsibility policy of safety, health and environment which is one of the crucial management factors in production and business operations.

We are pursuing the sustainable development of the enterprise and we are strictly following the national and filed environmental rules and regulations in all business fields involved providing safe and qualified production and service to the society.

公益事业

富瑞以推动社会和谐发展为己任，奉行“来源于社会，服务于社会”的理念，积极主动地承担社会责任，积极参与、举办社会公益活动，为社会发展做出贡献。

Public Welfare

Taking the responsibility of promoting the harmonious development of the society, and following the conception of "what taken from the society used for the society", Furui is positively and actively shouldering the social responsibilities by proactively attending and organizing social welfare activities to make contributions to the social development.