



中集安瑞科（荆门）能源装备有限公司 荆门宏图特种飞行器制造有限公司

CIMC ENRIC(JINGMEN)ENERGY EQUIPMENT CO., LTD.
JINGMEN HONGTU SPECIAL AIRCRAFT MANUFACTURING CO., LTD.



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低温储运设备分册

Cryogenic store and transportation equipment fascicule

HIGHLY

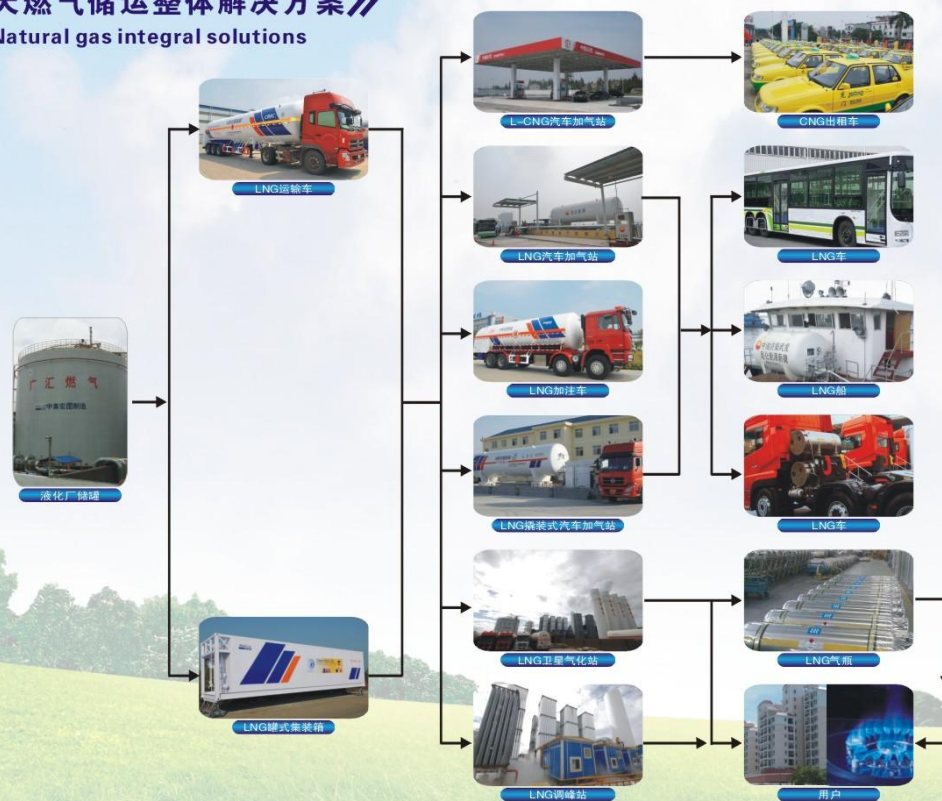
高度决定视野

宏图低温，创造清洁能源新品牌

Honto cryogenic Equipment, creating new brand for clean energy

天燃气储运整体解决方案

Natural gas integral solutions



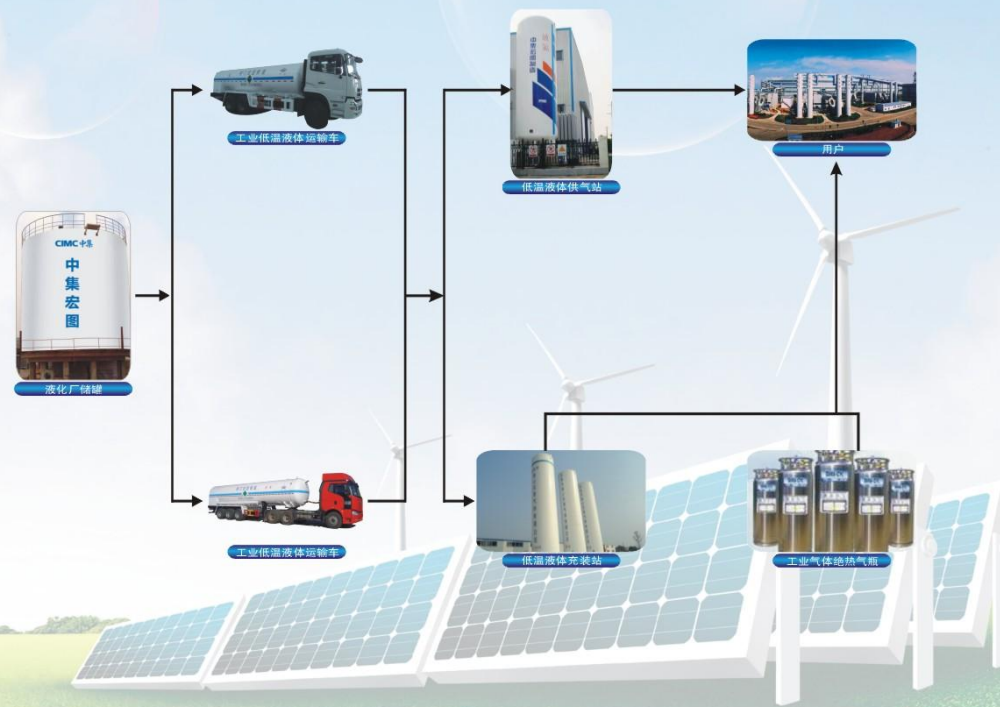
中集·荆门宏图特种飞行器制造有限公司上世纪九十年代涉足低温储运行业领域，先后开发了液化天然气、二氧化碳、氧、氮、氩、乙烯等30多个轻量化、大容积低温车型，LNG加注车、船用罐、撬装加气箱/站、大型低温储罐，100余款5-150m³规格卧/立式储罐等低温储运系列产品，全方位满足不同客户需求，形成了完整的天然气、工业气体“一站式”服务供应链。

公司新型低温运输车在全面继承宏图公司LPG罐车轻量化和中集低温建造技术基础上，采用了公司独有的真空夹层管道处理专利技术和外容器局部加强结构，并运用了目前先进的有限元分析设计，结合罐车的各种轻量化技术，产品整备质量和额定装载质量均居国内同类产品前列。运输高效、安全、可靠，绝热效果优良，性能稳定，性能指标优于高于国家现行法规和标准。

各类低温储罐、加气站主要用于低温介质的液态存储、充装。具有成本低廉，使用寿命长，结构紧凑，占地面积少，集中控制，操作方便等特点。

工业气体储运整体解决方案

Industry gas integral solutions



CIMC Jingmen Hongtu Special Aircraft Manufacturing Co., Ltd set foot in cryogenic industry since the 1990s and developed more than 30 models of light weighted and large capacity tankers for LNG, CO₂, Oxygen, Nitrogen, Argon and ethylene and so on, LNG filling vehicle, marine tank, portable filling container/station and large cryogenic tanks and over 100 kinds of 5-150m³ horizontal/vertical tanks. Honto can meet the different requirements of customers and form the supply chain for natural gas and industrial gas.

The new type cryogenic tanker adopts the particular vacuum layer patent technology and local reinforcement structure holding taking over the light weight technology and CIMC cryogenic technology. The kerb weight and rated payload is the best compared with other manufacturers. It is accordant with national regulations and standards and has the advantage of high efficiency, safe, reliable, excellent insulation and stable performance.

All kinds of cryogenic tanks and stations are used for storing and filling for cryogenic mediums and have the advantage of low cost, long durable year, compact structure, less area coverage, centralized control and easy operation and so on.

成熟的低温设备技术，多年凝聚的制造经验

非凡，卓越的性价比提升竞争力

Extraordinary: Mature cryogenic equipment technology and years of manufacturing experience promoting the competence with excellent cost performance.



52.6m³ LNG低温车
52.6m³ LNG semi-trailer



56.5m³ LNG低温车
56.5m³ LNG semi-trailer

中集·宏图公司系列低温液体运输半挂车产品具有罐车轻量化、功能人性化、管理信息化、专用性能领先化等优点。该系列罐车产品通过结构设计优化，提高了零件的通用化和多用化水平，采用了性能优良的奥氏体不锈钢材料，并充分运用材料的规定非比例延伸强度RP1.0的力学性能指标，确保了罐体质量轻量化目标的实现。

此外，通过全新的专利结构以及有限元分析手段和多样化的配置等途径，保证了罐车整备质量轻量化目标的实现。设计中，通过对行走机构、操作箱体及各项配置附件进行优化，提升了罐体的利用空间，极大的方便了使用者的日常操作及维护。同时在罐车设计上充分考虑了用户多样化需求，使罐车在基本型的基础上具备模块化改装的潜力，可根据用户需求，通过对罐车增加模块化功能组件，实现用户对车辆状态的实时、动态监控，为用车单位的科学、高效管理提供完善的解决方案。

该系列罐车先后应用并申报了多项国家专利，确保了各项指标达到或超过国家相关标准要求。Cryogenic liquid semi-trailers of CIMC Honto have the advantages of light weight, humanized function, informationized management and leading special performance.

With optimized structure, the cryogenic liquid semi-trailer is installed some multipurpose parts, which improves generalization level. The semi-trailers adopt austenitic stainless steel with excellent performance and make full use of the mechanical performance index of non-proportional extension strength RP1.0 of the material to achieve lightweight of the tank.

Besides, brand new patent structure, finite element analysis and diversified configuration also ensure the achievement of lightweight.

In the design, we optimize the chassis, the operation boxes and the various configurations to increase the utilization of the tank, which make it convenient to operate and maintain. In order to meet the diversified requirements of customers, the semi-trailers can be converted on modularization basis and with installation of the function modules they can achieve the real-time and dynamic control and monitoring, providing perfect solution for scientific and high-effective management of the semi-trailer owners.

The series has been applied several national patents and their various indexes reach or surpass the relevant national standards.

宏图牌天然气运输车产品型谱

Catalogue of LNG tanker

序号 Number	产品型号 Type	底盘型号 Chassis type	罐车外形尺寸 Vehicle dimension (L*W*H)长*宽*高(mm)	罐体容积 Capacity (m ³)	整备质量 Kerb weight (kg)	额定载质量 Rated load weight (kg)	总质量 Gross weight(kg)	绝热方式 Insulation type
1	HT9390GDY	三轴半挂	12430X2500X3900	52.6	16000	23000	39000	高真空多层绝热
2	HT9390GDY1	三轴半挂	13000X2500X3900	52.6	15600	23000	38600	高真空多层绝热
3	HT9390GDY2	三轴半挂	13000X2500X3900	52.6	16200	23000	39200	高真空多层绝热
4	HT9400GDYF3	三轴半挂	13000X2500X3900	52.6	16200	23800	40000	高真空多层绝热
5	HT9400GDYF	三轴半挂	13000X2500X3900	56.5	15600	23850	40000	高真空多层绝热
6	HT9400GDYF1	三轴半挂	13000X2500X3900	56.5	16500	24400	40000	高真空多层绝热
7	HT9400GDYF2	三轴半挂	13000X2500X3900	56.5	15380	24620	40000	高真空多层绝热

注明：本表中参数如有修订，恕不另行通知。
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note: pls excuse for no further notice about any changes of data.
customization for special specification and requirement is available.

中集·宏图公司HT9406GDYA和HT9406GDYB型低温液体运输半挂车是分别用于公路运输液态乙烯(LC2H4)和液态乙烷(LC2H6)的专用车辆，该类罐车设计积极响应国家节能减排政策并充分考虑客户利益最大化。内罐体采用最先进的轻量化技术，外罐体采用有限元应力分析设计，行走机构及其他结构模块采用轻量化的配置，保证了罐车整备质量的轻量化及容积的最大化。罐体采用高真空多层绝热的形式，阀门、安全附件等成品件均采用国内外知名品牌。该产品设计制造严格贯彻国家及行业相关技术规范标准。本类罐车具有装载量大、绝热效果优良、装卸速度快、卸料干净、操作方便、易于维护的特点，是运输液态乙烷/乙烷的理想专用设备。

The HT9406GDYA and the HT9406GDYB cryogenic liquid semi-trailers of CIMC Honto are special vehicles for transporting liquefied ethylene and liquefied ethane on road, which are not only complied with the national energy saving and emission reduction policy but also maximize benefit of the customers. The most advanced light-weighted configuration has been adopted to the internal tank, the finite element stress analysis design to the external tank and light-weighted configuration to the chassis and other structure units, making the lightest weight and maximized capacity possible. The high vacuum multi layers heat insulation has been adopted to the tank, and all the valves and safety accessories are foreign or domestic famous brand. The product is designed and fabricated with strict implement of relevant national and industry technical regulations and standards. With the advantages of large payload, excellent heat insulation, fast loading and unloading speed, thorough unloading, convenient operation and easy maintenance, this semi-trailers are the ideal special equipment for transporting liquefied ethylene/ethane.



46.38m³ 液态乙烯运输车
46.38m³ LNG semi-trailer



46.38m³ 液态乙烯运输车
46.38m³ LNG semi-trailer



51.55m³ 液态乙烷运输车
51.55m³ LNG semi-trailer



51.55m³ 液态乙烷运输车
51.55m³ LNG semi-trailer

宏图牌低温液体运输车产品型谱

Catalogue of LNG tanker

序号 Number	产品型号 Type	底盘型号 Chassis type	罐车外形尺寸 Vehicle dimension (L*W*H)长*宽*高(mm)	充装介质 Medium	罐体容积 Capacity (m ³)	充装质量 Kerb weight (kg)	整备质量 Kerb weight (kg)	总质量 Gross weight(kg)	绝热方式 Insulation type
1	HT9406GDYA	三轴半挂	12950X2490X3860	乙烯	46.38	23700	16300	40000	高真空绝热
2	HT9406GDYB	三轴半挂	13000X2500X3900	乙烷	51.55	25000	15000	40000	高真空绝热

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中集·宏图公司HT5310GDYT型低温液体加注车，设计用于LNG运输和充装的专用低温罐式运输车，适用于LNG燃料移动式补给，该移动加注车配备有LNG液体储罐、加注附件、管路阀门、安全装置、液位及流量计、增压装置等专用装置。该产品设计严格贯彻国家及行业有关技术法规标准，产品的可靠性、经济型、安全性和环保要求均符合国家强制性标准要求。

该款车适用于保障LNG车辆紧急加气、临时加气、维护保障需求，弥补了LNG加气站的不足，可以灵活、方便、快捷的为LNG汽车补充燃料，符合绿色低碳经济、新能源汽车的发展方向。

The filling tanker HT5310GDYT of CIMC Honto is designed for transportation and filling of LNG and suitable for LNG refueling. The tanker is provided with LNG tank, filling accessories, pipeline valves, liquid level and flowmeter equipment and pressurizing equipment. It is accordant with the relevant regulations and standards. The reliability, economy, safety and environment protection all comply with the national compulsory requirements.

This tanker is applicable for the emergency filling, temporary filling and maintenance of LNG tankers and make up the shortage of LNG stations. It can fill for LNG vehicles flexibly and is accordant with the developing trend of green low-carbon economy and new-energy vehicles.

宏图牌LNG加液车型谱

Catalogue of LNG filling tanker



类别	HT5310GDYT1
燃料类别	LNG液化天然气
底盘型号	SX3318DT456TL
功率	WP12NG380E40
外形尺寸 (长宽高) (mm)	11855x2490x3600
整备质量 (kg)	23137
额定载质量 (kg)	7668
最高车速 (km/h)	77
排放标准	国IV排放
其它	7T前桥, 东风10T后桥, 带ABS 东风T8平顶驾驶室 (带空调)
罐体容积、介质 (LNG液化天然气)	20立方米
罐体外形尺寸 (mm)	外罐长7499X直径2212
罐体介绍	罐体采用卧式双圆筒结构, 内筒选用06Cr19Ni10, 外筒选用Q345R压力容器用钢板, 内外筒之间采用专用的支撑结构, 夹层为真空多层隔热结构并抽真空, 采用高效的隔热材料, 隔热层设置低温及常温双壁真空吸附装置, 以获得并长时间维持高真空, 确保日常发车指标优良, 确保长途运输过程中温度升幅在标准范围内, 压力稳定, 运输安全可靠。
其它	该款车型管路系统主要包括充液管路系统、增压管路系统、加气管路系统、燃油循环系统、放散系统、仪表系统以及降压系统, 并配备有低温LNG加液泵ACD TC-34 1X2X6 2VSL, 11kw, 发电机380V, 50Hz, 1400rpm, E+H流量计。

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液氧运输半挂车
Liquefied oxygen semi-trailer



液态二氧化碳运输半挂车
LCO₂ semi-trailer



液氮运输半挂车
LN₂ semi-trailer



液氧运输车
Liquefied oxygen tanker



液氮运输车
Liquefied nitrogen tanker



液氩运输车
Liquefied argon tanker

宏图牌工业气体运输车产品型谱

Catalogue of industrial gas tanker

序号 Number	产品型号 Type	底盘型号 Chassis type	整车外形尺寸 Vehicle dimension (L*W*H)长*宽*高(mm)	充装介质 Medium	罐体容积 Capacity (m ³)	整备质量 (kg)	额定载质量 (kg)	总质量 (kg)	绝热方式 Insulation type
1	HT9403GDY	三轴半挂	11000X2490X3600	液氧	24.5	15000	25000	40000	高真空多层绝热
2	HT9403GDY1	三轴半挂	11000X2490X3600	液氧	26	13300	26700	40000	高真空多层绝热
3	HT9405GDY1	三轴半挂	12200 X 2490 X 3750	液氧	32.1	16070	23915	39985	高真空多层绝热
4	HT9405GDY	三轴半挂	12200X2500X3775	液氧	35.17	13600	26400	40000	高真空多层绝热
5	HT9404GDY	三轴半挂	11300X2500X3410	液氧	21.5	13020	26980	40000	高真空多层绝热
6	HT9402GDY	三轴半挂	11000X2500X3995	液态二氧化碳	27	16000	24000	40000	高真空多层绝热
7	HT9402GDY1	三轴半挂	13000X2500X3600	液态二氧化碳	27.5	15200	24750	39950	高真空多层绝热
8	HT9402GDY2	三轴半挂	13000X2500X3600	液态二氧化碳	29.6	13360	26640	40000	高真空多层绝热

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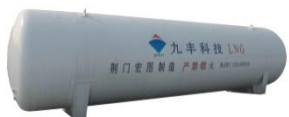
液氩储罐
Liquefied argon storage tank



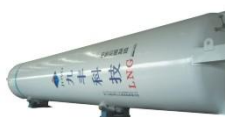
液态二氧化碳储罐
LCO₂ storage tank



液氮储罐
Liquefied nitrogen storage tank



LNG储罐
LNG storage tank



LNG储罐
LNG storage tank



船用罐
LNG storage tank for ship

宏图牌LNG储罐系列产品型谱
Catalogue of LNG storage tank series

型式 Type	产品型号 Model	有效容积 Capacity (m ³)	工作压力 Working Pressure (MPa)	外形尺寸 (直径x高) Dimensions (mm)	容器重量 Empty Tank Weight (Kg)
立式	CFL-30/0.8	30	0.8	φ 2500 × 13200	14400
立式	CFL-30/1.2	30	1.2	φ 2500 × 13200	16000
立式	CDL-30/1.2	30	1.2	φ 2350 × 11500	13800
立式	CFL-50/0.8	50	0.8	φ 3000 × 12830	22000
立式	CFL-60/0.8	60	0.8	φ 3000 × 15100	22800
立式	CFL-60/1.2	60	1.2	φ 3000 × 15100	25500
立式	CDL-60/1.2	60	1.2	φ 3000 × 14853	22500
立式	CFL-100/0.6	100	0.6	φ 3500 × 17175	37180
立式	CFL-100/0.8	100	0.8	φ 3500 × 17175	40180
立式	CFL-150/0.72	150	0.72	φ 3700 × 22055	54550
立式	CFL-150/0.8	150	0.8	φ 3700 × 22055	59050
卧式	CFW-30/1.2	30	1.2	φ 2600 × 10708	16800
卧式	CDW-30/1.2	30	1.2	φ 2300 × 10588	13700
卧式	CFW-50/0.8	50	0.8	φ 3250 × 10650	22000
卧式	CFW-60/1.2	60	1.2	φ 3000 × 14465	28400
卧式	CDW-60/1.2	60	1.2	φ 3000 × 14465	22500
卧式	CFW-100/0.6	100	0.6	φ 3500 × 16980	36000

注明：1、本表中参数如有修订，恕不另行通知。
2、针对用户对储罐有不同的容积和压力要求时可进行个性化设计和制作。
3、以上产品为常规设计的参数，可提供采用奥氏体应变强化技术的储罐产品。
note: pls excuse for no further notice about any changes of data.
customization for special specification and requirement is available.

宏图牌工业气体储罐系列产品型谱
Catalogue of industrial gas storage tank series

产品型号 Model	有效容积 Capacity (m ³)	工作压力 Working Pressure (MPa)	外形尺寸 (直径x高) Dimensions (mm)	容器重量 Empty Tank Weight (Kg)	日蒸发率Daily Boil-Off (%)		
					LO ₂	LN ₂	LAr
CFL-5/0.8	5	0.8	φ 2012 × 5180	4200	0.43	0.65	0.46
CFL-5/1.6	5	1.6	φ 2012 × 5180	4900	0.43	0.65	0.46
CFL-10/0.8	10	0.8	φ 2420 × 6040	6450	0.36	0.55	0.38
CFL-10/1.6	10	1.6	φ 2420 × 6040	7500	0.36	0.55	0.38
CFL-15/0.8	15	0.8	φ 2520 × 7314	8150	0.35	0.53	0.37
CFL-15/1.6	15	1.6	φ 2520 × 7314	9500	0.35	0.53	0.37
CFL-20/0.8	20	0.8	φ 2520 × 9050	11300	0.33	0.5	0.35
CFL-20/1.6	20	1.6	φ 2520 × 9050	13200	0.33	0.5	0.35
CFL-30/0.8	30	0.8	φ 2520 × 13200	13800	0.29	0.44	0.31
CFL-30/1.6	30	1.6	φ 2520 × 13200	16750	0.29	0.44	0.31
CFL-50/0.8	50	0.8	φ 3020 × 12830	22000	0.23	0.35	0.24
CFL-50/1.6	50	1.6	φ 3020 × 12830	27500	0.23	0.35	0.24
CFL-100/0.8	100	0.8	φ 3500 × 17175	41500	0.16	0.25	0.17
CFL-100/1.6	100	1.6	φ 3500 × 17175	52000	0.16	0.25	0.17
CFL-150/0.2	150	0.2	φ 3828 × 22250	54000	0.145	0.225	0.155

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3、以上产品为常规设计的参数，可提供采用奥氏体应变强化技术的储罐产品。
note: pls excuse for no further notice about any changes of data.
customization for special specification and requirement is available.



陕西众源绿能4×5000立方储罐1

中集·宏图公司利用自身在低温储运装备领域十多年的技术积累和市场优势，通过引进低温行业高端人才，借助中集技术共享平台，将业务链延伸至加气站（撬）领域，通过6年的发展，积累了丰富的LNG加气站建设和运行的经验，对LNG带泵运输车、集装箱式LNG加注撬、岸基式LNG加气站、加气趸船等新兴领域均有涉猎。拥有专业的团队，设计，制造、安装技术力量雄厚，可提供常规LNG加注站、撬装式LNG加注站、岸基式LNG加注站等不同类型的LNG加注成套解决方案，满足不同用户的需求。

公司及产品并具备以下优势：1、低温储罐是根据加气站的特殊要求专门设计的，出厂真空度优于国家标准，确保储罐的日蒸发率指标最优；2、一体化撬装设计，结构紧凑，工艺管线短，减少了BOG的排放；3、PLC自控，双阀设计，自动控制 and 双重安全保障；4、具有泵卸车、加注和自流增压卸车双重功能；5、流程合理排放少，经济环保高效。

Taking advantage of more than ten years technology accumulation and market superiority in the cryogenic storage and transportation industry, bringing in superior talents from cryogenic industry, and with the help of the technology sharing platform of CIMC, CIMC Honto has extended the business into gas filling station/skid. After 6 years development and experience accumulation of LNG filling station, Honto has set foot and made some achievement in the new filed such as LNG tanker with pump, container type LPG filling skid, riverside LNG filling station and filling wharf boat, for which Honto can provide integral solutions supported by the professional team and the strong design, fabrication and installation force to meet different customer requirements.

Advantages of Honto products: 1. The cryogenic storage tank is designed in accordance to the special requirement of the filling station, the vacuum degree is higher than the national standard in order to make sure of the daily evaporation ratio to be the best; 2. Integral skid type design, compact structure, short pipeline and less BOG emission; 3. PLC automatic control and double valves; 4. Unloading and filling with pump, unloading with the help of pressure from automatic flow; 5. Reasonable procedure, less emission, economical, environment-friendly and high efficient.



宏图牌加气站型谱

Catalogue of gas filling station

参数和配置	加气站类型	常规加注站	撬装加注站	岸基式加注站
	日加气规模 (Nm ³)		20000 - 90000	20000
参数与性能	LNG储存量 (m ³)	≤180	60/30	≤250
	储存设计压力 (MPa)	1.44	1.44	1.44
	系统设计压力 (MPa)	1.92	1.92	1.92
	动力需求 (KW)	22 - 50	22 - 35	22 - 50
	车辆、船加注速度 (辆/小时)	10 - 35	10 - 20	2 - 6
	加注机计量精度 (%)	1	1	1
主要设备配置	储罐数量 (个)	1-3	1	1-2
	加注机数量 (个)	1-6	1-2	1-4
	潜液泵数量 (个)	1-3	1-2	1-3
	控制系统	PLC可编程控制		
安保系统	可燃气体、火焰报警 ESD连锁保护			



LNG气化撬适用于小区集中供气、小型工厂及工业园区、小型调峰站及其它临时用气的场合；LNG气化站具有建设周期短以及能迅速满足用气市场需求的优势。气化撬的设备配置、可根据用户要求或使用场地条件进行相应调整。

中集·宏图公司气化撬产品具有以下优势：1、高度集成，低温储罐及附属气化设备撬块化；2、安装快捷，转运方便；3、功能齐全，操作简便；4、设有BOG回收系统，防止BOG气体排放，经济又环保；5、进口调压设备，供气稳定有保障。

LNG vaporizing station is applicable for housing estates, small factories, industry zones, small peak-shaving stations and other temporary gas using occasions; LNG vaporizing station has short construction period and can meet the need of gas market quickly. The facility configuration can be adapted to customer's requirement and field situation.

Advantages of LNG vaporizing station of CIMC Honto: 1. High integration; 2. Fast installation and easy transportation; 3. Complete functions and easy operation; 4. Economical and environment-friendly with BOG recycling system; 5. Stable gas supply with inlet pressure regulating equipment.

宏图牌CFW10DL100型液化天然气气化撬型谱

Catalogue of CDW21.6/300 LNG vaporizing skid

序号	指标名称	指标内容或数据
1	储存能力 (内罐几何容积)	21.6m ³
2	储罐工作/设计压力	<0.8/0.8MPa
3	气化系统管道设计压力	1.6MPa
4	工作介质	LNG/NG
5	设计温度	196℃常温
6	储罐日蒸发率	0.214% (液氮)
7	环境温度	-30 ~ 50℃
8	工作周期	连续
9	调压阀进口压力	0.45 ~ 0.65MPa
10	调压阀出口压力	0.2MPa
11	超压切断阀切断压力	0.25MPa
12	排气温度	低于环境温度10℃
13	小时气化能力	300Nm ³
14	整体尺寸	12196x2438x2896

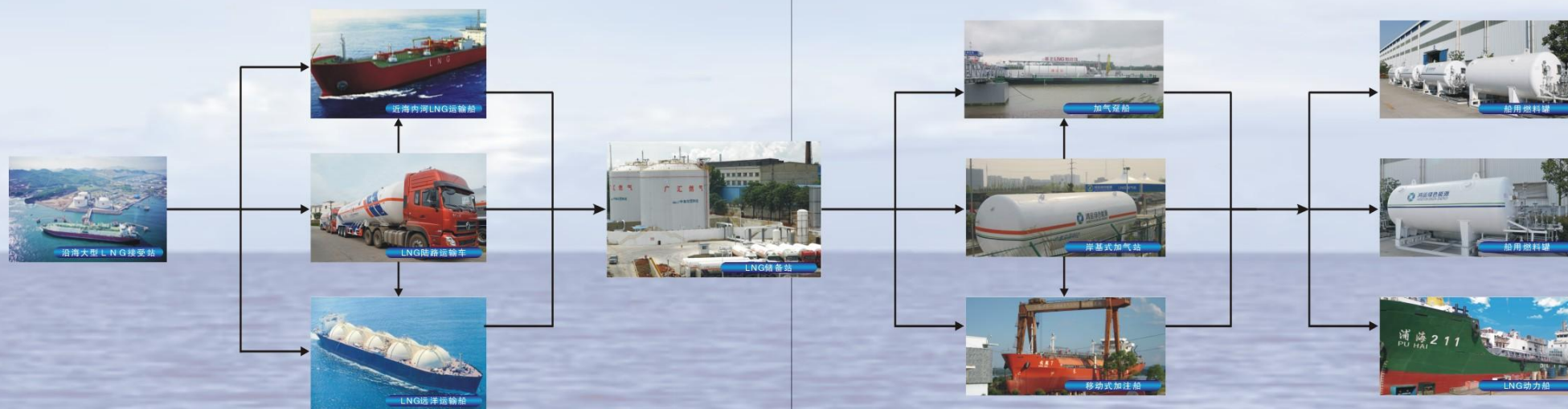


宏图牌水上LNG产品业务链

Natural gas integral solutions

中集·宏图公司是国内最早开启船用“油改气”研发项目的企业之一，一直致力于航运清洁能源装备应用技术研发与产品制造，参与了国家船用罐制造技术标准的制定。宏图公司是首批获得中国船级社颁发的“船用产品”工厂认证的企业，并于2013至2014年成功中标中石油、中海油等战略客户多批船罐制造订单，目前为国内建造船罐最多，也是国内最早介入LNG岸基式加气站、加气趸船的建设单位，为我国船运燃料实现新变革提供了有力的支撑。

As one of the earliest companies which start researching and developing “Oil to Gas” for ship, CIMC Honto is always devoted in research and fabrication of clean energy equipment applied technology and took part in the technical standard making of marine tanks of China. Honto is also one of the first batch of companies which have got the certificate of marine products of CCS, and from 2013 to 2014 Honto was awarded the tender of marine tanks purchase order from CNPC and CNOOC as the strategy customers, at present Honto is the company which has manufactured the most marine tanks and set foot in the field of riverside LNG filling stations and filling wharf boats earliest, having supplied the powerful support to the new revolution of marine fuel of China.



宏图牌水上LNG产品成功案例

Successful case of Honto overwater LNG equipment



2012年，宏图公司与中国船级社武汉分社、武汉规范所及武汉交发船舶设计院签订了战略合作协议，启动水上LNG加注站标准建制，并建成国内首座岸基式加注站—江苏鸿运绿色能源水上加注站。

In 2012, Honto signed the strategy cooperation agreement with CCS Wuhan branch, Wuhan regulation institute and Wuhan Jiaofa Ship Design Institute, started the standard establishing of overwater LNG filling station and constructed the first riverside filling station in China—Jiangsu Hongyun Green Energy Overwater Filling Station.



中集·宏图公司于2014年承接了国内某燃气公司500立方加气趸船，此条趸船是国内首座按中国船级社新规范标准建造的船加气趸船。

In 2014, CIMC Honto manufactured the 500m³ LNG filling wharf boat in Huanggang City, which is the first LNG filling wharf boat constructed as per the new CCS standard.





2013年，国家交通部审批通过国内第一批2艘LNG运输船的建造项目，宏图公司承担了其中一艘14000立方建造任务。该LNG运输船是国内首座批江海直达大型LNG运输船，预计2015年8月份下水。该LNG运输船下水，将标志着中国终于拥有自己独立建造大型LNG运输船的能力，打破了传统的槽车运输的单一模式，大大降低了运输成本，为LNG燃料动力船的推广奠定了坚实的基础。

In 2013, Ministry of Communications approved the first batch of two units of LNG cargo ship. Honto undertook the one of 14000m³, which is the first river-sea transportation LNG cargo ship in China and will be finished in August, 2015. The launching of this LNG cargo ship will mark that China has the ability to manufacture large-scale LNG cargo ships independently and end up the single model of transporting LNG by tankers, the transportation cost will be greatly reduced, and it will lay a solid foundation for the promotion of LNG powered ships.



2015年宏图承建目前国内最大容积（3600m³）全压式液氨运输船储罐项目罐体在浙江某船厂的组焊船台现场正如火如荼地施工中。该船为国内容积最大，筒体壁最厚的首艘液氨/LPG船罐运输船。图为罐体在荆门宏图厂内进行预制。

In 2015, the 3600m³ full pressure type liquid ammonia/LPG cargo ship, with the largest capacity and the thickest shell wall in China presently, is being manufactured in Zhejiang by Honto. The picture shows the prefabrication of the tank in Jingmen Honto workshop.



宏图牌LNG船用燃料罐技术参数表（含冷箱）
Technical data sheet of Honto LNG marine fuel tank

罐体型号 Type	设计压力 Chassis type	外形尺寸 Vehicle dimension (L*W*H)长*宽*高(mm)	材料(内、外罐) Medium	绝热方式 Insulation type
3m ³	1.1Mpa	06Cr19Ni10	4790X1416X2157	高真空多层缠绕
5m ³	1.1Mpa	06Cr19Ni10	5720X1636X2320	高真空多层缠绕
10m ³	1.1Mpa	06Cr19Ni10	6370X2016X2358	高真空多层缠绕
15m ³	1.1Mpa	06Cr19Ni10	7123X2416X2805	高真空多层缠绕
20m ³	1.1Mpa	06Cr19Ni10	7604X2416X2754	高真空多层缠绕

注明：本表中参数如有修订，恕不另行通知。
可根据客户的规格和要求定制。

note: pls excuse for no further notice about any changes of data.
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