CIMC TODAY

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聚焦中集商业成功

Focusing on CIMC Business Success

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中集成功收购德国 Ziegler 集团

CIMC Acquires German Ziegler

中集车辆参加 2013 年中国国际商用车展

CIMC Vehicles Attends China International Commercial Vehicles Expo 2013

中集启建集团（松山湖）产业创新发展中心

CIMC Constructs Industrial Innovation Development Center (Songshan Lake)

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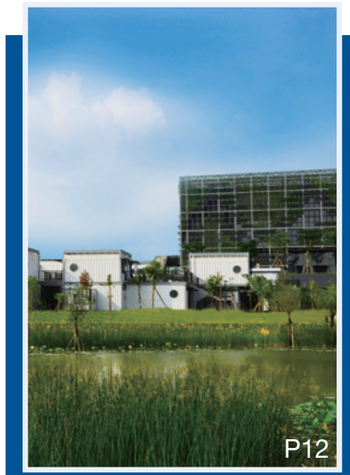


卷首语
Editor's Note

2013 年 7 月，中集发生了一件具有里程碑意义的事件——烟台中集海洋工程研究院正式投入使用。从进入海洋工程领域以来，我们始终将研发与技术摆在核心位置。今天，我们仍然清楚地认识到，只有依靠卓越的研发能力和全球技术资源整合能力，才能帮助我们更快地脱颖而出，增强我们在全球海洋工程领域的核心竞争力。这座总建筑面积达 15 万平方米的研究院，目前拥有 700 多名技术研发人员。研究院将承接船舶与海洋工程基础研发、试验；船舶与海洋工程设计；船舶与海洋工程贸易和经纪；船舶与海洋工程 EPC 工程咨询、项目管理、技术咨询、会展服务等业务。

我们相信，技术创新不是一条单行道，而是需要多方的参与及整合。所以我们与行业内最权威的船级社、国内外顶尖海工专家及专业机构建立了广泛而深入的合作关系，为中集海洋工程产业自主研发的发展注入源源不断的驱动力，这是中集海工发展战略的重要组成部分。这也意味着，我们的工程师必须及全球一流的海工专业人士密切合作，具备更广阔的国际视野，更加贴近全球客户的需求，帮助客户解决棘手问题。这始终是我们不懈的追求。

中集海工研究院远不是我们技术创新的句点。下一个创新中心——中集集团产业创新发展中心已在东莞松山湖开始兴建。未来，该中心将以中集现代装备产业为核心，产业链上下游中小型合作企业及项目为载体，发展产业创新集群。

我们的创新步伐时刻因您而动。您的期待与需求始终是我们发展技术、追求创新的动力。作为我们尊敬的客户和合作伙伴，我们期待与您在未来的创新征程上携手并肩，合作共赢！

《今日中集》编辑部

In July 2013, CIMC Offshore Engineering Institute Research Center was officially put into operation, creating a new milestone for CIMC. R&D and technology are always the focuses of our work ever since establishment of our business presence in offshore engineering. Today, we still firmly believe that the prominent capacity in R&D and integration of global technical resources are the key for us to outperform our counterparts and enhance the Group's core competitiveness in the field of offshore engineering worldwide. Covering an overall floorage of 150,000m^2, this Research Center is now staffed by more than 700 R&D technicians. The designed scope of business of the Research Center includes primary R&D and testing, design, trade and brokerage, EPC engineering consultation, project management, technical consultation and exhibition services of ship and offshore engineering.

We believe technical innovation is the product of multi-involvement and collaboration rather than an absolutely self-reliant task. Thus, we've established intensive partnerships with the industry's most authoritative classification societies, top experts and first-class professional institutes in offshore engineering at home and abroad. In this way, we secure an ongoing driving force for development of the Group's independent R&D in offshore engineering, which is an essential part of the development strategy of CIMC Offshore Segment. It also means that our engineers must work in close cooperation with world-class professionals in offshore engineering, posses a global outlook, cater to the demands of global customers and help them address problematic issues. All of these are always our relentless pursuits.

CIMC Offshore Engineering Institute Research Center is far from the end of the Group's efforts in technical innovation. The construction of the Group's another innovation center, namely CIMC Industrial Innovation Development Center, has begun in Songshan Lake High-tech Industrial Park in Dongguan City. This innovation center is planned to forge a cluster of industrial innovation by focusing on CIMC's modern equipment business and relying on upstream and downstream SMEs and projects in cooperation.

CIMC cannot move further in the path of innovation without you. Your expectations and demands are the motives for CIMC's technical R&D and innovation. We're looking forward to working with you, our distinguished customers and partners, toward the goal of win-win in the path of innovation.

Edit of *CIMC TODAY*

中集成功收购德国Ziegler集团

CIMC Acquires German Ziegler

11月7日，中集集团与德国Albert Ziegler GmbH & Co KG在德国德累斯顿正式签署了收购Ziegler的资产买卖协议，中集集团以约5,500万欧元（实际支付将基于现金、负债和存货变动情况调整）购买了金根总部的所有资产，以及金根总部所直接持有的德国境内和境外共9家子公司股份和权益。集团副总裁李胤辉、集团战略发展部总经理秦钢、中集天达总经理郑祖华、集团战略发展部投资总监吴三强等一行出席了此次签约活动。

德国 Ziegler 集团成立于 1891 年，总部设于德国金根，具有一百二十多年的历史，技术领先，特别是其水泵技术占据全球领先水平，系全球前五大消防车辆及器材供应商之一。该公司是可定制化消防车的生产商，产品涉及消防技术的全部范围，包括配件、专用泵、灭火系统以及各种灭火车辆。Ziegler 下属共有 7 个生产基地（含金根总部），分别分布在德国伦茨堡、慕劳、荷兰温斯霍滕和维瑟、克罗地亚萨格勒布、印度尼西亚雅加达等国家及地区。

本次收购使中集正式进入高端消防车制造领域，将丰富中集集团专用车辆的产品种类，作为中集集团专业车辆产业的战略延伸；同时补充完善现有空港板块业务产品，提升空港业务整体竞争力。另外，也将成为未来中集城镇化产业的重要基础。

November 7, 2013 – CIMC signed the Asset Purchase Agreement with Albert Ziegler GmbH & Co KG in Dresden, Germany for the takeover of Ziegler for some EUR55 million (subject to adjustment with variations in cash, liability and inventory). The deal covers all assets of Ziegler's headquarters in Giengen and the shares and equities of its 9 German and international subsidiaries. The signing ceremony was attended by, among others, Li Yinhui, Vice President of CIMC, Qin Gang, General Manager of CIMC's Strategy Development Department, Zheng zuhua, General Manager of Shenzhen CIMC-TianDa and Wu Sanqiang, Investment Director of CIMC's Strategy Development Department.

Founded in 1891, Ziegler is a manufacturer of customizable fire trucks based in Giengen. Boasting over 120 years of long history, Ziegler is one of the first five world-wide producers of fire-fighting vehicles and appliances. It supplies all products associated with fire technology, including fittings, special-purpose pumps, fire extinguishing systems and various fire trucks. Ziegler owns 7 production bases (including the headquarters in Giengen) in different countries and regions including Rendsburg and Muhlau in Germany, Winschoten and Visser in Netherlands, Zagreb in Croatia, and Djakarta in Indonesia.

The acquisition would pave the way for CIMC's establishment of its business presence in the high-end fire truck manufacturing market and expansion of its special-purpose vehicle product series, which is a strategic extension of CIMC's specialized vehicle business. Meanwhile, the acquirement would add new business products to and in turn enhance the overall competitiveness of CIMC's Airport Facilities Segment. Furthermore, it would lay a crucial basis for CIMC to realize industrial urbanization in the future.

德国联邦外贸与投资署署长一行访问集团总部

CEO of GTAI Visits CIMC Headquarters in Shenzhen

9 月 6 日上午，德国联邦外贸与投资署署长 Dr. Jürgen Friedrich 率队，包括德国工商大会代表在内的一行 9 人拜访了中集集团总部。集团战略发展部总经理秦钢及车辆集团、安瑞科控股的代表参加了接待。双方就中集在德国的投资情况和业务发展、德国政府给予的支持等作了交流。

中集从 2007 年开始，通过兼并收购以及自建的模式，在德国发展了车辆、能化和食品装备等业务，并拥有制造工厂、设计承包公司等多家分支机构，对当地经济和社区发展做出了积极贡献，未来还将有良好的发展前景。交流中，中集也提出希望德国政府在招商引资优惠政策、中集参与德国在华企业活动交流等问题上给予支持和帮助。

Dr. Jürgen Friedrich 表示，通过此次拜访对中集有了新的认识，德国联邦外贸与投资署愿意为中集在德国的长期发展，提供咨询及服务支持；同时，德国工商大会也愿意接受中集及下属企业成为会员，帮助中集拓展商业伙伴关系。

September 6, 2013 – Dr. Jürgen Friedrich, CEO of Germany Trade and Invest (GTAI), together with 8 delegators of Deutschen Industrie-und Handelskammertages (DIHK), visited CIMC headquarters in Shenzhen and were warmly welcomed by Qin Gang, General Manager of CIMC's Strategy Development Department and the representatives of CIMC Vehicles and Enric. The two parties exchanged their views on CIMC's investments and business development in Germany as well as German Government's supports to CIMC.

CIMC started its businesses in vehicles, energy, chemical and food equipment in Germany in 2007 by means of M&A and self-construction. It has set up many branches there including manufacturing plants and design outsourcing companies, making a positive contribution to the development of local economy and community. During the communication, the representatives of CIMC expressed their expectations on German Government's support and assistance in terms of preferential policies in investment promotion, CIMC's participation in activities of interaction with German businesses operating in China, etc.

Dr. Jürgen Friedrich said he acquired new insights into CIMC during this visit. He also expressed that GTAI would offer necessary consultation and service to facilitate CIMC's long-term development in Germany. Meanwhile, DIHK would accept the application of CIMC and its affiliates for membership of DIHK to help CIMC expand its business partner network.

中集、新日铁住金、宝钢携手成立全球桩腿建造领先企业铁中宝

CIMC, NSSMC and Baosteel Establish JV Tiezhongbao – A Worldwide Leading Manufacturer of Offshore Platform

8 月 21 日，中集中投与日本新日铁住金公司、宝钢集团以及有关贸易商合资成立铁中宝钢铁加工贸易有限责任公司（简称“铁中宝”）。新公司的成立将提升中集来福士在海工装备关键配套件获取的便利性，有效降低对于国外进口的依赖和购买成本。中集集团总裁麦伯良、新日铁执行董事住金饭岛、上海宝钢国际总经理姚林龙共同出席了在深圳的签约仪式，并就如何提升海工装备行业的配套和创新能力，促进国内海工产业升级等方面交流了意见。

据悉，铁中宝公司注册地在烟台，按照规划铁中宝每年可提供 12 套自升式平台桩腿系统材料，新日铁住金公司是日本一家大型钢铁公司，由新日本制铁与住友金属工业合并组建，其粗钢产量为日本第一，并拥有领先的技术和制造能力。中集来福士总裁于亚说：“中集与日本新日铁住金、宝钢等领先企业携手成立“铁中宝”合资公司，各方将充分利用自身优势资源和专业能力，致力于提供海工平台桩腿钢材和齿条钢等厚板等关键配套件的加工，将铁中宝打造成全球桩腿和齿条钢等厚板加工的领先企业。”

August 21, 2013 – CIMC signed an agreement with Nippon Steel & Sumitomo Metal Corp. (“NSSMC”) and Baosteel together with other traders to establish a joint venture, Tiezhongbao Steel Processing and Trading Co., Ltd. (“Tiezhongbao”). This joint venture will give CIMC Raffles an easier access to key parts and components of offshore facilities so as to reduce its reliance on export and cut down purchase cost. Mai Boliang, President of CIMC, Atsushi Iijima, Executive Officer of NSSMC and Yao Linlong, General Manager of Shanghai Baosteel International attended the signing ceremony held in Shenzhen. The attendees held talks on, among others, the enhancement of industrial matching and innovation in offshore facilities and furthering of offshore facilities industrial upgrade at home and abroad.

It is reported that Tiezhongbao is registered in Yantai, with a designed capacity of producing 12 sets of jack-up rig legs every year. NSSMC is a large iron & steel company based in Japan, incorporated through merger of Nippon Steel Corporation Sumitomo and Metal Industries. NSSMC ranks No.1 in crude steel production in Japan and boasts of state-of-the-art technologies and first-class manufacturing capacity. “Tiezhongbao, as a joint venture established by CIMC, NSSMC and Baosteel, will make full use of advantageous resources and expertise of all partners to provide processing service of key parts and components of offshore facilities such as rig leg steels and rack steels. It will strive for a worldwide leading company in processing of rig legs, rack steels and other thick steel plates” said Yu Ya, President of CIMC Raffles.

中集启动“卓越领导者”之旅

Embarking on CIMC's "Extraordinary Leaders" Journey

10 月 25 日，“中集集团领导力发展 A2 计划暨第一次集中研讨”正式拉开序幕。A2 计划的目标是“用三年时间，为中集培养出一批符合中集文化和核心价值观要求、胜任未来业务挑战、能够引领中集事业持续健康发展的卓越业务领军人才和职能领导者”。

集团总裁麦伯良在致辞时强调，升级最终要落到人的身上，战略再好，组织架构设计得再清晰，如果没有与产业发展相匹配的人才，都会变成空中楼阁。他指出，“为了中集的基业长青，在未来 3 年内，中集需要通过 A2 计划，培养一批高瞻远瞩、具备战略思维的核心干部来引领组织健康发展。”

启动会现场特意邀请领导力发展领域的世界级专家 John H. Zenger 教授参加。82 岁的 Zenger 教授是全球领导力发展泰斗，也是 ZF 公司创始人，以及国际上备受尊敬和欢迎的演说家、顾问和高管教练。这是 Zenger 教授第一次来到中国，便给中集送上两份厚重的礼物——国内第一次授课机会及最新著作《卓越领导者》。6 小时紧凑的讲课与实践，Zenger 教授通过大量调研数据的分析，深刻阐述了卓越领导者的关键理念，并运用 360 测评帮助学员认知自我，寻找个人发展方向。

三年的 A2 计划，将分为“觉差距”、“拓视野”、“迎挑战”、“优团队”、“推变革”等 5 个阶段的学习过程。集团副总裁吴发沛把三年的 A2 计划比喻为中集的“追求卓越之旅”，并预言将有越来越多卓越的领导者从中脱颖而出。

October 25, 2013 – The "CIMC Leadership Training Program A2 & 1st Seminar" officially kicked off. The Training Program A2 aims to culture, within 3 years, extraordinary business and functional leaders who fit into the Group culture and core value, can face up to business challenges and will lead CIMC toward sustainable and sound development.

Mai Boliang, President of CIMC, made a speech on the kick-off meeting, stressing that talent is the key of industrial upgrade which may turn out to be a futile attempt without specialized talents, even in the presence of a great strategy and clearly designed organizational structures. He said, "By developing the Training Program A2, we plan to culture the Group's key executives showing great foresight and strategic thinking in the coming three years to lead CIMC toward sustainable and sound development."

Prof. John H. Zenger, a world-renowned expert in leadership development, was invited to the kick-off meeting. Apart from a global leading authority in leadership development, 82-year-old Prof. Zenger is also the founder of ZF Company, highly-recognized and well-respected speaker, consultant, and executive coacher. It was the Prof. Zenger's fist visit to China, bring with him two precious gifts, i.e. first lecture given in China and his latest work *the Extraordinary Leaders*. During the 6hr lecture, Prof. Zenger expounded the key concepts regarding extraordinary leaders based on a mass of research data. In addition, he instructed the trainees to develop self-cognition and identify personal development orientation by using the 360 assessment system.

The 3-year Training Program A2 is made up of five major modules including Discover Gap, Broaden Horizon, Address Challenges, Construct Team and Promote Reform. Wu Fapei, Vice President of CIMC, pointed out that the Training Program A2 was just like CIMC's journey in pursuit of excellence and would culture more and more extraordinary leaders in the near future.

中集荣获“中国全球最佳品牌”奖

CIMC Awarded "Best Global Brands"

7 月 17 日，由中国顶尖财经媒体《21 世纪经济报道》与中山大学中国品牌研究中心 (CBC)、美国密歇根大学 ROSS 商学院联合主办的“2013 年全球品牌峰会暨中国最佳全球品牌颁奖仪式”在深圳圆满落幕。集团总裁办公室主任郑源华出席本次活动。

峰会以“全球品牌映像，中国最佳实践”为主题，邀请在品牌知名度、美誉度、海外投资、人力资源、技术创新与知识创造等方面取得优异表现的中国企业。在下午的圆桌论坛环节，来自企业的品牌管理者与海外商学院的品牌专家共同探讨“中国品牌的海外形象塑造”。郑源华主任向在座嘉宾分享了中集集团的成长路径、海外品牌并购经验以及 30 年来所取得的成就，并就 B2B 企业的品牌建设与传播发表了独到的观点，赢得现场专家与业内人士的一致认可。

在稍后进行的颁奖仪式中，中集与中国银行、TCL、美的等八个企业荣获 2013 年“中国全球最佳品牌”奖。

2013 年全球品牌峰会评审委员会为中集集团颁奖的获奖理由：

中集集团，是全球领先的物流及能源行业装备及解决方案供应商。近年来，中集从“联姻”海外企业拓展集团产业版图，到荣登香港联交所主版；从发展“冷链”经济生态圈，到深潜大西洋“蓝海”经济圈，海洋工程的绽放赢得了世界的赞誉。中集集团紧抓全球经济变化的契机，加快产业结构调整和战略升级，将绿色创新科技融入研发和工程服务中。未来，我们期待中集将国人“中国制造走向世界”的发展梦想一一实现。

July 17, 2013 – The Global Brands Summit & China's Best Global Brands Award Ceremony 2013, co-sponsored by 21st Century Business Herald, China Brand Center (CBC) at Sun Yat-Sen University and Stephen M.Ross School of Business at University of Michigan wrapped up successfully in Shenzhen. Zheng Yuanhua, Director of President Office attended the ceremony.

The summit themed "Global Brand Image, China's Best Practice" was attended by Chinese enterprises outperformed others in brand awareness, reputation, overseas investment, human resources, technical innovation, knowledge creation, etc. In the panel discussion held in the afternoon, brand managers from Chinese enterprises exchanged their views on Chinese brands' image-building abroad with brand experts from schools of business at foreign universities. Mr. Zheng Yuanhua introduced CIMC's history, experience in acquisition of foreign brands and the achievements made in the past 30 years. In addition, he also expounded B2B businesses' brand creation and communication from unique points of view, which were widely acknowledged by experts and professionals present in the summit.

In the award ceremony following the summit, CIMC was awarded "Best Global Brands", together with another 7 enterprises including BOC, TCL and Midea.

Reasons for awarding CIMC as "Best Global Brands" in the Global Brands Summit 2013:

CIMC is a world leading supplier of logistics and energy equipment and solutions. In recent years, CIMC made spectacular achievements including establishing partnership with foreign companies for business expansion, listing on the Main Board of SEHK, developing "cold chain" economic-ecologic circle and diving deep in the Atlantic "Blue Ocean" economic circle. CIMC has managed to speed up industrial restructuring and strategic upgrading at the turning point of changes in global economy, introducing green innovative technologies to R&D and engineering services. We expect CIMC to fulfill our Chinese people's dream of "Made in China Going Global".

2013财富中国500强：中集集团携安瑞科再入围

CIMC and Enric Listed among 2013 Fortune China Top 500 Companies

7月16日，《财富》中文版正式发布2013年中国500强排行榜，今年，中国500强总体市盈率持续下降；500家上榜公司的总收入为26.18万亿元，总利润为2.17万亿元，总市值为24.86万亿元，分别比上年增加了约10%、3%和9%。

中集集团排名95位

2012年，中国国际海运集装箱（集团）股份有限公司以543.34亿元营业收入，19.39亿元利润，排名95名仍进入中国100强之列，但受全球经济低迷、复苏缓慢及航运运力相对过剩的影响，集团整体营业收入表现下滑，较2012年的73位排名下降22位；中集集团多元化发展战略已初现成效。集装箱、车辆、能源、化工及液态食品装备是收入的主要来源，分别占本集团营业收入或营业利润10%以上；集装箱以外的业务收入已超过营业收入的50%。

中集安瑞科排名450位

中集集团旗下九大板块业务之一的中集安瑞科控股有限公司以80.83亿元营业收入，7.66亿元利润，排名450位，较2012年的468位排名上升18位；2012年，尽管主要经济体持续疲弱，但受益于能源领域下游需求特别是天然气气源供应及消耗的快速增长，国内天然气储运装备及工程、低温装备、罐式集装箱需求旺盛，中集安瑞科依然保持较好增长趋势。目前拥有位于中国以及欧洲等地18个制造基地和研发中心，形成了中欧互动、分布合理、互为支持的产业格局。安瑞科业务基地分布在中国廊坊、石家庄、蚌埠、荆门、北京、南通、张家港、欧洲荷兰、比利时、丹麦。其中，南通中集罐式储运设备制造有限公司是全球最大的罐式集装箱制造商。

July 16, 2013 – Fortune magazine Chinese edition officially published the ranking list of Top 500 Chinese companies. This year, PE ratio of the companies listed in Fortune China Top 500 continues to drop, with total turnover of RMB26.18 trillion, total profit of RMB2.17 trillion, and total market value of RMB24.86 trillion, up by 10%, 3% and 9% respectively compared with 2012.

CIMC Ranking No.95

With an annual turnover of RMB54.334 billion and annual profit of RMB1.939 billion, CIMC ranked No.95 on the Top 100 List this year, dropping by 22 places compared with 2012 due to global economic downturn, sluggish recovery and oversupply of shipping capacity. The Group's diversification strategies begin to bear fruit. Container, vehicle, energy, chemical and liquid food equipment are the primary sources of revenue, each accounting for 10% or above of the Group's annual turnover or profit. The operating income contributed by the units other than Container Segment accounts for more than 50% of the Group's annual turnover.

CIMC Enric Ranking No.450

With RMB8.083 billion operating revenue and RMB766 million operating profit, CIMC Enric Holding (Shenzhen) Limited, one of CIMC's major nine business units, ranked No.450 on the list, rising by 18 places compared with 2012 (ranking No.468). In 2012, despite of continued weakness in major economies, thanks to rapid climbing of demand in downstream energy field, especially natural gas supply and consumption, demand of domestic natural gas storage tanks and projects, low temperature tanks and tank container were vigorous and CIMC ENRIC still remained preferable growth trend. At present, the company possesses 18 manufacture bases and R&D centers in China and in Europe, and an industry pattern featured by interaction of China and Europe, reasonable distribution and mutual support has come into being. Business bases of the company have been scattered in Langfang China, Shijiazhuang, Bengbu, Jingmen, Beijing, Nantong, Zhangjiagang, Holland, Belgium and Denmark, among which, Nantong CIMC ENRIC Storage Tank Manufacture Co., Ltd. is the largest manufacturer of tank container in the world.

中集模块化建筑获联合国青睐

CIMC Modular Buildings Deeply Favored by U.N.

中集集团成员企业扬州通利原本是国内第一家做标准冷箱的企业，2004年，企业实施产品战略转型升级，开始进军特种箱业务。在与客户的交流中，扬州通利敏锐地意识到集装箱多式联运的特性，正在受到联合国维和部队及各国军方的普遍青睐与关注，集装箱产品在军方市场中存在着巨大商机。经历了几年的探索，2009年集团正式批准，成立扬州泰利特种装备有限公司，专注于中集军品市场的挖掘与开拓。与此同时，通利也积极协同支持泰利各项军品开发与产品服务。

自2008年开始，通利公司已开始向联合国各类组织提供超过百台的房屋箱、批量特种冷藏箱和批量特种设备箱。2009年后，扬州泰利公司陆续通过了联合国采购司、联合国计划署、联合国项目办公室和联合国儿童基金会等12个UN各类组织的考察，凭借良好的质量和优质的服务记录，顺利通过了联合国组织的合格供应商的资质审查。

2012年6月，联合国秘书长潘基文访华，对中国国防部某维和中心进行了访问。期间潘基文对由中集承建的军用模块化建筑给予了很高的评价，并提出我国派兵到非洲马里的维和营地要使用该集装箱房，并且在其他维和基地都要陆续更替成该种集装箱房。此后，泰利迅速和非洲马里维和部队达成项目合作意向。对方首批房屋箱需求就超过400多台。产品功能种类丰富多样，主要有办公、住宿、餐饮、娱乐、医疗等，该批产品极大地提高了维和官兵的生活和工作质量。

近年来，泰利、通利又陆续为美国、英国、德国、俄罗斯等国家的军队提供了大量的定制化、模块化建筑产品。扬州泰利目前已经形成了系列化的军品设计、生产和检测能力，产品涵盖了军用医疗、仓储、办公、生活、应急救灾和应急指挥的所有品种。

（2010年智利大地震后，通利为联合国智利批量提供的20’应急救灾营房，其中包含办公室、卫生间和仓储功能的房屋等。）

(the 2010 Chile earthquake, Tom Lee to the United Nations Chile batch to provide 20’ emergency relief camp, including office, bathrooms and storage function of the housing.)

As the subsidiary of CIMC, Yangzhou Tonglee Reefer Container Co., Ltd. (TLC) has been the first manufacturer of standard cold container in China. In 2004, TLC made a strategic transition of products upgrading and began to engage in special container business. When communicating with customers, TLC had a keen perception that container multimodal transport was receiving widespread attention from the UN peacekeeping troops and foreign military authorities and containers would be in huge demand in military market. After years of trial and error, Yangzhou Taili Special Equipment Co., Ltd. (Taili) was founded in 2009 with the approval of CIMC, focusing on establishing CIMIC's business presence in military product market. Meanwhile, TLC provided active support for Taili in military product R&D.

Since 2008, TLC has provided various UN organizations with more than one hundred house containers, batches of special refrigerated containers and special equipment containers. After 2009, Taili's good quality and outstanding service records allowed it to win recognition from 12 UN organizations, such as UNPD, UNDP, UNOPS and UNICEF, making itself successfully on the list of UN's approved suppliers.

In June 2012, Secretary General of the United Nations Ban Ki-moon visited a peacekeeping center under China's Ministry of National Defense. He spoke highly of military modular buildings and commented such kind of house container would be adopted for China's peacekeeping base in Mali and other bases in the near future. Shortly afterwards, Taili concluded a letter of intent for cooperation with Malian peacekeeping forces, and the latter placed the first order of more than 400 house containers. As the house container is versatile in various ways, allowing people to work, live, eat, play and receive medical care in it, it has greatly improved living and working condition of peacekeepers.

In recent years, Taili and TLC have provided plenty of customized and modular buildings for troops of the US, the UK, Germany and Russia. Presently, Taili has developed the capability in serialized military product design, production and testing and its products cover military medicare, warehouse, office work, living, emergency relief and emergency command.

中集模块化建筑亮相龙岗国际低碳城

CIMC Modular Buildings Debut in Longgang International Low-carbon City

10 月 30 日，由中集集团成员企业深圳中集模块化房屋有限公司负责承建的龙岗国际低碳城会展项目（集装箱建筑部分）正式投入使用。

该项目采用 270 个既有集装箱改造而成，面积达 4000 平方米，工期为 3 个月。整个项目秉承“低碳环保”的主题，打造低碳环保的可持续零污染集装箱建筑群，成为中国低碳发展国际交流合作的载体和窗口、宜居宜业的标杆性低碳绿色综合示范区。

该项目设计不拘泥于传统现代主义建筑的逻辑思维，而是探索创新造型手法，讲究人文关怀，一改以往集装箱建筑机械冰冷的特点，将中国传统庭院中的“四合院”建筑特点融入到设计中，打造集传统与现代、感性与理性相结合的中式集装箱建筑群落。独步在奇趣迭起的游廊中，遥望精致的雕花玻璃，观赏着典雅古朴的庭院布置，让人仿佛置身于中国古典园林中，风雅备至，充满浓郁的文化气息，犹如一座中国传统文化的殿堂，让您惊讶：原来集装箱建筑也可以这么的艺术！

另外项目还积极应用各项环保技术及材料。施工过程采用集装箱模块化绿色建筑技术，与传统建筑相比，大量缩短施工时间及能耗，其中节约施工时间 60%、节约建筑工地劳动力 70%；本项目除了建筑方式的转变外，还大量运用如中水循环系统、空气自然对流及自然采光等节能环保技术，中空夹花玻璃、保温隔热材料等节能环保材料，很好地完成了节地、节能、节水、节材、节时的建筑目标。本项目不但降低了施工能耗，提高了建造速度，而且大大降低了建筑的运营能耗、成本和碳排放量，高效高质地满足了客户的需求，获得市场的广泛好评和认可。使得该建筑成为目前深圳最节能环保、生态低碳的绿色建筑之一，在世界上也属于领先行列。

October 30, 2013 – The Exhibition Center (container building) of Longgang International Low-carbon City contracted by Shenzhen CIMC Modular Housing Co., Ltd., CIMC member company, was officially put into use.

Covering an area of 4,000m^2, the Exhibition Center was built within 3 months through reconstruction of 270 existing containers. The project, manifesting the theme of “low carbon & environmental protection” in every detail, is a complex of green container architectures featured by sustainable development, low carbon and zero pollution. It is also a platform for international exchanges and cooperation in development of China’s low-carbon industry and a benchmark low-carbon and green demonstration zone suitable for living and working.

Instead of designing the project solely based on the logical thinking of traditional architectures of modernism, the architects attempted to explore innovative construction techniques while bearing the human-oriented concept in mind. The cold and mechanical features of common containers were replaced by the architectural elements of Chinese traditional quadrangle dwellings, giving rise to a Chinese-style container architecture complex representing a mixture of tradition & modernism and sensibility & rationality. Walking on the gallery full of peculiarities and enjoying the beauty of dedicated cut glass and courtyard decorations, you may feel as if you’ve stepped into a Chinese classical garden full of grace and cultural ambience. Surrounded by such a palace characterized by Chinese traditional cultures, you will be surprised at how artistic these containers can be!

Furthermore, various eco-friendly technologies and materials were applied in the project. For example, the green modular container architectural technology was employed in construction, consuming much less time and energy than traditional architectures. Specifically, the time and labor of construction were cut down by 60% and 70% respectively. Apart from the reform in construction process, the contractor utilized a series of energy efficient and eco-friendly technologies (e.g. reclaimed water system, natural convection and natural lighting) and materials (e.g. hollow floral patterned glass and thermal insulation material) in the project with the intend to realize the goal of lowering consumptions of land, energy, water, material and time. Because of lower energy consumption, shortened construction period and lower operating energy consumption, cost and carbon emission, the project caters well to the customers’ demands and is widely accepted by the market. All of these have made the project one of the most energy efficient and eco-friendly low-carbon green buildings in Shenzhen and also a leading architecture in the world.

中集助力中国航天科技集团提升火箭运输效率

CIMC Boosts CASC's Rocket Transport Efficiency

在神舟十号任务完成后，中国载人航天工程将全面进入空间实验室和空间站研制阶段，预计未来两年，我国将先后发射天宫二号和货运飞船，位于海南的第四个发射场也将在今后两年启用，具备发射长征五号和长征七号运载火箭的能力。这将是我国第四个航天发射场，也是唯一的一个临海发射场。

为了顺利完成长征五号和长征七号运载火箭的海运运输任务，中集集团成员企业南通中集特种运输设备制造有限公司通过了中国航天科技集团公司的认证和审核，承担长征五号和长征七号运载火箭的系列特种集装箱的研发和生产制作任务。

7 月 31 日，中国航天科技集团组织 25 人的专家团，对南通中集生产的长征五号运载火箭系列特种集装箱进行了实物验收，同时对设计资料、生产工艺、质量记录等进行了详细的验收评审，对中集的产品质量和按期交货给予了高度评价。8 月 16 日和 19 日，该系列火箭运输专用箱分为两船完成装船出运。

长征五号火箭特种箱的研制成功，使之成为目前世界上最大的集装箱，很好地解决了火箭箭体通过集装箱进行海运的主要难题，更好地实现将火箭箭体通过“门到门”运输，并成为火箭箭体运输的一种新型运输方式，体现出集装箱运输的优势——多式联运、高效率、高效益，保证货物运输安全。中国航天科技集团总工程师孙为钢对中集产品这样评价道：“产品质量非常好，履行合同交货期是航天系统中最好的”。

After successful launching of Shenzhou 10, China would embrace the space lab and station development phase of manned space flight project. It is estimated that in the next 2 years, China will successively launch Tiangong-2 and cargo spacecraft and possess the capacity of launching Long March 5 and Long March 7 launch rockets. Meanwhile, the launching site in Hainan will also be put into operation within 2 years. It is the fourth launching site of China and also the single coastal launching site.

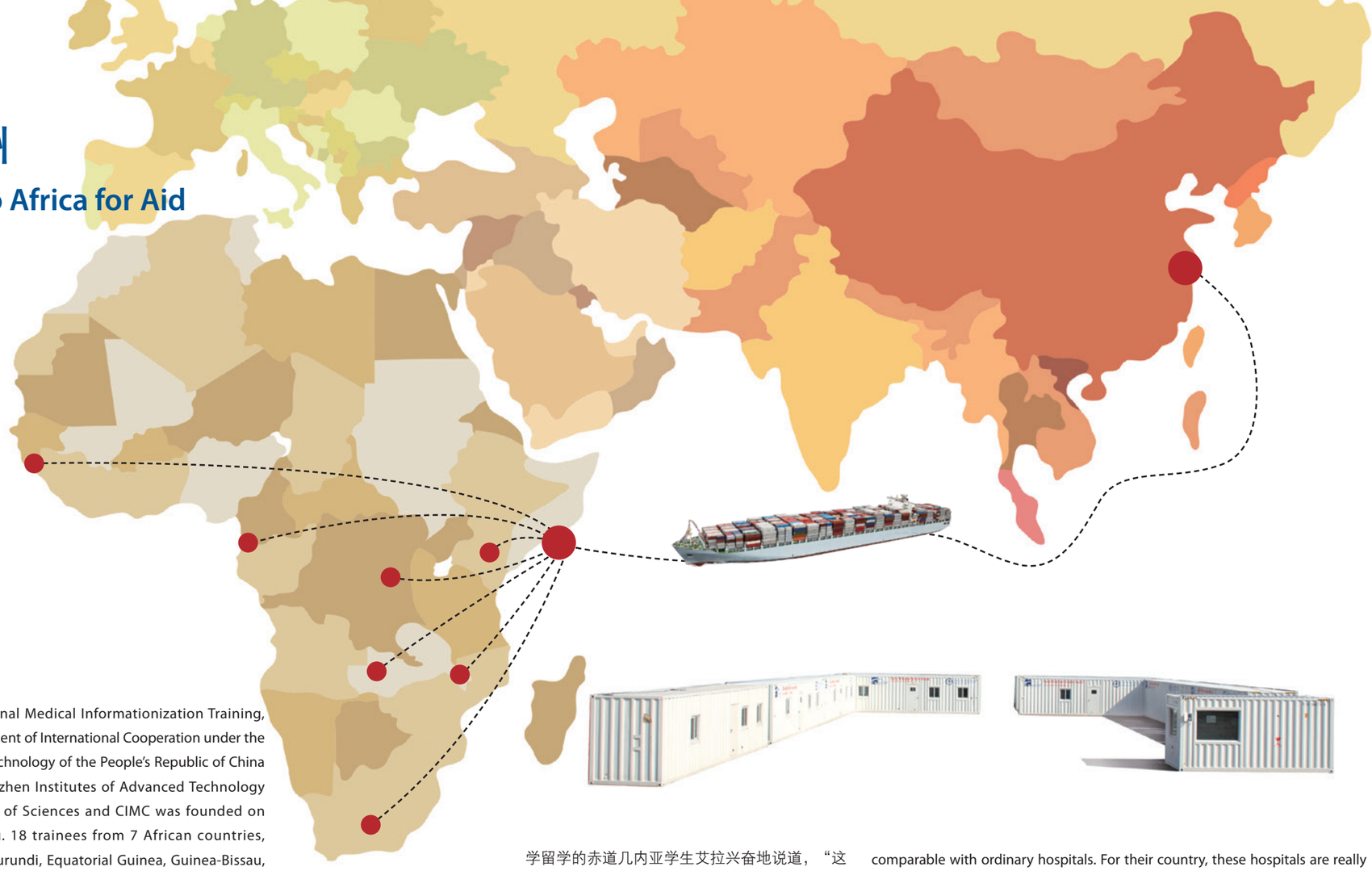
In order to successfully fulfill the maritime transportation tasks of Long March 5 and Long March 7 launch rockets, Nantong CIMC-Special Transportation Equipment Manufacture Co., Ltd. (“Nantong CIMC”), a member enterprise of CIMC undertakes R&D and manufacture of special containers for Long March 5 and Long March 7 launch rockets after passing the certification and approval by China Aerospace Science and Technology Corporation.

On July 31, the expert group consisting of 25 members designated by China Aerospace Science and Technology Corporation carried out physical acceptance inspection for the special containers produced by Nantong CIMC for Long March 5 launch rocket, followed by an acceptance review for the design materials, manufacturing techniques and quality records. After inspection, the expert group gave a high appraisal of high quality and punctual delivery of CIMC. On August 16 and 19, the special containers for the rockets were loaded in two ships for delivery.

After successful development, the special container for Long March 5 launch rocket becomes the largest container in the world. It can solve the major problem of maritime transportation of rocket body in containers and well realize “door-to-door” transportation of rocket body. As a new way for transportation of rocket body, it gives full play to the advantages of container transportation-multi-modal transportation, high efficiency and good benefits and guarantees the safety of cargo transportation. Sun Weigang, the Chief Engineer of China Aerospace Science and Technology Corporation, appraises CIMC as follows, “CIMC produces top-quality products and does best in punctual delivery.”

中集“集装箱医院”驰援非洲

CIMC Container Hospitals Delivered to Africa for Aid



10 月 25 日，由中国科学技术部国际合作司主办、中国科学院深圳先进院和中集集团承办的“健康非洲”医疗信息化国际培训在扬州开班。来自南非、布隆迪、赤道几内亚、几内亚比绍、肯尼亚、马拉维、赞比亚等 7 个非洲国家的 18 名学员参加了启动仪式，并将在扬州接受“箱房医院”的使用培训。

在这次科技部援非计划中，中科院深圳先进院和中集扬州润扬联合研制了“箱房医院”，该设计具有易搬迁、可循环利用及海陆联运快速投放等功能特征，将有效应用于于非洲基层医疗建设。首批产品原计划今年 4–5 月发往非洲，但由于雅安地震紧急转运发往灾区。新一批模块化箱房医院预计年底可以发往南非、纳米比亚、喀麦隆、安哥拉等国家，示范应用于这些国家的基层医疗建设当中。在中国医科大学留学的赤道几内亚学生艾拉兴奋地说道，“这些‘集装箱医院’功能齐全，可以与医院媲美，如果援助他们国家，对于当地老百姓来说，无疑是雪中送炭。”

“箱房医院”是目前国内唯一取得专利生产的集装箱医院。这批“箱房医院”医疗水平介于乡镇卫生院与县级医院之间，可以覆盖两万人左右的区域，未来将研发更大规模的集装箱医院，有望将“三甲医院”放在集装箱里面。除了这个“箱房医院”外，还有 4 个“箱房诊所”一同援助非洲，“箱房诊所”医疗水平相当于村级诊所和社区卫生服务中心的水平，只有一节集装箱，方便运输。

南非医疗博士 Morelto molefi 接受采访时表示：这些医疗集装箱对南非医疗将产生很大的作用。未来，将会继续与中集扬润、中科院深圳先进院合作，用更高医疗水平帮助南非人民。

“Health Africa” International Medical Informationization Training, sponsored by the Department of International Cooperation under the Ministry of Science and Technology of the People's Republic of China and undertaken by Shenzhen Institutes of Advanced Technology under Chinese Academy of Sciences and CIMC was founded on October 25 in Yangzhou. 18 trainees from 7 African countries, including South Africa, Burundi, Equatorial Guinea, Guinea-Bissau, Kenya, Malawi and Zambia attended the Launching Ceremony and would accept the training on use of container hospital.

As a part of the Plan of Aids for Africa of the Ministry of Science and Technology, Shenzhen Institutes of Advanced Technology under Chinese Academy of Sciences cooperates with Yangzhou CIMC Runyang to develop “container hospital”. This type of hospital is characterized by mobility, recyclability, sea-land multi-modal transportation and fast building and will be effectively used for establishment of basic-level medical system in Africa. Originally, the first products were supposed to be delivered to Africa during April and May. But due to Ya'an earthquake, they were sent to the disaster area for emergency aid. It is planned that new modular container hospitals can be delivered to South Africa, Namibia, Cameroon and Angola at the end of this year to be demonstratively applied in establishment of basic-level medical system in these countries. Ira, a student of Equatorial Guinea studying in China Medical University, excitedly said that these fully-functional container hospitals are comparable with ordinary hospitals. For their country, these hospitals are really timely help.

The container hospital developed by Shenzhen Institutes of Advanced Technology and Yangzhou CIMC Runyang is the only patented “container” hospital in China. This type of container hospital can cover an area with about 20,000 persons and its medical level falls between that of township health center and county-level hospital. In the future, larger container hospital will be developed, even “Third-level Grade-A” container hospital. In addition to “container” hospitals, four “container” clinics are also provided to Africa. The medical level of “container clinic” is equal to that of village clinic and community health service center. Composed of only 1 container, container clinics can be easily transported.

Morelto molefi, a doctor of medicine of South Africa said in an interview that these medical containers will play an important role in the medical system of South Africa. In the future, CIMC Runyang and Shenzhen Institutes of Advanced Technology under Chinese Academy of Sciences will make closer cooperation to help the people of South Africa with advanced medical technology.

李贵平出席2013年“选择美国”投资峰会

Li Guiping Attends SelectUSA 2013 Investment Summit

中集车辆集团总经理李贵平受中集集团总裁麦伯良的委托，于 2013 年 10 月 31 日至 11 月 1 日出席了在美国华盛顿特区举办的“选择美国”— 2013 投资峰会。此次峰会是由美国商务部“选择美国”投资促进办公室举办，旨在邀请全球对美国投资有兴趣的知名跨国企业以及美国各州经济和发展部门官员参加。当晚的峰会由美国商务部长佩妮主持。美国总统奥巴马、国务卿克里和财长雅克布 • 卢等出席了峰会，并在会上发表了精彩演讲。一些世界知名企业如英国劳斯莱斯公司、日本三井商社、韩国三星物产、巴西 Brasken 公司、中国新奥燃气等受邀在峰会上分享了他们在美国投资的最佳实践经验。出席本次峰会的嘉宾共有 1200 多人。

“选择美国”是美国总统奥巴马在 2011 年下令在商务部设立的一个投资促进办公室，其目的主要是维护美国作为世界跨国公司投资热点和全球贸易中心的地位，为对美投资者提供一站式的商务方案、投资法律和支持等服务。

中集集团最早于 2004 年收购破产的 HPA Monon 公司的土地和厂房，并组建了 Vanguard National Trailer Inc.，由此拉开了投资美国的序幕。

Entrusted by Mai Boliang (President of CIMC), Li Guiping, Managing Director of CIMC Vehicles Group Co., Ltd. attended “SelectUSA 2013 Investment Summit” in Washington DC of the USA during October 31 to November 1, 2013. The Summit was held by SelectUSA Office of the United States Department of Commerce and aimed at inviting well-known multi-national enterprises interested in investment in the USA and the officers of the economic development department of each state. The Summit was presided over by Penny Pritzker, Commerce Secretary. Barack Obama, President of the USA, John Kerry, U.S. Secretary of State and Jacob Lew, U.S. Secretary of the Treasury attended the Summit and gave excellent speeches. In addition, some world-renowned enterprises, such as Rolls-Royce (the UK), Mitsui (Japan), Samsung (South Korea), Brasken (Brazil) and ENN (China) were invited to share their best investment experience in the USA at the Summit. Totally, over 1,200 persons attended the Summit.

SelectUSA is an investment promotion office established in 2011 under the order of Obama. Its purpose is to maintain the position of the USA as an investment hot spot of multi-national enterprises and a global trade center and to provide one-stop services for investors in the USA, including commercial scheme, legal support of investment, etc.

CIMC firstly purchased the lands and plants of bankrupt HPA Monon in 2004 and then established Vanguard National Trailer Inc., which is the start of CIMC’s investment in the USA.

联合卡车LNG车型助推客户迈向绿色环保之路

LNG C&C Trucks Pushing Customers toward Path of Environmental Protection

今年上半年，全国污染最严重的 10 个城市中，河北省每月都占 5–7 个，为此河北省专门出台了大气污染专项治理十条措施来整治日益突出的污染问题。机动车的发展也一步步向节能环保需求靠拢，这是河北金项联商贸有限公司总经理侯红梅今年 5 月决定大批量购买联合卡车 LNG 重卡的一个重要原因。“以 LNG（液化天然气）代替柴油，大大降低了重卡的尾气排放，作为经销商，我们要率先承担起环保重任，LNG 重卡也是我们今后推广的重点。”

河北军存预拌混凝土有限公司 5 月份购买了 300 多辆联合卡车 LNG 搅拌车，这也是他们首次使用 LNG 重卡。“之所以大批量的购买联合卡车 LNG 搅拌车，就是看中了它的环保优势”，河北军存的负责人费利卫说，“由于公司运输量大，柴油车尾气排放造成的污染比较严重，换成 LNG 搅拌车以后，尾气味道小了很多，我们打算长期使用。”

对于 LNG 重卡来说，除了节能环保的特点，气耗低、马力足是客户最看重的。“在试用过程中我们发现，有些品牌的 LNG 重卡虽然气耗小，但是动力性不足，爬坡时候相当费劲。有些品牌向我们宣传气耗很低，但是在实际试用过程中，我们发现气耗跟柴油相比相差不大，并不节省，甚至在试用过程中就出现问题，在今后的长远使用，质量更难保证。”通过 4 个多月的对比试用，侯红梅发现联合卡车在所有试用品牌中气耗最低。

另据专家介绍，发生雾霾天气的内因正是日趋严重的污染。节能环保已经成为包括机动车在内的众行业发展必然趋势，联合卡车 LNG 重卡正是为了适应环保需求而推出市场，目前从市场反馈来看，LNG 重卡的未来发展将有无限可能。

In the first half of this year, 5-7 cities among the 10 most polluted cities nationwide are in Hebei Province. To this end, the government of Hebei Province issued 10 Measures for Treatment of Air Pollution to solve the increasingly serious problem of pollution. Currently, the development of motor vehicles gradually directs at meeting the requirements of energy saving and environmental protection. This is an important reason why Hou Hongmei, Managing Director of Hebei Jinxianglian Commerce and Trade Co., Ltd. decided to purchase massive heavy trucks of C&C Trucks in May this year. “Replacing diesel with LNG can greatly reduce the exhaust emission of heavy trucks. As a dealer, we should play an important role in environmental protection. Therefore, LNG heavy trucks will become the focus of promotion”, said Hou Hongmei.

In May, Hebei Juncun Premixed Concrete Co., Ltd. purchased more than 300 LNG mixer trucks from C&C Trucks. This is the first time for it to use LNG heavy truck. “The reason why we purchase massive LNG mixer trucks from C&C Trucks is that the trucks enjoy outstanding advantages in environmental protection”, said the principal of Juncun, “Due to large freight volume, the pollution caused by exhaust gas emission of diesel vehicles is serious. However, after LNG mixer trucks are put into use, the exhaust gas is greatly reduced. Therefore, we decide to use LNG mixer trucks in the future.”

In addition to energy saving and environmental protection, LNG heavy truck is also characterized by low air consumption and sufficient horsepower, which are important for customers. “In trial, we find that some LNG heavy trucks have insufficient horsepower, in spite of low air consumption. Some trucks are exaggerated in promotion in terms of air consumption. In actual operation, their air consumption does not greatly differ from that of diesel vehicles, thus costs cannot be reduced. Some trucks are even found to have defect in operation. It is indicated that the quality of trucks of many brands cannot be assured in long-term operation.” Hou Hongmei discovers that the trucks of C&C Trucks have the lowest air consumption after trial and comparison for more than four months.

According to experts, the worsening pollution is exactly the cause for the dense smog. Energy conservation and environmental protection have become the irresistible trend for the development of numerous industries covering motor vehicles. LNG heavy truck of C&C Trucks is launched to meet the requirements for environmental protection. In the light of current market feedbacks, the future development of LNG heavy truck contains infinite possibility.

联合卡车获中国卡车节油大赛冠军

C&C Trucks Awarded Championship of China's Truck Fuel Saving Competition

10 月 23 日，第六届中国国际卡车节油大赛颁奖典礼在北京举行。首次组队参赛的联合卡车，在 420 马力 6*4 牵引车组比赛中脱颖而出，凭借其深厚的技术底蕴荣获节油冠军奖；同时，在 LNG 车型比拼中，联合卡车 LNG 车型依靠其在整体结构上的巨大优势，一举将结构优化奖收入囊中。

经济性作为用户买车时最关注的因素之一，不仅影响着使用收益还刺激着企业积极改进。而如何将车辆运营降到最低水平也一直是联合卡车追寻的目标。联合卡车集成重卡行业最优基因，其经济性完美诠释了高端重卡的内涵。

On October 23, the 6th China Annual International Truck Energy Conservation Competition Awards Ceremony was held in Beijing. C&C Trucks which participated in the competition for the first time won the championship in the 420-horsepower 6*4 tractor group by virtue of outstanding technical strength. Meanwhile, in LNG truck competition, the LNG trucks of C&C Trucks won the Optimum Structure Award with great advantages in overall structure.

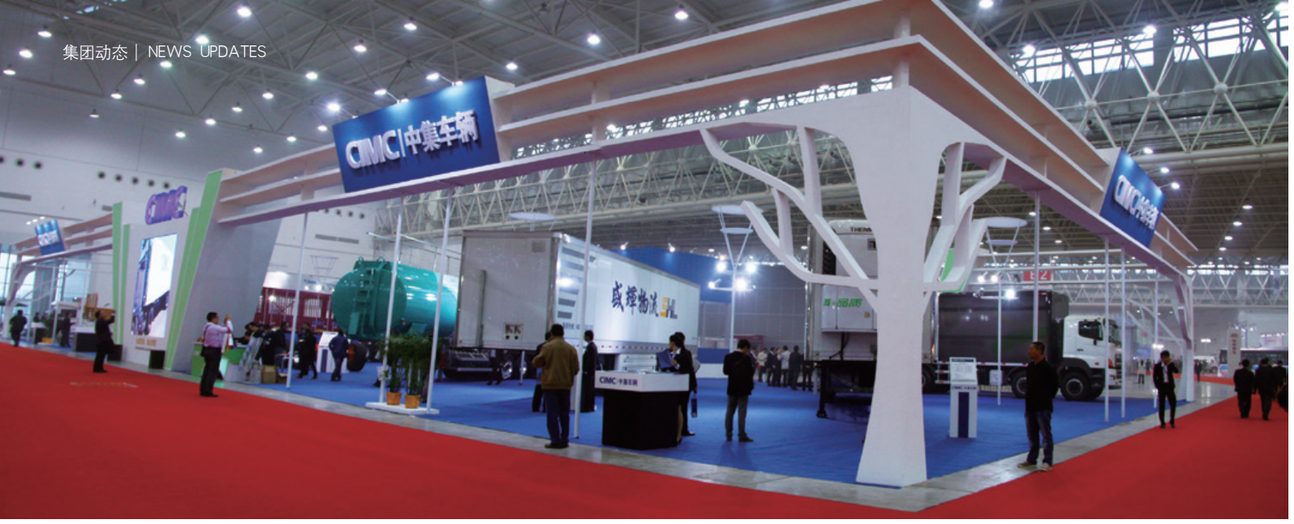
Economic efficiency is one of the key factors which affect the selection of customers in buying vehicles. It can not only influence the benefits of use, but also stimulate improvement of enterprises. Therefore, how to minimize operation of vehicles is a long-term objective of C&C Trucks. C&C Trucks integrates all advantages of heavy truck industry and the economic efficiency of the trucks of C&C Truck expresses the essence of high-level heavy trucks.

“这车确实不错，往年的比赛车辆一般到时速 80 公里的速度点，百公里耗油量就达到 30 多升，联合卡车还不到 30 升。当然，最终的油耗水平要综合风力、温度、湿度等多种因素测算出来，但联合卡车应该也是比较节油的，而且它的舒适度也不错。”测试完毕后从联合卡车上下来的测试工程师评价说。

参赛的联合卡车匹配联合动力为其量身定制的 K12 发动机，首次在发动机行业运用可靠性增长技术，突破了中国制造的可靠性弱势，大幅度提高了发动机使用寿命；整车与发动机的完美匹配，使得该车在节油性能方面有着得天独厚的优势；其次与发动机相匹配的是法士特 12JSD240TA，其最大输入扭矩 2400N.m，后桥采用 485 桥，可选速比 3.7 或 3.364，使得联合卡车整个传动系统动力链更加高效、强劲；并且全车在不降低使用可靠性的基础上进行了轻量化改造，完美诠释了节油重卡的“内涵”，为国内用户量身打造了一款节油冠军车型。

"This vehicle is really good. Other participating vehicles in the previous years generally consume over 30L oil for about 100km at the hourly speed of 80km while the vehicle of C&C Trucks consumes less than 30L. Of course, the final data of oil consumption should be calculated based upon multiple factors, such as comprehensive wind power, temperature and humidity. But I suppose that the vehicle of C&C Trucks may have lower oil consumption. Moreover, it is quite comfortable," said the test engineer after testing vehicles of C&C Trucks.

The vehicle of C&C Trucks participating in the competition is equipped with K12 engine specially designed by Y&C Engine. K12 engine is produced with the reliability growth technology which is applied for the first time in engine industry, thus overcoming the weakness of Chinese engines and greatly prolonging the service life of the engine. Perfect matching of the vehicle and the engine brings unique advantage to the vehicle in terms of energy saving. In addition, the gearbox adopted in the vehicle is 12JSD240TA gearbox with the maxim input torque of 2,400N.m, 485 rear axle and optional speed ratio of 3.7 or 3.364. It is well matched with K12 engine, which makes the power transmission chain of the drive system stronger and more efficient. Moreover, the vehicle is transformed to be lightweight without any loss of reliability. It reflects the essence of energy-saving heavy truck. Above all, the truck of C&C Trucks is an energy-saving champion truck for domestic customers.



中集车辆参加2013年中国国际商用车展

CIMC Vehicles Attends China International Commercial Vehicles Expo 2013

中国国际商用车展览会是中国唯一的国家级商用车展，展会于 10 月 30 日 – 11 月 2 日在武汉国际博览中心举行。中集车辆集团在本次展会中共展出了 8 款车型和 1 个零部件展架，展会期间还邀请部分客户参加了多个论坛和研讨会。

展会上，首次登场的由中集车辆研究院主导研发设计的物流厢式概念车，吸引了大量客户驻足观看。炫酷黑色碳纤维材质的圆角厢体设计，集低碳环保、美观、高强度、自重轻、低风阻系数等优良品质于一身；先进、人性化的车厢内固货装置和货物分层系统设计，以及首创对开式液压尾板设计等，每一个细节都体现出中集车辆研发团队的智慧与创新实力。

应用欧洲第三代半挂车技术制造的铝合金液体运输半挂车、新型栏板半挂车、超轻仓栅运输半挂车、PSI 轮胎自动充气系统、采用欧洲技术设计的中集空气悬挂系统以及被盛辉物流、天津品优购买的厢式半挂车系列产品都在本次车展上悉数亮相。通过车展平台进行产品推介，中集车辆向客户及同行深入展示了中集车辆最新的研发成果与服务，同时也对我们及时了解客户需求和行业发展，进一步推动紧贴市场需求的车辆创新研发，提供更高性能产品与高质量的服务具有重要意义。

China International Commercial Vehicles Expo, the only State-class commercial vehicles expo in China, was held in October 30 – December 2, 2013 in Wuhan Int'l Expo Center. CIMC Vehicles showcased 8 vehicles of different models in addition to 1 parts display rack. During the Expo, a series of forums and seminars were held by the organizer and attended by selected clients.

The concept van vehicle for logistics use developed and designed by CIMC Vehicle Research Institute made its debut in the Expo, attracting the eyes of many customers. The cool black rounded van body made of carbon exhibits an integration of superior features such as low carbon, artistic appearance, high strength, light weight and low coefficient of drag. The wisdom and innovation capacity of the R&D team of CIMC Vehicle Research Institute are revealed in every detail of the vehicle, such as the customized and advanced cargo securing and hatching devices and the innovative open-type hydraulic tailgate.

Besides the concept van vehicle mentioned above, other products of CIMC Vehicles were also put on display in the Expo, including the aluminium alloy liquid transport semitrailer, novel plate transport semitrailer, ultra-light stake transport semitrailer and PSI tire auto-inflation system produced with European 3rd Generation Semitrailer Manufacturing Process, CIMC airmatic system designed with European technology and van semitrailers purchased by Shenghui Logistics and Tianjin Peyond Logistics. Through product introductions in the Expo, CIMC Vehicles presented to customers and peers the latest R&D achievements in CIMC vehicles and associated services. Meanwhile, the Expo gave CIMC a chance to dig into customers' demands and industry trends, which is beneficial to promoting vehicle innovation and R&D fitting into market demand and offering high performance products and first-rate services.

中集安瑞科助力中国首条LNG加气趸船成功试运行

CIMC Enric Boosts Successful Commissioning of China's First LNG Replenishing Ship

9 月 26 日，中国首条投入运营的 LNG 加气趸船在南京八卦洲成功试运行，这条名为“海港星 01 号”的加气趸船设施主体设备之一——两台 250m^3 的加气趸船用低温储罐由中集安瑞科旗下的圣达因（张家港中集圣达因低温装备有限公司，以下简称中集圣达因）制造。

2012 年 10 月，在国家交通运输部“有序推进 LNG 动力船舶试点改造，推进内河 LNG 动力船舶应用示范工程该项目”政策的引导下，中集圣达因作为国内重要的 LNG 设备提供商，承接了江苏港华燃气八卦洲 LNG 加气趸船项目两台 250m^{3}LNG 船用罐的建造任务。当年 12 月，中集圣达因取得 CCS 颁发的工厂认可证书、船用产品证书，成为国内首家取得 CCS 工厂认可和 250m^{3}LNG 船用罐认可的企业。

该型船用燃料罐使用在发动机机舱内，国内尚属首例。与此同时，中集圣达因还承接了湖北中长燃 LNG 加注趸船项目六台 250m^{3}LNG 船用罐的建造工作。中集圣达因 LNG 船用罐的成功推出，为中集安瑞科未来在船用 LNG 供气系统、加气系统及 LNG 内河运输船的研发和建造奠定了基础，并将为打造绿色水域、环保航运、降本节能提供很好的保证。

On September 26, the commissioning of China's first LNG replenishing ship was successfully completed on Baguazhou Island in Nanjing. The two 250m^3 refrigerated storage tanks, as one of the main equipment of the "Seaport Star #01" Ship, are manufactured by Sanctum (Zhangjiagang CIMC Sanctum Cryogenic Equipment Co., Ltd. CIMC-Sanctum for short) affiliated to CIMC Enric.

In October 2012, under the guidance of the policy stating "promote pilot programs for renovating power-driven LNG vessels and demonstration projects of applying power-driven LNG inland vessels" issued by the Ministry of Transport of the P.R.C, CIMC-Sanctum, as a leading supplier of LNG equipment in China, contracted the building of two 250m^3 storage tanks equipped for LNG replenishing ships of JOC Ganghua LNG Company. In December of the same year, CIMC-Sanctum obtained the Certificate of Works Approval and Certificate of Marine Products granted by CCS, making it China's first enterprise possessing CCS works approval and product approval of 250m^3 LNG tanks.

This fuel tank is to be equipped in the engine compartment, which we've never seen before in China. Meanwhile, CIMC-Sanctum also undertook to build six 250m^3 storage tanks equipped for LNG replenishing ships of China Changjiang Bunker (Sinopec) CO., Ltd. in Hubei. CIMC-Sanctum's successful launching of LNG tanks laid a solid foundation for CIMC Enric's R&D and construction of LNG supply system, replenishing system and LNG inland vessel. Moreover, it is conductive to realizing the goals of green waters, eco-friendly shipping and cost lowering & energy saving.

俄罗斯能化巨头组团考察中集安瑞科

Russian Energy and Chemical Equipment Magnates Visit CIMC Enric

7 月，中集安瑞科廊坊基地（廊坊能源装备集成有限公司，以下简称集成公司）迎来了四家俄罗斯公司组成的参观考察团队，他们分别来自经营雅库茨克两大气田的 Yatec 股份公司油气分公司、俄罗斯最大的化肥厂 Eurochem 集团公司、俄罗斯家喻户晓的天然气工业公司 (GASPROM)、M-TRADE 公司，目的是考察集成公司的生产经营能力和技术水平。

集成公司今年抓住机遇将 CNG 液压加气子站、子站拖车销售到了俄罗斯市场，并在“2013 年第二十七届夏季大运会”现场为当地车辆加气，实现了中集安瑞科产品在海外销售的扩展，有力提高了中集安瑞科品牌在俄罗斯的影响力。中集安瑞科产品吸引了参与大运会的各国代表和游客的目光，也吸引了各国商家特别是俄罗斯企业的目光。

7 月 14 日，由 Maksim 先生带队的俄罗斯客人一行参观了正在运营的天然气母站以及该司多套 CNG 及 LNG 设备，对这些设备在实际运营中所表现出的优越性能、便捷操作和人性化设计表示出浓厚的兴趣。

随着集成公司海外事业发展步伐的加快，集成公司与国外客户的沟通交流也不断加强。相继有哈萨克斯坦、俄罗斯、哥伦比亚、尼日利亚等欧洲、北美、南美、东南亚、非洲等多个国家和地区客户参观考察，并且产品已销往中亚、东欧、东南亚等世界多个地区。这次考察活动将成为集成公司与俄罗斯多家公司合作的基石，也将是中集安瑞科的产品迈向国际的重要一步。

In July 2013, a delegation composed of the representatives from four Russian companies visited CIMC Enric Langfang Base (Enric (Langfang) Energy Equipment Integration Co., Ltd., “CIMC-Integration” for short) with the aim of investigating CIMC-Integration’s production and operation capacities and technical level. These companies include Yatec Oil & Gas Company, the operator of two major gas fields in Yakutsk, Eurochem, the largest Russia-based fertilizer plant, GASPROM and M-TRADE.

In 2013, CIMC-Integration seized the opportunity to sell CNG hydraulic replenishing stations and substations in Russia and to practice replenishing for local vehicles in the 27th Summer Universiade 2013, opening another overseas market of CIMC Enric products and enhancing the influence of Enric brand in Russia. Enric products appealed to delegates, tourists and firms, especially Russian businesses, from different countries.

In July 14, Mr. Maksim, together with other Russian guests visited a LNG mother station in service and CNG & LNG equipment of CIMC-Integration. The guests showed keen interest in the equipment’s high performance, easy operation and humanization design revealed in real operation.

While expanding overseas operations, CIMC-Integration deepens its communication with foreign customers. Customers from different countries and regions including Kazakhstan, Russia, Columbia and Nigeria in Europe, North America, South America, Southeast Asia and Africa paid visits to CIMC-Integration in succession, coupled by sales of products to Central Asia, Eastern Europe, Southeast Asia, etc. This visit paid by Russian energy and chemical equipment magnates serves as a footstone for CIMC-Integration to establish partnership with several Russian companies and also a milestone move for CIMC Enric products to go global.

中集安瑞科成功进军核电装备领域

CIMC Enric Starting Business in Nuclear Power Equipment Sector

9 月 17 日，中集安瑞科旗下 CIMC TANK 制造基地（南通中集罐式储运设备制造有限公司）向国核工程有限公司成功交付其自主制造的第一套核级设备，即 AP1000 首套重要设备——三门核电 1 号机组 MS23 空气存储包项目，并启程发往浙江三门核电站。

上海核工程研究设计院和国核工程有限公司的客户代表在产品验收仪式上表示：CIMC TANK “无论从管理体系、企业实力，还是整个现场管理水平，都属行业领先。”核级设备 MV23 空气存储包，主要功能是在事故状态下为核电站主控室不间断的提供 72 小时的空气供应，其成功交付标志着中集已经具备为核电站提供核二、三级设备的能力。

中国作为世界核能发展速度最快的国家，在新的核电政策中提出，“按照全球最高要求新建核电项目。新建核电机组必须符合三代安全标准。”要求设立核电安全最高准入门槛，标志着核电设备的品质要求更加严格，这就需要高度规范的质保体系支撑，确保产品的绝对可靠、安全，可以说是真正实现“零缺陷”的最佳实践。

在 CIMC TANK，“零缺陷工程”的推进由来已久，并通过不断积累储备了领先行业的制造能力，从标准罐式集装箱、特种罐箱、封头、压力容器、气瓶、罐车到核电、核磁共振业务的开拓和市场认可，尤其是其 ISO 液体罐箱产销量从 2004 年开始稳居世界第一，都是对其内在能力的不断挖潜和提升。

无疑，CIMC TANK 为中集进一步深入开拓核安全级产品市场打开了一扇门，在不断提高核电设备生产制造能力、不断完善核电质保体系的基础上，可以预期中集在核电装备领域将赢得更为广阔、持续的发展空间。

September 17, 2013 – The CIMC Tank Manufacturing Base (Nantong CIMC Tank Equipment Co., Ltd.) affiliated to CIMC Enric delivered to State Nuclear Power Engineering Company (SNPTC) the first set of nuclear class equipment – main equipment of the world’s first AP1000 nuclear power station – MS23 air receiver of Sanmen nuclear power station #1 generator. It is now being shipped to Zhejiang Sanmen Nuclear Power Station.

The customer representatives from Shanghai Nuclear Engineering Research & Design Institute and State Nuclear Power Engineering Company pointed out in the product acceptance ceremony that CIMC Tank claims its position as industry leader because of its management system, corporate strength and spot management competency. MV23 air receiver of nuclear class equipment mainly serves as a source of 72hr uninterrupted air supply for the master-control room of a nuclear power station in emergency. The successful delivery of MV23 air receiver marked the acquisition of CIMC’s capacity to supply Class II & III nuclear facilities for nuclear power stations.

As the worldwide fastest growing country in terms of nuclear power generation, China stressed in a new nuclear power policy that nuclear power plants shall be built as per the highest safety requirements of the world and nuclear power units newly built shall be up to the 3rd generation safety standard. According to the policy, it is required to develop the highest access threshold of nuclear power safety, suggesting a more stringent requirement on quality of nuclear power facilities. As such, the companies specialized in nuclear power equipment are expected to develop a highly-regulated quality assurance system so as to secure absolute safety and reliability of equipment and thus to practice “zero fault” in the real sense.

CIMC Tank has launched the “Zero Fault” project for long and developed the industry-leading manufacturing capacity after years of operation. From tapping the markets of standard tank containers, special tank containers, pressure vessels, gas cylinders, tank trucks, nuclear power equipment and MRIs to winning market recognition, CIMC Tank never stops to maximize its own potentials. Especially, the ISO liquid tank container has been retaining the world’s first place in production and sales ever since 2004.

No doubt CIMC Tank has paved a way for CIMC to tap further the market of nuclear class products. On the premises of improving production capacity and quality assurance system of nuclear power equipment on an ongoing basis, it can be anticipated that CIMC will expand and grow steadily in the nuclear power equipment sector.

中集来福士承建世界最大超深水双塔半潜式钻井平台

CIMC Raffles Contracts to Build World's Largest Ultra Deep-Water Semisubmersible Drilling Rig

8 月 28 日上午，中集来福士为挪威 Frigstad Deepwater 公司承建的、世界上最大的超深水双钻塔半潜式钻井平台 Frigstad Deepwater Rig Alfa 在海阳基地开工。Frigstad Deepwater 公司总裁 Harald Frigstad、首席执行官 Simen S Eriksen 以及中集来福士总裁于亚等共同启动钢板切割机。

Frigstad Deepwater Rig Alfa 属最新一代超深水半潜式钻井平台，是中集来福士为 Frigstad Deepwater 公司建造的第二座超深水半潜式钻井平台。该平台采用 NOV（国民油井华高）液压双钻塔设计，在安全基础上大幅提高了生产效率，可以在墨西哥湾、中国南海、澳大利亚、巴西海域、西非、南大西洋等深海域作业。

中央电视台、中新社、中国船舶报、中国能源报、中国工业报等 14 家新闻媒体对 Frigstad Deepwater Rig Alfa 开工仪式进行了采访报道。Frigstad 公司总裁 Harald Frigstad 在媒体见面会上表示：“目前看到中国正在向海工行业的领导地位而努力，我们相信这个目标会实现，我们相信中国。中集来福士是中国海工领域最佳的船厂，尤其是在钻井平台项目方面有着丰富的经验，拥有良好的口碑和长期积累的良好交付业绩。对于中集来福士的承建，我们充满信心。”

该平台中集来福士负责详细设计、施工设计、建造及调试工作，并将独立完成整套钻井系统的安装及调试。中集来福士将继续采用上、下船体并行建造、20000 吨大吊一步合拢的独特建造模式。该平台将于 2015 年底完工交付。

On the morning of August 28, 2013, Frigstad Deepwater Rig Alfa, the world's largest ultra deep-water semisubmersible drilling rig with two drilling tower, constructed by CIMC Raffles for Frigstad Deepwater ushers its steel cutting in HCRO. Chairman Harald Frigstad and CEO Simen S Eriksen of Frigstad Deepwater Company and Mr. Yu Ya, President of CIMC Raffles jointly started the steel cutting machine.

Frigstad Deepwater Rig Alfa is one of the ultra deepwater semisubmersible drilling rigs of the latest generation and also the second one constructed by CIMC Raffles for Frigstad Deepwater Company. Due to its NOV hydraulic dual towers design, its production efficiency will be highly improved without compromising security. This drilling rig is workable in multi deepwater areas, such as Mexico Gulf, China South Sea, Australia, BrazilSea, West Africa and South Atlantic etc.

The steel cutting ceremony was witnessed by 14 presses including CCTV, China News Service, China Ship News, China Energy News, China Industry News, etc. Mr. Harald Frigstad said in the media conference, “China is now striving for the leader of offshore engineering sector, which we believe will be realized. CIMC Raffles is the best shipyard in China's offshore engineering sector attributable to its good reputation and punctual delivery records. We are full of confidence in CIMC Raffles's capacity in building the drilling rig.”

CIMC Raffles is responsible for detailed design, construction design, construction and commissioning of the drilling rig. CIMC Raffles will continue to employ the unique construction mode, that is, carrying out parallel construction of deckbox and lower hull and fulfilling mating with 20,000t gantry crane. This drilling rig is scheduled to be delivered at the end of 2015.

中集来福士助力中海油服在挪威北海屡创佳绩

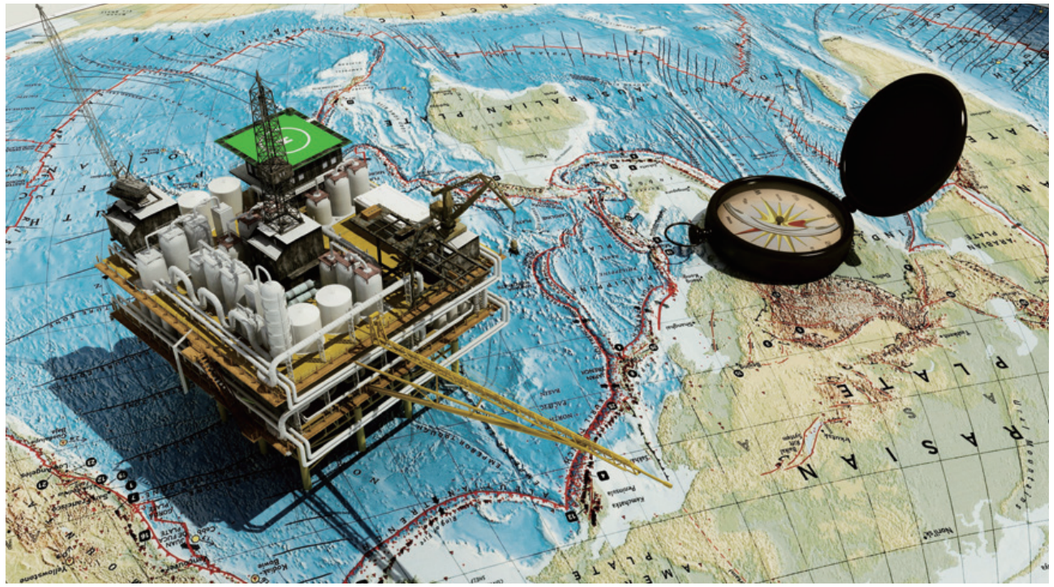
CIMC Raffles Assists COSO to Make Consecutive Breakthroughs in Operations in Norwegian North Sea

9 月 27 日上午，中集来福士为中海油服欧洲钻井公司承建的第四座深水半潜式钻井平台中海油服兴旺号上下船体成功合拢。这是中集来福士 2 万吨桥式起重机“泰山”第九次完成半潜平台大合拢。中国船舶行业工业协会会长张广钦、山东省国防工办主任王超英、中海油服首席执行官兼总裁李勇、中海油服欧洲钻井公司总裁 Jorgen 和中集来福士总裁于亚等出席合拢仪式。

中海油服兴旺号最大工作水深 1500 米，最大钻井深度 7600 米，配置 DP3 动力定位系统，设计服务温度为零下 20 度，由 Grenland Group 提供基础设计，满足挪威石油当局和 NORSOK 标准，入级挪威船级社和中国船级社。该平台在中集来福士已交付的三座中海油服系列深水半潜式钻井平台的基础上，由船东、船厂和设计公司合作升级改进，性能和工作舒适度都有较大幅度提升，使之达到冰级、环保和低温作业水平，更适合挪威北海区域的恶劣海况。

中集来福士自 2010 年 10 月起，已先后向中海油服欧洲钻井公司交付了 3 座中海油服系列半潜式钻井平台。2013 年 5 月，中海油服欧洲钻井公司在挪威国家石油公司对 2012 年 9 月至 2013 年 3 月期间 13 个钻井承包商进行的综合评比中荣获第一名。该综合排名取决于七个月来各钻井承包商的作业安全、设备完整性、作业时效及作业表现等方面的平均成绩。

在挪威北海这片全球海况最恶劣、作业要求最严格的海域上，中海油服欧洲钻井公司作为一个新成立的油服公司，依托中海油服系列半潜式钻井平台取得如此骄人的业绩实属不易。挪威石油安全管理局颁发的 AoC (Acknowledgement of Compliance) 证书是所有平台进入挪威北海的入场券。中海油服欧洲钻井公司的第一座半潜钻井平台中海油服先锋号在到达挪威后，仅用了 2 个月时间就获得了 AoC 证书，又仅用了 2 个月就完成作业前准备开始钻井。当前中海油服欧洲钻井公司运营的 3 座中海油服系列半潜钻井平台均已获得 AoC 证书并全部在挪威北海作业，业绩优秀，其中中海油服先锋号多次被评为“月度平台”。



In the morning of September 27, COSL Prospector, the fourth deep water semisubmersible drilling rig constructed by CIMC Raffles on behalf of COSL Drilling Europe AS (“CDE”) accomplished the mating milestone. This is also the ninth time this 20,000t “Taisun” crane was taken into use for the mating of semisubmersible drilling rigs. Mr. Zhang Guangqin, Chairman of Industry Association of China Shipbuilding Industry, Mr. Wang Chaoying, Director of Scientific and Technological Industry office of National Defense in Shandong Province, Mr. Li Yong, CEO & President of COSL, Mr. Jorgen, President of CDE and Mr. Yuya, President of CIMC Raffles and other leaders and guests attended this ceremony.

COSL PROSPECTOR is a DP3 vessel with an operating depth of 1,500m, a drilling depth of 7,600m and a designed operating temperature of -20°C. Built based on the basic design furnished by the Grenland Group, the COSLP ROSPECTOR meets the requirements of PSA and NORSOK. On the basis of the experience of previous three COSL rigs, and due to the optimization cooperated by owner, shipyard and designer, this rig improves a lot in performance and comfort. Besides, it’s workable in ice conditions and low temperatures in a pollution-free way and more suitable for the harsh conditions of the Norwegian North Sea.

Since October 2010, CIMC Raffles has delivered three COSL serial semisubmersible drilling rigs for CDE. On May, 2013, CDE ranked the first among thirteen drilling operation contractors in the comprehensive assessment held by Statoil from September 2012 to May 2013. The ranking based on the average record of certain indicators for seven months, such as the operation safety, equipment integrity, operation efficiency and operation performance etc.

As a new oil service company and operating on Norwegian North Sea with the worst sea condition and the most severe requirements, it’s never easy for CDE to gain such a credible record. AoC Certificate authorized by Oil Safety Administration is the access symbol to North Sea. COSL Pioneer, the first semisubmersible drilling rig built on behalf of CDE got this certificate after arrival in Norway for two months. The pre-drilling preparations were accomplished within two months following that. Besides, three delivered COSL serial drilling rigs operated by COSL Europe Drilling has got AoC certificate and perform excellently in North Sea. COSL Pioneer has been honored “Monthly Rig” for many times.

美国工程院院士William Webster、哈尔滨工程大学副校长夏桂华一行来访中集来福士

William Webster, the Member of American National Academy of Engineering and Xia Guihua, Vice President of Harbin Engineering University Visit CIMC Raffles

2013 年 10 月 29 日至 10 月 31 日，哈尔滨工程大学特聘海外专家团队“学术大师”、美国工程院院士 William Webster，哈尔滨工程大学副校长夏桂华，哈尔滨工程大学深海工程中心常务副主任孙丽萍教授一行访问了中集海洋工程研究院和烟台中集来福士海洋工程有限公司。中集来福士总裁于亚、副总裁王静华、中集海工院副总经理高上、副总经理滕瑶、研发设计中心技术总监贺昌海等接待了来访嘉宾。

William Webster 院士与夏桂华副校长赞赏中集来福士近年来在海工领域的成就和发展，并表示作为国内在深海工程领域居于领先地位的大学，哈尔滨工程大学与产业界的合作能够有效地推进学科建设和科技成果转化，有利于优势互补并促进双方共赢，愿意致力于进一步推动哈尔滨工程大学相关学科与我公司的交流与合作。

经过充分沟通后，双方达成一系列合作共识。10 月 30 日上午，于亚与夏桂华就哈工程在烟台设立深海工程研究中心分部事宜签订了合作意向协议。

10 月 31 日上午，William Webster 院士为中集海工团队做了精彩的海洋工程专题报告。于亚、王静华和中集来福士约 90 名技术人员参加了报告会。报告结束后，院士与大家进行了热烈的互动，就工作中遇到的技术问题、年轻工程师的成长困惑等进行了交流，William Webster 院士的精彩解答赢得了阵阵掌声。

During October 29-31, 2013, William Webster, the foreign specially-appointed professor “Academic Master” of Harbin Engineering University and the member of American National Academy of Engineering, Xia Guihua, Vice President of Harbin Engineering University and Sun Liping, Executive Deputy Director of Deepwater Engineering Research Center of Harbin Engineering University visited CIMC Offshore Engineering Institute Research Center and YCRO. They were received by Yu Ya, President of CIMC Raffles, Wang Jinghua, Vice President, Gao Shang, Deputy General Manager of CIMC Offshore Engineering Institute Research Center, Teng Yao, Deputy General Manager and He Changhai, CTO of R&D Design Center.

Both William Webster and Xia Guihua spoke highly of CIMC Raffles’s recent achievement and development in offshore engineering and said given the cooperation between industrial circles and Harbin Engineering University, a national leading university in offshore engineering, it would effectively promote discipline construction and commercialization of research findings, reinforce complementary advantages and realize win-win outcomes. Furthermore, they expressed the willingness to further enhance the cooperation and exchange between the university and CIMC Raffles.

After a detailed discussion, much consensus was reached. On the morning of October 30, Yu Ya and Xia Guihua signed a letter of intent for cooperation concerning the founding of a branch of Deepwater Engineering Research Center of Harbin Engineering University in Yantai.

On the morning of October 31, William Webster made a wonderful offshore engineering report attended by Yu Ya, Wang Jinghua and around 90 technicians of CIMC Raffles. After finishing the report, William Webster interacted with the audience, deftly answering technical questions and solving confusions of young engineers, whose performance was greeted with intermittent applause from the audience.

中国船级社海工技术中心在中集海工研究院设立烟台分部

China Classification Society (CCS) Offshore Technology Center Sets Up a Branch in Yantai CIMC Offshore Engineering Institute Research Center

9 月 13 日下午 3 时 30 分，中国船级社海工技术中心烟台分部成立揭牌仪式在烟台中集海洋工程研究院举行。

在揭牌仪式上，中集来福士总裁于亚表示，这是中集海工与中国船级社合作的又一个里程碑，标志着中国船级社与中集集团战略合作的进一步增强与深入。于亚认为，中国船级社海工技术中心烟台分部在中集海工院的成立，是中集来福士重要的学习机会。他期望在中国船级社的帮助下，中集海工工程技术人员进一步加强对高端海洋工程船型及其配套的学习和研究，加快对高端海工产品领域的改善，系统提升中集海工的技术研发能力。

莫鉴辉表示，中集来福士是中国海工装备设计建造领域的领军企业，目前拥有近 1000 人的技术研发团队，这在国内是少有的。中集来福士将在半潜平台、自升平台，以及更多高端海工装备领域引领中国海工的发展。国家将海洋石油钻井平台研发中心设在这里，中国船级社要将服务更加贴近客户。中国船级社与中集来福士将开展全面合作，共同推动中国海工发展。

At 3:30 pm, September 13, the unveiling ceremony for the founding of the branch of CCS Offshore Technology Center took place in Yantai Offshore Engineering Institute Research Center.

At the ceremony, Yu Ya, President of CIMC Raffles said this had marked another milestone in the deepened strategic cooperation between CCS and CIMC. Yu Ya believes that the establishment of the branch in Yantai grants the company a great learning opportunity. He anticipates CCS will help CIMC offshore engineering technicians further enhance their knowledge and research on high-end offshore ships and other facilities, make quick improvement in high-end offshore products and increase offshore technology R&D capability of CIMC.

Mo Jianhui points out that CIMC Raffles is the leader in offshore equipment design and construction in China. It has a technology R&D team of about 1,000 members, which is a startling figure nationwide. CIMC will be leading the development of Chinese offshore engineering in semisubmersible platform, jack-up drilling rig and more high-end offshore equipment. The establishment of offshore oil drilling platform R&D center in Yantai allows CCS to get closer to its customers. The comprehensive cooperation between CCS and CIMC Raffles will drive the development of Chinese offshore engineering.

中集9200TEU集装箱船系列船在大连开工建设

CIMC 9200TEU of Container Vessel Series under Construction in Dalian

7 月 25 日上午，由大连船舶重工集团有限公司承建的中集 9200TEU 集装箱船系列中的第 3 艘在大船集团二工场船体加工车间举行开工仪式。出席仪式的有来自中集集团、法国达飞轮船 (CMA-CGM) 公司现场监造组、法国船级社等来宾。

9200TEU 集装箱船系列是中集集团运用资本和研发优势，创新商业模式，成功界入大型船舶行业的首个产品。该系列船是中集自主研发设计的新一代超大型节能环保高效集装箱船，通过了美国船级社、法国船级社、德国船级社、中国船级社及行业内知名专家的联合评审，技术指标达到同类型船舶的国际先进水平，多项关键核心技术获得国家专利局知识产权保护，使中集迅速进入该型船主流国际市场。作为船东的中集融资租赁有限公司与法国达飞轮船公司于 2012 年 9 月 22 日签署了 10 艘 9200TEU 集装箱船 12 年期的租赁合同。大连船舶重工集团有限公司和江苏新时代造船有限公司分别承建系列船中的 6 艘和 4 艘。

在大船集团总经理助理为典礼致词之后，中集船舶海洋工程设计研究院胡安康院长与大船集团副总经理陈永义共同为开工揭幕，达飞现场监造组的王女士应邀按下了数控切割机的按钮，标志着第 3 艘 9200TEU 集装箱船正式开工。

On the morning of July 25, steel cutting ceremony of the third vessel of the CIMC 9200TEU container vessel series, its construction contracted to Dalian Shipbuilding Industry Co., Ltd., was held at the hull workshop of the Second Factory of Dalian Shipbuilding Industry Co., Ltd. The ceremony was attended by guests from CIMC, CMA-CGM on-site supervision team, Bureau Veritas, etc.

CIMC 9200TEU container vessel series is the first product of CIMC's successful entry into the large vessel industry with coordination of capital and R&D strengths as well as innovative business models. This vessel series, the latest ultra-large container vessel, is independently researched, developed and designed by CIMC, that are energy-saving, environmentally-friendly and highly efficient. It has passed the joint review by American Bureau of Shipping, Bureau Veritas, Germanischer Lloyd, China Classification Society as well as renowned experts in the industry, with its technical indicators reaching internationally leading levels of vessels of similar type. Several key technologies have obtained the intellectual property protection of the State Patent Office. Hence, CIMC has paced up into the mainstream international markets of such vessel type. As the ship owner, CIMC Finance Leasing Co., Ltd. has signed a lease contract with CMA-CGM on September 22, 2012 for 12-year tenure of ten 9200TEU container vessels. Dalian Shipbuilding Industry Co., Ltd. and Jiangsu New Times Shipbuilding Co., Ltd. have undertaken six and four respectively.

After the Assistant General Manager of Dalian Shipbuilding Industry Co., Ltd. delivered a speech at the ceremony, Dr. Hu Ankang, Head of the CIMC Ship and Offshore Design & Research Institute, as well as Mr. Chen Yongyi, Deputy General Manager of Dalian Shipbuilding Industry Co., Ltd., unveiled the construction ceremony together. Then, Ms. Wang of CMA-CGM on-site inspection team pressed the button of digital controlled cutter, marking the official commencement of the construction of the third vessel of 9200TEU container vessel series.

中集天达为深圳机场新航站楼提供全部登机桥

CIMC-TianDa Supplies Boarding Bridges for Newly-built Terminals of Shenzhen Airport

11 月，深圳机场 T3 航站楼正式启用，站坪上一字排开的 75 台旅客登机桥蔚为壮观，它们均由中集旗下的中集天达空港设备有限公司制造。

经过多轮竞标，中集天达在与美国、德国等国际一流制造巨头的一系列比拼中，以综合实力最终胜出，一举拿下深圳机场 T3 航站楼全部 75 台登机桥的巨额订单。这令国际巨头感到压力的同时，也赢得竞争对手对中国制造的尊重。击败全球登机桥行业巨头，成功跻身国际一流水准的航站楼，令中集登机桥成为中国高端制造业的代表，这也成为深圳 T3 航站楼的最大亮点之一。

目前，中集天达已成为旅客登机桥行业的全球著名品牌，先后申请国际国内专利 253 项，已获专利 156 项，遥遥领先全球同行业；全球 40% 的旅客登机桥都来自于中集天达，世界 50 多个国家和地区的近 200 个机场里使用着 3200 多台中集登机桥，近年来的市场份额位居全球第一。除旅客登机桥外，中集天达还生产机场摆渡车、航空食品车、飞机除冰车、升降平台车、旅客行李处理系统、航空货运处理系统等空港设备，正向全球空港设备制造行业的领军企业迈进。

In November, the new-built T3 terminal of Shenzhen Airport officially came into operation. The neatly lined-up 75 sets of passenger boarding bridges manufactured by CIMC-TianDa on the station site invite a quite spectacular scene.

After several rounds of bidding, CIMC-TianDa has raced against a number of world-class manufacturing giants from the United States, Germany, etc., in a series of competitions, and finally out-beat them in terms of its overall strength and win a huge order for the manufacturing of all the 75 boarding bridges of Shenzhen Airport T3 terminal. This success has not only brought pressure to other international giants, but also won the respect from our competitors on made-in-China. The victory over global industry giants as and the capability recognition to build top-notch terminals have enabled CIMC boarding bridges to become the representative of China's high-end manufacturing, which is also one of the biggest highlights of the Shenzhen Airport T3 terminal.

Nowadays, CIMC-TianDa has evolved into the biggest names in the global passenger boarding bridges industry brands. It has applied for 253 domestic and international patents, and obtained 156 of them, way ahead of global industry peers. 40% of passenger boarding bridges on this planet are made by CIMC-TianDa; there are a total of 3200 sets of CIMC boarding bridges in over 200 airports covering 50 major countries around the global. In recent years, its market share has climbed to the first rank in the world. In addition to passenger boarding bridges, CIMC-TianDa also offers airport shuttle buses, airline food carts, aircraft de-icing vehicles, lifting platform cars, passenger baggage processing systems, airfreight processing systems, and a variety of other airport equipments. CIMC-TianDa is now making its leaps and bounds to become a worldwide airport equipment manufacturing empire.

中集启建集团（松山湖）产业创新发展中心

CIMC Constructs Industrial Innovation Development Center (Songshan Lake)

2013 年 9 月 16 日上午，中集集团（松山湖）产业创新发展中心举行开工奠基仪式，东莞市委副书记、市长袁宝成、常务副市长梁国英、中集集团副总裁吴发沛、中集地产总经理禹振飞等政府与公司领导共同为项目开工培土奠基。东莞市松山湖管委会党工委书记刘宁主持开工仪式。

按照东莞市政府“一切从简，高效进行”的要求，奠基仪式简单、庄重。东莞市政府、松山湖管委会、中集集装箱板块、中集金融板块、中集智能板块、松山湖项目的总包方深圳越众（集团）、监理方东莞鸿业公司的部分领导与员工 100 多人共同参与了奠基仪式。

吴发沛副总裁和梁国英常务副市长分别代表中集集团和东莞市政府在仪式上致辞，希望项目投资方和建设单位牢固树立精品意识、时间意识、效率意识，科学组织，精心施工，加快工程建设进度，超前开展招商运作，确保把项目建成精品工程和样板工程；各有关部门要强化服务意识，优化服务环境，及时解决难题，确保项目建设顺利推进。中集集团也将以此为契机，紧密依靠东莞这个产业创新的平台，进一步加快区域经济建设的进度，为东莞地方建设作出积极贡献。

作为东莞市政府 2013 年度重大招商成果，中集集团（松山湖）产业创新发展中心是中集集团创新战略发展布局的重要项目，项目定位于中集集团自身业务的发展与延伸，以及产业链上下游企业的孵化与加速成长，形成具有中集特色的发展模式和品牌，为后续产业链的集聚和产业集群化发展创造了良好的条件。

中集集团产业创新发展中心位于东莞市松山湖科技园南部金多港地区，建成后将包括集装箱总部、创新发展中心、研究总院、培训学院、集装箱板业总部、中小配套企业总部等多个功能区。项目还将针对中集未来新技术和新业务发展过程所需的配套上下游合作企业，提供办公、服务、技术交流与支持等产业发展平台，形成以中集现代装备产业为核心，产业链上下游中小型合作企业及项目为载体的产业创新发展集群。

On the morning of September 16, 2013, the cornerstone laying ceremony was held to mark the project commencement in the Industrial Innovation Development Center of CIMC (Songshan Lake), attended by Yuan Baocheng, Deputy Secretary of Dongguan Municipal Party Committee and Mayor of Dongguan, Liang Guoying, Executive Vice Mayor, Wu Fapei, Vice President of CIMC and Yu Zhenfei, General Manager of CIMC Real Estate. The ground-breaking ceremony was presided over by Liu Ning, Secretary of Party Working Committee of Songshan Lake Management Committee, Dongguan.

The ceremony was held in accordance with the Dongguan government's requirement "simplicity and efficiency". More than 100 people were present at the foundation stone laying ceremony, including Dongguan municipal government officials, Songshan Lake Management Committee, CIMC Container Segment, CIMC Finance Segment, CIMC Smart and Security Research Center, Shenzhen Yuezhong Investment Holding Co., Ltd., the general contractor of Songshan Lake project and Dongguan Hongye Consult Company, the engineering construction supervision company.

Executive Vice Mayor Liang Guoying and Vice President Wu Fapei made speeches on behalf of Dongguan municipal government and CIMC respectively, hoping the project investors and constructors would foster a strong awareness about fine quality, time and efficiency, scientific management, meticulous in construction, while expediting construction progress, attracting investments in advance and making the project a good example; relevant departments should strengthen service awareness, optimize service environment, solve problems timely and ensure smooth progress. CIMC will also take advantage of this industrial innovation platform to further speed up regional economic construction and make positive contributions to the economy of Dongguan.

Thanks to the investment-friendly policy adopted by Dongguan municipal government in 2013, CIMC (Songshan Lake) Industrial Innovation Development Center is the key project of its innovation strategy development. It aims to extend CIMC's existing business scope and accelerate the development of upstream and downstream enterprises relating to the industrial chain so as to create the development mode and brand unique to CIMC and pave the way for a smooth conglomeration and clustering of industrial chain in the future.

The center is situated in Jinduo Bay, south of Songshan Lake Technopark, Dongguan. After the completion, it will house many functional areas, such as container headquarters, innovation development center, general research institute, training institute, container segment headquarters and small and medium-sized supporting enterprise headquarters. The project will provide offices, service, technological exchange and support for downstream and upstream enterprises needed for CIMC's new technology and business development in the future to achieve the industrial innovation development clustering, a kind of conglomeration that highlights CIMC's modern equipment industry and is supplemented by the industrial chain-related downstream and upstream cooperative enterprises and projects.

中集集团获批深圳第一家跨国公司外汇资金集中管理试点资质

CIMC Approved as First Shenzhen Trial Operator of Centralized Management of Foreign Exchange for Multinationals

10 月 24 日，国家外汇管理总局核准中集集团开展跨国公司总部外汇资金集中运营管理试点业务，这是继 2012 年核准全国第一批北京、上海 17 家试点企业之后，深圳第一家企业获批开展跨境资金集中运营试点业务。

按照批复，中集集团第一批参与试点业务的成员企业共 43 家，本次核定集团整体外债额度 4.55 亿美元，对外放款额度 9.2 亿美元。通过该试点优惠政策，可实现集团全球外汇资金在试点通道额度内自由流通，实现集团外汇资金在全球市场内统一运营、集中管理，为实现集团在全球范围内外汇资金优化配置管理，奠定关键基础。通过境内外两个市场的联通协合，可以初步突破外汇管制的壁垒，利用境内外市场的优势做到成本最优，业务拓新，更加高效的实现多币种资产管控，在降低集团整体财务费用的同时，利用集团境内外资金池联动，灵活调剂境内外资金盈缺，提高资金运营效率和效益，降低集团整体流动性风险和外汇风险。

该项目的获批对中集意义重大，通过境内外资金池互通渠道的搭建和完善，跨境资金运营管理得以初步实现，完成集团搭建世界级的跨国公司资金管理体系核心框架的建设。

On October 24, the State Administration of Foreign Exchange approved CIMC to conduct trial operation of centralized management of foreign exchange for multinationals HQ. CIMC has become the first enterprise in Shenzhen that has been approved to carry out centralized operations of cross-border funds, following the first batch of 17 pilot enterprises in Beijing and Shanghai approved the credentials back in 2012.

According to the approval document, in the first batch there are 43 member companies under CIMC to conduct pilot business. The certified overall foreign debt of the Group is 455 million dollars, and 920 million dollars of foreign loan quota. This pilot preferential policy enables a free flow of the Group's global foreign exchange within the pilot channels, facilitates a united operation and centralized management of the Group's foreign exchange in the global market, and lays a vital foundation in the optimal allocation and management of the Group's foreign exchange fund on the global scale. With the concerted cooperation of both the domestic market and foreign market, barriers of exchange controls will be hit with an initial wave of strikes. The Group can avail itself of the features of the domestic market and foreign market to achieve optimal cost and business expansion. Multi-currency asset management and control is expected to be much more effectively, not only reducing the Group's overall financial expenses, but also improving the efficiency and effectiveness of capital operations and reducing the overall liquidity risk and foreign exchange risk, via the interaction of home and overseas capital ponds and a flexible adjustment of domestic and foreign capital deficiency.

The Approval of this project is significant for CIMC. With the establishment and improvement of interaction channels of home and overseas capital ponds, trans-border capital operation and management can realize its rudimentary implementation, and complete CIMC's vision to construct the core framework of a world-class fund management system for multinationals.

中集为澳洲力拓提供公路运盐列车

CIMC Provides Salt-carrying Road Trains for Rio Tinto Group

2013 年 8 月 27 日，中集集团成员企业大连中集铁路装备有限公司为力拓丹皮尔盐矿生产的公路运盐列车完工交接仪式，在公司厂区内隆重举行。

参与交接仪式的有力拓丹皮尔盐矿总经理 Jim Cooper、力拓新兴市场采购部总经理 Matthew Kulmar、力拓集团盐业公司项目管理工程师 John Konrath、力拓新兴市场采购部货车部负责人 Jack Zhou、中集集团战略发展部高级顾问叶龙、大连中集铁路装备有限公司总经理刘志勇及公司员工 300 余人。

力拓公路运盐列车设计有独特的准刚性悬挂、串连牵引装置，可满载 210 吨以上重载运行，有电控、气控、液压控制的单台或成列底门开闭自卸功能，涉及澳洲和欧洲多项技术标准转化、多种新特材料、业内多种新工艺的应用，是力拓首次在澳洲以外地区生产。

在交接仪式上，力拓公司丹皮尔盐矿总经理 Jim Cooper 先生在致辞中表示，与中集集团及下属的大连中集铁路装备有限公司通过运盐列车项目建立的互惠合作关系具有很高的期待，有创新设计和技术优势的公路列车将增强丹皮尔盐矿的竞争优势，帮助目前年出口晒制盐超过 1000 万吨的丹皮尔盐矿保持世界领导者地位，并希望与大连中集铁路装备公司保持长期合作关系。

力拓新兴市场采购部总经理 Matthew Kulmar 对大连中集铁路装备公司成功履行产品质量、交期和安全上的承诺给予了高度评价，并代表力拓授予大连中集铁路装备有限公司“可信赖供应商”荣誉称号。

On August 27, 2013, Dalian CIMC Railway Equipment Co., Ltd., one of the subsidiaries of CIMC, held a grand ceremony of delivery & handover of salt-carrying road trains for Dampier Salt Mines run by Rio Tinto Group in its factory.

The attendees included Jim Cooper, General Manager of Dampier Salt Mines, Matthew Kulmar, General Manager of Rio Tinto Group Emerging Market Purchasing Department, John Konrath, Project Management Engineer of Rio Tinto Group Salt Industry Corporation, Jack Zhou, Chief of Truck Segment of Emerging Market Purchasing Department, Ye Long, Senior Adviser of CIMC Group Strategic Development Department, Liu Zhiyong, General Manager of Dalian CIMC Railway Equipment Company and over 300 employees.

The road train is designed with a unique quasi rigid suspension and cascade traction gear, capable of carrying over 210 tons of cargoes. It features a single bottom door or row-arranged bottom door opening and closing dump function controlled by electric, pneumatical and hydraulic means. It has been the first time for Rio Tinto to have manufactured such vehicle outside Australia as it involves several Australian and European technical standards conversions, a number of new special materials and new industrial technological applications.

At the delivery & handover ceremony, Mr. Jim Cooper expressed his high expectation for the mutual-benefit cooperation between Rio Tinto Group and Dalian CIMC Railway Equipment Corporation through this project, because the train with innovative design and technological prowess would allow Dampier Salt Mines that now exports more than 10 million tons of solar salt annually to enhance the competitiveness, stay ahead of global competitors and forge a long-term partnership with Dalian CIMC Railway Equipment Corporation.

Matthew Kulmar spoke highly of Dalian CIMC Railway Equipment Corporation in terms of its unfailing commitment to good quality, delivery time and safety, for which the latter was credited with the title of “a reliable supplier”.

谁动了中国LNG铁路运输的第一块奶酪？
——安瑞科LNG罐箱在国内首次LNG铁路运输试验中唱主角

Who Moved the First Piece of Cheese of China LNG Rail Transport?
—— ENRIC LNG Tank Container Plays the Lead in China's First LNG Rail Transport Testing

8 月 29 日，由中国铁道总公司（原铁道部）发起的国内首次 LNG 铁路运输试验在青藏线格－拉段获得成功。试运专家组一致认为：“试验所用 LNG 罐箱性能安全可靠，完成符合铁路运输要求，押运安全监控系统运行的适应性及运输过程管理均符合试验预期。”此次上线运行试验的成功，填补了国内 LNG 铁路运输的空白，将有效降低 LNG 运输成本，对推动 LNG 铁路运输业务的正式开通具有重要意义，对完善国内 LNG 销售网络将会起到积极的推动作用。

据了解，本次试验的主角 —— LNG 罐式集装箱出自中集安瑞科旗下品牌 ENRIC（安瑞科）石家庄生产基地（石家庄安瑞科气体机械有限公司，以下简称石家庄安瑞科），该型号为 GX42T7-LNG-01 的 40 英尺 LNG 罐式集装箱，以优越的保温性能、密封性能和数据传输的可靠性，不但满足了普通铁路运输，还经受了高原特殊环境的考验，创造了世界高原铁路运输的新记录。

机会来自多年的 LNG 罐箱设计制造实力

2012 年，为了解决西藏人民冬季取暖问题，受国务院委托，此项目由中国铁道总公司（原铁道部）发起，拟通过铁路采用罐式集装箱将液化天然气（简称 LNG）从格尔木运至西藏。一直以来，在《铁路危险货物运输管理规定》及《铁路危险货物品名表》中均未规定液化天然气可采用罐式箱进行铁路运输。中国铁道总公司（原铁道部）组织开展了液化天然气 (LNG) 铁路安全运输可行性研讨，全面启动青藏线格拉段 LNG（液化天然气）铁路安全运输研究工作，当年 9 月，中国铁道总公司下发《液化天然气 (LNG) 铁路安全运输可行性研究工作方案》。

北京交通大学铁路危险货物运输研究实验室据此成立 LNG 载运工具研究项目组。石家庄安瑞科凭借多年的行业口碑、坚实的研发实力，以及十多年的 LNG 公路运输和 2002 年成功完成 LNG 海运集装箱试验经验，在众多竞选企业脱颖而出，被选定为本次 LNG 铁路运输 5 个试验箱的设计制造企业。其设计的 LNG 罐式箱方案合理性、安全性、可靠性顺利通过多方专家研讨审核，被一致认为具备生产样箱投入实验条件。进入项目后，石家庄安瑞科总经理杨葆英对此高度重视，迅速组织内部研讨并成立了“铁路运输液化天然气 (LNG) 罐式集装箱专项小组”，对设计制造过程每一细节都精益求精，一丝不苟，该项目先后获得七项实用新型专利。

经受住了特殊环境的多重考验

该实验路段格尔木运至西藏拉萨，路段为青藏高原高海拔地区，空气稀薄，气候寒冷，最低气温零下 45 ℃。铁路 LNG 集装箱必须具备足够的刚度和温度适应性，才能承受运输过程中的冲击、震动、及环境变化和温度变化等条件。石家庄安瑞科研发团队为了验证 LNG 集装箱在各种工况下性能，进行了多项试验，针对铁路运输的特殊条件和恶劣环境条件进行了多次应力分析计算。

今年 3 月 7–10 日和 15–17 日，石家庄安瑞科研发团队对罐箱分别进行了三次静强度试验和冲击试验，实验数据非常理想，尤其在罐箱冲击试验中，罐箱框架两端共设 64 个测量点，冲击速度从 3Km/h–8Km/h，试验获得一次性通过，赢得了北京交大研发团队的高度好评，这在铁路罐箱冲击实验中是不多见的。

经过精心准备，8 月 16–29 日，LNG 罐箱铁路运行试验在青藏铁路上进行，全面测试 LNG 罐式集装箱保温性能、密封性能和数据传输的可靠性。试运行区间为格尔木到拉萨，整个运行过程中罐箱压力无升高，液位无升高；框架、罐体外观良好；阀门仪表连接可靠；罐体外表面无结霜结露，绝热性能良好。LNG 罐箱监控系统运行正常，数据采集准确率和完整率均不低于 99.5%，远远高于《LNG 罐箱运行试验大纲》采集数据完整率和准确率不低于 90% 的要求。8 月 30 日，国家低温容器质量检验中心对运行试验后的五个罐箱进行了真空度测试，真空度测试结果良好，满足《压力容器定期检验规则》的要求。

8 月 29 日，中国铁路总公司运输局及中国铁路总公司科技管理部联名发布“关于格拉段顺利完成 LNG 罐式集装箱运输实验”的贺电，肯定了本次实验成功，对支援西藏发展及拓展液化天然气铁路运输业务具有重大意义，为科技成果转化成生产力做出了新的贡献。

创造一个崭新的 LNG 物流平台

LNG 铁路罐式集装箱试运行成功将会改变现有 LNG 物流模块，创造一个崭新的 LNG 物流平台。LNG 接收站投资大，建站周期长，申批手续繁杂，而 LNG 罐式箱运输成本低，完全可以规避以上不足，实现门到门的运营，具有非常广阔的市场前景。

而中集安瑞科作为中集的能源、化工、食品装备板块，早在 2004 年就开始进入 LNG 运输、存储设备制造和小型存储工程领域。在 LNG 物流模块，中集安瑞科旗下三大产品品牌 —— ENRIC（安瑞科）、SANCTUM（圣达因）和 HONTO（宏图）已推出 LNG 低温液体运输半挂车、LNG 汽车罐车、LNG 低温液体罐式集装箱、LNG 车用瓶和 LNG 船用罐等产品，在业内具有良好的口碑，并已具备 12 万立方 LNG 运输船的制造能力。LNG 铁路罐式集装箱的推出，不仅填补了国内空白，也拓宽了中集安瑞科在 LNG 物流领域的业务应用。据了解，目前国内大型物流公司及知名燃气运营商都非常关注 LNG 铁路罐式箱实验进展情况，并已表达与安瑞科共同展开 LNG 铁路集装箱运输的合作意向。

安瑞科 LNG 铁路罐箱的精彩亮相，不但为行业内 LNG 罐式箱的压力容器标准起到了参考作用，还让中集安瑞科实现了 LNG 海路、公路、铁路联运的梦想。

China's first LNG rail transport testing, launched by China Railway Corporation (formerly the Ministry of Railways) on August 29, has succeeded in the Lhasa–Golmud section of the Qinghai–Tibet Railway. It has been agreed, by the panel of experts for the testing, that the LNG tank containers used in the testing prove to be of safe and reliable performance, in line with the requirements of rail transport, and the operational adaptability of escort safety monitoring system and transportation process management have both consistent with the testing expectation. This success can fill the gaps in domestic LNG rail transport blank and will effectively reduce LNG transportation costs. It has an important significance to promote the official start-up of LNG rail transport business, and will play a positive role in improving domestic LNG sales network.

It is known that the lead of the testing, LNG tank container, comes from Shijiazhuang ENRIC Manufacturing Base (Shijiazhuang Enric Gas Equipment Co., Ltd., hereinafter referred to Shijiazhuang Enric) under the parent group CIMC Enric. The tank container, model GX42T7-LNG-01, is a 40-foot LNG tank container, with superior thermal insulation and sealing performance, as well as a sound reliability of data transmission. It is not only up to common railway transport, but can also withstand the demanding test under special circumstances such as plateau altitude conditions, setting a brave new record for the world's plateau railway transport.

Opportunity Favors those with Years of Design and Manufacturing Capability of LNG Tank Container

In 2012, in order to address the problem of heating service during winters for the Tibetan people, China Railway Corporation (formerly the Ministry of Railways), authorized by the Chinese State Council, proposed a project to transport liquefied natural gas (LNG in short) from Golmud to Tibet via railway system with the use of tank containers. It has not been specified in *Railway Transportation of Dangerous Goods Specifications or Name List of Railway Hazards and Dangerous Goods* that liquefied natural gas can be carried by tank containers by railways. China Railway Corporation (formerly the Ministry of Railways) conducted a feasibility discussion on liquefied natural gas (LNG) rail transport, and launched a research in full swing over LNF rail transport safety at the Lhasa-Golmud section of the Qinghai-Tibet Railway. In September of the same year, China Railway Corporation issued *Liquefied Natural Gas (LNG) Rail Transport Feasibility Study and Work Plan*.

Railway Dangerous Goods Transport Research Laboratory of Beijing Jiaotong University thereof established LNG Vehicle Research Project Team. Shijiazhuang Enric, with its years of industry reputation, strong R&D capabilities, as well as its experience of LNG road transportation for more than a decade and successful container test of LNG maritime transportation in 2002, prevailed among many competing companies, and was certified to be the designer and manufacturer for five test chambers of LNG rail transport. Its LNG tank container proposal, due to rationality, safety and reliability, smoothly passed the discussion and review by multi-party experts. It was unanimously considered that the conditions to put prototypes into experiment are mature. After entering the project, Ms. Yang Baoying, General Manager of Shijiazhuang Enric, attached great importance to this project, quickly organized an internal seminar and set up Liquefied Natural Gas (LNG) Rail Transport Tank Container Special Group. Every detail of the design and manufacturing process is conducted with excellence and meticulousness. The project has won seven utility model patents successively.

Withstood Multiple Tests under Special Circumstances

The experimental railway section, begins from Golmud to Lhasa of Tibet, is located at a high altitude area of Qinghai–Tibet Plateau, with thin air, severe climate, and a minimum temperature of minus 45°C. LNG railway container, therefore, must have sufficient stiffness and temperature adaptability to withstand shocks, vibration, environmental changes, temperature changes and other conditions during the transportation process. Shijiazhuang Enric R&D team, in order to verify the performance of LNG containers in a variety of operational conditions, has conducted a number of tests and several stress analysis calculations in light of special conditions and hostile environmental conditions of railway transport.

On March 7–10 and March 15–17 this year, Shijiazhuang Enric R&D team has carried out three static strength tests and impact tests respectively on tank containers. Relevant experimental data has turned out to be very satisfactory, especially regarding impact test on tank containers. The two ends of tank containers are set with a total of 64 measuring points, while the impact velocity ranges from 3km/h–80km/h. The containers have passed this test at the very first round, which is very rare in rail tank container impact tests, and has won a high praise from Beijing Jiaotong University research team.

After careful preparation, LNG tank container operational testing is launched on Qinghai–Tibet Railway on August 16–29, in order to fully test thermal insulation and sealing performance, and reliability of data transmission. Railway section under the testing is from Golmud to Lhasa. Pressure inside the tank container has not increased throughout the operation, nor has the liquid level; the framework and body of the tank containers are kept in good condition; connection of valve instrument is reliable; outer surface of the tank containers is without frost or dew, and of good thermal insulation property. The monitoring system of LNG tank container is in sound operation as well. The accuracy rate and integrity rate of the data acquisition are both not less than 99.5%, far higher than the integrity rate and accuracy required in *LNG Tank Container Operational Testing Outline*, which should not be less than 90%. On August 30, China's National Cryogenic Vessels Quality Inspection Center has conducted vacuum test on the five tank containers after the said tests done previously. The vacuum test has produced good results and met the requirements written in *Periodic Inspection Code for Pressure Vessels*.

On August 29, Transport Bureau and Technology Management Department of China Railway Corporation jointly published a congratulatory message of *On Lhasa–Golmud Section's Successful LNG Tank Container Transport Experiment*. This message affirms the success of this experiment, and its great significance in supporting the development of Tibet and expanding LNG railway transportation business, as well as the latest contribution it has done to materialize scientific and technological achievements into a productive force.

Create a Brand-New LNG Logistics Platform

A successful trial run of railway LNG tank container will change the current LNG logistics module, and create a brand-new LNG logistics platform. LNG terminal requires big investment, a long construction cycle, and complicated review formalities. However, considering the low transportation costs of LNG tank container, the aforementioned cons can be greatly offset; plus its door to door operations enable it with very broad market prospects.

In addition, CIMC Enric, as the CIMC's Energy, Chemical and Food Equipment Segment, has began to explore the area of the transportation, storage equipment manufacturing, and diminutive storage project of LNG as early as 2004. As for LNG logistics module, its three brands under CIMC Enric – Enric, Sanctum, and Honto, have launched LNG cryogenic liquid transport semitrailer, LNG tanker car, LNG cryogenic liquid tank container, LNG road can, LNG maritime tank and various other products, and has established a good WOM in the industry and manufacturing capacity of 120,000-cubic LNG carriers. The introduction of railway LNG tank container not only fills the gaps in China, but also broadens the CIMC Enric's business applications in the field of LNG logistics. It is known that currently domestic logistics tycoons and noted gas operators are very intrigued about the progress of railway LNG tank container experiment and have expressed their intention to cooperate together with Enric LNG to develop railway container transport.

The fascinating debut of Enric LNG railway tank container not only can be served as the industry standard reference for pressure vessels of LNG tank container, but also helps to realize the long-yearned vision for CIMC Enric to conduct its LNG intermodal transportation by sea, by road, and by railway.

解剖中集海工三重驱动：制造技术融资租赁为一体

Three Growth Engines for CIMC Raffles: Integration of Manufacturing, Technology and Finance Lease

摘自：21 世纪经济报道　作者：梁钟荣

By Liang Zhongrong　From 21st Century Business Herald

在山东烟台，中集来福士所处的芝罘岛形同一朵蘑菇，又如一把雨伞，挡住船厂之外的风雨和巨浪。

代表中集集团出任来福士总裁的于亚，对这个地形非常满意：“来福士船坞下面的水深有十八米，属于深水不冻船坞，在国内非常难得。”

2013 年前三季度数字显示，中国海上石油装备接单量已经超过 100 亿美元，占全球份额的 20% —— 三年前这个数字尚不足 10%。同时，中国在订单量和订单总金额上超越新加坡，仅次于第一名的韩国。

以 2008 年参股新加坡莱佛士（后更名为中集来福士）作为起点，中集来福士是目前国内最大的半潜式钻井平台制造商，占据国内 80% 以上的市场份额，其海工装备订单主要集中在移动钻井装备（半潜式钻井平台、自升式钻井平台）、浮式生产装备、海洋工程船。其中，中集来福士占据国内半潜式钻井平台（注：一个平台造价约 5-6 亿美元）订单量的 67%，其自升式钻井平台的接单率也位列国内三甲。

于亚认为，中国的海工装备企业往往经历三个阶段：第一个阶段是韩国和新加坡不接的订单，船东拿出苛刻的条件、降低造价让中国船企接单；第二个阶段为企业完成首批石油钻井平台工程后，船东会开始拿更多的订单给船企，造价合适，但有较严格的风险条款内容附加；第三个阶段则是获得船东的充分信任，给予和韩、新两国船企相同的商务合同，“中集目前处于第二阶段”。

Located in Zhifu Island, Yantai, Shandong, CIMC Raffles looks like a mushroom or an umbrella to keep off storms and huge waves for the shipyard.

Appointed President of Raffles by CIMC, Yu Ya takes much satisfaction in the favorable geographical position, “The water beneath Raffles shipyard is 18 meters deep and is ice-free all the year around, making it a rare port nationwide.”

The data in the first three quarters of 2013 suggest that the order value for China’s offshore oil equipment has exceeded 10 billion dollars, holding 20% of the global market share, which was a striking contrast with less than 10% market share three years ago. Meanwhile, China has overtaken Singapore to become the second largest shipyard after Korea in terms of order quantity and total order value.

Initially, as a shareholder of Singapore Raffles (later renamed CIMC Raffles) in 2008, CIMC Raffles is now the largest semisubmersible drilling platform manufacturer in China with over 80% domestic market share. Most offshore equipment ordered are mobile drilling rigs (semisubmersible drilling platform, jack-up drilling rig), floating production equipment and ocean engineering vessels. CIMC Raffles accounts for 67% of domestic orders for semisubmersible drilling platform (each costs about 500 to 600 million dollars) while it is the top three providers of jack-up drilling rig in China.

Yu Ya maintains that Chinese offshore equipment enterprises often experience three stages of growth: in the first stage, Chinese shipbuilding enterprises have to accept less profitable and demanding orders bypassed by Korea and Singapore; in the second stage, after completing the first oil drilling platform project, they acquire more orders from shipowners at a reasonable price but with unfavorable risk clauses; in the third stage, they win trust from shipowners and are entitled to the same business contracts with those of Korea and Singapore. “Presently, CIMC is in the second stage of development.”

从集装箱到高端海工

“泰山吊”是中集来福士吸引船东下单的一个重要因素，工期的节省，在海上石油钻井平台的制造过程当中直接就意味着效益。钻井平台的制造过程每节省一天，就意味着船东公司可以早一天把平台租给采油公司。业内行规，船东公司给船厂提前完工的奖励是，一天 20 万美元。

中集来福士的前身是烟台船厂，1995 年引入新加坡船业资深从业者、华人章立人控股，船厂改名为新加坡莱佛士。

1998 年起，章立人发现油价已从谷底开始攀升，海上采油的需求面临爆发节点，遂开始助推莱佛士从拖轮生产向海工装备转型。自 2000 年莱佛士进入海上采油领域，全球石油价格从每桶 10 美元左右的价格一路上升到现在的 100 美元／桶，刺激各种资本进入海上石油开采领域，带动了石油钻井平台需求的大幅上升。

2008 年全球金融危机，由于多个船东资金吃紧，莱佛士也出现了资金链问题，章立人将莱佛士船厂股份转让给了手握资金的中集集团。由此，原莱佛士船厂的核心“海工”业务，正式成为中集旗下重要的上升产业板块。

中集派出了集团副总裁于亚来领导海工这个业务板块。在海工板块业务不景气、给集团带来亏损的背景下，中集仍然坚持投资海工，在烟台投资建立了中集海洋工程研究院，把来福士船厂内原来只有六七十人的技术队伍，扩展到了近千人的技术体系。

中集来福士项目管理部助理总监邵永强对记者承认，当初进入莱佛士的原因，除却完善的工程条件，另一个因素是看中其投资 2.6 亿元的“泰山吊”（2 万吨的吊点桥式起重机）。“原先 36 个月左右的半潜式钻井平台建造周期，现在已缩至 26 个月左右。”

2008 年 8 月，中海油服务公司以 25 亿美元的价格收购挪威船东公司 Awilco，获得进入海上采油最为成熟的区域——北海海上采油区域的机会，并宣布它将建立一支海上采油船队进军国际市场。其背后的合作伙伴，就是中集旗下于亚领导的中集来福士。

五年来，来福士船厂已经为中海油服完成了四条海上钻井平台的订单。从这些船的名字上，清楚看到两个合作伙伴对于市场的期许，这四条船的名字分别叫“先锋”、“开拓”、“进取”和“兴旺”。今年9月27日，“兴旺”号已经完成了上下船体的大合拢工作。

于亚解释，挪威北海是全球作业环境最恶劣的海域之一，因而对于进入的海工装备要求最高。中集来福士已有 3 个平台在运作，甚至有的平台获得挪威船级社最高评价。

双轮驱动：海工院和融资租赁

中集海洋工程研究院成立的目的，即摆脱原来船厂单纯为制造工厂、没有学术背景的现状，不再简单地只接受来样加工，而是介入基础设计、扩展设计和详细设计的每一个阶段。意欲打造专业的海上采油船只制造企业。

于亚认为，融资租赁是一个在设计和制造的基础上，叠加的商业服务模式。“一开始是挪威的订单，参照的是产融结合模式”。多项模式做下来，中集的融资租赁就了解挪威大型海工怎么运作的。

传统上，海上采油的船东公司较为倾向韩国船厂。因为韩国产品稳定性较好，尤其是交船期相当牢靠，具有较高的市场信誉。而“中国制造”在行业内并不受船东公司的信任。

在于亚看来，韩国、新加坡从业时间长，经验富足，配套能力强大。“人家说建造周期是 30 个月就 30 个月，个别的时候多两天。而我们做计划的前提是自己编制的，并不是多少经验堆积，所以到时候会有问题，船东也不信任”。

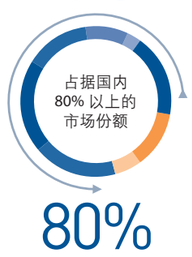
“海工制造变化的东西特别多，系列性不强，可以说每个船都是不一样的，而且客户在建造的过程中会根据它的油公司等客户不断提要求。所以整个海工项目的交期对每个船厂都是特别头疼的事。” 邵永强说。

与章立人主导下的莱佛士船厂不同的是，中集进入之后，不但有生产条件的逐步改善，更注重技术领域的扩展。在过去技术部的基础上，中集来福士将技术部独立出来，2009 年成立中集海洋工程研究院。

中集海工院副总经理滕瑶对记者表示，2004 年初的时候，中集来福士整个技术中心大概在 60 多个人，目前整个海工院人数在 700 人左右。“我们团队做高端平台的数量在中国应该是排第一的，像半潜式平台是国内最前沿的海工产品，国内现在总共是 8 艘半潜式钻井平台，我们设计了其中 6 艘”。

“以前经常是被别人牵着走，但是我们现在知道如何做。”邵永强说，设计推动的整体技术实力提高，减少了建造过程中的修改，“我们现在有一个数据，目前生产的修改工时还不到 2%，以前的修改工时则是超过 10% 到 30%”。这也能保证如期完成。

设计
+
制造
+
融资
租赁



作为海工驱动的另一只重要轮子，中集集团于 2007 年成立融资租赁公司。其客户不局限于中集自身产品，比如，为世界第二大和第三大的船舶企业提供了船舶“设计 + 制造 + 融资租赁”的整体解决方案。

不过于亚承认，相较于挪威三四十年的成功模式，中国企业还需要经验探索。

集体进军海工热潮

钻井平台订单大幅增长的主要原因包括：一是大量建造于上世纪七八十年代的老旧平台已开始淘汰；二是市场新增需求持续活跃，主要涉及高端深水自升式钻井平台如工作水深在 400 英尺（122 米）左右或可在北海地区恶劣海况下作业的平台；三是墨西哥加快了海上油气资源开发的步伐，带来了大量自升式钻井平台需求；四是市场投机成分加大。

研究机构 Religare 提供的数据显示，截至今年三季度，中国船厂所获自升式钻井船订单已占到全球订单总量的 45%，而按合同金额计算，中国所获订单金额已占到全球订单总金额的 32%。

在价格回暖及造船价格跌幅较大的前提下，国内船企纷纷转型海工装备，尤其是进入自升式钻井平台领域。于亚对记者坦言，积极来看，这使得海工的整个供应链会渐渐加快向中国转移，“但它也有很多隐患”。

海工的门槛非常高，每个船厂最少要有 3–5 年的学习期，学习期一过，可能这个高峰就没了。于亚说，一个国家顶多就是 3–5 家企业，现在韩国 3 家，新加坡 2 家，日本基本上退出，“中国船企进入，从客观上加速了海工出口转移的步伐，但可能在 3–5 年之后，又会退出一大批”。

中国船舶工业行业协会秘书长王锦连认为，在过去几年中，中国一些骨干船企抓住机遇兼并国外的公司，壮大了他们海工方面的设计科技人员，“但是总体上我们这个产业里的高端人才，包括设计、经营、管理等方面的人才，甚至于包括有关法律方面的人才都相当缺乏。”

Evolving from container to high-end offshore engineering

For CIMC Raffles, "Taisun" plays a vital role in attracting orders from shipowners. Obviously, shorter construction period means great efficiency in manufacturing offshore oil drilling platform, the sooner the platform is made, the earlier it will be leased to oil production companies. The guild practice has it that shipyards will be rewarded with 200 thousand dollars for ahead-of-scheduled delivery on a daily basis.

CIMC Raffles was formerly known as Yantai Shipyard, which was renamed CIMC Raffles Offshore (Singapore) by Brian Chang, the Singaporean veteran shipbuilder of South African descent, when he became the major shareholder of the shipyard in 1995.

Back in 1998, Brian Chang predicted a growing demand for offshore oil production as oil price started to rise after bottoming out. Then he turned Raffles into offshore engineering equipment business from tug boat production. Since Raffles went for offshore oil production in 2000, global oil price has climbed to 100 dollars/barrel from around 10 dollars/barrel, having stimulated various capital inflows and significantly increased the demand for oil drilling platform.

The 2008 global financial crisis had led to financial strains for many shipowners, including Raffles. Brian Chang then sold the shares of Raffles Shipyard to the financially sound CIMC, making the original core business – "offshore engineering" CIMC Raffles's important emerging business segment.

Yu Ya, Vice President of CIMC was appointed to manage Offshore Segment. Despite the losses resulting from the unprofitable segment, CIMC still continued its investment in offshore engineering, setting up CIMC Offshore Engineering Institute Research Center in Yantai and expanding the original technological team of only sixty to seventy people in Raffles Shipyard into a technological system of nearly one thousand people.

Shao Yongqiang, Assistant Director of CIMC Raffles Project Management Department, told a reporter that he chose to work for Raffles simply because it had invested RMB260 million in the crane "Taisun" (20 thousand tons of gantry crane) aside from Raffles' complete range of engineering facilities. "It takes only about 26 months to build a semisubmersible drilling platform that used to be done in around 36 months."

In August 2008, China Oilfield Services Limited (COSL) acquired Awilco, a Norwegian drilling rig owner at 2.5 billion dollars, making itself accessible to the most-developed offshore oil production area-offshore oil production in the North Sea. Meanwhile, COSL announced it would build an offshore oil production fleet to break into the international market. In fact, CIMC Raffles was the partner of COSL.

In the past five years, Raffles Shipyard has completed the order of four vessels for offshore drilling platforms placed by COSL. The names of the four vessels can clearly show the market expectation of these two partners, namely, "Pioneering", "Trailblazing", "Enterprising" and "Thriving". On September 27, 2013, the "Thriving" Vessel successfully integrated its upper and lower hulls.

Yu Ya explains that the North Sea is one of the worst operating environments in the world, so it is the most challenging and demanding task for offshore equipment to operate there. Three CIMC Raffles's platforms have operated there, some of which even have won the highest level of approval by Det Norske Veritas.

Offshore engineering institute and financing leasing "two-wheel driven"

CIMC Offshore Engineering Institute Research Center is founded on reversing the reality that original shipyards are simply fabrication plants and lack academic background. So it not only processes items according to buyer's samples, but also starts to try basic design, extended design and detailed design, aiming to become a specialized vessel manufacturing enterprise for offshore oil production.

Yu Ya maintains that finance lease is a commercial service mode based on design and fabrication. "At the outset we completed orders from Norway based on the mode of industry and finance integration." After practicing several modes, the mode of finance lease allows CIMC to gain insight into how Norwegian large offshore engineering works.

Traditionally, offshore oil rig owners tend to favor Korean shipyards because of product stability, reliable delivery time and good reputation. By contrast, "Made in China" seems to be less trusted by shipowners.

Yu Ya thinks that Korea and Singapore have been in this industry for many years with ample experience and a complete line of facilities. "They will make on-time delivery if they promise to achieve it in 30 months, and delayed delivery for at most two days only happens on rare occasions. However, we make a production plan not based on much experience, that is why shipowners will not trust us if problems pop up."

"For the part of offshore manufacturing, much change will arise as it is not systematic enough and customers will demand changes according to oil companies. So the whole offshore project will be a great challenge for every shipyard. " says Shao Yongqiang.

Unlike Raffles Shipyard run by Brian Chang, CIMC Raffles Shipyard has improved its manufacturing condition gradually and paid more attention to technological strength. CIMC Raffles formed an independent technology department out of the old one, namely, CIMC Offshore Engineering Institute Research Center founded in 2009.

Teng Yao, Vice General President of the institute told reporters that there were roughly 60 people in the Technology Center in early 2004, but it now reached 700 people. "Our teams are unrivaled in China in the quantities of high-end platforms manufactured, and the semisubmersible platform is the top-notch offshore product nationwide. So far we have designed 6 of 8 semisubmersible drilling platforms altogether in China."

"We used to follow suit, but now we are clear about what to do now." Shao Yongqiang remarks. Design-driven technological strength reduces the risk of changes during the manufacturing process. "The data suggests that there are less than 2% man-hour alterations for the production currently against 10% to 30% alterations previously." This can also guarantee the pre-scheduled delivery.

As another important wheel to drive the growth of offshore engineering, CIMC Financing Leasing Co., Ltd. was established in 2007. It provides a wider range of products and service, for instance, it can provide a turnkey solution "design+manufacturing+finance lease" for the world's second and third largest shipbuilding enterprises.

But Yu Ya admits that there is still a long way for Chinese enterprises to go compared with Norwegian long years of successful mode.

Growing entrants in offshore engineering

The main reasons for remarkable increase in drilling platform orders are: 1. Many old platforms built in the 1970s to 1980s are

obsolete; 2. New market demands are on the rise continuously, mainly the demand for high-end deepwater jack-up drilling rig, which is used to operate at 122 m (400 foot) undersea or severe operating condition in the North Sea; 3. Mexico has intensified efforts to accelerate the exploitation of offshore oil and gas resources, leading to massive demand for jack-up drilling rigs; 4. Increased speculation in markets has pushed up the demand.

As the data from the research institute Religare indicate, as of the third quarter this year, Chinese shipyards have received 45% of global orders of jack-up drilling rigs, with the contract value accounting for 32% of the aggregate amount in the world.

As prices go up and shipbuilding cost decrease, domestic shipbuilders flock to offshore equipment business, especially the jack-up drilling rig. Yu Ya tells reporters that this trend will positively benefit the gradual shift of the entire supply chain towards China, but "potential risks abound at the same time."

Offshore engineering is characterized by very rigorous technological requirements, so it takes every shipyard 3 to 5 years to grasp the rudiments. After that, they will likely surmount technological difficulties. Yu Ya points out that there are at most 3 to 5 shipbuilding enterprises in every country, 3 in Korea, 2 in Singapore and almost 0 in Japan presently. "Chinese entrants have sped up the shift in offshore export, but many will possibly withdraw in 3 to 5 years."

Wang Jinlian, Secretary-general of China Association of the National Shipbuilding Industry, believes that Chinese major shipbuilding enterprises have seized the opportunity to acquire foreign companies and increased designers and engineers in offshore in the past few years, "but there is still a great shortage of high-end talents for Chinese shipbuilding industry, like designer, manager, operator and even lawyer."

青岛中集冷箱：世界冷链装备领跑者

Qingdao CIMC Cold Container: the Forerunner of the World's Cold Chain Equipment

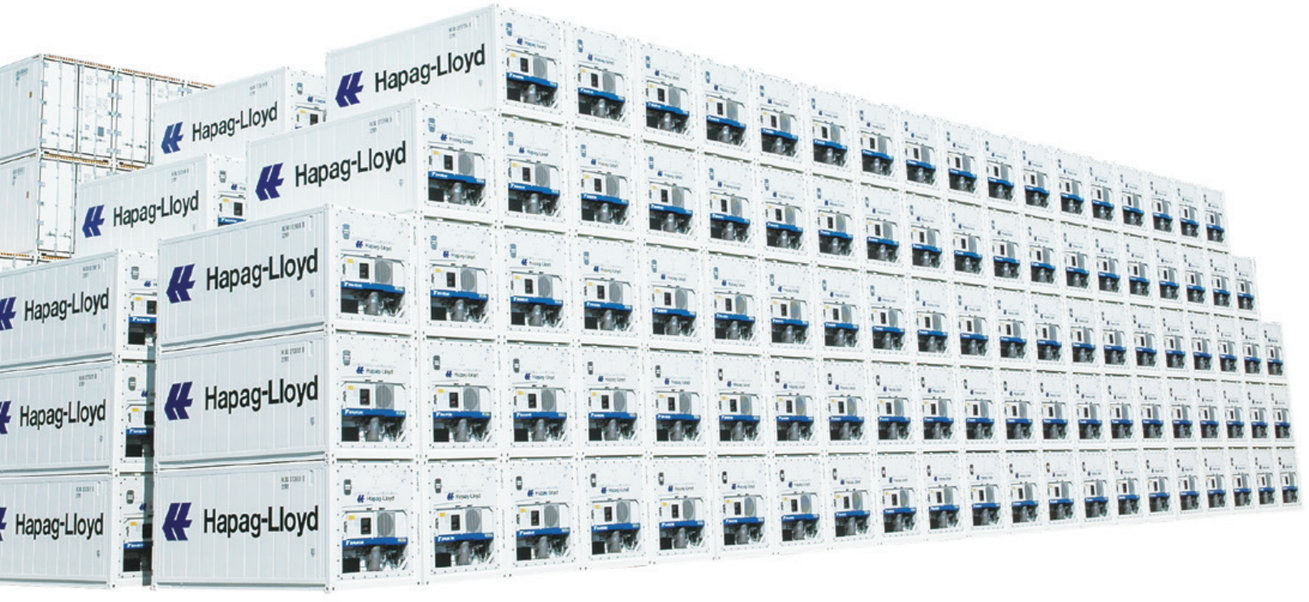
摘自：青岛财经日报　作者：马芳
By: Ma Fang　Source: Qingdao Financial Daily

今年以来，新生力量菜鸟网络、电商巨头京东、零售巨头沃尔玛、物流大鳄顺丰等纷纷加大马力布局生鲜食品的销售与配送。由于生鲜食品的特殊性，冷链在这场“大战”中是不可或缺的重要保证。为了保证易腐食品在仓储与运输过程中不变质，需要较为严格的低温、恒温条件，这就离不开冷链产业链中的冷库、冷藏箱、冷藏车、冰柜等冷却仓储设备。坐落于胶州兰州东路的青岛中集冷藏箱制造有限公司就是一家专注于冷藏装备制造的世界级企业。

冷箱销量连续 7 年世界第一

“集装箱制造产生于欧美，一度转移到日本和韩国，亚洲金融危机时转移到中国，目前全球 80%–90% 集装箱的生产全部在中国完成。从未来来看，暂时还看不到集装箱制造业向海外转移的迹象。虽然一些新的经济体劳动力成本比中国低，但中国目前的配套优势还是无可取代的。集装箱分为干货集装箱和冷藏集装箱两种，冷藏箱是集装箱中的高科技产品，相当于一个超大冰箱，其主要用途是运输食品、水果、生鲜等易腐货物及药品、高精尖科技产品等对温度敏感货物。”青岛中集冷藏箱制造有限公司总经理助理粘君来首先向记者介绍了产业背景。

青岛中集冷藏箱制造有限公司成立于 1999 年，隶属于世界领先的物流装备和能源装备供应商——中集集团。从成立之日起，就提出了“成为全球领先的冷藏装备制造商与服务商，培育世界一流的冷藏装备制造和研发能力”的愿景，从一开始单一的冷藏箱制造逐步发展成为集标准冷藏箱、特种冷藏箱、冷藏半挂车、冷机生产和研发中心于一体的创新化冷藏产业基地。“我们公司的主打产品是 20 尺、40 尺标准冷藏集装箱，后来根据市场需求，又组建了一家特种冷藏设备公司，建立了世界上唯一一条完整的特种冷藏箱生产线，能够生产 13 大系列 200 个品种的冷藏箱，可充分满足客户多样化和定制化需求，已成为特种冷箱领域的主力供应商。”令青岛冷箱人自豪地是，其冷箱产品大踏步挺进日本、韩国、美国、欧洲、澳洲、东南亚等市场。2012 年产量突破 3.87 万台，全球市场占有率超过 33%，自 2006 年起，产销量连续 7 年位居世界第一。



“世界级”冷车稳居欧美市场

该公司为继续做大冷链装备产业，不满足于冷箱领域的成功，将目光投向了冷藏车制造。“我们在胶州成立了一家冷藏运输设备有限公司，它是国内唯一一家能够提供符合国际标准、定位高端的冷藏半挂车产品的企业，企业研发的具有自主知识产权的冷藏半挂车专利产品，拥有 14 项技术专利，市场定位主要针对欧美等发达地区。在 2009 年 3 月的路易威尔中美车展期间，该产品获得了高度评价，技术和质量标准进入了美国前三名。”

值得一提的是，该产品的生产采用的是 CKD 模式，即在胶州的生产基地生产各个部件，通过集装箱运往美国，在美国建立装配工厂在当地组装，这样大幅降低了人工费、材料费，将中国的成本优势、人才优势移植到了美国，使产品迅速占据欧美市场。目前，该公司在美国、南非、中东、欧洲总共设立了 5 个装配点。“目前中国冷链产业还处在培育期，这种高端产品被国内市场接受还需要一个过程。”粘君来直言道：“但从市场走向看，我国冷链市场的前景非常广阔，所以我们已提前布局国内市场，在上海和济南分别收购或成立了两家工厂，专门开发了面向国内市场的冷藏车产品。另外，我们也正在研发冷链装备中的冷库和小的移动式冷箱、冷柜等新产品，也就是说，冷链装备制造中的相关产品我们都会涉及。”

核心技术有望实现“中国造”

而冷藏箱最核心的产品是冷机，目前主要由国外厂商垄断。记者了解到，这一技术有望在青岛中集冷箱公司实现历史性突破。

记者在青岛中集冷箱公司的厂区内看到，一排排、一列列的白色冷藏集装箱整齐的码放着，宛如一座座小楼，看上去非常壮观。陪同人员对记者说：“这些都是产成品，端部的制冷部件就是冷机，仅冷机的价格就大约占了整个冷箱价格的一半，目前几大冷机制造商均是国外企业。”

自主研发一直是青岛中集冷箱公司的优势。2004 年该公司成立了冷藏技术研发中心，并取得了山东省级认定、高新技术企业认证，其致力于冷藏设备的研发，主要包括标准冷藏箱，特种冷藏设备如保温箱、军用箱、内陆箱、房屋箱，以及新材料的开发、新结构、新工艺的改进和创新等，累计拥有自主专利 100 余项。

除了已在上海成立了一家车用冷机公司之外，3 年前该公司也展开了海运冷机的联合研发，目前已经经过了样机试用阶段，下一步准备建一条冷机生产线进行小批量生产。“海运冷机的本土化，对整个行业的影响是很大的，对产业拓展和规模提升都有很大帮助。”粘君来说。

胶州将成冷链产业集聚高地

令中集人兴奋的是，一幅更加宏伟的冷链产业蓝图已在胶州徐徐展开，中集集团斥资 50 亿元的“中集冷链高新产业园”项目正在胶州开发区紧张建设，这将让青岛中集冷箱公司实现新的腾飞。

该项目主要包含海运冷箱“梦工厂”、冷链研究院、特种冷箱和冷机制造及冷链物流项目等产业板块，涵盖整个冷链产业主要项目在内的集冷链总部经济、产品研发、生产制造、人才育成、学术研究等功能为一体的全国第一家。

据悉，青岛中集冷箱“梦工厂”是园区内的主体项目之一，目前厂房主体已经开建，预计 2014 年年底即可正式投产。青岛中集冷箱“梦工厂”项目投产后，将具备年产 10 万台冷箱的产能，将成为全球单厂产能最大、技术最先进、效率最高的冷藏箱制造企业。冷链研究院将打造成为具备产品研发、技术支持、学术交流等多种功能的国家级技术中心，作为中集冷链产业研发基地和技术孵化器，负责冷链相关产品和技术的研发。

中集冷链高新产业园建成投产之后将会有 150 亿元以上的产值，同时会产生很大的社会效益、科技贡献及汇聚更多冷链人才，将有力促进青岛蓝色经济的发展。

Qingdao CIMC Cold Container: the Forerunner of the World's Cold Chain Equipment

This year, emerging market player Cainiao Network Technology Co., Ltd., E-business giant Jingdong, retailer tycoon Walmart and logistics giant SF Express are making more investments in fresh food sales and distribution. Owing to the unique characteristics of fresh food, cold chain plays an indispensable part in this "competition". To ensure the freshness of perishable foods during the storage and transportation, it requires stringent low-temperature and constant-temperature condition and cannot do without such cold storage facilities as refrigerated container, refrigerator truck and freezer. Qingdao CIMC Reefer Container Manufacture Co., Ltd. is a world-class company specializing in refrigerated equipment production at Lanzhou East Rd., Jiaozhou.

The world's No.1 seller of refrigerated container for 7 consecutive years

"Container was first produced in Europe and America, then it appeared in Japan and Korea. Asian financial crisis saw its shift towards China where 80% to 90% of global containers are manufactured presently. A new shift toward other countries won't happen in the short term, since China takes an incomparable advantage in supporting facilities over new economies with lower labor cost. Container consists of refrigerated container and dry container, and the refrigerated one is a high-tech product like a super large refrigerator primarily used to carry perishable goods (fresh food and fruit) and temperature-sensitive items like medicines and high-precision products." Nian Junlai, general manager assistant of Qingdao CIMC Reefer Container Manufacture Co., Ltd. describes industrial background to reporters.

Founded in 1999, Qingdao CIMC Reefer Container Manufacture Co., Ltd. operates as the subsidiary of CIMC, the world's leading provider of logistics and energy equipment. The vision has long been put forward since its inception, "striving to become the world's leading refrigerated equipment manufacturer and service provider and develop the manufacturing capability and R&D ability to deliver world-class refrigerated equipment." The refrigerated container manufacturing enterprise has morphed into an innovative refrigeration industry base that incorporates the standard refrigerated container, special refrigerated container, refrigerated semitrailer and cold machine production and R&D center. "Our company specializes in 20ft and 40ft standard refrigerated containers. Qingdao CIMC Special Reefer Co., Ltd. was then incorporated to meet fresh market demands, forming the only complete production line of special refrigerated container in the world. Its capability to manufacture 13 refrigerated container series with 200 types allows it to satisfy diverse customer-specific needs and become a major supplier of special refrigerated container." The company takes pride in the fact that its refrigerated container has made great headway in Japan, Korea, America, Europe, Australia and Southeast countries. It manufactured more than 38,700 containers in 2012, making up 33% of global market share and it has been the world's largest seller and manufacturer of refrigerated container for 7 consecutive years since 2006.

"World-class" cold vehicle progresses steadily in European and American markets

In order to make it bigger and stronger, the company was not satisfied with current success and began to invest in refrigerator truck manufacturing business. "We founded Qingdao CIMC Reefer Transport Equipment Co., Ltd. in Jiaozhou, it is the only company in China capable of supplying international standards-compliant and high-end refrigerated semitrailer. The refrigerated semitrailer features proprietary intellectual property rights and 14 technology patents, mainly sold to western developed countries. In March 2009, the refrigerated semitrailer won international acclaim during the Louisville Car Show and its technology and quality ranked No.3 in the US."

It is noteworthy that CKD mode is adopted for the container production, that is, every component produced in Jiaozhou is transported to the US in containers and then assembled in the US assembly factory, which significantly decreases labor and material costs. In this way, China's advantage in cost and talent makes it possible for the company to expand markets in Europe and America. Presently, the company has 5 assembly plants altogether in America, South Africa, the Middle East and Europe. "Chinese cold chain industry remains in the infancy and it may take a long time for domestic market to accept such high-end products." Nian Junlai says frankly, "But in light of market trend, the prospect for Chinese cold chain industry will be bright, so we have begun to establish the presence in domestic market by acquiring or founding two plants in Shanghai and Jinan and have produced refrigerator trucks to exclusively meet domestic market demands. In addition, we are actively developing new products, such as cold storage, small mobile cold container and refrigerator. In other words, our product range covers many products relating to cold chain equipment."

Core technology will likely be achievable in China

As the core component of containers, cold machine is mainly monopolized by foreign manufacturers. The reporter learns that Qingdao CIMC Reefer Container Manufacture Co., Ltd. will likely make historic breakthrough in this technology.

The reporter found row-upon-row of white refrigerated containers like small houses neatly arranged in the factory. The reporter was told, "These are finished products, and the refrigerated parts at both ends are cold machine, which represents about 50% of the total container cost and is made by several major manufacturers overseas."

Qingdao CIMC Reefer Container Manufacture Co., Ltd. always attaches great importance to independent R&D. In 2004, the company set up a refrigeration technology R&D center that was widely recognized by Shandong province and a total of high-tech enterprises. With over 100 proprietary patents, the R&D center is dedicated to refrigerated equipment R&D, mainly

including standard refrigerated container, special refrigerated equipment like thermal container, military container, inland transport container and household container; meanwhile it also focuses on new material development, new structure and new technological improvement and innovation.

Along with an automobile cold machine company founded in Shanghai, the company was also involved in R&D of cold machine for sea transportation 3 years ago, the sample machine has proven workable in trial stage and a cold machine production line will be created for a small-lot production. "The localization of cold machine for sea transportation will make a great difference to the whole industry and will greatly promote industrial expansion in size and strength." says Nian Junlai.

Jiaozhou will become the hub of cold chain industry

It is exciting news for CIMC employees that a grand blueprint unfolds as the "CIMC cold chain high-tech industry park" invested by CIMC Group with RMB5 billion is in the construction process in Jiaozhou development zone, making it possible for Qingdao CIMC Reefer Container Manufacture Co., Ltd. to achieve new heights.

This project mainly involves sea transportation refrigerated container "Dreamworks", cold chain institute, special refrigerated container and cold machine manufacturing and cold chain logistics project. It has been the first enterprise to have combined the cold chain industry economy, product R&D, production, talent cultivation and academic research.

The "Dreamworks" is reported to be one of the major projects in the high-tech industry park. Presently, the construction of main factories is under way, which will be expected to operate by the end of 2014. After the "Dreamworks" goes into operation, it will produce 100 thousand refrigerated containers annually and become the largest refrigerated container manufacturer with the largest capacity, most advanced technology and highest efficiency in the world. To develop itself into a multifunction national-level technology center capable of product R&D, technological support and academic exchange, the cold chain institute will serve as the cold chain industry R&D base and technology "incubator" to do relevant product and technology R&D.

CIMC cold chain high-tech industry park will come with an output value of more than RMB15 billion and immense social benefits, technological contributions and increasing cold chain talents after it is put into use, and it will significantly promote the development of Qingdao's blue economy.

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scanning

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