

www.wxdelin.com



无锡德林船舶设备有限公司
WUXI DELIN MARINE EQUIPMENT CO.,LTD

船 舶 与 海 工 高 端 装 备 专 业 服 务 商

 **无锡德林船舶设备有限公司**
WUXI DELIN MARINE EQUIPMENT CO.,LTD

2015版

地址/Add: 无锡市锡山区锡港东路8号 No.8, Xigang Road (E), Wuxi City, China

电话/Tel: +86-510-8377 1984 +86-510-6891 5002 (国内业务/Local business)

+86-510-8101 3575 +86-510-6855 7507 (国际业务/International business)

传真/Fax: +86-510-8377 2065 邮编/Post code: 214191 网址/Http: www.wxdelin.com

E-mail: mail@wxdelin.com(国内业务/Local business) f.trade@hailian.net(国际业务/International business)



企业文化 ENTERPRISE CULTURE

WUXI DELIN MARINE EQUIPMENT CO., LTD

公司愿景 Company Vision

成为船舶与海工高端装备专业服务商
Become the professional service provider of high-end marine and offshore equipment

核心价值观 Core Value

顾客长期满意, 公司持续发展, 员工快乐工作
Long-term customer satisfaction, sustainable company development, happy staff career

质量方针 Quality Policy

科技创新, 安全可靠, 精益求精, 持续改进
Innovative in science and technology, safe and reliable, keep improving

企业精神 Enterprise spirit

团结、奉献、创新、自强
Unity, dedication, innovation, self-improvement

产品目录 CATALOGUE

WUXI DELIN MARINE EQUIPMENT CO., LTD

甲板机械 Deck Machinery

舵机 Steering Gear	
• 转叶式液压舵机 Rotary Vane Steering Gear	05-06
• 直驱容积控制转叶舵机 Direct-drive Rotary Vane Steering Gear	07-07
锚机 Windlass	08-08
绞车绞盘 Winch and Capstan	
• 绞车 Winch	09-09
• 绞盘 Capstan	10-10

船舶特辅装置 Special Auxiliary Device of Ship

高海况工作艇收放装置 Launch & Recovery System (Davit) for Working Boat under Heavy Sea Conditions	11-16
拖曳绞车 Towing Winch	17-18
鲨鱼钳 Shark Jaw	19-20

船舶姿态控制装置 Attitude Control Device for ship

减摇水舱 Anti-rolling Tank	21-22
Magnus减摇装置 Magnus stabilizing Device	23-24
高性能船舶综合姿态控制装置 Ride Control System for High Performance Ships	
• 纵倾调整尾板 Trim Tab	27-27
• T形水翼 T-shape hydrofoil	28-28
• 船尾拦截器 Stern Interceptor	29-29
• 稳定翼 Stabilizer Fin	30-30
六自由度运动平台 6-DOF Motion Platform	31-32

海洋工程装备 Ocean Engineering Equipment

全回转可伸缩过桥装置 Slewing Type Telescopic Gangway	33-34
深海光电复合绞车 Winch for deep sea electro-optic composite cable	35-36

船装 Marine Fittings

舵系 Rudder System	
• 襟翼舵 Flap Rudder	37-38
• 导管襟翼舵 Nozzle Flap Rudder	39-39
• 空气舵 Air Rudder	40-40
门、盖、梯 Door, Hatch, Ladder	
• 液压滑动式水密门 Hydraulic sliding watertight door	41-42
• 电动卷帘门 Electric Roller Door	43-43
• 特种船用门 Special Marine Door	44-44
• 舱口盖 Hatch Cover	45-46

气调保鲜装置 Air-conditioned Fresh Keeping Device

气调保鲜类产品 Air-conditioned Fresh Keeping Products	47-52
--	-------





科技创新 安全可靠 精益求精 持续改进

Innovative in science and technology
safe and reliable, keep improving

公司简介 / Company Profile

无锡德林船舶设备有限公司位于无锡市锡山区。于2010年在原无锡市海联舰船附件有限公司机械事业部基础上注册成立，现有员工近300人，其中博士和硕士20多名，本科及以上学历超百人，各类中高级职称人员30多人，专业技术人员60多人，质量管理人员10多人，公司占地面积5万多平方米，建筑面积4万多平方米。公司已建成国内领先的多自由度摇摆试验台、舵机试验台、700t·m拉力试验台、减摇水舱试验台，并和江南大学联合建设了蔬果保鲜实验室。

公司和哈尔滨工程大学、江苏科技大学、江南大学、中国船舶重工702所等建立了广泛的产学研合作。被认定为国家重点高新技术企业，建立了博士后工作站、工程技术中心，具有强大的研发能力和技术支撑能力，获得包括国家重点新产品、国家重点创新基金和国家火炬计划在内的多项国家科技项目立项以及国防军品科研任务。已获授权的发明专利、软件著作权近百项，并起草制定了《船用气调保鲜系统》、《工作舱收放装置》等国家标准和行业标准。

公司立足于军品、民品及外贸三大市场，从事多种船用机、电、液产品的研发、生产和服务，包括甲板机械、船舶特辅装置、船舶姿态控制装置、海洋工程装备、涂装和气调保鲜装置等六大类产品。产品已广泛用于中船工业集团、中船重工集团、交通部等管辖的重点船厂。同时出口法国、德国、西班牙、新加坡、泰国等欧洲和东南亚船厂。

Located in City of Wuxi, Wuxi Delin Marine Equipment Co., Ltd. was founded in 2010 based on the mechanical department of Wuxi Hailian Marine Fitting Co., Ltd. Now Delin has up to 300 staffs, including more than 20 with doctorate and master degree, 100+ with bachelor degree, 30+ with intermediate and senior professional titles, 60+ professionals and 10+ quality controllers. The company has 50,000+ floor area and 40,000+ area of structure with advanced test facilities such as domestic-leading Multi-DOF swaying test bench, steering gear test bench, 700t·m tensile test rig, anti-rolling test bed. Delin has also built the laboratory for fresh keeping of fruit and vegetable in cooperation with Jiangnan University.

Delin has a comprehensive cooperation research and development with Harbin Engineering University, Jiangsu Science and Technology University, Jiangnan University, CSIC 702 Institute, etc. As the high and new-tech enterprise of Jiangsu Province, Delin has obtained various qualification certificates for military industry, established postdoctoral workstation and engineering technology centre at provincial level. Delin holds the scientific and technology approved projects including National New Key Product, National Key Innovation Fund, National Torch Plan, etc. Along with up to 100 authorized patents and software copyrights, Delin has drafted the national and industry standard as "Marine Air-conditioned Fresh Keeping system" and "Launch and Recovery System for Working Boat".

Delin penetrates in the military, civil and global markets with R&D, manufacture and service of various marine mechanical, electrical and hydraulic products, including six series of products, which are deck machinery, marine special auxiliary device, ride control system of ship, offshore equipment, marine fittings and air-conditioned fresh keeping device. Delin products have been widely applied to key domestic shipyards of CSSC, CSIC and Ministry of Transport. Meanwhile, Delin has also exported products to major international marine and offshore markets including France, Russia, Germany, Spain, Singapore, Thailand, etc.

产品系列-甲板机械

DELIN PRODUCTS-DECK MACHINERY

WUJI DELIN MARINE EQUIPMENT CO., LTD.



舵机 | 转叶式液压舵机 Steering engine | Rotary Vane Steering Gear



▲ 转舵机构 Steering gear



▲ 液压泵站 HPU

概述 Overview

转叶式液压舵机由转舵机构、液压泵站、储备油箱、启动箱、报警操舵箱等组成。其控制形式为阀控或泵控，能与任何形式的自动操舵仪和随动操舵仪配合使用。转叶式液压舵机适用于各航区，已广泛用于各类船舶。

Hydraulic rotary vane steering gear consists of steering gear, HPU, reserve tank, starting box, and alarm steering box, etc. Controlled by valve or pump, the steering gear can work together with all forms of autopilot and follow-up steering apparatus. Rotary vane steering gear is applicable to all navigation areas and all kinds of ships.



▲ 12000方挖泥船转叶舵机液压泵站
HPU of rotary vane steering gear for 12000m³ dredger



▲ 转叶式液压舵机试验台
Testbed of rotary vane steering gear

技术参数 Technical Parameters

项目名称 Project Name	性能指标 Performance Index
舵机扭矩 Working torque	10kNm-1600kNm
转舵角度 Steering angle	±35°、±45°、±65°
转舵时间 Steering time	28s/65°、20s/65°、12s/65°、25s/85°

注：可根据客户要求定制。
Note: Products are customizable.

产品特性 Product Features

- 结构紧凑，占地面积小
- 安装和维修方便
- 重量轻，噪音小
- 抗冲击，抗振动性能好
- 舵角范围宽，最大可达±65°
- 代替上舵承
- Compact structure
- Easy installation and maintenance
- Low weight and noise
- Shock and vibration resistance
- Steering angle up to ±65°
- Can replace the upper rudder carrier

应用及业绩 Application and performance

我公司转叶式液压舵机已生产百套产品，使用于挖泥船、测量船、拖轮（船）、油化船、渔政船、破冰船、科考船等一系列船舶上。

Delin rotary vane steering gear has been widely applied to dredgers, survey vessels, tugs, oil and chemical tankers, fish administration vessels, ice-breakers and science & research vessels, etc.



产品系列-甲板机械

DELIN PRODUCTS-DECK MACHINERY

WUHAN DELIN MARINE EQUIPMENT CO., LTD.

舵机 | 直驱式转叶舵机

Steering Gear | Direct-drive Rotary Vane Steering Gear



▲ 转舵机构 Rotary vane steering gear



▲ 液压泵站 Direct-drive hydraulic power unit

概述 Overview

直驱式转叶舵机是融合交流伺服技术控制灵活与液压系统大出力的特点，并结合转叶舵机的技术优势，摒弃了传统液压伺服系统中容易发生故障的液压伺服阀和变量泵，利用交流伺服电机驱动双向定量泵，通过直接控制交流伺服电机来改变双向定量泵的转动方向、转速和运转时间从而调整舵机的运转方向、速度和舵角。

Direct-drive rotary vane steering gear has both the features of flexible control from AC servo technology and high output from hydraulic system. In combination with the technology advantages of rotary vane steering gear, the electro-hydraulic servo valve and variable displacement pump which are easily fault are replaced by the bidirectional constant displacement pump driven by AC servo motor. Then the direction, speed and rudder angle of the steering gear are controlled directly by the rotation direction, speed and running time of AC servo motor.

产品特性 Product Features

直驱式转叶舵机中的伺服电机可在恒转矩下变速，避免了节流损耗和溢流、卸荷损耗；而且当舵角保持不变时，伺服电机处于停止运转的工作状态。比传统舵机中的电机始终处于额定转速旋转更节能、高效和环保，所以直驱式转叶舵机是一种极具发展前景的舵机型式；同时去掉了体积庞大的油箱和泵站，具有集成度高、结构紧凑、占地面积小、控制简单灵活、振动噪声小、可靠性高等特点，有效地提高了舰船的操纵性。

The throttle loss, overflow, and unloading loss in the direct-drive rotary vane steering gear are extremely reduced because AC servo motor can output the constant torque with variable speeds. When the rudder angle keeps constant, the servo motor under non-operating state has better energy-saving, efficient and environment friendly performance compared with the tradition steering gear motor whose rated speed is constant. The promising direct-drive rotary vane steering gear has no huge oil tank and HPU, so that it can effectively increase the maneuverability of the ship with the features of high-level integration, compact structure, small space usage, easy control, low vibration and noise, high reliability.

应用及业绩 Application and performance

直驱式转叶舵机具有高效节能的特点，但转叶舵机转舵扭矩较小，一般适用于中小型船舶。直驱式转叶舵机的伺服电机调速范围比较大，可以达到较高的航速；而且振动噪声小，在操纵性和环境噪声要求较高的军用舰船上有着良好的应用前景。

The direct-drive rotary vane steering gear has the characteristic of high efficiency and energy-saving. It also has high steering speed by its servo motor with a broad speed range. The product is applicable to the medium and small ships due to the relatively small steering torque. With its low-noise feature, the product also has bright application prospect in the military vessels with high requirement in maneuverability and environmental noise.

产品系列-甲板机械

DELIN PRODUCTS-DECK MACHINERY

WUHAN DELIN MARINE EQUIPMENT CO., LTD.

起锚机 Windlass



▲ 46电动液压组式起锚机 46 Electro-hydraulic combined windlass

概述 Overview

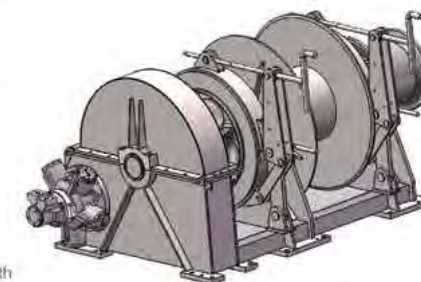
起锚机分为电动起锚机和电动液压起锚机，主要由减速箱、链轮轴装置、制动装置、离合装置及机架等组成，广泛应用于各类船舶的起抛锚作业及系泊系统。

Windlass can be electric or electro-hydraulic driven. It mainly consists of reduction box, chain wheel (sprocket) shaft device, braking device, clutch device and rack, etc. Windlass is widely applied in the operation of anchor handling and mooring.

技术参数 Technical parameter

项目名称 Project Name	性能指标 Performance Index
锚链直径 Dia. of anchor chain	Φ22mm~Φ102mm
起锚速度 Anchor lifting speed	≥9m/min
卷筒拉力 Pull force on drum	30kN~250kN
公称速度 Nominal speed	≥15m/min

注：可根据客户要求定制。 Note: Products are customizable.



产品特性 Product Features

- 抛锚长度显示
- 拉力显示
- 驾驶室遥控操作
- 体积小、重量轻
- 制动安全可靠
- Displayable anchor handling length
- Displayable pull force
- Remote control from wheelhouse
- Compact and light
- Safe and reliable braking

应用及业绩 Application and performance

我公司生产的液压组式起锚机已应用于14000kW 远海救助拖船、万米级潜水器科考母船等船舶。

Delin combined hydraulic windlasses have been applied to 14,000kW ocean salvage tug, research mother ship for 10,000m deep ROV, etc.



产品系列-甲板机械

DELIN PRODUCTS-DECK MACHINERY

WUXI DELIN MARINE EQUIPMENT CO., LTD.

绞车 Winch

概述 Overview

绞车分为电动绞车和液压绞车，主要由减速箱、卷筒轴装置、制动装置、离合装置、机架等执行、动力和控制部分组成。广泛应用于各类船舶的系泊作业，工程船舶的定位，移动、起吊甲板货物等。

Winch can be electric or electro-hydraulic driven. It mainly consists of reduction box, drum and shaft device, braking device, clutch device and rack, etc. Winch is widely applied in the mooring operation, positioning of working vessel, moving and lift of deck cargos, etc.



技术参数 Technical parameter

项目名称 Project Name	性能指标 Performance Index
卷筒负载 Load on drum	30kN~250kN
系缆速度 Mooring speed	≥15m/min

注：可根据客户要求定制。
Note: Products are customizable.

产品特性 Product Features

- 绳长度显示
- 拉力显示
- 驾驶室遥控操作
- 体积小、重量轻、负载大
- 液压制动，安全可靠

- Displayable cable length
- Displayable pull force
- Remote control from wheelhouse
- Compact and light and high load
- Safe and reliable braking

应用及业绩 Application and performance

我公司生产的绞车已应用于“雪龙号”科考船、68m打桩船、14000kW远海救助拖船及3000t近海救助拖船等。

Delin hydraulic winches have been applied to MV Xue Long icebreaking research vessel, 68m piling ship, 14,000kW ocean salvage tug and 3000t offshore salvage tug, etc.



产品系列-甲板机械

DELIN PRODUCTS-DECK MACHINERY

WUXI DELIN MARINE EQUIPMENT CO., LTD.

绞盘 Capstan

概述 Overview

绞盘分为电动绞盘和液压绞盘，主要由减速箱、绞盘头、及基座组成，适用于各类工程船舶定位和系泊系统。

Capstan can be electric or electro-hydraulic driven. It mainly consists of reduction box, drumhead and foundation, Capstan is applied in the mooring operation and positioning of vessels.



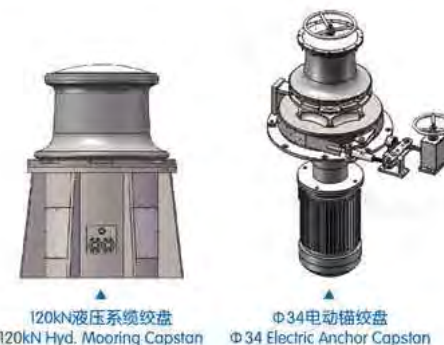
产品特性 Product Features

- 操作简便
- 体积小、重量轻、负载大
- Simple operation
- Small volume, light weight, load.

技术参数 Technical parameter

项目名称 Project Name	性能指标 Performance Index
锚链直径 Dia. of anchor chain	Φ22mm~Φ102mm
起锚速度 Anchor lifting speed	≥9m/min
绞盘拉力 Pull of capstan	30kN~250kN
公称速度 Mooring speed	≥15m/min

注：可根据客户要求定制。 Note: Products are customizable.



应用及业绩 Application and performance

我公司生产的绞盘已应用于14000kW远海救助拖船、万米级潜水器科考母船及海上系泊测试平台等。

Delin capstans have been applied to 14,000kW ocean salvage tug, research mother ship for 10,000m deep ROV and ocean mooring testing platform, etc.



产品系列-船舶特辅装置

DELIN PRODUCTS-SPECIAL AUXILIARY DEVICE OF SHIP

WUHAN DELIN MARINE EQUIPMENT CO., LTD.



高海况工作艇收放装置

Launch & Recovery System (Davit) for Working Boat under Heavy Sea Conditions

高海况工作艇收放装置由防摆装置、臂架、便携式的遥控装置、吊环吊钩及动力单元组成。用于各类小艇的收放作业。目前公司生产的高海况工作艇收放装置有四种：折臂型（WDLZ）、单臂回转型（WDL）、“A”字翻转型（WDLA）、双吊点型（WDL2）。每种收放装置在小艇收放时都具有波浪补偿、减摆、减震缓冲、安全联锁保护等功能。

The launch and recovery system (Davit) consists of anti-swing device, boom, portable remote control device and hook, etc. Currently we have four types of davits: Foldable (WDLZ), Single-boom slewing (WDL), A-type overturning (WDLA), Double suspending point (WDL2). Each type has the function of wave compensation, anti-swing, shock resistance and interlock safety protection, etc.

WDLZ折臂型高海况工作艇收放装置 WDLZ Type (Foldable)



产品特性 Product Features

- 水平折臂式臂架结构，节省安装及存放空间，可置于舱室内
- 波浪补偿自动控制系统
- 减摆装置，有效减少工作艇随母船的摇摆
- 便携式遥控装置，操作简单
- 模块化设计，高度集成液压系统，安装方便、易于维修



- The horizontal foldable boom structure saves space and can be mounted within cabin.
- Wave compensation automatic control system (ACS) for working boat.
- Anti-swing device to effectively reduce the boat swing along with the mother ship
- Portable remote control device for easy operation.
- Modular design and integrated hydraulic systems ensures the easy installation and maintenance.

技术参数 Technical specifications

项目名称 Project Name	性能指标 Performance Index	
	安全工作负载 SWL	26kN
最大起升速度 Max. Hoisting Speed	≥20m/min	
最大下放速度 Max. Launch Speed	≥20 m/min	
波浪补偿速度 Speed of Wave Compensation	100~120 m/min	
外形尺寸（长×宽×高）Dimension (L×W×H)	~5800mm×1400mm×2500mm	~6850mm×~1450mm×2500mm
工作环境 Working Environment	横倾±20° 纵倾±10°，不大于5级海况 Heel±20°，Trim±10°，no more than sea state 5	

注：可根据客户要求定制。
Note: Products are customizable.



▲ 便携式遥控装置 Portable remote control box



▲ 减摆罩 Antipendulation hood



▲ 带航速收放 Fast launch & recovery under sailing condition

产品系列-船舶特辅装置

DELIN PRODUCTS-SPECIAL AUXILIARY DEVICE OF SHIP

» WJAI DELIN MARINE EQUIPMENT CO., LTD.



WDLL单臂回转型高海况工作艇收放装置 WDLL Type (Single-boom slewing)



单臂回转型收放装置
Single-boom slewing LARS

- Single boom structure has bigger slewing angles and length-width ratio, suitable for installation at the ship side.
- Wave compensation automatic control system (ACS) for working boat.
- Anti-swing device to effectively reduce the boat swing along with the mother ship.
- Guarantee the work boat parallel with the mother ship during the slewing.
- Portable remote control device for easy operation.
- Modular design and integrated hydraulic systems ensures the easy installation and maintenance.

技术参数 Technical Parameter

项目名称 Project Name	性能指标 Performance Index	
安全工作负载 SWL	27kN	45kN
最大起升速度 Max. Hoisting Speed	≥36m/min	
最大下放速度 Max. Launch Speed	≥36m/min	
波浪补偿速度 Speed of Wave Compensation	100-120 m/min	
外形尺寸(长×宽×高) Dimension (L×W×H)	~5200mm×1800mm×3700mm	~6350mm×~2000mm×3550mm
工作环境 Working Environment	横倾±20° 纵倾±10°，不大于5级海况 Heel±20°, Trim±10°, no more than sea state 5.	

注：可根据客户要求定制。
Note: Products are customizable.



单臂回转型收放装置
Single-boom slewing LARS



减震缓冲装置
Damping and buffering device



减摆装置(带旋转功能)
Anti-swing device (with rotating function)

产品特性 Product Features

- 单臂回转型结构，回转角度大，长宽比大，重量轻；
- 波浪补偿自动控制系统；
- 减摇摆装置，有效减少工作艇随母船的摇摆；
- 保证工作艇艏艉线在吊臂回转过程中，自动与母船保持平行；
- 便携式遥控装置，操作简单；
- 模块化设计，高度集成液压系统，安装方便、易于维修。

WDLA“A”型高海况工作艇收放装置 WDLA Type (A Type)

产品特性 Product Features

- “A”字型吊臂结构，结构简单；
- 波浪补偿自动控制系统；
- 减摇摆装置，有效减少工作艇随母船的摇摆；
- 结构简单便于安装，易于维护；
- 可靠性强。

- A-type boom has simple structure.
- Wave compensation automatic control system (ACS) for working boat.
- Anti-swing device to effectively reduce the boat swing along with the mother ship.
- Simple structure for easy installation and maintenance.
- High reliability.



▲ WDLA型高海况工作艇收放装置 WDLA Type Davit

产品系列-船舶特辅装置

DELIN PRODUCTS-SPECIAL AUXILIARY DEVICE OF SHIP

WUXI DELIN MARINE EQUIPMENT CO., LTD.

WDLA “A”型高海况工作艇收放装置 WDLA Type (A Type)



技术参数 Technical Parameter

项目名称 Project Name	性能指标 Performance Index		
	安全工作负载 SWL	27kN	50kN (45kN)
最大起升速度 Max. Hoisting Speed	≥36m/min (48m/min)		
最大下放速度 Max. Launch Speed	≥36m/min (48m/min)		
波浪补偿速度 Speed of Wave Compensation	100-120 m/min		
外形尺寸 (长×宽×高) Dimension (L×W×H)	-3500mm ×2700mm ×4300mm	-3560mm ×2600mm ×5150mm	-4150mm ×3780mm ×4770mm
工作环境 Working Environment	横倾±20° 纵倾±10°，不大于5级海况 Heel±20°，Trim±10°，no more than sea state 5		

注：可根据客户要求定制。
Note: Products are customizable.

WDLA型工作艇收放装置 WDLA Type (Double Suspending Point)

产品特性 Product Features

- 双吊点臂架结构，安全负荷高；
- 结构简单，便于安装，易于维护；
- 操作简单方便，安全性高。

- The double suspending boom structure has high SWL.
- Simple structure for easy installation and maintenance.
- Easy operation and high safety.

产品系列-船舶特辅装置

DELIN PRODUCTS-SPECIAL AUXILIARY DEVICE OF SHIP

WUXI DELIN MARINE EQUIPMENT CO., LTD.

WDLA双吊点型工作艇收放装置 WDLA Type (Double Suspending Point)



双吊点收放装置 Double Suspending Device

技术参数 Technical Parameter

项目名称 Project Name	性能指标 Performance Index
安全工作负载 SWL	≥50kN
最大起升速度 Max. Hoisting Speed	≥18m/min
最大下放速度 Max. Launch Speed	≥28m/min
波浪补偿速度 Speed of Wave Compensation	100-120 m/min
工作环境 Dimension	横倾±20° 纵倾±10° 不大于5级海况 Heel±20°，Trim±10° no more than sea state 5

注：可根据客户要求定制。
Note: Products are customizable.

应用及业绩 Application and Performance

高海况工作艇收放装置已有百套应用于各类水面舰艇、各类救助船、海上石油平台、各种海上工程船、补给船、客滚船及大型旅游船、各类公务船，并可推广到普通运输船上兼做起艇起吊设备。

The launch and recovery system (Davit) for working boat under heavy sea conditions is mainly applied to all types of surface ships, salvage ships, offshore platforms, engineering ships, supply ships, Ro-Ro, cruise ships, public surface ships etc. The LARS can be also applied as lifting equipment on the normal transport ships.



产品系列-船舶特辅装置

DELIN PRODUCTS-SPECIAL AUXILIARY DEVICE OF SHIP

DELIN MARINE EQUIPMENT CO., LTD.

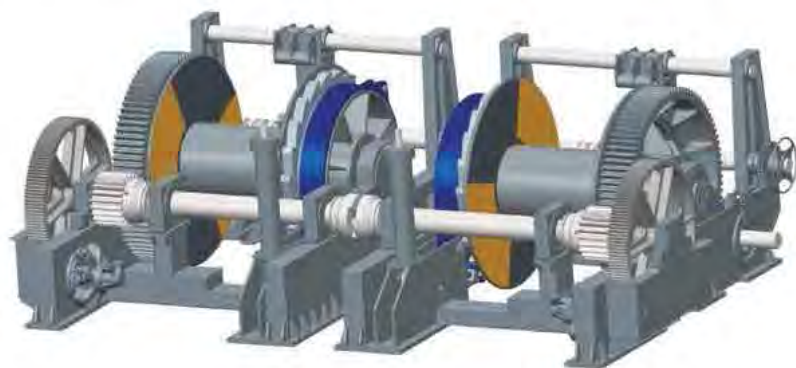


拖曳绞车 Towing Winch

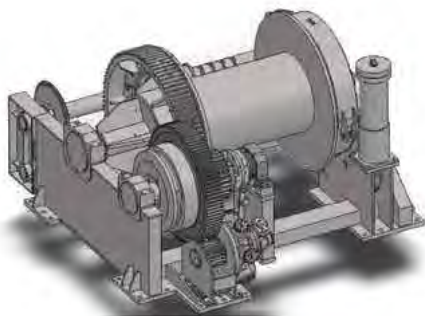
概述 Overview

拖曳绞车分为单卷筒、双卷筒和三卷筒三种型式，主要由减速箱、卷筒装置、排缆装置、中间轴装置、液压制动装置、液压离合装置、机架及控制部分等组成，主要用于海洋救助拖船、平台三用工作船等海上拖曳作业和起抛锚作业。

Towing winch can be single-drum, double-drum and triple-drum, it consists of reduction box, drum, spooling device, intermediate shaft, hydraulic braking device, hydraulic clutch device and rack, etc. Towing winch is applied in the towing and anchor handling operation of tugs, AHTS and salvage ships, etc.



▲ 2000kN液压拖曳绞车 2000kN Hyd. Towing Winch



技术参数 Technical parameter

项目名称 Project Name	性能指标 Performance Index
卷筒拉力 Pull force on drum	160kN-3000kN
公称速度 Nominal speed	≥2.5m/min
钢丝绳直径 Dia. of wire rope	Φ26mm-Φ76mm
容绳量 Rope capacity	≤1500m

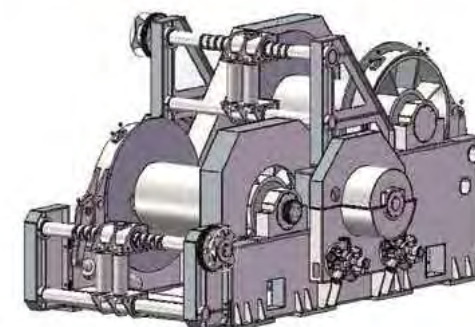
注：可根据客户要求定制。
Note: Products are customizable.

产品特性 Product Features

- 具有自动恒张力控制
- 具有应急释放功能
- 拉力显示
- 绳长显示
- 绳长放空报警
- 驾驶室遥控操作
- 体积小、重量轻、负载大
- 弹簧制动，液压释放，安全可靠
- Automatic constant tension control
- Emergency release
- Displayable pull force
- Displayable rope length
- Alarm for empty rope
- Remote control from wheelhouse
- Compact, light, high load.
- Spring braking, hydraulic release, Safe and reliable.



▲ 1500kN液压拖曳绞车 1500kN Hyd. Towing Winch



▲ 1500kN液压拖曳绞车 1500kN Hyd. Towing Winch

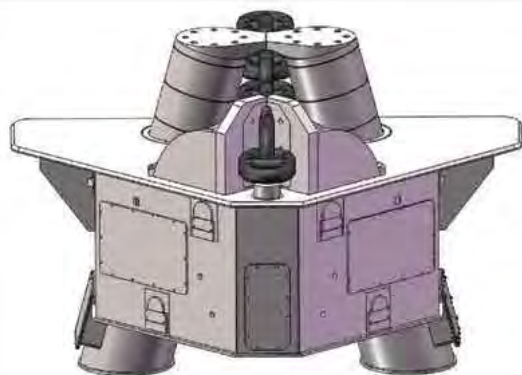
应用及业绩 Application and Performance

我公司生产的液压拖缆机已应用于14000kW远海救助拖船、30000近海救助拖船及新型破冰船等船舶。

Delin hydraulic towing winches have been applied to 14,000kW ocean salvage tug, 30000 offshore salvage tug and new-type icebreaking ship, etc.



鲨鱼钳 Shark Jaw

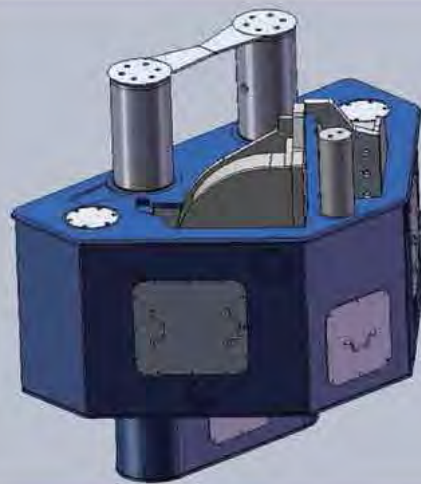


▲ 3500kN斜立装连杆式鲨鱼钳
3500kN Inclined vertical connecting-rod type shark jaw

概述 Overview

鲨鱼钳分为叉式鲨鱼钳和连杆式鲨鱼钳，主要用于各类工程船舶，锁紧钢丝绳或锚链，防止钢丝绳、锚链滑动，并能承受一定负载。

Shark jaw can be fork type (V type) and connecting rod type, it is mainly applied to all types of engineering ships by locking wire rope or chain to prevent them from slipping. The shark jaw can also endure certain load.



▲ 3500kN直立装连杆式鲨鱼钳
3500kN Vertical connecting-rod type shark jaw

技术参数 Technical parameter

	项目名称 Project Name	性能指标 Performance Index
鲨鱼钳 Shark Jaw	安全负载 SWL	60kN-3500kN
	锚链直径 Chain parameter	Φ12.5-Φ102
	钢丝绳直径 Dia. of wire rope	Φ12.5-Φ102
	工作高度 Working height	≤600mm
档销 Towing Pin	安全负载 SWL	60kN ~2000kN
	锚链直径 Chain parameter	Φ12.5-Φ102
	钢丝绳直径 Dia. of wire rope	Φ12.5-Φ102
	工作高度 Working height	≤700mm

注：可根据客户要求定制。
Note: Products are customizable.

产品特性 Product Features

- 应急释放
- 遥控操纵
- 体积小、重量轻
- 安全可靠
- Emergency release
- Remote control from wheelhouse
- Compact and light
- Safe and reliable

应用及业绩 Application and Performance

航标船：600kN单叉式鲨鱼钳、600kN双叉式鲨鱼钳
14000kW远海救助拖船：3500kN斜立装鲨鱼钳

600kN single-fork type shark jaw, 600kN double-fork type shark jaw,
14000kW ocean salvage tug: 3500kN inclined vertical shark jaw.



减摇水舱 Anti-rolling Tank

概述 Overview

减摇水舱装置（简称ART）分为可控被动式减摇水舱和自由液面被动式减摇水舱。可控被动式减摇水舱由液压泵站、阻尼挡板、空气蝶阀、控制箱、控制面板及液位传感器等组成；自由液面被动式减摇水舱由控制箱、控制面板及液位传感器等组成。被动式减摇水舱装置主要用于减小舰船在风浪中的横摇，改善船舶在风浪中的适航性和居住性。

Anti-rolling tank (ART) can be classified as controllable passive ART and free surface passive ART. Controllable passive ART consists of HPU, damper, air butterfly valve, control box, control panel and liquid level sensor, etc. Free surface passive ART consists of control box, control panel and liquid level sensor, etc. The anti-rolling tank is mainly applied to reduce the rolling of ship in the wave, to improve the seakeeping and comfortability of the ship.



▲ 减摇水舱 Anti-rolling Tank

产品特性 Product Features

可控被动式减摇水舱

- 低能耗，高效率；
- 全航速下有效；
- 全自动操控；
- 占用空间小，布置灵活；
- 提高船体的减振力，防止船速降低；
- 增大龙骨纵横比，提高减振力。

自由液面被动式减摇水舱

- 耗能低，制造成本低；
- 全航速下有效；
- 不易损坏且维修保养成本低；
- 提高船体的减振力，防止船速降低；
- 增大龙骨纵横比，提高减振力。

Controllable passive ART

- Low energy consumption, high efficiency.
- Effective under all speeds.
- Automatic control.
- Compact and flexible arrangement.
- Increase the damping force of the hull to prevent the speed reduction.
- Increase the aspect ratio of keel and damping force.

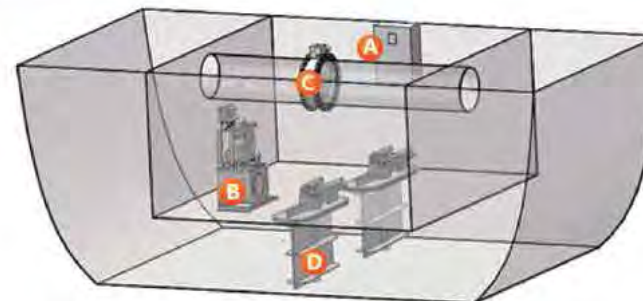
Free surface passive ART

- Low energy consumption and manufacture cost.
- Effective under all speeds.
- Durable and low maintenance cost.
- Increase the damping force of the hull to prevent the speed reduction.
- Increase the aspect ratio of keel and damping force.



▲ 减摇水舱 Anti-rolling Tank

结构示意图 Structure diagram



控制面板
Control Panel



A 控制箱
Control Box



B 液压泵站
HPU



C 空气蝶阀
Air Valve



D 阻尼挡板
Damper

应用及业绩 Application and Performance

我公司减摇水舱装置已经成功应用国家考古局、交通部救助局、中海油、渔政局、海警局、天津海事局以及中国海军等船东，配套包括考古船、渔政船、海洋救助船、破冰船、巡航救助船、环保船、科考船以及多用途拖轮等多种类型船舶上。

Delin has successfully cooperated with State Heritage Board, the Salvage Bureau of Ministry of Transportation, CNOOC, Fish Administration, National Coast Guard, Tianjin MSA and Chinese Navy, etc in the field of anti-rolling tank. The products are applied to different types of ships including archaeological ship, fish administration ship, ocean salvage tug, ice-breaking ship, cruise rescue ship, environmental ship, research ship and AHTS, etc.



全回转可伸缩过桥装置 Slewing Type Telescopic Gangway



概述 Overview

全回转伸缩式过桥装置主要用于固定或浮动的海洋结构物之间的人员转移，也能用于燃油、泥浆、电、水等其他物料的输送。过桥装置在搭接时是由人工操作的，使用简单的控制就能自由地伸缩、俯仰和回转，安全的着陆在目标结构物上；并且能自由地伸缩、俯仰和回转。

The slewing type telescopic gangway is mainly applied to transfer personnel as well as the fuel oil, mud, electricity, water, etc. between the fixed and floating offshore structures. The gangway is manually operated at working mode. With simple control it can land safely on the target structure by freely telescoping, pitching and slewing.

产品特性 Product Features

- 操作简单快捷；
- 能补偿海洋结构物之间产生的六个自由度运动，可靠性高；
- 重量轻、速度快、运营成本低；
- 功率消耗小；
- 被动式运动补偿系统使得过桥装置拥有失效保护功能；
- 自动紧急起升系统能有效保护过桥装置和目标结构物；
- 交通灯系统在过桥装置预设的范围内时（如伸缩、俯仰角等），才允许人员通行，安全可靠。
- Simple operation.
- Reliable 6-DOF motion compensation
- Compact, fast and low operation cost.
- Low energy consumption.
- Fail-safe function by the passive motion compensation.
- Effective protection of gangway and target structure by automatic emergency lifting system.
- Safety and reliability guaranteed by traffic light system, which presets the safety range (telescopic length and luffing angle, etc.) for personnel passage.



技术参数 Technical parameter

项目名称 Project Name	性能指标 Performance Index
操作长度 Operating length	36.5m
最大长度 Maximum length	42.5m
最小长度 Minimum length	30.5m
通道宽度 Walkway width	1.2m
最大仰角 Maximum lifting angle	+24°
最小仰角 Minimum lifting angle	-16.5°

注：可根据客户要求定制。 Note: Products are customizable.

主要应用 Main application

适用于海洋生活平台与海上补给船，海上风电船与海上风电平台、船与船以及海洋钻井平台之间人员的通过或物资的转移。可以根据功能需求、储存空间，成本预算等不同定制不同型式和规格的全回转伸缩式过桥装置。

Applicable to the personnel and supply transfer among offshore accommodation platform, OSV, turbine installation vessel, offshore turbine, and drilling rigs, etc. The slewing telescopic gangway can be customizably designed according to the requirement for function, storage space and cost control, etc.



深海光电复合缆绞车 Winch for deep sea electro-optic composite cable

概述 Overview

深海光电复合缆绞车分为电液式和电动变频两种形式。由牵引绞车、储缆绞车、排缆装置、本地控制台、远程控制台等组成。控制台上可控制收、放缆绳的速度和方向，并能实时显示速度、长度、张力等信息。

主要功能有：收放科考设备（声纳、温盐深探测仪（CTD）、采样器等）、水下无人遥控潜水器（ROV）、同时具备将科考设备采集的科考数据传输到控制室的能力。

The winch for deep sea electro-optic composite cable (the winch) consists of the traction winch, storage winch, spooling device, local console, remote control panel, etc. At the control panel the cable speed and direction are controlled, the information such as speed, length, and tension, etc. are displayed.

Main function: Launch and recovery of the deep sea research equipment (Sonar, CTD, sampling apparatus, ROV). Transfer data collected from the research equipment to the control room onboard.

产品特性 Product Features

电液深海光电复合缆绞车技术特点

- 牵引绞车的主、从动摩擦轮通过同步控制，达到顺利排绳和张力衰减功能；
- 牵引绞车、储缆绞车采用液压闭式回路，在节能的同时，能实现储缆卷筒缆绳缠绕的恒张力控制；
- 缠绕10000米复合缆不乱绳；
- 设置排缆导轮倾角支撑平衡油缸，动态调整导轮倾角适应卷筒缆绳层数的变化；
- 设置储缆端张力测量传感器和缆绳收放长度传感器，具有缆绳层数、圈数记忆功能；
- 提供排缆倾角补偿功能。

Technical feature of electro-hydraulic winch for deep sea electro-optical composite cable

- The synchronous control of active and slave-driven friction wheels on the traction winch ensures the smooth spooling and tension attenuation.
- The hydraulic closed circuit of traction and storage winch, more than its energy saving feature, can realize the constant tension of cable winding from the storage drum.
- Lebus double-line drum ensures no cable disorder for winding 10,000m cable.
- Supporting balanced cylinder for the spooling roller is set to dynamically adjust the dip angle of the roller for the sake of variation of cable layers.
- Sensors are set for tension and length monitoring at cable storage. Memory function of cable layers.
- Alarm of inclined spooling.

电动变频深海光电复合缆绞车的技术特点

- 牵引绞车的主、从动摩擦轮由两个变频电机、直角减速机驱动，通过PLC同步控制，达到顺利排绳和张力衰减功能；
- 相对于电液绞车，电动变频绞车具有节能、高效、环保、噪音小、没有漏油污染等问题等显著特点；
- 缠绕10000米复合缆不乱绳；
- 设置排缆导轮倾角支撑气弹簧，能够适应导轮倾角随着卷筒缆绳层数变化的需要；
- 设置储缆端张力测量和缆绳收放长度测量传感器，具有缆绳层数、圈数记忆功能；
- 提供排缆倾角报警功能。

Technical feature of electric frequency conversion winch for deep sea electro-optical composite cable

- The active and slave-driven friction wheels are driven by two variable frequency motors and right-angle reduction gears, and synchronously controlled by PLC to ensure the smooth spooling and tension attenuation.
- Compared with the electro-hydraulic winch, the electric winch has the feature of energy saving, efficient, environment friendly, low noise and no oil leaking.
- Lebus double-line drum ensures no cable disorder for winding 10,000m cable.
- The dip angle supporting air spring on the spooling roller ensures the dip angle adjustment according to the variation of cable layers.
- Sensors are set for tension and length monitoring at cable storage. Memory function of cable layers.
- Alarm of inclined spooling.



▲ 深海绞车总成 Deep sea winch assembly

技术参数 Technical parameters

项目名称 Project Name	单位 Unit	性能指标 Performance Index	
牵引绞车拉力 Pull of traction winch	KN	100	
复合缆长度 Cable length	m	10000	
复合缆直径 Cable diameter	mm	17.27 (光电缆 Optical Cable)/17.3 (同轴缆 Coaxial Cable)	
绞车绳速 Winch speed	高速 High	m/min	120
	低速 Low	m/min	60
张力 Tension	KN	4-10	
控制方式 Control		机旁控制+远程控制 Local + remote control	

注：可根据客户要求定制。 Note: Products are customizable.

应用及业绩 Application and Performance

以上深海光电复合缆绞车主要用于地质勘探船、水文调查船、科考船、测量船等海洋调查、科考类舰船。按缆绳分：CTD绞车、地质缆绞车（钢缆、纤维缆）、同轴缆绞车、光电缆绞车、ROV脐带缆绞车、拖网绞车。

The winch for deep sea electro-hydraulic composite cable is mainly applied to research ships like geology survey ship, oceanographic research ship, research ship, survey ship, etc. Classified by cable, there are CTD winch, geology cable winch (steel, fiber), coaxial cable winch, electro-optic cable winch, ROV umbilical winch, trawl winch, etc.

舵系 | 襟翼舵 Rudder System | Flap Rudder

概述 Overview

襟翼舵由主舵和襟翼两部分组成，襟翼借助连杆机构随主舵转动，使舵叶弯曲呈较大拱度，加大了转舵的能力。与常规舵相比，襟翼舵纠偏能力强、转舵反应快、舵效高，安装维修也方便。近年来，襟翼舵在国内外已得到广泛的使用。

Flap rudder consists of main rudder and flap. The flap rotates along with the main rudder by connecting rod, so that the rudder blade can bend to a higher camber to increase the steering capability. Compared with the conventional rudder, the flap rudder has the advantage of better deviation rectification, fast steering, high efficiency and easy installation and maintenance. In recent years, the flap rudders are widely used in the industry.



产品特性 Product Features

- 改善船舶的运营安全性;
 - 改善船舶的应舵性能和回转性能;
 - 升力系数是传统舵的1.5-1.8倍;
 - 最佳的平衡系数和襟翼面积;
 - 较小的舵面积;
 - 结构简单，易于维护;
 - 安装方便，使用可靠。
- Improve the safety of ship operation.
 - Improve the steering response and turning performance of the ship.
 - Lift coefficient 1.5-1.8 times of conventional rudder.
 - Best balance coefficient and flap area.
 - Small rudder area.
 - Simple structure for easy maintenance.
 - Easy installation and reliable use.



技术参数

Technical parameters

项目名称 Project Name	性能指标 Performance Index
最大操舵角 Max. steering angle	±45° (±70°)
最大襟翼角 Max. flap angle	±90° (±120°)
平衡系数 Balance coefficient	0.38-0.45
襟翼比 Flap ratio	0.20-0.25

注：可根据客户要求定制。
Note: Products are customizable.

应用及业绩 Application and Performance

襟翼舵可广泛用于拖船、大型油船、车客渡船、多功能供应船、海洋救助船等操纵性能要求高的船舶上。襟翼舵已有数百套产品应用于12000kw拖船、3000吨渔政船、65米平台供应船、6000HP多功能供应船等多型船舶上，产品质量可靠，得到用户的一致好评。

The flap rudder is widely applied to ships in need of high maneuverability such as tug, large oil tanker, ferry, multi-purpose supply vessel, ocean salvage vessel, etc. Delin's flap rudders have been applied to 12,000kW tug, 3000ton fishery administration vessel, 65m PSV, and 6000HP MPSV, etc. The products with reliable quality have gained good reputation among the customers.



舵系 | 导管襟翼舵 Rudder System | Nozzle Flap Rudder



概述 Overview

导管襟翼舵由导管、襟翼、舵杆、连接套筒、传动机构、上密封组件、下油封组件、上下舵承等组成。主要安装形式有悬挂式和双支点式。导管的应用使推进系统更加优越并且有效地增加了推力，提高了船舶的操纵性能，同时也保证了螺旋桨的安全性。

Nozzle flap rudder consists of nozzle, flap, rudder stock, coupling sleeve, transmission mechanism, upper sea components, lower oil sea components, upper and lower rudder carriers, etc. The main installation forms include suspension type and double-pivot type. The application of nozzle enhances the propulsion system with higher thrust. It improves the ship maneuverability and guarantees the safety of propeller.

产品特性 Product Features

- 提高螺旋桨推进效率: Improve the propulsive efficiency.
- 提高船舶操纵性能: Improve the ship maneuverability.
- 增加船舶推进力: Increase the thrust.
- 减少震动: Reduce the vibration.
- 保护桨叶以防受损: Protect the blade.

应用及业绩 Application and Performance

导管襟翼舵已应用于拖船、挖泥船等工程船舶上。

Delin nozzle flap rudders have been applied to engineering ship such as tug and dredger.



舵系 | 空气舵 Rudder System | Air Rudder



概述 Overview

空气舵的舵叶由钛合金骨架和铝合金板铆接而成，空气舵上下两端的同心转轴与舵叶采用铰制螺栓连接，空气舵安装在船尾上，利用高速的空气流来控制船舶航行的方向。

The blades of air rudder are riveted by titanium alloy skeleton and aluminum alloy plate. The coaxial rotors at the top and bottom ends of the air rudder are hinged to blades with hinged bolts. The air rudders are mounted at stern to steer the navigation direction with the help of high-speed air flow.

产品特性 Product Features

- 采用钛合金与铝合金铆接结构，重量轻，抗腐蚀性强。
- The rivet structure of titanium alloy and aluminum alloy is light and corrosion-proof.

应用及业绩 Application and Performance

主要应用于气垫船，以及对海洋与航空结合有要求，对重量、强度有较高要求的高性能船舶。

Mainly applicable to the hovercraft, as well as high performance ships with high requirement to weight and strength, which are usually in combination of marine and aviation technology.



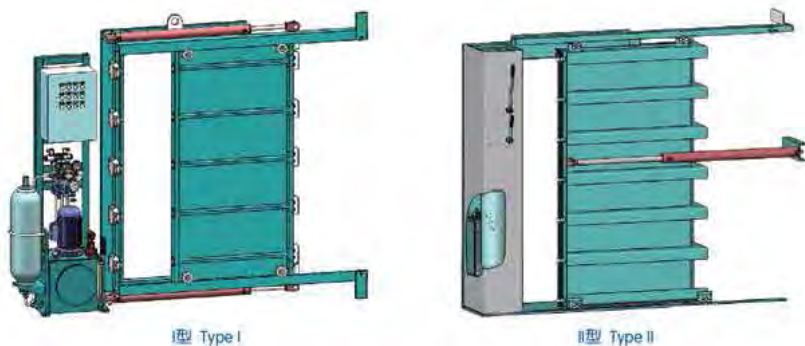
门、盖、梯 | 液压滑动式水密门

Door, Hatch, Ladder | Hydraulic sliding watertight door

概述 Overview

液压滑动式水密门广泛应用于各种船舶和海上移动平台。采用液压电气控制，驾驶室能够显示水密门的状态和遥控关闭水密门。就地位置能够动力操作水密门。同时在地位置和舱壁甲板以上位置还设有独立的应急手动操作装置。

Hydraulic sliding watertight doors are widely applied to ships and offshore platforms. There are: local control and remote control from wheelhouse; Status display in wheelhouse; Independent emergency manual operating device locally and above the deck.



类型 Type	结构型式 Structure type	门槛高度 Height of threshold
I型 Type I	分体式/整体式 Split/Integrated	≥200mm
II型 Type II	整体式 Integrated	≥16mm

注：可根据客户要求定制。 Note: Products are customizable.

水密门液压系统有三种型式

- 1、多扇水密门设置一套集中液压系统；
- 2、每扇水密门设置一套独立液压系统；
- 3、采用母船液压系统为水密门供油。

Three types of hydraulic system of watertight door

1. One integrated HPU for multiple watertight doors.
2. One independent HPU for each watertight door.
3. Use the ships hydraulic system.

产品特性 Product Features

- 结构合理，操作方便，便于维护
- 功能齐全，集成度高，占用空间小
- 耐压范围广（0-50m水压），安全可靠
- 防火等级A60级（可选项）
- 通孔尺寸大
- Reasonable structure, easy operation and maintenance
- Multi-functional, highly integrated, compact
- High pressure range (Water pressure 0~50m), Safe and reliable
- A60 fireproof (optional)
- Large clear size of opening



应用及业绩 Application and Performance

目前公司液压滑动水密门年产量约400套，产品销往国内各大船厂，并出口到亚洲、欧洲、美洲等国家和地区，成功配套了多种船舶和海上移动平台。

Delin's annual production of hydraulic sliding watertight door is about 400 sets. The products have been sold to major Chinese shipyards and exported to countries and regions in Asia, Europe and America.



门、盖、梯 | 电动卷帘门 Door, Hatch, Ladder | Electric Roller Door

概述 Overview

电动卷帘门广泛应用于各种船舶和海上移动平台。动力装置由电机和减速机组成，经链轮和链条驱动，采用按钮操作卷帘门，应急情况下采用手动装置操作卷帘门。

Electric roller Door is widely applied in ships and offshore platforms. It consists of power unit and reduction gear. The roller Door is operated by button and driven through chain. In emergency case it can be manually operated.



卷筒式电动卷帘门 Rolling type roller shutter

技术参数 Technical parameters

型式 Type	通孔尺寸 Clear size
卷筒式 Rolling type	10000 (H) × 5000 (W)
吸顶式 Ceiling type	5000 (H) × 10000 (W)

注：可根据客户要求定制。 Note: Products are customizable.



吸顶式电动卷帘门 Ceiling type roller shutter

产品特性 Product Features

- 通孔尺寸大；
- 设备占用空间小；
- 带自锁功能；
- 点动控制，安全可靠；
- 卷帘片为铝合金型材，重量轻，刚度好；
- 密封性好，满足冲水试验；
- Large clear size of opening.
- Compact space.
- Auto-lock function.
- High reliability by inching control.
- Roller shutter piece made of aluminum alloy, light and good stiffness.
- Good tightness. Flush test.

应用及业绩 Application and performance

电动卷帘门用于各种库房大门，例如仓库、工作艇库、直升飞机库等。

Electric rolling doors for all kinds of warehouse door, such as warehouse, working boat warehouse, helicopter warehouse etc.



门、盖、梯 | 特种船用门 Door, Hatch, Ladder | Special Marine Door

概述 Overview

特种船用门与一般的滑动式水密门不同，它具有特定的功能和特殊的安装要求，公司将根据用户特殊的要求进行设计和制造。公司已设计制造了多种型式的特种船用门，如舷梯门、舷门等，采用液压电气控制，并设置应急手动操作装置。

Different from the conventional sliding watertight door, the special marine door has specific function and installation requirement. Delin makes the customized design and manufacture upon customer's requirement. Delin has designed and produced many types of special marine doors such as gangway ladder door and gangway. The products are electro-hydraulic driven with emergency manual operation.

产品特性 Product Features

- 结构型式多样，性能可靠；
- 操作方便，便于维护；
- 密封性好，满足风雨密或水密要求；
- 液压驱动，运行平稳。
- Variety of types, reliable performance.
- Easy operation and maintenance.
- Good tightness, weathertight or watertight.
- Hydraulic driven and stable operation.



▲ 舷梯门 Side Door



▲ 闸门 Sluice Gate



▲ 舷门 Gangway



▲ 引航员门 Pilot Door

产品系列-舾装

DELIN PRODUCTS-MARIN FITTINGS

WUJI DELIN MARINE EQUIPMENT CO., LTD.

门、盖、梯 | 舱口盖 Door, Hatch, Ladder | Hatch Cover

概述 Overview

舱口盖广泛应用于各种船舶和海上移动平台，舱口盖有多种型式，如：铰链式舱口盖、折叠式舱口盖、平移式舱口盖、吊离式舱口盖等等。其控制形式采用液压、电气控制，并设置应急手动操作装置。

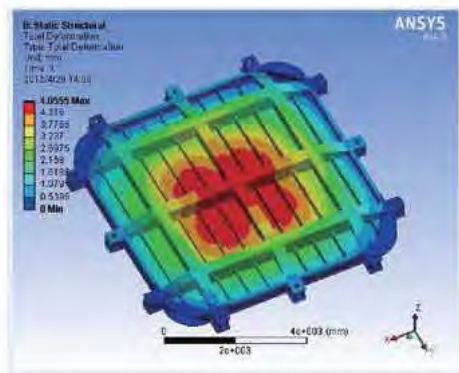
Hatch covers are widely used for ships and offshore platforms. It has many types: hinge type, foldable type, translational type, lift-away type, etc. The hatch cover is electro-hydraulic controlled with emergency manual operation device.

结构型式 Structure type	铰链式舱口盖 Hinge	折叠式舱口盖 Foldable	平移式舱口盖 Translational	吊离式舱口盖 Lift-away
密性 Tightness	风雨密/水密 Weather/Water	风雨密 Weather	风雨密 Weather	风雨密/水密 Weather/Water
开启方式 Opening mode	液压驱动 Hydraulic	液压驱动 Hydraulic	液压驱动 Hydraulic	吊离(母船吊机) Lift-away(by crane)
压紧方式 Closing mode	手动/液压驱动 Manual/Hydraulic	手动 Manual	手动 Manual	手动/液压驱动 Manual/Hydraulic

产品特性 Product Features

- 盖板和围板结构合理，重量轻，强度高
- 操作方便，便于维护
- 密封性好，满足风雨密或水密要求
- 液压驱动，运行平稳，性能可靠

- Both cover plate and coaming have reasonable structure, light weight and high strength
- Easy operation and maintenance
- Good tightness, weather tight or watertight
- Hydraulic driven, stable operation and reliable performance



产品系列-舾装

DELIN PRODUCTS-MARIN FITTINGS

WUJI DELIN MARINE EQUIPMENT CO., LTD.



▲ 铰链式舱口盖 Hinge hatch cover



▲ 折叠式舱口盖 Foldable hatch cover



▲ 平移式舱口盖 Translational hatch cover



▲ 吊离式月池盖 Lift-away hatch cover

应用及业绩 Application and Performance

目前公司舱口盖年产量约50套，产品销往国内各大船厂，并出口到亚洲、欧洲等国家和地区，成功配套了多种船舶和海上移动平台。

Delin's annual production of hatch cover is about 50 sets. The products have been sold to major Chinese shipyards and exported to countries and regions in Asia and Europe.



资质荣誉 QUALIFICATION AND HONOR

WUXI DELIN MARINE EQUIPMENT CO., LTD.

公司已经获得各类军工资质认证，被评为江苏省高新技术企业，建立省级博士后工作站和工程技术中心，获得包括国家重点新产品、国家重点创新基金和国家火炬计划在内的科技立项，现获得授权的发明、软件著作权近百项。起草制定了《船用气调保鲜系统》、《工作艇收放装置》等国家标准和行业标准。

As the high and new-tech enterprise of Jiangsu Province, Delin has obtained various qualification certificates for military industry, established postdoctoral workstation and engineering technology centre at provincial level. Delin hold the scientific and technology approved projects including National New Key Product, National Key Innovation Fund, National Torch Plan, etc. Along with up to 100 authorized patents and software copyrights, Delin has drafted the national and industry standard as "Marine Air-conditioned Fresh Keeping system" and "Launch and Recovery System for Working Boat".



高新技术企业
High and new-tech enterprise



国家重点新产品
National new key product



高新技术产品
High and new-tech product



国家重点创新基金
National key innovation fund



博士后工作站
Postdoctoral workstation at provincial level



工程技术中心
Engineering technology centre at provincial level

船检证书 CLASS SOCIETY CERTIFICATES

WUXI DELIN MARINE EQUIPMENT CO., LTD.

公司产品分别获得CCS、LR、ABS、BV、GL、KR、DNV、NK等船级社及欧共体EC的产品形式认可证书。产品的认可不仅是企业获得向国外市场开拓的基础，也为公司产品质量的持续改进提供必须的保障。

Our products have gained product form approval certificates from CCS, LR, ABS, BV, GL, KR, DNV, NK, EC and so on. The approval of products not only is the basis in tapping foreign markets, but also can make sure to improve product quality continuously.



团结·奉献·创新·自强
Unite · Dedication · Innovation · Self-improvement