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3S LIFT Offshore Davit Crane

Wind turbine cranes specially designed for the harsh marine environment

Ficont Industry (Beijing) Co., Ltd.
No. 11 Tongji South Road, Jingkai District,
Beijing 100176, China
Tel: +86 10 69597866
E-mail: info-china@3SLift.com

3S Americas, Inc.
2920 Telecom Parkway,
Suite 400, Richardson,
TX 75082, USA
Tel: +1 972 849 3210
Email: info@3SAmericas.com

3S Europe GmbH
Hein-Saß-Weg 21,
21129, Germany
Tel: +49 40 32518887
Email: info@3SEurope.de

3S Lift India Private Limited
Workafella Business Center-51,Level 4,
Tower A Rattha Tek Meadows Old
Mahabalipuram Road, Rajiv Gandhi
Salai, Sholinganallur Chennai, Tamil
Nadu, India, 600119
Tel: +91 9600653379
Email: info-india@3sindustry.com

3S Japan Co., Ltd
13-106,17-4-chome,Minamiaoyama,
Minato City, Tokyo 107-0062
Tel: +81 3 57863515
Email: info-Japan@3sindustry.com

customer service hotline
+49 40 32518887

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01 / Company Introduction



100,000+
Applications in WTG tower



100+
Invention Patents



800+
Global Patent Applications



65
Country Markets

Ficont Industry (Beijing) Co., Ltd. (referred to as 3S LIFT; stock name: Ficont; code: SH605305) is a leading domestic provider for safe operating equipment at height and service solutions. Its products have been exported to **65** countries and applied in **16** industries, ranking first in the wind power industry. 3S LIFT has established a post-doctoral scientific research station, applied for **800** patents, and obtained **100** safety quality certifications around the world. It is a “professional, specialized, special and high-tech” state-level enterprise, national enterprise with advantages in intellectual property, and national champion model manufacturer.

With more than **900** employees, including more than **100** foreigners, 3S LIFT has a head office in Beijing, factory in Tianjin, and wholly-owned subsidiaries in Dallas (USA), Hamburg (Germany), Chennai (India), Tokyo, (Japan) and Sao Paulo (Brazil). It has after-sales service networks around the world, and has global equipment installation and maintenance capability, achieving quick, stable, and professional technical support, and providing end-to-end one-stop service.



| R&D Center in Beijing (Yizhuang)



| Factory in Tianjin



| North America Branch in Texas



| Europe Branch in Hamburg



| India Branch in Chennai



| Japan Branch in Tokyo

02 / Product Introduction

| Product Usage

The 3S LIFT offshore crane is a special lifting device intended for transferring materials (spare parts, maintenance materials, etc.) between a service vessel and outside platform of the WTG tower. It significantly reduces labor intensity, and improves maintenance efficiency and operation safety.

Equipped with high-quality components, the crane has a strong and reliable life cycle and adapts to the harsh marine environment. Meanwhile, it is sturdy and durable, with high safety, reliability and lasting corrosion resistance. It has a high level of shock resistance and bearing capacity, even in harsh conditions, and is designed with more than 35 years of service life.

The crane adopts an ergonomic design structure, which is highly comfortable and can easily lift and transport heavy objects, ensuring efficient supply and maintenance of spare parts for maximum efficiency.

| Industrial Advantage

3S LIFT is one of the earliest manufacturers in China engaged in development and applications of offshore cranes. In 2012, we successfully installed a crane in the offshore project of an internationally renowned OEM. This crane serves offshore wind turbines with more than 12 GW in capacity. 3S LIFT also has more than 11 years of experience in lifting and transporting solutions for offshore davit cranes, an industry-leading scientific research team of more than 100, and more than 3,000 offshore davit crane applications, ranking first in the Asia-Pacific market.



Product structure



Wireless remote control

Start and operate the device through a wireless remote control. The remote control is equipped with a display screen, which can display real-time load and height information, and provide a visual operating experience, making the operation more conveniently and efficiently.



Boom Assembly

A hexagon variable cross-section structure design with high strength.

CX-class corrosion resistance (ISO12944-9).

The slewing radius can be customized as required.



Drive Unit

The wire rope storage position and power source of the whole device.

Designed with a winch drum inside, the gearbox has a simple and compact structure.

Its LEBUS rope groove has a special wire rope pressure mechanism and slack rope limiter mechanism.



Slewing Bearing Assembly

The high-precision slewing bearing ensures smooth operation.

The self-locking design resists gusts up to 70 m/s.

The electric and manual slewing bearings are easy to use and convenient.



Lifting Hook Limit Switch

The top limit switch enables the hook to slowly stop after reaching the intended position.

It has a special wire rope outlet space and the position is highly adaptable. It has a special design to reduce abrasion caused by wire ropes, extending its service life.



Lowering Limit Switch

The lowering limit switch enables the hook to slowly stop after reaching the intended position.

It can record the position and stop reverse rolling.



Supporting Column

A component supporting the whole equipment, designed with high strength. It is installed on the base of outer tower platform. The column flange can be customized.

Product Features



Patents

35

Technology based on
35 patents



Certifications

CE Certification (by SGS)
EMC Certification
China Classification Society
(CCS) Certification
DNV-GL Certification



Standards

MD 2006/42/EC
EMC 2014/30/EC
EN 13852-1
EN 13852-3
EN ISO 12100
EN 60204-1
ISO 12944
DNV GL-ST-0378

Ultra-high anti-corrosion protection

The crane has CX-class corrosion resistance, making it suitable for all-weather marine environment.

Customizable safe working load

The safe working load can be customized according to customers' needs to facilitate lifting and transporting large WTG components.

Self-locking protection function

The self-locking slewing bearing is an independent mechanical locking mechanism and can resist gusts up to 70 m/s.

Anti-twisting wire rope

The anti-twisting wire rope can stop rotation of the lifting object and reduce wire rope damage and breakage, with excellent corrosion resistance at the same time.

Overload protection function

When a load between 100% and 110% of the rated load is applied, the winch drum will stop running automatically to ensure the safety of the operator and equipment.

Unique wire rope pressure mechanism and slack rope limiter mechanism

The unique wire rope pressure mechanism and slack rope limiter mechanism keep the wire rope in order. The lifting hook stops immediately when reaching the ground, making the crane safe and reliable.

Automatic Overload Protection System (AOPS)

When the crane's hook becomes entangled with the vessel, leading to an overload, the AOPS is automatically activated. As this occurs, the winch drum releases the rope, accompanied with an audible and visual alarm. This system prevents significant damage to the crane in the event of an overload.

Emergency Load Lowering Function (ELL)

The ELL function is activated by the operator, and is used to slowly and safely lower the suspended load to the supporting level in case of sudden power failure or crane failure.

Distributed sealing protection design

The crane uses distributed sealing for its key parts. The wire rope, hoisting motion limiter, lifting motor and slewing bearing are all equipped with sealing housing, improves the waterproofing and corrosion resistance of the entire crane, and prolonging the service life.

Wireless remote control

The wireless remote control is equipped with a screen, which can display real-time load and height information during the operation, so that it can provide a convenient and efficient visualization experience for users.

Obstacle avoidance function

By preset the position of obstacles, ensure that the hook reaches sufficient height to safely cross the obstacles before turning. The crane will stop slewing when the height requirement is not met, so that the crane will avoid collision risks effectively and make operation safer.

PRODUCT FEATURES



Star Product Offshore Davit Crane

OC-5010	
Safe working load	500 kg/1,000 kg
Lifting speed	20 m/min or 36 m/min
Slewing radius	5 m
Max. slewing angle	350°
Max. lifting height	30 m
Wire rope diameter	11 mm
Power supply	400 V/690V
Rated power	8 kW
Service life	35 years
Operating temperature	-20°C to 45°C
Max. wind speed	18 m/s
Max. significant wave height	2 m



Product Range

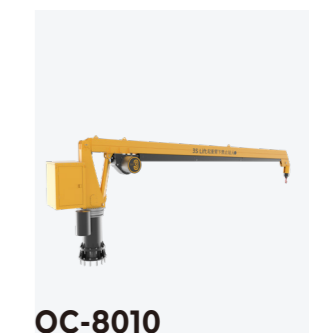
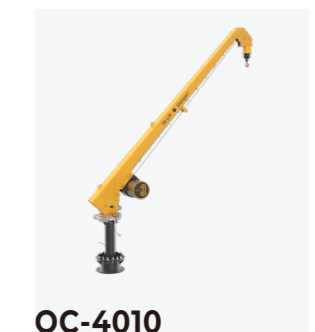
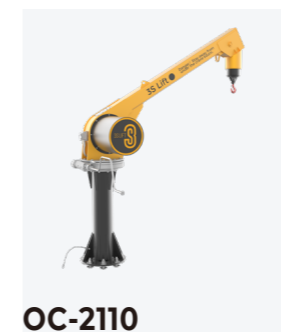
Standard model						
Product model	Slewing radius	Safe working load	Lifting speed	Lifting height	Wire rope diameter	Operating temperature
OC-2110	2.1 m	1,000 kg	18 m/min	≤25 m	φ11mm	-20°C to 45°C
OC-2516	2.5 m	1,600 kg	24 m/min	≤28 m	φ12mm	-20°C to 45°C
OC-3010	3 m	1,000 kg	24 m/min	≤25 m	φ11mm	-20°C to 45°C
OC-4010	4 m	1,000 kg	24 m/min	≤25 m	φ11mm	-20°C to 45°C
OC-5010	5 m	1,000 kg	36 m/min	≤25 m	φ11mm	-20°C to 45°C
OC-5016	5 m	1,600 kg	24 m/min	≤28 m	φ12mm	-20°C to 45°C
OC-7010	7 m	1,000 kg	36 m/min	≤25 m	φ11mm	-20°C to 45°C
OC-8010	8 m	1,000 kg	40 m/min	≤30 m	φ11mm	-20°C to 45°C

NAMING CONVENTIONS (using the OC-5010 as an example)

OC - 5010

- 10: Safe working load 1,000 kg
- 50: Slewing radius 5.0 m
- OC: Offshore Crane

The above specifications can all be customized.





| Product Features

Safe

AOPS and ELL functions meet the EN13852-3 standard

Lowering limit switch and slewing motion limiter

Obstacle avoidance function to avoid collisions with obstacles during lifting operations.

Several emergency stop buttons in various locations which cannot be reset automatically

Power-off brake works in case of power-off

Slewing mechanical lock function

Automatic speed change function for lifting

The column is equipped with an anchor point.

Easy-to-use

Plug-and-play design is easy and convenient.

Ergonomic wired remote control and easily operated interface.

Manual/automatic slewing design for ease of operation.

The wireless remote control is equipped with a screen, which can display real-time load and height information during the operation, so that it can provide a convenient and efficient visualization experience for users.

More efficient

Lifting speed up to 40 m/min and automatic speed change design, improving working efficiency.

The strict FEMA analysis and quality control system ensure good product quality and low failure rate.

Environmental protection design

With a pure electric design, the crane achieves zero carbon emissions, fulfilling green commitments and promoting sustainable development.

The low-noise design is friendly to operators and the marine environment.

The general AC/DC contactor conforms to the Green Premium™ ecological certification.

Components meet the RoHS and REACH EU environmental protection standards.

03 / Application Cases

The 3S LIFT offshore davit crane ranks first in domestic market share and has been widely applied in many provinces and municipalities in China, such as Guangdong, Fujian, Jiangsu, Liaoning, Shanghai and Hunan. It is also ranked first in Asia-Pacific market and been widely applied in Vietnam, Japan and other countries.

NO.1
Chinese market

NO.1
Asia-pacific market

3000+

Offshore crane sales volume in the Asia-Pacific region: 3,000+

Beijing, China

Liaoning Province

Shandong Province

Jiangsu Province

Shanghai

Japan

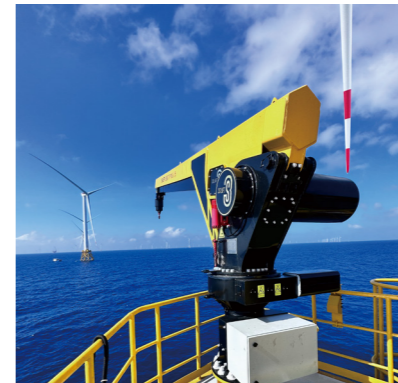
Zhejiang Province

Fujian Province

Guangdong Province

Hainan Province

Vietnam



04/ After-sales Service



Delivery

3S LIFT has factories in Beijing, Tianjin, China and Germany. The product will be delivered to the designated place within **8-12** weeks after the contract signing.



Installation

3S LIFT provides professional guidance on installation and operation (including an installation and commissioning manual, operation manual, and operation and usage video).



Training

Video training course
Indoor online video training
Outdoor on-site training



Maintenance

The entire crane and its components have a warranty period of **5** years.

3S LIFT provides maintenance and guidance service and parts and components during the entire service life of the crane (it can also provide on-site annual inspections and regular maintenance).





Global Services

32

32 provincial administrative regions

65

65 countries



Service Standard

12_h

Quick responses in 12 hours

24_h

Solutions in 24 hours

48_h

Arrival at the task site in 48 hours

