COMPLETE DECK EQUIPMENT SOLUTIONS

PALFINGER MARINE PRODUCT CATALOGUE
THE GAME CHANGER
A TOTAL SUPPLIER EMERGES

By acquiring Harding, PALFINGER MARINE is the new market leader in lifesaving equipment and a leading supplier of deck equipment and handling solutions. We offer our customers a one-stop-shop solution with high-quality packages of products and services.

The new and enlarged PALFINGER MARINE is a large step closer to achieving its strategic goal of becoming a complete supplier of integrated marine deck equipment solutions with global service stations.

As part of the PALFINGER Group, PALFINGER MARINE promises LIFETIME EXCELLENCE. For our customers, this means excellence without compromise, and reliable, economical solutions throughout the entire product life-cycle.

CRANES
06.

MARINE | OFFSHORE | WIND

Marine, offshore and wind cranes by PALFINGER MARINE are designed to meet safety standards and extreme environmental conditions of the maritime industry. The extensive range of AHC cranes, foldable knuckle boom cranes, knuckle boom cranes, stiff boom and telescopic boom cranes as well as wire luffing lattice boom and travelling cranes can be used for various applications within the shipbuilding, oil and gas and offshore wind industry. Decades of worldwide experience in producing cranes is the basis for the company’s technical expertise, innovative strength and uncompromising quality.

LIFESAVING EQUIPMENT
26.

DAVITS | LIFE- AND RESCUE BOATS | MILITARY AND PROFESSIONAL BOATS

PALFINGER MARINE offers the safest range of opportunities for customers. All systems have their unique features. That ensures us the flexibility and capability to provide customers with the best possible solution for their project.

PALFINGER MARINE davits are innovative and user-friendly and are intended for long-term, reliable operation in harsh and hazardous marine and offshore environments. Daughter crafts and workboats are easy to install, trouble-free, maintenance-friendly and ensure safety when it matters most.

PALFINGER MARINE offers a wide range of high-end lifeboat solutions from even the most complex of projects to standard lifeboat products for the offshore and shipping industry. The product range covers totally enclosed lifeboats, free fall lifeboats, partially enclosed lifeboats, rescue boats and fast rescue boats. PALFINGER MARINE is also specialised in designing and manufacturing special boats such as military and law-enforcement boats.

WINCHES AND HANDLING EQUIPMENT
52.

WINCHES | HANDLING EQUIPMENT | FENDERS

PALFINGER MARINE is a supplier of customised deck machinery and handling equipment for offshore vessels, offshore service vessels, special vessels and oil rigs. The comprehensive product portfolio includes winches, lifting and handling equipment, bulk and bunker-handling equipment. The well-proven designs ensure trouble-free operations in demanding maritime environments which require high performing and reliable equipment. PALFINGER MARINE also offers a wide range of pneumatic fenders, foam-filled fenders, fixed fenders and fender davits available for a wide range of applications.

SERVICE
70.

AFTER SALES | SERVICE

PALFINGER MARINE provides comprehensive, customised and reliable services to customers around the world. A global network of specially trained engineers and experts offer extensive know-how and experience. PALFINGER MARINE is a reliable and professional partner in every situation, from telephone assistance to on-time delivery and instant on-site support.
GLOBAL COVERAGE

WORLD WIDE NETWORK – WE ARE HERE TO HELP

Our setup includes an extensive network of service stations throughout the world.

PALFINGER MARINE has 33 fully owned sales and service hubs in 19 countries in Europe, Asia, the Americas, the Middle East and Africa.

With the world’s largest own service network, PALFINGER MARINE is able to follow up your vessels more efficiently than any other service provider in the industry.

In addition to our own 33 offices PALFINGER MARINE has also certified over a dozen service stations – extending the network to the most remote areas.
As a result of their sophisticated crane geometry work is effortless with foldable knuckle boom cranes. They make full use of their strengths and flexibility when loading and unloading equipment. Due to their compact construction they can easily be accommodated on every type of vessel especially where space is limited. Adding various features and options make the foldable knuckle boom cranes a multi-functional tool.

PALFINGER MARINE foldable knuckle boom cranes can be designed according to offshore rules and regulations.

### TYPICAL APPLICATIONS

**OFFSHORE CRANES**
- Service cranes
- Provision and cargo handling cranes
- Access basket cranes
- Fishing and fishfarming cranes

**MARINE CRANES**
- Service cranes
- Provision and cargo handling cranes

**WIND CRANES**
- Nacelle cranes
- Turbine cranes

### FEATURES

- Long-life surface treatment: corrosion protection
- Low/high temperature operations
- Lebus grooved winch drums
- Return oil utilisation
- Continuous slewing system
- Power link system

### OPTIONS

- Constant tensioning
- Remote control
- Standing platform
- Operator’s cabin
- Overload protection: MOPS, AOPS
- Offshore Control System (OCS)
- Lifting of personnel – man-riding
- Workman basket
- External hydraulic power packs
- Local control stand (FLVK)

### CRANES

**FOLDABLE KNUCKLE BOOM CRANES**
- Range from 30 up to 2840 kNm

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**Crane Type**

<table>
<thead>
<tr>
<th>Crane Type</th>
<th>Outreach</th>
<th>Lifting Capacity</th>
<th>Lifting Moment</th>
<th>Total Moment</th>
<th>Payload Diameter</th>
<th>Turning Angle</th>
<th>Operating Pressure</th>
<th>Dead Weight</th>
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<td>PC 2700</td>
<td>1.5–5.8 m</td>
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<td>27.2 kNm</td>
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<td>200 bar</td>
<td>230–250 kg</td>
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<tr>
<td>PK 4501 M</td>
<td>3.4–11 m</td>
<td>1180–290 kg</td>
<td>38.9–24.2 kNm</td>
<td>44.9 kNm</td>
<td>400°</td>
<td>300 bar</td>
<td>560–750 kg</td>
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<tr>
<td>PK 3101 M</td>
<td>3.5–9.2 m</td>
<td>1600–1480 kg</td>
<td>55.6–40.8 kNm</td>
<td>58.7 kNm</td>
<td>400°</td>
<td>320 bar</td>
<td>600–670 kg</td>
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<tr>
<td>PK 4101 M</td>
<td>3.5–13.8 m</td>
<td>2100–250 kg</td>
<td>72–33.6 kNm</td>
<td>73.4 kNm</td>
<td>400°</td>
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<td>810–1290 kg</td>
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<td>PK 1101 M</td>
<td>3.7–14 m</td>
<td>2500–300 kg</td>
<td>95.4–54.4 kNm</td>
<td>104.8 kNm</td>
<td>400°</td>
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<td>820–1270 kg</td>
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<td>4–14 m</td>
<td>2800–470 kg</td>
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<td>4000–500 kg</td>
<td>174.1–313.3 kNm</td>
<td>196.8 kNm</td>
<td>620°</td>
<td>400°</td>
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<td>PK 2002 M</td>
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<td>400°</td>
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<td>PK 6100 M</td>
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<td>400°</td>
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<td>6110–8960 kg</td>
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<td>PK 15000 M</td>
<td>3.8–21.5 m</td>
<td>25400–3500 kg</td>
<td>982.7–730.5 kNm</td>
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<td>900°</td>
<td>800°</td>
<td>8590–10560 kg</td>
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<td>PFM 2000</td>
<td>7.5–20.8 m</td>
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<td>800°</td>
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<td>1750°</td>
<td>800°</td>
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<td>PFM 5000</td>
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<td>800°</td>
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**Image Descriptions**

- PK 15002 M
- PFM 4500
- PK 15500 M
- PFM 2000
- PK 11001 M
- PK 12001 M
- PFM 3500
- PK 23500 M
- PFM 2500
- PK 150002 M
- PK 50002 M
- PFM 4500
- PK 29002 M
- PK 32002 M
- PK 41002 M
- PK 50002 M
- PK 65002 M
- PK 90002 M
- PK 150002 M
The PALFINGER MARINE stiff boom cranes are based on a pedestal slewing design with hydraulic cylinder luffing. The cranes are available in the range from 141–30000 kNm lifting moment and are supplied according to customer requirements. The stiff boom cranes can be delivered within a broad range of certifications and numerous optional features. Stiff boom cranes are typically used in dock, on fixed installations and in harbour conditions.

### Crane Types

<table>
<thead>
<tr>
<th>Crane Type</th>
<th>Outracht</th>
<th>Lifting Capacity</th>
<th>Lifting Moment</th>
<th>Total Moment</th>
<th>Pedestal Diameter</th>
<th>Dead Weight</th>
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<td>PSM 200</td>
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<td>PSM 400</td>
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<td>10– 3.1 t</td>
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<td>737 kNm</td>
<td>1005 mm</td>
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<td>19–5.3 t</td>
<td>840–2340 kNm</td>
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<td>20.3–4.6 t</td>
<td>1140–4420 kNm</td>
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<td>25.6–5.4 t</td>
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<td>2325 kNm</td>
<td>2570 mm</td>
<td>11.4–14.1 t</td>
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<td>14.4–18.8 t</td>
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**CRANES**

**STIFF BOOM CRANES | Range from 150 up to 30000 kNm**

**OFFSHORE CRANES**
- Deck cranes (shipboard)
- Ship to Ship cranes
- Hose handling cranes
- Provision cranes

**MARINE CRANES**
- Service cranes
- Hose handling cranes
- Container and cargo handling cranes

**WIND CRANES**
- Substation cranes
- Platform cranes

**FEATURES**
- Long-life surface treatment: corrosion protection
- Operation from control platform on crane
- Electro hydraulic drive
- Continuous slewing
- Low/high temperature operations
- External hydraulic power packs
- Anti-collision system
- Active Heave Compensation (AHC)

**OPTIONS**
- Design according to rules and regulations (API 2C, EN13852, NORSOK etc.)
- Diesel hydraulic drive
- Shock absorber
- Metalizing
- Aux winch
- Lobus drum

**TYPICAL APPLICATIONS**
- Constant tensioning
- Remote control
- Operator’s cabin
- Overload protection: MOPS, AOPS
- Offshore Control System (OCS)
- Lifting of personnel – man-riding

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*Special offshore wind crane
**Available only for deck cranes
The PALFINGER MARINE telescopic boom cranes are based on a pedestal slewing design with hydraulic cylinder luffing. The boom extension is a telescopic inner section that allows a more flexible and wider operational radius in use and leaves the crane stored in a compact position. The advantages of the telescopic cranes are low weight and less complex design making them maintenance-friendly. The cranes are available in the range from 140–12000 kNm lifting moment and are supplied according to customer requirements and with numerous optional features.

### Crane Types and Specifications

<table>
<thead>
<tr>
<th>Crane Type</th>
<th>Outreach (m)</th>
<th>Lifting Capacity (t)</th>
<th>Lifting Moment (kNm)</th>
<th>Total Moment (kNm)</th>
<th>Pedestal Diameter (mm)</th>
<th>Dead Weight (t)</th>
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</thead>
<tbody>
<tr>
<td><strong>PTM RANGE</strong></td>
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<td>602</td>
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<td>PTM 900</td>
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<td>24000</td>
<td>2550</td>
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*Available only for deck cranes.

### TYPICAL APPLICATIONS

#### OFFSHORE CRANES
- Deck cranes (shipboard)
- Ship to Ship cranes
- Pipe handling cranes
- Provision cranes

#### MARINE CRANES
- Provision cranes
- Service cranes
- Container and cargo handling cranes

#### WIND CRANES
- Substation cranes

### FEATURES
- Long-life surface treatment: corrosion protection
- Operation from control platform on crane
- Electro hydraulic drive
- Continuous slewing
- Low/high temperature operations
- Innovative design
- Components protected from wear and tear

### OPTIONS
- Constant tensioning
- Remote control
- Operator's cabin
- Overload protection: MOPS, AOPS
- Offshore Control System (OCS)
- Lifting of personnel – man-riding
- External hydraulic power packs
- Anti-collision system
- Active Heave Compensation (AHC)
- Design according to rules and regulations (API 2C, EN13852, NORSOK etc.)
- Diesel hydraulic drive
- Shock absorber
- Metalizing
- Aux winch
- Lebus drum
PALFINGER MARINE knuckle boom cranes are designed to lift high loads with extended jib and provide the operator with great flexibility during lifting operations. The knuckle boom crane range is available from 130–30000 kNm lifting moment. Severe weather conditions and heavy seas introduce oscillating motions to suspend loads. The improved level of control makes the crane ideal for offshore lifting operations in higher sea states.

**Crane Type** | **Outreach** | **Lifting Capacity** | **Lifting Moment** | **Total Moment** | **Pedestal Diameter** | **Dead Weight**
--- | --- | --- | --- | --- | --- | ---
**PKM RANGE**
PKM 150 | 6–12 m | 2.1–1.1 t | 132–108 kNm | 267 kNm | 885 mm | 3.0–3.3 t
PKM 250 | 10–16 m | 2.9–1.8 t | 242–290 kNm | 437 kNm | 885 mm | 3.8–4.1 t
PKM 350 | 12–18 m | 3.6–2.3 t | 370–450 kNm | 644 kNm | 1095 mm | 5.5–5.8 t
PKM 550 | 14–20 m | 4.7–3.2 t | 573–655 kNm | 1017 kNm | 1490 mm | 7.5–7.8 t
PKM 750 | 16–20 m | 6.1–4.2 t | 746–805 kNm | 1440 kNm | 1595 mm | 10.3–11.1 t
**DKF RANGE**
DKF 220 | 27 m | 30 t | 2200 kNm | 4000 kNm | 1800 mm | 25 t
DKF 300 | 30 m | 30 t | 3000 kNm | 5000 kNm | 2065 mm | 27.5 t
DKF 400 | 32 m | 30 t | 4000 kNm | 6300 kNm | 2365 mm | 29.5 t
DKF 500 | 35 m | 35 t | 5000 kNm | 8000 kNm | 2385 mm | 34.5 t
DKF 600 | 37 m | 50 t | 8000 kNm | 11500 kNm | 2275 mm | 55 t
DKF 1000* | 40 m | 60 t | 10000 kNm | 14400 kNm | 2358 mm | 70 t
DKF 1100 | 43 m | 80 t | 12000 kNm | 18000 kNm | 2580 mm | 100 t
DKF 1600 | 45 m | 100 t | 16000 kNm | 25500 kNm | 3166 mm | 150 t
DKF 2000 | 50 m | 125 t | 20000 kNm | 32000 kNm | 3550 mm | 200 t
DKF 2500 | 50 m | 150 t | 25000 kNm | 40000 kNm | 4000 mm | 220 t
DKF 3000 | 55 m | 200 t | 30000 kNm | 50000 kNm | 4000 mm | 275 t

*Available only for deck cranes.

**Typical Applications**
- **Offshore Cranes**
  - Deck cranes (shipboard)
  - Ship to Ship cranes
  - Pipe handling cranes
  - Boat handling cranes
- **Marine Cranes**
  - Provision cranes
  - Service cranes
  - Container and cargo handling cranes
- **Wind Cranes**
  - Substation cranes

**Features**
- Long-life surface treatment: corrosion protection
- Operation from control platform on crane
- Electro hydraulic drive
- Continuous slewing
- Low/high temperature operations

**Options**
- Constant tensioning
- Remote control
- Operator’s cabin
- Overload protection: MOPS, AOPS
- Offshore Control System (OCS)
- Lifting of personnel – man-riding
- External hydraulic power packs
- Anti-collision system
- Active Heave Compensation (AHC)
- Design according to rules and regulations (API 2C, EN13852, NORSOK etc.)
- Diesel hydraulic drive
- Shock absorber
- Metalizing
- Aux winch
- Lubus drum
- Docking head for boat handling
- Pipe gripper
PALFINGER MARINE delivers AHC offshore cranes ranging from smaller models for SOV’s to larger models for subsea lifts, in addition to special systems for module handling deployments. All cranes are tailor-made to meet customer requirements and can be delivered in various configurations. The AHC system is developed for the harsh offshore environment. Rugged design made by experienced engineers, ensures trouble free operation under the most extreme conditions.

**AHC CRANE DESIGN FEATURES**

**LOW WEIGHT AND LOW CENTER OF GRAVITY**
- Low built design
- All components and the AHC winch placed as low as possible to ensure low weight and low center of gravity
- High lifting capabilities compared to weight and center of gravity maximise the cargo capacity on deck
- Maximising wire capacity on the AHC winch while remaining safe fleet angles

**LOW POWER CONSUMTION**
- Advanced hydraulic drive system and smart system design to share the available power effectively between the different functions
- Low installed power compared to AHC performance and available hoisting speeds

**HIGH PERFORMANCE**
- Capacity to reduce movement with up to 98 %
- Optimised drive train for correct speed and high capacity

**OPERATOR ERGONOMICS AND MAINTENANCE ACCESS**
- State-of-the-art operator cabin environment
- Designed for easy access to all points of maintenance, inspection and service

**HYDRAULIC SYSTEM**
- HPU placed inside crane pedestal (no need for container system)
- Zero load drop when the brake is removed, no need for tuning of the system with different loads
- Load can be held in subsea mode with brake off and all safety systems active for several days if necessary without any movement of the load due to leakage in the hydraulic system

**FEATURES**

**OPTIONS**

**DKF1600C**
- 100 T AHC CRANE
- Low center of gravity
- Low weight
- Low power consumption
- Superior AHC performance

**DKF220C**
- 5 T AHC CRANE
- Low weight
- Extended outreach for windmill operations

**FMHS**
- Travelling on rails
- SWL up to 3000 t
- Rotation +/- 180
- Roll and pitch +/- 20
- Working depth down to 3000 m

**FMHS**
- Travelling on rails
- SWL up to 3000 t
- Rotation +/- 180
- Roll and pitch +/- 20
- Working depth down to 3000 m
CRANES

3D-COMPENSATED CRANES

PALFINGER MARINE has developed a new modular, 3D-compensation unit, for use on wind farm service operation vessels (SOVs) for increased vessel operability. Hence enabling smaller and more cost-effective vessels to be used in harsher weather conditions.

TYPICAL OPERATIONS

- Offshore wind turbine supply and maintenance operations.
- Work towards all kind of fixed installations where elimination of ship motion is required to ensure safer and improved lifting operation.
- The 3D-compensation module is designed for mounting on PALFINGER MARINE offshore cranes—knuckle boom cranes, telescopic boom cranes or stiff boom cranes—on board vessels to transfer goods to and from windmills or other fixed installations. The 3D-boom module can be dismounted and parked in a separate cradle, allowing the crane to be used as a standard offshore crane.
- The 3D-compensation increases the operational safety and eases transfers for lifting and landing. It enables positioning of the cargo on the wind turbine, substation and installations despite movements of the vessel due to waves and currents, as the 3D-compensation keeps the load vertically and the boom tip horizontally steady.
- The low weight which is being compensated gives an advantage, as it influences less on the ship stabilising systems and also requires less power consumption when in 3D mode.
- The unit has very high performance with high accuracy due to the state of the art, tailor-made MRU unit located on the unit itself.
- PALFINGER MARINE has put great effort into making a more user-friendly interface (HMI) from the operator cabin display and on the radio remote controllers used for smaller cranes.

3D-COMPENSATION UNIT

- Plug and play concept for mounting and dismounting
- Easy to retrofit onto existing offshore cranes
- Existing crane configuration may still be used

FEATURES

- Knuckle boom JB crane
- 3-axis hydraulic motion compensation system for pitch, roll and heave
- 3D unit powered by crane power pack using quick connections
- Motion reference unit (MRU)
- MOPS – Manual Overload Protection System
- AOPS (Automatic Overload Protection System)
- Min./max. payload in 3D-compensation mode: 1–3 t
- Operational window up to approximately 3 m wave height, wave period 4–20 s
- Compensation working range is approximately 6 m in vertical, 5.5 m in radial and +/-1.5 m in slewing direction

OPTIONS

- Radio or cable remote control systems
- Active Heave Compensation on winch can be added for increased performance
- Anti-collision system mounted in the boom tip
- Operator cabin (with A/C)
- Centralised greasing system
- Further options available upon request
NEW INNOVATIVE ELECTRICAL CRANE DESIGN

PALFINGER MARINE has developed a new and innovative range of wire luffing lattice boom cranes with fully electric drive based on VFD technology, designed according to EN13852-1 and NORSOK R002.

- State-of-the-art control system
- Safe to use up to significant wave height up to 6 m
- Optimised load charts to ensure flexibility in operation
- Designed for easy maintenance
- Easy access to all areas of the crane
- Remote access of crane for quick support and fault detection
- Off the shelf components to ensure easy maintenance and quick supply of spare parts

ADVANTAGES
- Less vibration, less noise
- Less components
- More smooth and predictable operations
- Reduction in maintenance cost
- Subject to wear and tear

ENVIRONMENT-FRIENDLY
- No risk of oil spill
- Less power consumption

TYPICAL APPLICATIONS

- Operators cabin
- Tugger winches
- Remote control
- Design according to API-2C / ABS / EN13852 / NORSOK / BV / LRS etc.
- Personnel lift
- AOPS / MOPS / TENSIONING
- Anti-collision system / Metalizing
- Shock absorber
- Aux winch
- Lebus drum

CRANES

CRANES

WIRE LUFFING LATTICE BOOM CRANES | Range from 4000 up to 30000 kNm

<table>
<thead>
<tr>
<th>Crane Type</th>
<th>Max. Outreach</th>
<th>Max. Lifting Capacity</th>
<th>Lifting Moment</th>
<th>Total Moment</th>
<th>Pedestal Diameter</th>
<th>Dead Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>DKW 400</td>
<td>35 m</td>
<td>30 t</td>
<td>4000 kNm</td>
<td>6300 kNm</td>
<td>2050 mm</td>
<td>20 t</td>
</tr>
<tr>
<td>DKW 500</td>
<td>37 m</td>
<td>35 t</td>
<td>5000 kNm</td>
<td>8000 kNm</td>
<td>2240 mm</td>
<td>25 t</td>
</tr>
<tr>
<td>DKW 800</td>
<td>43 m</td>
<td>50 t</td>
<td>8000 kNm</td>
<td>11500 kNm</td>
<td>2271 mm</td>
<td>40 t</td>
</tr>
<tr>
<td>DKW 1000</td>
<td>47 m</td>
<td>60 t</td>
<td>10000 kNm</td>
<td>14400 kNm</td>
<td>2550 mm</td>
<td>50 t</td>
</tr>
<tr>
<td>DKW 1200</td>
<td>50 m</td>
<td>80 t</td>
<td>10000 kNm</td>
<td>18000 kNm</td>
<td>2550 mm</td>
<td>60 t</td>
</tr>
<tr>
<td>DKW 1600</td>
<td>55 m</td>
<td>100 t</td>
<td>16000 kNm</td>
<td>34000 kNm</td>
<td>3166 mm</td>
<td>80 t</td>
</tr>
<tr>
<td>DKW 2000</td>
<td>65 m</td>
<td>125 t</td>
<td>20000 kNm</td>
<td>44000 kNm</td>
<td>3987 mm</td>
<td>120 t</td>
</tr>
<tr>
<td>DKW 2500</td>
<td>70 m</td>
<td>150 t</td>
<td>25000 kNm</td>
<td>45000 kNm</td>
<td>4000 mm</td>
<td>130 t</td>
</tr>
<tr>
<td>DKW 3000</td>
<td>80 m</td>
<td>200 t</td>
<td>30000 kNm</td>
<td>60000 kNm</td>
<td>4500 mm</td>
<td>160 t</td>
</tr>
</tbody>
</table>

FEATURS

- Internal slewing gearing and slewing gears
- Reduced need for maintenance
- Easy access to all types of maintenance
- Weight optimised
- Enables operation in up to 6 m significant wave height

KEY DESIGN FEATURES

- State-of-the-art control system
- Safe to use up to significant wave height up to 6 m
- Optimised load charts to ensure flexibility in operation
- Designed for easy maintenance
- Access to all areas of the crane
- Remote access of crane for quick support and fault detection
- Off the shelf components to ensure easy maintenance and quick supply of spare parts

ADVANTAGES
- Less vibration, less noise
- Less components
- More smooth and predictable operations
- Reduction in maintenance cost
- Subject to wear and tear

ENVIRONMENT-FRIENDLY
- No risk of oil spill
- Less power consumption

The PALFINGER MARINE wire luffing lattice boom cranes are based on a slewing pedestal design. The cranes are state-of-the-art and supplied according to the latest offshore rules and regulations in the range of 4000–30000 kNm lifting moment. Wire luffing lattice boom cranes are supplied with built-in electro hydraulic or diesel hydraulic power packs. In addition PALFINGER MARINE has developed a new and innovative fully electric wire luffing crane design. Wire luffing lattice boom cranes are typically used on fixed installations and drilling rigs, Jack ups, drills, FPU’s and FPSO’s. Typically used when the needed outreach exceeds 40–50 m.
PALFINGER MARINE travelling cranes are available in numerous configurations and for a range of applications from very simple engine room cranes to highly advanced BOP and XMAS tree handling cranes. The travelling feature indicates the mobility of the crane in the way it travels within a given area of operation. Structures of overhead, underslung, gantry and semi-gantry cranes are available for various handling requirements up to SWL 600 t. Travelling cranes are delivered electric or hydraulic driven and with numerous different features and options depending on applications. All cranes are delivered tailor-made according to project specific requirements.

### TYPICAL APPLICATIONS

**OFFSHORE CRANES**
- BOP handling cranes
- X-mas tree handling cranes
- Pipe handling cranes
- Riser handling cranes
- Cargo rail cranes
- Travelling deck cranes
- Service cranes

**MARINE CRANES**
- Monorail provision cranes
- Engine room cranes
- Cargo rail cranes
- Travelling deck cranes
- Service cranes

### CRANES

**TRAVELLING CRANES | Range from 1 up to 600 t**

The PALFINGER MARINE range of travelling cranes is divided in four main categories according to geometry:
- TKO Overhead travelling crane
- TKU Underslung travelling crane
- TKG Gantry travelling crane
- TKSG Semi-gantry travelling crane

In addition the range comprises travelling cranes for different special applications like:
- DFK-R Cargo rail cranes
- TKG-DKF Travelling deck cranes
- ER Engine room cranes
- PN Provision cranes

### Range

<table>
<thead>
<tr>
<th>Range</th>
<th>Category</th>
<th>Lifting Capacity</th>
<th>Span</th>
<th>Dead Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>TKO</td>
<td>Overhead travelling crane</td>
<td>1–600 t</td>
<td>5–50 m</td>
<td>5–200 t</td>
</tr>
<tr>
<td>TKU</td>
<td>Underslung travelling crane</td>
<td>1–200 t</td>
<td>5–30 m</td>
<td>5–50 t</td>
</tr>
<tr>
<td>TKG</td>
<td>Gantry travelling crane</td>
<td>1–600 t</td>
<td>5–50 m</td>
<td>15–600 t</td>
</tr>
<tr>
<td>TKSG</td>
<td>Semi-gantry travelling crane</td>
<td>1–600 t</td>
<td>5–50 m</td>
<td>1–400 t</td>
</tr>
</tbody>
</table>

**TYPICAL APPLICATIONS**
### PALFINGER MARINE Fixed Boom Cranes

PALFINGER MARINE fixed boom cranes are experts for safe and fast material handling to the offshore wind platform. A special surface coating and processing of high-quality materials protects the fixed boom cranes against corrosion. Fixed boom cranes are available with electric and hydraulic drives.

<table>
<thead>
<tr>
<th>Class Type</th>
<th>Outreach</th>
<th>Lifting Capacity</th>
<th>Significant Wave Height</th>
<th>Power Consumption</th>
<th>Dead Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PF RANGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF6000</td>
<td>2.4 m</td>
<td>0.7–1 t</td>
<td>1.8 m</td>
<td>6 kW</td>
<td>0.9 t</td>
</tr>
<tr>
<td>PF8000</td>
<td>2.9 m</td>
<td>1 t</td>
<td>1.8 m</td>
<td>6 kW</td>
<td>1 t</td>
</tr>
<tr>
<td>PF9000</td>
<td>3.4 m</td>
<td>1 t</td>
<td>1.8 m</td>
<td>6 kW</td>
<td>1.3 t</td>
</tr>
<tr>
<td>PF16000</td>
<td>3.0 m</td>
<td>2 t</td>
<td>1.8 m</td>
<td>12 kW</td>
<td>1.6 t</td>
</tr>
<tr>
<td>PF20000</td>
<td>6.9 m</td>
<td>1 t</td>
<td>1.8 m</td>
<td>9 kW</td>
<td>2 t</td>
</tr>
</tbody>
</table>

### Features

- Stainless steel components
- Overload protection system (MOPS/AOPS)
- Electrically operated rope winch
- Slewing speed: ~1 rpm
- Electric power: 3x 400–690 V/50–60 Hz/-6 to 12 kW
- Cable remote control system
- Protection class IP66
- Manually/Electrically operated slewing drive
- Bottom flange on mounting base
- 10–12 mm wire rope, rotation free galvanized
- Surface protection: spray galvanized 60–160 µm + system A8.04 acc. to DIN EN ISO 12944 C5-M high (320 µm)
- Protection class: IP66
- Manually/Electrically operated slewing drive
- Bottom flange on mounting base
- 10–12 mm wire rope, rotation free galvanized
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### Options

- Pivoting bars (additional lifting points)
- Slack wire detection system
- Visual warning light
- Working light
- Pulley line system
### LIFE RAFT AND RESCUE BOAT SLEWING DAVITS

**SCM-L SERIES**
- Slewing davit for life rafts up to 39 pers.
- Standard and proven design
- Easy to install
- Low cost of ownership
- Easy to operate

**SCM-R SERIES**
- Slewing davit for rescue boats up to 5.25 m (L.O.A.)
- Standard and proven design
- Easy to install (plug and play)
- Provided with self-contained stainless steel HPU
- Easy to maintain

**SCM-R SERIES**
- For rescue boat handling
- Manual slewing
- Electrical hoisting

**SCH-R SERIES**
- Slewing davit for rescue boats up to 5.25 m (L.O.A.)
- Standard and proven design
- Easy to install (plug and play)
- Provided with self-contained stainless steel HPU
- Easy to maintain

**PRHE SERIES**
- Hydraulic pivoting and electric hoisting
- Easy to install (plug and play)
- All components protected from wear and tear
- Innovative design
- Optional Ro-Ro certificate (NPDS 3500H)

**NPDS SERIES**
- Easy to install (plug and play)
- Totally enclosed system

**NPDS SERIES**
- All components protected from wear and tear
- Easy to install

**FEATURES**
- Easy exchangeability of components
- Stock availability
- Proven design

**ACCESSORIES (OPTIONS)**
- Shock absorber
- Boat supports
- Ex-proof
- Heating system
- Other options available on request

### (FAST) RESCUE BOAT DAVITS

**PFHS 15**
- 15 kN
- 1529 kg
- D–18 m/min
- Electric

**PFHE 20**
- 20 kN
- 2108 kg
- D–18 m/min
- Electric

**PFHE 25-2**
- 25 kN
- 2540 kg
- D–18 m/min
- Electric

**PFHE 25-2**
- 27.5 kN
- 2540 kg
- D–18 m/min
- Hydraulic

**PFHE 25-2**
- 35.5 kN
- 3500 kg
- D–18 m/min
- Electric

**PFHE 25-2 H**
- 27.5 kN
- 3853 kg
- 0–48 m/min
- Hydraulic

**PFHE 25-2 H**
- 27.5 kN
- 2804 kg
- 0–48 m/min
- Hydraulic

**PFHE 35-2**
- 35.5 kN
- 3203 kg
- 0–48 m/min
- Hydraulic

**PFHE 35-2 H**
- 37.5 kN
- 4023 kg
- 0–48 m/min
- Hydraulic

**PFHE 35-2 H**
- 37.5 kN
- 3233 kg
- 0–48 m/min
- Hydraulic

**NPDS 3500H / NPDS 3500HFR**
- 31.4 kN
- 3200 kg
- D–18/50 m/min
- Hydraulic

**NPDS 4000 / NPDS 4000H**
- 31.4 kN
- 4000 kg
- D–18/50 m/min
- Hydraulic

**NPDS 6000H**
- 58.4 kN
- 6000 kg
- D–18/50 m/min
- Hydraulic

**TELESCOPIC DAVITS**
- NTDS 1800 H
- 17.6 kN
- 1800 kg
- D–18/50 m/min
- Hydraulic

**TELESCOPIC DAVITS**
- NTDS 3500 H
- 31.4 kN
- 3500 kg
- D–18/50 m/min
- Hydraulic

**FEATURES AND OPTIONS**
- High speed, optional constant tensioning plus shock absorber
- Ro-Ro fast rescue boat davit

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**DAVITZEN MARINE Product Catalogue**

---

29
DAVITS

WORKBOAT | DAUGHTER CRAFT DAVITS

PRH-AP SERIES
- Hydraulic pivoting A-frame davit with anti-pendulum docking head (AP)
- Winch equipped with fully hydraulic constant tensioning system
- Hydraulically operated anti-pendulum docking head
- Increased safety for crew due to AP docking head

PRH-CT SERIES
- Hydraulic pivoting dual point davit
- Two independently operated constant tensioning winches
- Hydro-pneumatic shock absorber
- Stainless steel operating console

NTDS SERIES
- Roof mounted telescopic davit
- Space-saving option
- All components protected from wear and tear
- Easy to install
- Totally enclosed system

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load (SWL)</th>
<th>Max Boat Weight</th>
<th>Hoisting</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRH 55 H</td>
<td>55 kN</td>
<td>5608 kg</td>
<td>0–1835 m/min (hydraulic)</td>
</tr>
<tr>
<td>PRH 75 H</td>
<td>75 kN</td>
<td>7647 kg</td>
<td>0–1848 m/min (hydraulic)</td>
</tr>
<tr>
<td>PRH 75 AP</td>
<td>55 kN</td>
<td>5608 kg</td>
<td>0–1835 m/min (hydraulic)</td>
</tr>
<tr>
<td>PRH 100 AP</td>
<td>100 kN</td>
<td>10197 kg</td>
<td>0–1848 m/min (hydraulic)</td>
</tr>
<tr>
<td>PFH-CT 100</td>
<td>100 kN</td>
<td>10197 kg</td>
<td>0–1835 m/min (hydraulic)</td>
</tr>
<tr>
<td>NTDS 12000H</td>
<td>117.7 kN</td>
<td>12000 kg</td>
<td>0–1830 m/min (hydraulic)</td>
</tr>
</tbody>
</table>

FEATURES AND OPTIONS

ACCESSORIES (OPTIONS)
- Shock absorber
- High speed winch
- Painterline boom
- Constant tensioning system
- Ex-proof
- Other options available on request

INNOVATIVE
- Designed for daily operations
- Meeting Navy and Coast Guard requirements
- Increased operational efficiency
- Easy to install
- Totally enclosed system
**PFH SERIES**
- Hydraulic pivoting davit for lifeboats
- Ideal for situations where height restrictions apply
- Modular built system, easy to install
- Foldable davit arms for easy transportation
- Provided with self-contained HPU

**VIP SERIES**
- Gravity based davits
- Hydraulic brake system
- Low cost of ownership
- Easy to operate

**NPD SERIES**
- Hydraulic pivoting and hydraulic hoisting/lowering
- Easy to install (plug and play)
- Totally enclosed system
- All components protected from wear and tear
- Innovative design

**NTD SERIES**
- Hydraulic hoisting
- Easy to install
- Totally enclosed system
- All components protected from wear and tear
- Innovative design

---

### LIFEBOAT DAVITS

#### PFH SERIES
- **Type**: PFH 60
  - **Safe Working Load (SWL)**: 80 kN
  - **Max Boat Weight**: 8138 kg
  - **Operation**: hydraulic pivoting/gravity lowering/electric hoisting

- **Type**: PFH 140
  - **Safe Working Load (SWL)**: 140 kN
  - **Max Boat Weight**: 14768 kg
  - **Operation**: hydraulic pivoting/gravity lowering/electric hoisting

- **Type**: PFH 180
  - **Safe Working Load (SWL)**: 180 kN
  - **Max Boat Weight**: 18354 kg
  - **Operation**: hydraulic pivoting/gravity lowering/electric hoisting

- **Type**: PFH 230
  - **Safe Working Load (SWL)**: 230 kN
  - **Max Boat Weight**: 23453 kg
  - **Operation**: hydraulic pivoting/gravity lowering/electric hoisting

#### NPD SERIES
- **Type**: NPD 6000H
  - **Safe Working Load (SWL)**: 58.8 kN
  - **Max Boat Weight**: 6000 kg
  - **Operation**: 0–5/18 m/min

- **Type**: NPD 11300H
  - **Safe Working Load (SWL)**: 110.8 kN
  - **Max Boat Weight**: 11300 kg
  - **Operation**: 0–5/18 m/min

- **Type**: NPD 14800H
  - **Safe Working Load (SWL)**: 145.1 kN
  - **Max Boat Weight**: 14800 kg
  - **Operation**: 0–5 m/min

#### TELESCOPIC DAVITS
- **Type**: NTD 12000H
  - **Safe Working Load (SWL)**: 117.7 kN
  - **Max Boat Weight**: 12000 kg
  - **Operation**: 0–5/18 m/min

---

### ACCESSORIES OPTIONS

**PFH SERIES**
- **Converter**
- **Life/rescue execution (if applicable)**
- **Ex-proof**
- **Skid mounted**
- **Other options available on request**

**VIP SERIES**
- **Converter**
- **Life/rescue execution (if applicable)**
- **Ex-proof**
- **Skid mounted**
- **Other options available on request**

**NPD SERIES**
- **Converter**
- **Life/rescue execution (if applicable)**
- **Ex-proof**
- **Skid mounted**
- **Other options available on request**

---

### FEATURES AND OPTIONS

#### ACCESSORIES OPTIONS
- **Converter**
- **Life/rescue execution (if applicable)**
- **Ex-proof**
- **Skid mounted**
- **Other options available on request**

#### INNOVATIVE
- Designed for daily operations
- Increased operational efficiency
- Meeting Navy and Coast Guard requirements

#### ACCESSORIES OPTIONS
- **Converter**
- **Life/rescue execution (if applicable)**
- **Ex-proof**
- **Skid mounted**
- **Other options available on request**

#### FEATURES AND OPTIONS
- **Converter**
- **Life/rescue execution (if applicable)**
- **Ex-proof**
- **Skid mounted**
- **Other options available on request**
PALFINGER MARINE offers a range of innovative, compact and well-designed davits for the cruise market which maximize the available deck space on board while at the same time offering an extremely efficient installation process and minimal lifetime maintenance.

### VIP SERIES
- Gravity based davits
- Hydraulic brake system
- Low cost of ownership
- Easy to operate

### PD SERIES
- Innovative design
- Semi-gravity based, hydraulic assisted
- Easy to install (plug and play)
- A good solution if limited space

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load (SWL)</th>
<th>Max Boat Weight</th>
<th>Hoisting</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD 24</td>
<td>235.4 kN</td>
<td>24000 kg</td>
<td>0–5 m/min</td>
</tr>
<tr>
<td>VP 23 FDL</td>
<td>235.4 kN</td>
<td>23600 kg</td>
<td>0–5 m/min</td>
</tr>
<tr>
<td>VP 24 FD</td>
<td>235.4 kN</td>
<td>23600 kg</td>
<td>0–11.8 m/min</td>
</tr>
<tr>
<td>PD 55DM</td>
<td>539.4 kN</td>
<td>55000 kg</td>
<td>0–5 m/min</td>
</tr>
<tr>
<td>LS 55</td>
<td>539.4 kN</td>
<td>55000 kg</td>
<td>0–5 m/min</td>
</tr>
<tr>
<td>PD 55L</td>
<td>539.4 kN</td>
<td>55000 kg</td>
<td>0–5 m/min</td>
</tr>
</tbody>
</table>

**LIFESAVING EQUIMENT**
OFFSHORE DAVITS

FPG SERIES
- Fixed outrigger platform davit for lifeboats
- Solid and proven design
- Easy to operate
- For life- and/or rescue boat handling

NRDS SERIES
- Easy to install (plug and play)
- Totally enclosed system
- All components protected from wear and tear
- Innovative design
- Hydraulic hoisting/lowering

FAD 1000
- Independent integrated hydraulic system
- Gravity lowering/Electrical hoisting
- Light weight, with adjustable hook distance
- Easy to install and maintain

FAD 1000
- Independent integrated hydraulic system
- Gravity lowering/Electrical hoisting
- Light weight, with adjustable hook distance
- Easy to install and maintain

OFFSHORE DAVITS - GRAVITY

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load (SWL)</th>
<th>Max Boat Weight</th>
<th>Operation/hoisting</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPG 85-2</td>
<td>85 kN</td>
<td>8667 kg</td>
<td>gravity lowering/electric hoisting</td>
</tr>
<tr>
<td>FPG 120</td>
<td>120 kN</td>
<td>12236 kg</td>
<td>gravity lowering/electric hoisting</td>
</tr>
<tr>
<td>FPG 145</td>
<td>145 kN</td>
<td>14785 kg</td>
<td>gravity lowering/electric hoisting</td>
</tr>
<tr>
<td>FPG 180</td>
<td>180 kN</td>
<td>18054 kg</td>
<td>gravity lowering/electric hoisting</td>
</tr>
<tr>
<td>FPG 230</td>
<td>230 kN</td>
<td>23453 kg</td>
<td>gravity lowering/electric hoisting</td>
</tr>
<tr>
<td>FAD 1000</td>
<td>128 kN</td>
<td>13052 kg</td>
<td>gravity lowering/electric hoisting</td>
</tr>
</tbody>
</table>

OFFSHORE DAVITS - HYDRAULIC

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load (SWL)</th>
<th>Max Boat Weight</th>
<th>Hoisting</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPR 30</td>
<td>30 kN</td>
<td>3059 kg</td>
<td>18 m/min</td>
<td>electric hoisting/gravity lowering</td>
</tr>
<tr>
<td>FPR 35 H</td>
<td>37.5 kN</td>
<td>3823 kg</td>
<td>48 m/min</td>
<td>hydraulic hoisting/lowering</td>
</tr>
<tr>
<td>NRDS 3500 H</td>
<td>31.4 kN</td>
<td>3200 kg</td>
<td>18–48 m/min</td>
<td>hydraulic hoisting/lowering</td>
</tr>
</tbody>
</table>
RSQ 450 SERIES
- Hull made out of seawater resistant aluminum or glass reinforced plastic (GRP)
- Designed for service in the most demanding environments
- 15–40 Hp outboard engines
- Complies with SOLAS regulations
- Perfect alternative for inflatable MOB’s

RSQ 475 SERIES
- Inboard diesel with propeller
- Optional offload release hook
- Hull made out of seawater resistant aluminum or glass reinforced plastic (GRP)
- Complies with SOLAS regulations
- Low maintenance on the aluminum hull

RSQ 475 SERIES
- Inboard diesel with propeller
- Optional offload release hook
- Hull made out of seawater resistant aluminum or glass reinforced plastic (GRP)
- Complies with SOLAS regulations
- Low maintenance on the aluminum hull

RSQ 475 SERIES
- Inboard diesel with propeller
- Optional offload release hook
- Hull made out of seawater resistant aluminum or glass reinforced plastic (GRP)
- Complies with SOLAS regulations
- Low maintenance on the aluminum hull

FRSQ 600 SERIES
- Hull and console made out of seawater-resistant aluminum or glass reinforced plastic (GRP)
- Designed for service in the most demanding environments
- Excellent maneuverability and stability
- Inboard diesel and outboard version available
- Complies with SOLAS regulations

FRSQ 700 SERIES
- Single or twin inboard diesel with waterjet propulsion
- Closed cell foam tender with a hypalon cover to absorb possible heavy impacts
- Double shock absorbing seats fitted
- Deep V-bottom construction for high speeds and stability
- Aluminum hull guarantees a long lifetime and low maintenance

FRSQ 850 SERIES
- Single or twin inboard diesel with waterjet propulsion
- Excellent maneuverability and stability
- Aluminum used guarantees low maintenance costs and the lifetime of the hull
- Closed cell foam tender with a hypalon cover to absorb possible heavy impacts
- Boat can carry up to 21 persons according to SOLAS

Options and Accessories
- Boat cover
- Steering console
- (Releasable) cradle
- Spare parts

Options and Accessories
- HF (if ordered)
- VHF
- Rescue net
- Remote control offload release hook
- GPS
- EPIRB
- Spare parts
LIFE- AND RESCUE BOATS

LBT SERIES
- Complies with SOLAS regulations
- Available in two versions: tanker or dry cargo
- Fitted with European standard equipment
- Capacity 25–150 persons
- For marine and offshore applications
- Big size seats available
- External steel parts are of 316 L quality
- Polar code approval available upon request

<table>
<thead>
<tr>
<th>Cargo version (C) / Tanker version (T)</th>
<th>L x W x H (m)</th>
<th>Max Seating (pers. at 82.5 kg)</th>
<th>Hook Distance (m)</th>
<th>Over Load (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBT 525 C / LBT 525 T</td>
<td>5.3 x 2.3 x 3.1</td>
<td>25</td>
<td>4.9</td>
<td>4423 / 4753</td>
</tr>
<tr>
<td>LBT 650 C / LBT 650 T</td>
<td>6.5 x 2.3 x 3.1</td>
<td>36</td>
<td>6.1</td>
<td>5485 / 5925</td>
</tr>
<tr>
<td>LBT 750 C / LBT 750 T</td>
<td>7.0 x 2.7 x 3.1</td>
<td>48</td>
<td>6.6</td>
<td>7216 / 7605</td>
</tr>
<tr>
<td>LBT 750 C / LBT 750 T</td>
<td>7.5 x 2.9 x 3.3</td>
<td>68</td>
<td>7.1</td>
<td>8945 / 9330</td>
</tr>
<tr>
<td>LBT 850 C / LBT 850 T</td>
<td>8.5 x 2.9 x 3.3</td>
<td>80</td>
<td>8.1</td>
<td>10949 / 11295</td>
</tr>
<tr>
<td>LBT 950 C / LBT 950 T</td>
<td>9.4 x 3.6 x 3.3</td>
<td>102</td>
<td>9.6</td>
<td>13625 / 14315</td>
</tr>
<tr>
<td>LBT 1090 C / LBT 1090 T</td>
<td>10.9 x 3.9 x 3.5</td>
<td>130</td>
<td>10.5</td>
<td>17406 / 17966</td>
</tr>
<tr>
<td>LBT 1180 C / LBT 1180 T</td>
<td>11.8 x 4.2 x 3.7</td>
<td>150</td>
<td>11.5</td>
<td>21355 / 22000</td>
</tr>
</tbody>
</table>

OPTIONS AND ACCESSORIES
- VHF radio
- SART (Search and Rescue Transponder)
- EPIRB (Emergency Position Indicating Radio Beacon)
- Engine heater
- Boat heater
- Polar package
- Spring starter/hydraulic starter
LIFE- AND RESCUE BOATS

FREE FALL LIFEBOATS

FF 1200
- Design basis DNV-OS-E406/NORSOK R-002 & Solas
- 70 person capacity based on an average weight of 100 kg per person
- Superior space and comfort for person size from 1.4 m to 2.1 m and weight from 50 kg to 150 kg
- Seats with 5-point seat belts provide excellent safety and comfort
- Twin steering position
- Structural design gives the lifeboat max. strength, safety and minimum of deflection
- Unique combination of excellent positive headway and low G-forces
- High power engine, 280 hp. High speed and high bollard pull

REFERENCE PROJECTS
- Johan Sverdrup (Statoil)
- Gina Krog (Statoil)
- Martin Linge (Total)
- Ivar Asen (DNV)

LBF
- Complies with SOLAS regulations
- Freefall height between 16–32 m
- Capacity from 14–60 persons
- Available in two versions: tanker or dry cargo
- European standard equipment

OPTIONS AND ACCESSORIES
- Boat heater
- Emergency spring starter
- Engine heater
- Hydraulic starter
- SART (Search and Rescue Transponder)
- EPIRB (Emergency Position Indication Radio Beacon)
- Other options available on request

TYPICAL APPLICATIONS
- Platforms of any type
- Drillships
- FPSOs
- Car carriers
- Any large complement ship
- VLCCs
- VLOCs
- LNGCs
- LNG-FPSOs

FREE FALL DAVITS

JYF 55
- 59 kN free fall launching or hydraulic lowering
- Max boat weight 6016 kg

JYF 75
- 75 kN free fall launching or hydraulic lowering
- Max boat weight 7047 kg

JYF 85
- 80 kN free fall launching or hydraulic lowering
- Max boat weight 11929 kg

JYF 105
- 113 kN free fall launching or hydraulic lowering
- Max boat weight 11929 kg
PALFINGER MARINE offers a full range of partially enclosed lifeboats and combined tender/lifeboat systems for any kind of passenger vessel. All can be delivered with our customised davit systems.

**CTL 38 AND CTL 38 SV**
CTL 38 is one of the most sold tender lifeboats in the world, offering a comfortable ride, low running costs and good manoeuvrability. It is offered as a standard version, the CTL 38, and a shortened version, the CTL 38 SV.

**THE NEW CTL 49 AND CTL 57**
New developed tender lifeboats with latest innovations in design and technics. The largest tender lifeboat in the market with almost countless options for individual customization.

**MPC 29 AND MPC 32**
The PALFINGER MARINE MPC series consists of two compact 150 people partially enclosed lifeboats, offering optimal manoeuvrability, spacious interior and user friendliness.

**THE NEW MPC 39 AND MPC 49**
With its capacity of up to 450 persons it is the largest lifeboat in the market. The unique double deck design provides safe boarding and comfortable seating. Advanced safety by design.

### OPTIONS AND ACCESSORIES
- Extras for low temp areas (POLAR Code compliance)
- Tailored designs with your or our architects
- Wood applications on floors, walls or other interiors
- Fast ferry comfort seats
- Restroom facilities with hot and cold water
- Entertainment systems with sound and screens
- AC systems and/or heatings
- LED Mood lights in cabin or outside
- USB charging ports at each seat row
- Panoramic windows in ceiling
- Bar on board

### LIFE- AND RESCUE BOATS
**LIFE- AND RESCUE BOATS**

**CRUISE LIFEBOATS AND TENDERS | NEW GENERATION**

<table>
<thead>
<tr>
<th>Type</th>
<th>No. of pers./LIFEBOAT</th>
<th>No. of pers./TENDER</th>
<th>L x W x H</th>
<th>Weight Loaded</th>
<th>Hook Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTL 38</td>
<td>150</td>
<td>120</td>
<td>12 x 4.7 x 3.9 m</td>
<td>23600 kg</td>
<td>11.2 m</td>
</tr>
<tr>
<td>CTL 38 SV</td>
<td>150</td>
<td>120</td>
<td>11.2 x 4.7 x 3.9 m</td>
<td>23600 kg</td>
<td>10.5 m</td>
</tr>
<tr>
<td>CTL 49</td>
<td>250</td>
<td>200</td>
<td>15.5 x 5.5 x 4.2 m</td>
<td>39000 kg</td>
<td>14.2 m</td>
</tr>
<tr>
<td>CTL 57</td>
<td>270</td>
<td>220</td>
<td>17.5 x 5.7 x 4.2 m</td>
<td>45000 kg</td>
<td>16.7 m</td>
</tr>
<tr>
<td>MPC 29</td>
<td>150</td>
<td></td>
<td>8.8 x 4.5 x 3.4 m</td>
<td>17100 kg</td>
<td>8.5 m</td>
</tr>
<tr>
<td>MPC 32</td>
<td>150</td>
<td></td>
<td>9.6 x 4.5 x 3.4 m</td>
<td>17100 kg</td>
<td>8.5 m</td>
</tr>
<tr>
<td>MPC 39</td>
<td>330</td>
<td></td>
<td>12.5 x 5.5 x 4.2 m</td>
<td>38000 kg</td>
<td>11.5 m</td>
</tr>
<tr>
<td>MPC 49</td>
<td>410</td>
<td></td>
<td>15 x 5.5 x 4.2 m</td>
<td>53000 kg</td>
<td>14.2 m</td>
</tr>
</tbody>
</table>
FRSQ 670 A WB
- Designed for many different applications because of the high stability and large deck area
- Hull shape guarantees a stable boat, ideal for different deckloads and towing purposes
- Propulsion is an inboard diesel engine in combination with a waterjet propulsion
- Strong, less damage responsive, maintenance-friendly and made of heavy duty aluminum

FRSQ 850 A WSV
- Available as windfarm orworkboat version
- The closed cell foam fender with a hypalon cover absorbs possible heavy impacts
- Twin inboard diesel engines with waterjet propulsion
- Aluminium used guarantees the low maintenance costs and the long lifetime of the hull
- Can be executed in full redundant setup for optimum reliability

FRSQ 1200 A WB
- FRSQ tug especially designed for oil spill recovery and towing purposes
- Modifications to the hull can be easily implemented
- The coxswain and navigator have access to an ergonomic cockpit
- Three shock absorbing seats are installed
- Twin inboard diesel with waterjet propulsion, bollardpull up to 4.1 t

### OPTIONS AND ACCESSORIES
- Additional seats
- Towing hooks / Bölters
- Rescue equipment
- VHF
- GPS
- Railings

### OPTIONS AND ACCESSORIES
- Rescue net horn
- Radar
- Horn
- GPS
- Spare parts
- Airconditioning

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (m)</th>
<th>Capacity (pers.)</th>
<th>Weight (incl. max. pers.)</th>
<th>Propulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSQ 850 A FRDC</td>
<td>8.5 x 3.3 x 3.3</td>
<td>8</td>
<td>6000 kg</td>
<td>110 hp – twin inboard diesel with propeller (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 1000 A FRDC</td>
<td>10.4 x 3.5 x 3.3</td>
<td>15</td>
<td>7251 kg</td>
<td>258 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 1200 A FRDC</td>
<td>12.0 x 3.5 x 3.6</td>
<td>15</td>
<td>8750 kg</td>
<td>258 hp – twin inboard diesel with waterjets (optional 370)</td>
</tr>
</tbody>
</table>

### OPTIONS AND ACCESSORIES
- Rescue net horn
- Radar
- Horn
- GPS
- Spare parts
- Airconditioning

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (m)</th>
<th>Capacity (pers.)</th>
<th>Weight (incl. max. pers.)</th>
<th>Propulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSQ 670 A WB</td>
<td>6.9 x 2.7 x 2.7</td>
<td>6</td>
<td>2350 kg</td>
<td>110 hp – single inboard diesel with propeller (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 850 A WB</td>
<td>8.5 x 3.1 x 3.7</td>
<td>15</td>
<td>4700 kg</td>
<td>164 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 850 A WSV</td>
<td>8.5 x 3.2 x 3.7</td>
<td>15</td>
<td>1030 kg</td>
<td>370 hp – single inboard diesel with waterjets (optional 440 hp)</td>
</tr>
<tr>
<td>FRSQ 950 A WB/TS</td>
<td>10.5 x 3.5 x 3.3</td>
<td>3</td>
<td>8010 kg</td>
<td>270 hp – twin high thrust waterjets (optional 490 hp)</td>
</tr>
<tr>
<td>FRSQ 1000 A WB</td>
<td>10.4 x 3.5 x 3.3</td>
<td>15</td>
<td>7200 kg</td>
<td>200 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 1200 A WB</td>
<td>12.5 x 3.5 x 3.4</td>
<td>15</td>
<td>10485 kg</td>
<td>258 hp – twin inboard diesel with waterjets (optional 440 hp)</td>
</tr>
</tbody>
</table>

A = Aluminum

### OPTIONS AND ACCESSORIES
- Rescue net horn
- Radar
- Horn
- GPS
- Spare parts
- Airconditioning

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (m)</th>
<th>Capacity (pers.)</th>
<th>Weight (incl. max. pers.)</th>
<th>Propulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSQ 850 A WSV</td>
<td>8.5 x 3.1 x 3.7</td>
<td>15</td>
<td>4700 kg</td>
<td>164 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 850 A WSV</td>
<td>8.5 x 3.2 x 3.7</td>
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<td>1030 kg</td>
<td>370 hp – single inboard diesel with waterjets (optional 440 hp)</td>
</tr>
<tr>
<td>FRSQ 950 A WB/TS</td>
<td>10.5 x 3.5 x 3.3</td>
<td>3</td>
<td>8010 kg</td>
<td>270 hp – twin high thrust waterjets (optional 490 hp)</td>
</tr>
<tr>
<td>FRSQ 1000 A WB</td>
<td>10.4 x 3.5 x 3.3</td>
<td>15</td>
<td>7200 kg</td>
<td>200 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 1200 A WB</td>
<td>12.5 x 3.5 x 3.4</td>
<td>15</td>
<td>10485 kg</td>
<td>258 hp – twin inboard diesel with waterjets (optional 440 hp)</td>
</tr>
</tbody>
</table>

A = Aluminum

### OPTIONS AND ACCESSORIES
- Rescue net horn
- Radar
- Horn
- GPS
- Spare parts
- Airconditioning

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (m)</th>
<th>Capacity (pers.)</th>
<th>Weight (incl. max. pers.)</th>
<th>Propulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSQ 850 A WSV</td>
<td>8.5 x 3.1 x 3.7</td>
<td>15</td>
<td>4700 kg</td>
<td>164 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 850 A WSV</td>
<td>8.5 x 3.2 x 3.7</td>
<td>15</td>
<td>1030 kg</td>
<td>370 hp – single inboard diesel with waterjets (optional 440 hp)</td>
</tr>
<tr>
<td>FRSQ 950 A WB/TS</td>
<td>10.5 x 3.5 x 3.3</td>
<td>3</td>
<td>8010 kg</td>
<td>270 hp – twin high thrust waterjets (optional 490 hp)</td>
</tr>
<tr>
<td>FRSQ 1000 A WB</td>
<td>10.4 x 3.5 x 3.3</td>
<td>15</td>
<td>7200 kg</td>
<td>200 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>FRSQ 1200 A WB</td>
<td>12.5 x 3.5 x 3.4</td>
<td>15</td>
<td>10485 kg</td>
<td>258 hp – twin inboard diesel with waterjets (optional 440 hp)</td>
</tr>
</tbody>
</table>

A = Aluminum
FRSQ 850 A NAVY
– Multitask missions
– High maneuverability due to twin waterjet propulsion
– Protective fender to deaden hard side impacts
– Tailor-made solutions
– Excellent reachability of the engines for maintenance purposes

FRSQ 1000 A NAVY
– Deep V-bottom construction, suitable for high speeds and high stability in any marine environment
– Closed cell foam fender with a polyurethane top-layer, possible to repair on site
– Excellent reachability of the engines for maintenance purposes
– Many possibilities to customise the layout of the craft
– Recovered by single arm davit or stern entry system

PB 1500 A NAVY
– Specially designed for professional use such as industrial activities, coast guards, military or rescue work for high speed
– V-shape hull provides high stability during navigation and good seakeeping in hostile marine environment
– Many possibilities to customise the layout of the craft
– Hull and cabin made out of seawater-resistant aluminium
– Special attention is paid to local reinforcements in highly loaded areas

PB 500 RIB
– Hull is made of GRP
– Excellent reachability of the engine for maintenance
– Inflatable tubes or foam filled tubes
– Single inboard diesel, coupled to a waterjet
– Single point lifting hook or 4-point lifting sling
– For SAR or patrol purposes

PB 700 RIB
– Inflatable or foam filled fender
– Several options of seating arrangements
– In- or outboard propulsion
– Suitable for stern entry recovery
– For SAR, patrol or interception purposes
– Construction built in GRP or aluminium
– Many possibilities for customisation

PB 1100 RIB
– Inflatable or foam filled fender
– Special made V-shaped hull provide high stability during high speed manoeuvring and excellent seakeeping in hostile marine environments
– Designed for recovery by davit or stern entry system
– Lifting sling or single point lifting hook
– Several options of seating arrangement
– Special attention is paid to local reinforcements in highly loaded areas

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (L x B x H)</th>
<th>Capacity (pers. at 82.5 kg)</th>
<th>Weight (incl. max. pers.)</th>
<th>Propulsion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSQ 475 A Navy</td>
<td>5.2 x 2.3 x 2.0 m</td>
<td>6</td>
<td>1085 kg</td>
<td>32 hp – inboard diesel with propeller (optional 59 hp)</td>
</tr>
<tr>
<td>FRSQ 470 A Navy</td>
<td>6.2 x 2.3 x 2.0 m</td>
<td>15</td>
<td>3095 kg</td>
<td>60 hp – single outboard (optional 250 hp)</td>
</tr>
<tr>
<td>PB 700 A Navy</td>
<td>7.1 x 2.7 x 2.7 m</td>
<td>10</td>
<td>3428 kg</td>
<td>100 hp – twin inboard diesel with waterjets (optional 250 hp)</td>
</tr>
<tr>
<td>FRSQ 800 A Navy</td>
<td>8.5 x 3.2 x 2.7 m</td>
<td>21</td>
<td>4093 kg</td>
<td>150 hp – twin inboard diesel with waterjets (optional 250 hp)</td>
</tr>
<tr>
<td>FRSQ 1000 A Navy</td>
<td>10.4 x 3.5 x 3.3 m</td>
<td>15</td>
<td>7600 kg</td>
<td>232 hp – twin inboard diesel with waterjets (optional 292 hp)</td>
</tr>
<tr>
<td>PB 1500 A Navy</td>
<td>15.1 x 4.8 x 5.9 m</td>
<td>17</td>
<td>13500 kg</td>
<td>450 hp – twin inboard diesel with waterjets (optional 350 hp)</td>
</tr>
</tbody>
</table>

A = Aluminium

OPTIONS AND ACCESSORIES

Different type of seats
Defense systems
Armor
Communication equipment
Spare parts

OPTIONS AND ACCESSORIES

Boat heater
Emergency spring starter
Engine heater
Hydraulic starter
Spark arrester
Console cover
Communication equipment
T-top
The SeaCure LHR M2 release gear systems have been designed and tested in compliance with the new IMO regulation, and are based upon more than 85 years experience in developing lifesaving equipment. We believe LIFETIME EXCELLENCE needs to be backed up with competence onboard your vessel, therefore we offer our Computer Based Training as part of the hook offer. As your partner, we will guide you through the rules and regulations, looking after your lifesaving equipment through our global service network, managed and monitored in our safety management system.

### Features for LHR Hooks

| 3.5, 6, 9 and 12 t versions available |
| Meets IMO requirements for lifeboat release and retrieval systems |
| Tested and approved to IMO testing requirements set in MSC 1392 |
| Approved according to major classification societies and flag states |
| No wear and tear on critical components |
| Optional Secondary Safety System (SSS) |
| Use of high corrosion resistance materials |
| User friendly, easy to understand and operate |

### Features for LHR Hooks

<table>
<thead>
<tr>
<th>Model</th>
<th>SWL</th>
<th>Mode of Operation</th>
<th>Relevant Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH23</td>
<td>23 kN</td>
<td>automatic</td>
<td>MED A.1/1.26 Release Mechanism for Liferafts Launched by a Fall or Falls</td>
</tr>
<tr>
<td>ARH33</td>
<td>33 kN</td>
<td>automatic</td>
<td>SOLAS Chapter II, as amended</td>
</tr>
<tr>
<td>CAR 35</td>
<td>35 kN</td>
<td>combined</td>
<td>ICA Code for Hooks for Liferaft Launching, as amended</td>
</tr>
<tr>
<td>CAR F-35</td>
<td>35 kN</td>
<td>automatic</td>
<td>MSC.81(70), as amended</td>
</tr>
<tr>
<td>MED A.1/1.26a Release Mechanism for Lifeboat and rescue boats</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOLAS Chapter III, LSA Code and MSC.81(70) as amended</td>
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<td></td>
</tr>
<tr>
<td>MSC.1/Circ.1392</td>
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<td></td>
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</tr>
</tbody>
</table>

### RAFT AND RESCUE BOAT HOOKS

**PALFINGER MARINE raft and rescue boat hooks are designed for release of davit launched rafts and rescue boats. They come with an EC (wheel mark) certificate as standard, and are fully SOLAS approved. Our hooks are also approved by Transport of Canada and USCG, and a number of other classification societies. The hooks are made out of high quality stainless steel, in order to withstand the marine environment, and are delivered with a 5-year guarantee.**

### Rescue Boat Hooks

<table>
<thead>
<tr>
<th>Model</th>
<th>SWL</th>
<th>Mode of Operation</th>
<th>Relevant Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRH15</td>
<td>15 kN</td>
<td>on-offload</td>
<td>MED A.1/1.26 Release Mechanism for Liferafts Launched by a Fall or Falls</td>
</tr>
<tr>
<td>RRH25</td>
<td>25 kN</td>
<td>on-offload</td>
<td>SOLAS Chapter III, as amended</td>
</tr>
<tr>
<td>CAR 35</td>
<td>35 kN</td>
<td>combined</td>
<td>Fully compliant with updated SOLAS requirements as per Resolutions MSC.320(89) and MSC.341(88)</td>
</tr>
<tr>
<td>CAR F-35</td>
<td>35 kN</td>
<td>automatic</td>
<td>MSC.1/Circ.1392</td>
</tr>
</tbody>
</table>

### Life Raft Hook

<table>
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<th>Relevant Standard</th>
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<td>23 kN</td>
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<tr>
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### Lifeboat Hooks

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### Free Fall Hooks

<table>
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<tr>
<th>Model</th>
<th>SWL</th>
<th>Mode of Operation</th>
<th>Relevant Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHH13</td>
<td>(hydraulic)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FHH15</td>
<td>(hydraulic)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FHH16</td>
<td>(hydraulic)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FHH25</td>
<td>(hydraulic)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LIFESAVING EQUIPMENT**
PALFINGER MARINE offers a range of mooring winches for all types of vessels with almost unlimited speed and line pull capacities. The rugged design is made for harsh and demanding offshore conditions and includes heavy duty split bronze bearings. The operating mechanism for brakes and clutches are designed for easy and safe manual operation but may also be remotely operated by hydraulic cylinders. The winch design provides easy access to all points for lubrication and inspection.

FEATURES
- Electric or hydraulic drive
- Single or multi drum configuration
- With or without warping end
- Rated pull 5–401
- Manually operated clutch and band brake
- Local control

OPTIONS
- Auto tension/tensioning control
- Split drums
- Hydraulic operated band brake
- Hydraulic operated clutch
- Light line speed
- Remote control (wireless)

MOORING WINCHES

PALFINGER MARINE supply mooring systems suitable for offshore vessels which require advanced mooring capabilities. The systems consist of multiple mooring winches with centralised control systems in addition to local manual controls on each winch. The mooring systems are equipped with wire rope tension and payout length control and are capable of emergency release under a combination of all of the following conditions: dead ship (by use of accumulators), brake on and hoisting/lowering conditions. Configuration from 4–16 point mooring.

FEATURES
- Electric or hydraulic drive
- Single or double drum configuration
- Type of drum: steel wire
- Rated pull from 20–400 t / Capacity up to 2000 m
- Manual or hydraulic operated clutch
- Spooling device / Local control
- Auto tension / Tensioning control

OPTIONS
- Remote control (from bridge or radio remote)
- Rope length and/or speed measurement
- Bridge operated anchor drop
- Water cooled brakes

MOORING SYSTEMS

PALFINGER MARINE offers a range of capstans for various mooring operations. Hydraulic capstans are designed with internal drive systems in order to save space onboard the vessel. Electric capstans can be incorporated directly into the deck structure by means of foundation pipe pieces. The foundations are open at the bottom and make it easy to connect the motors from below deck. Electric capstans are delivered with DOL or frequency converters for variable speed.

FEATURES
- Electric or hydraulic drive
- Single or double configuration
- Chain size from 36–160 mm
- Manually operated clutch
- Manually operated band brake
- Local control

OPTIONS
- With or without mooring drum
- Auto tension/tension control (for mooring drums)
- With or without warping end
- Chain length and/or speed measurement
- Bridge operated anchor drop
- Hydraulic operated brake
- Remote control (wireless)

CAPSTANS

PALFINGER MARINE combined bollard capstans (powered bollards) have a space-saving design to make efficient use of deck space onboard the vessel. They combine the features of a standard capstan (rotating part) with the features of a standard bollard (non rotating part).

FEATURES
- Electric or hydraulic drive
- Rated pull from 3–15 t
- Local control or remote control with cable

OPTIONS
- Remote control (from bridge or radio remote)
- Rope length and/or speed measurement
- Bridge operated anchor drop
- Water cooled brakes

BOLLARD CAPSTANS
WINCHES

ANCHOR HANDLING WINCHES

PALFINGER MARINE offers a wide range of anchor handling/towing (AHT) winches with the following configurations:
- Double drum waterfall
- Side-by-side
- Triple drum waterfall

FEATURES
- Hydraulic or electrical drive
- Double (waterfall or side by side) and triple configuration
- Rated pull: 150 – 500 t on 1st layer
- Brake holding force: up to 670 t
- Hydraulic operated brake
- Hydraulic operated clutch

WINCH OPERATING MODES
There are several defined operating modes which can be used when conducting different types of work:
- Hoisting
- Lowering
- Speed lowering
- Dynamic breaking

SUPPLEMENTARY PRODUCTS
- Electric or hydraulic drive
- Single or double configuration
- Steel wire drum
- Rated pull from 20 – 250 t
- Drum capacity according to customer’s request
- Hydraulic operated clutch

TOWING WINCHES

PALFINGER MARINE towing winches are available for all types of tugs and offshore vessels including PSV’s and standby vessels. The rugged design made by highly experienced engineers ensures trouble-free operation under the most extreme conditions. The winches are delivered with joystick bridge control for required functions and automation, in addition to local controls. The wire spooling system ensures excellent spooling of extremely long wires, without the need for a defined minimum distance between the winch and the first wire sheave. Forward towing winches for tugs can be delivered according to customers requirements including active escort tug requirements. All towing winches are delivered either in single or double drum configurations with water fall or linear configuration options.

100 T TOWING WINCH
- Electrical driven
- Brake holding capacity: 250 t
- Double configuration
- Drum capacity: 1000 m steel wire
- Local and remote operated spooling device

125 T TOWING WINCH
- Hydraulic driven
- Single drum configuration
- Brake holding capacity: 250 t
- Drum capacity: 1500 m steel wire
- Local and remote operated spooling device

115 T WINDLASS TOWING WINCH
- Hydraulic driven
- Combined windlass / Towing winch configuration
- Active escort winch
- Brake holding capacity: 200 t

150 T TOWING WINCH
- Hydraulic driven
- Combined windlass / Towing winch configuration
- Local and remote operated spooling device

175 T WINDLASS TOWING WINCH
- Hydraulic driven
- Combined windlass / Towing winch configuration
- Active escort winch
- Brake holding capacity: 200 t

AHT winches can be supplied up to 500 t capacity (line pull at first layer) with hydraulic and electrical drives and spooling devices according to individual client requirements. These winches are delivered with local controls as well as advanced bridge control systems, handling all required functions and automations. The winches are of easy-duty box frame type construction with the main drums running on spherical roller bearings. All drums are declutchable able.
PALFINGER MARINE offers a range of different tugger winches for work on deck onboard various kinds of offshore vessels with rated pull from 5–30 t. The robust design allows safe and longterm operation in harsh conditions. Winches are delivered with easy access for lubrication and inspection.

**TUGGER WINCHES**

**FEATURES**
- Electric, hydraulic or pneumatic drive
- Single drum configuration
- With or without warping end
- Type of drum: Steel wire

**OPTIONS**
- Rated pull from 5–30 t
- Drum capacity from 100–600 m
- Manually operated clutch
- Electric, hydraulic or pneumatic drive

**CARGO SECURING WINCHES**

PALFINGER MARINE’s range of cargo securing winches (CSW) for moving and securing of cargo on deck are designed for use in the most difficult environments onboard PSV’s. For best possible use on deck the winch is built with manual disengagement/freewheeling. To maintain the safety on deck the cargo securing winches are delivered with “failsafe” brake with hydraulic deactivation.

**FEATURES**
- Electric or hydraulic drive
- Single drum configuration
- Rated pull (1st layer): 3–5 t
- Maximum speed: up to 100 m/min

**OPTIONS**
- Local control

**TRANSPONDER WINCHES**

Transponder winches are used for lowering transponders down at the bottom of the sea as a reference for the vessel.

**FEATURES**
- Electric or hydraulic drive
- Single drum configuration
- Rated pull (1st layer): 1–5 t

**OPTIONS**
- Remote control (wireless)
- Secure grid
- Hydraulic operated brake

**CONSTANT TENSION WINCHES**

Constant tension (CT) is used to achieve a constant line-pull set by the winch operator. PALFINGER MARINE’s range includes various CT winch models where the line-pull is either measured by a load cell or by the software in the frequency drive controllers. If the actual line-pull differs from the preset value the winch will pay in/out wire to maintain the preset value. An adjustment of the wire tension is possible by changing the tension set point value. PALFINGER MARINE also supplies CT winches for lifting purposes. These winches are delivered according to DNV lifting appliances. CT lifting winches are a suitable alternative when active heave compensation (AHC) is not required.

**FEATURES**
- Hydraulic or electric drive
- Single drum configuration
- 5–40 t rated pull

**OPTIONS**
- Local control
- Drum capacity according to customer’s request

**THRUSTER REPLACEMENT WINCHES**

PALFINGER MARINE is supplier of custom-made winches for replacement of thrusters offshore. The winches are part of a system which enables the vessel to replace the thrusters without going into dock. Systems like this are used for vessels that are out in open sea for long periods of time like FPSO’s, drillships, accommodation vessels and drilling rigs. Each system consists of three winches: two for pulling/lowering of the thruster and one to obtain redundancy in case of failure.

**FEATURES**
- Electric or hydraulic drive
- Rated pull: 35 t
- Brake holding force: 90 t
- Drum capacity: 300 m wire

**OPTIONS**
- Included spooling device
- Portable control panel
- Brake holding force: 90 t
WINCHES

ACTIVE HEAVE COMPENSATION WINCHES (AHC)

The AHC system is specially designed for load handling from a vessel or rig towards the seabed, underwater installations or other fixed targets on the seabed. AHC is used to control the relative position of a load to a fixed object. The position is determined by the control system using a real time signal from a Motion Reference Unit (MRU) as an input signal. In response to this signal the AHC system will pay in/out to keep the load at a constant elevation.

150 T AHC WINCH
- 150 t AHC winch
- Energy efficient
- Spooling device
- Stand alone unit

15 T AHC WINCH
- 15 t AHC Winch
- Electrical driven
- 500 m wire

CONTROL SYSTEMS
- State of the art
- User-friendly interface
- Different configurations available

PALFINGER MARINE supplies a wide range of custom-made storage winches. Normally they are supplied for rope or wire. PALFINGER MARINE also designs special purpose storage winches like iceberg net winches and hose storage winches. The winches are designed according to project-specific specifications and can be delivered in different configurations for various line pulls and brake holding capacities.

FEATURLES
- Electric or hydraulic drive
- Single or double drum configuration
- Capacity and speed according to requirements
- 3–60 t rated pull
- Manually operated band brake / Local control

OPTIONS
- Remote control
- Spooling device
- Hydraulic operated brakes

STREAMER STORAGE WINCHES

PALFINGER MARINE has a range of streamer storage winches suitable for seismic vessels and seismic support vessels. The winches are typically delivered with 7000–10000 m of streamer cable. They are designed to be moved easily from vessel to vessel if needed.

FEATURLES
- Electric or hydraulic drive
- Single or double drum configuration
- Capacity according to customer’s requirements
- Spooling device
- Rated pull from 3–10 t
- Local control

OPTIONS
- Remote control
- Containerised design
- Lifting frame

AHC ON HYDRAULIC Driven WINCHES

AHC winches by PALFINGER MARINE are based on a secondary controlled hydraulic active heave compensation system. This enables compensation of the heave motion of the vessel with an extremely fast response time at low power consumptions.

AHC ON ELECTRIC Driven WINCHES

PALFINGER MARINE also supplies electric driven winches with active heave compensation. High power, low inertia E-motors allow realtime compensation of the heave motion of the load. In response to the signal from the motion reference unit the winch will pay in/out wire rope.

WINCH CONTROL

The control system can be delivered with different configurations ranging from a simple control unit and on to advanced systems with multiple displays and data recorders. One of the benefits of the hydraulic system is zero load drop when the brake is removed. The load can be held in subsea mode with brake off and all safety systems active for several days if necessary without any movement of the load.

FEATURES
- Electric or hydraulic drive
- Single drum configuration
- Remote control

OPTIONS
- Spooling device
- Lifting frame
PALFINGER MARINE has a range of A-frames for different purposes with a lifting capacity ranging from 10–250 t and a working out-reach/in-reach of up to 25 m. Heavy duty design is made for use in harsh environments and detail design is done according to project-specific requirements with several options available. A-frames are designed for different purposes/applications: Anchor handling, buoy handling, plough handling and subsea handling (with use of AHC winch) etc.

PALFINGER MARINE has developed a semi-automated system for safe, efficient and easy handling of containers, pallets and loose goods on board windmill service operation vessels (SOVs). The system is highly adaptable and suitable for various vessel designs as well as retrofitting to existing vessels. The overhead travelling crane is equipped with a telescopic container spreader for handling both 10” and 20” containers. The system can be adapted to the length and width of the container store and can be delivered with container yoke for container handling in transverse or longitudinal direction.

PALFINGER MARINE supplies single and double stern rollers with SWL ranging from 50–750 t. The short-ended design provides up to 75 % reduction in man-hours for installation compared to traditional stern rollers, lighter construction with less friction between drum and axle and simultaneous and full utilisation of both drums (double drums).

Cargo securing systems from PALFINGER MARINE enables safe and efficient moving and securing of cargo onboard platform supply vessels. The system can easily be fitted to new vessel designs and consists of 7–11 lines, each with two securing carriers. The system is one man operated by remote controlled and enables securing of cargo on both sides of the vessel.
PALFINGER MARINE supplies highly innovative onboard slipway systems for stowage and launch and recovery of small crafts up to 12 m such as rescue boats, daughter crafts and lifeboats onboard offshore vessels and offshore windfarm service vessels. The systems can be delivered mounted on a hydraulic controlled frame (with hydraulic cylinders for lifting the entire frame) or for mounting directly into the hull structure of the mother vessel. All systems are adapted according to vessel structure in addition to the length and hull shape of the small crafts. PALFINGER MARINE works closely with customers and design companies in order to find the optimal and the most cost-efficient solution according to the intended usage, speed, type of crafts, wave height, sea state and redundancy requirements in addition to material, weight and space constraints.

**ONBOARD SLIPWAY SYSTEMS | Offshore vessels**

PALFINGER MARINE supplies highly innovative onboard slipway systems for stowage and launch and recovery of small crafts up to 12 m such as rescue boats, daughter crafts and lifeboats onboard offshore vessels and offshore windfarm service vessels. The systems can be delivered mounted on a hydraulic controlled frame (with hydraulic cylinders for lifting the entire frame) or for mounting directly into the hull structure of the mother vessel. All systems are adapted according to vessel structure in addition to the length and hull shape of the small crafts. PALFINGER MARINE works closely with customers and design companies in order to find the optimal and the most cost-efficient solution according to the intended usage, speed, type of crafts, wave height, sea state and redundancy requirements in addition to material, weight and space constraints.

**EFBEFIS COMPARED TO TRADITIONAL LAUNCH AND RECOVERY SYSTEMS (LARS)**

**ALL VESSELS**

- Safe operation even in harsh weather conditions: eliminate the use of hooks, painter line or arrestor wire during normal operation, reducing the risk of dangerous situations occurring during launch and recovery of daughter crafts.
- Performance: Better than launch and recovery by davit systems when it comes to operating conditions and weather window.
- Versatility: can handle crafts with different shape, propulsion system and weight. PALFINGER MARINE’s slipway systems can handle multiple crafts and transfer a craft from the slipway to a stowage position on the mother vessel.
- Short response time: the system enables very fast launch and recovery speeds in emergency situations.
- Easy operation: vessel personnel can learn to operate proficiently in a short period of time.

**WINDFARM SERVICE OPERATION VESSELS (SOV)**

- Increased productivity: Multi-craft slipway systems enable SOVs to launch several personnel and cargo transfer boats in order to service more than one windmill at a time. By using personnel and cargo transfer boats the SOV does not have to wait for service personnel at the windmill unit, eliminating the need for the SOV dropping-off and picking-up personnel and goods at each individual windmill unit. The SOV can use the gangway of easy accessible windmill units and use personnel and cargo transfer boats to service less accessible windmill units.
- Lower fuel consumption and emission: The SOV does not have to approach each and every windmill unit to transfer personnel.
- Lower risk of damage to windmill installation: By using personnel and cargo transfer boats, the SOV can stay at a distance during supply operations, reducing the risk of collisions between SOV and windmill installations.

**FEATURES**

- Single or double/parallel slipways with wheels
- Deck or frame mounted
- Hydraulic drive
- Self-adjusting to different hull shapes
- Back up winch system for emergency
- Overrunning clutches on wheels (allow high speed entry)
- Local and/or remote control

**OPTIONS**

- Stored power
- Different types of stern arrangement – extension of the slipway into the sea
- No drive on wheels (gravity launch with small craft providing power for recovery)

**ONBOARD SLIPWAY SYSTEM | Navy and Coast Guard**

PALFINGER MARINE supplies highly innovative onboard slipway systems for stowage and launch and recovery of small crafts up to 12 m such as rescue boats, daughter crafts and lifeboats onboard offshore vessels and offshore windfarm service vessels. The systems can be delivered mounted on a hydraulic controlled frame (with hydraulic cylinders for lifting the entire frame) or for mounting directly into the hull structure of the mother vessel. All systems are adapted according to vessel structure in addition to the length and hull shape of the small crafts. PALFINGER MARINE works closely with customers and design companies in order to find the optimal and the most cost-efficient solution according to the intended usage, speed, type of crafts, wave height, sea state and redundancy requirements in addition to material, weight and space constraints.

**FEATURES**

- Hydraulic adjustable wheel drives
- Adaptable to different hull shapes
- Foldable stern ramp
- Guide poles on ramp entrance
- Integrated redundancy/back up system
- Operating conditions: Sea State 0–3
- Safe working load: 1–12 t

**OPTIONS**

- Adaptable to different hull shapes
- Hydraulic slipway elevator
- Integrated boat transfer unit
- Boat handling and parking cradles
- Skidding system for boat cradles
- Securing system for cradles
- Operating conditions: Sea State 0–7
- Safe working load: 1–30 t
- Safe working load: 1–5 t

For Navy and Coast Guard vessels PALFINGER MARINE has developed several different slipway systems depending on intended use, vessel design and type of small crafts.

**STERN RECOVERY SYSTEM**

PALFINGER MARINE stern recovery system is suitable to launch and recover RHIBs, fast rescue boats, interceptors and daughter crafts onboard navy and coastguard vessels within seconds. This entry system is similar to the launching and landing system found on advanced air craft carriers. The craft enters the slip by own speed and a catch system reduce the speed by hooking to the craft. The major benefits of the stern recovery system are fast and safe operations, one man operation, the innovative launch/retrieval system, hook arrestor system and minimised maintenance requirements.

**FEATURES**

- Increased productivity: Multi-craft slipway systems enable SOVs to launch several personnel and cargo transfer boats in order to service more than one windmill at a time. By using personnel and cargo transfer boats the SOV does not have to wait for service personnel at the windmill unit, eliminating the need for the SOV dropping-off and picking-up personnel and goods at each individual windmill unit. The SOV can use the gangway of easy accessible windmill units and use personnel and cargo transfer boats to service less accessible windmill units.
- Lower fuel consumption and emission: The SOV does not have to approach each and every windmill unit to transfer personnel.
- Lower risk of damage to windmill installation: By using personnel and cargo transfer boats, the SOV can stay at a distance during supply operations, reducing the risk of collisions between SOV and windmill installations.

**OPTIONS**

- Stored power package
- Ex-proof components
- Modular built system
- Other options available on request
The Ship to Ship bunker reels are made for bunkering while vessels are moving. The reels are typically used for diesel and Heavy Fuel Oil (HFO). Standard reels are included framed foundation and designed for up to 250 m of 4” or 5” hose. Reels are normally delivered for hard wall hose, but can be delivered included spooling device suitable for soft wall hose.

Effective loading of fluids and dry bulk materials between supply vessels and fixed or floating production units is necessary to maintain continuous operations. PALFINGER MARINE supplies standard solutions or customised design for a variety of hoses and length suitable for both new buildings and upgrades.

Installing bulk loading stations with hose reel winches provide several advantages compared to traditional saddles:

- Increased safety of equipment and personnel in hostile offshore environments
- Less time needed for operation
- Reduced need for operating personnel – one-man operated
- Environment protection and protection from spillage
- Reduced exposure to sunlight for longer hose life
- Increased lifespan of the hoses due to less wear and tear
- Easy access for maintenance and service

A typical station will be fitted with multiple reels for 60–100 m of 4” or 5” soft wall hoses with floating elements/floating hose for mediums like drill water, potable water, base oil, brine, diesel, mud, cement etc.

**FEATURES**

- Electric, hydraulic or pneumatic drive
- With or without skirt foundation
- Delivered for Safe zone, Zone 1 or Zone 2
- Number of reels 1 to 16
- Reel capacity: up to 120 m of soft wall hose
- Hoses diameter: 1.5”–8”
- Local control

**OPTIONS**

- Remote control
- Foundation structures
- Stacked configuration
- Reels in stainless steel
- Remote control
- Hoses included in delivery
- Lifting equipment

**HOSE REELS FOR DIESEL SUPPLY**

PALFINGER MARINE supplies hose reels for various vessels like PSV’s, MPSV’s, well intervention vessels etc. The reels are designed for transfer of diesel to and from other vessels and oil rigs. A typical reel is hose reel/bunker reel for diesel with 60 m of soft wall hose inclusive floating part. Hose reels are adapted to the required hose length and hose diameter.

**FEATURES**

- Electric, hydraulic or pneumatic driven
- Single drum configuration
- Drum capacity and size of hoses according to customer’s request
- Local control

**OPTIONS**

- Remote control
- Designed for soft wall hose
- Spooling device
- Hoses included in supply

**HOSE SECURING SYSTEM**

Hose Securing System (HSS) provides automated and safe operation during loading and off-loading of fluids and dry bulk material. Various numbers of Hose Securing Arms (HSAs) are mounted outside of the rail on the vessel close to the bulk loading connection points for catching and locking the hose. During loading and unloading the system compensates increasing and decreasing pressure of the hoses.

**FEATURES**

- Hydraulic drives
- Configuration: According to customer’s request
- Hoses designed for up to 6” SW and HW hoses
- Local or remote control

**OPTIONS**

- Hoses included in supply
- ISO container brackets for easy removal
- Remote control
**FENDERS**

**SCM-F Series**
- Slewing davit for smaller sized fenders
- Easy to install
- High reliability
- Easy to operate

**NFD Series**
- Totally enclosed plug and play system
- Easy to install and operate (remote control)
- Safe and efficient handling of heavy duty fenders
- Reduced maintenance cost

**SFD Series**
- Slewing davit for bigger sized fenders
- Provided with self-contained HPU
- Solid and proven design
- High reliability

**Pneumatic – NPF series**
- Fully ISO 17357-1:2014 compliant
- Chain & tyre net type / Sling type
- Stock world wide: Busan, Singapore, Dubai, Rotterdam, Haugesund, Bergen
- Global service network

**Foam filled – NFF series**
- First class quality – closed cells with no absorption
- From 30 kg/m³ to 140 kg/m³ density
- Non marking
- Chain and tyre net optional

**Fixed fenders – System fenders**
- Rubber profiles for ships and quays
- Wide range of available sizes and configurations
- Available for a wide range of applications

**FEATURES AND OPTIONS – PNEUMATIC FENDERS**
- High protection netting with aircraft tyres
- Complete STS mooring package – ropes, wires and hardware
- 2 year operational spare part package
- Class certification (ABS)
- Service Agreement including safety valve testing and re-certification

**FEATURES AND OPTIONS – FOAM FILLED FENDERS**
- First class quality – closed cells with no absorption
- From 30 kg/m³ to 140 kg/m³ density
- Non marking
- Chain and tyre net optional

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load (SWL)</th>
<th>Max Fender Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCM-F</strong></td>
<td>5–12 kN</td>
<td>500–1200 kg</td>
</tr>
<tr>
<td><strong>SFD</strong></td>
<td>12–80 kN</td>
<td>1200–8000 kg</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load (SWL)</th>
<th>Fender Size</th>
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</thead>
<tbody>
<tr>
<td><strong>NFD 2500 – 2030</strong></td>
<td>24.5 kN</td>
<td>2.0 diameter x 3.5 m length</td>
</tr>
<tr>
<td><strong>NFD 2540 – 2540</strong></td>
<td>24.5 kN</td>
<td>2.5 diameter x 4.0 m length</td>
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<tr>
<td><strong>NFD 5500</strong></td>
<td>54 kN</td>
<td>2.5 diameter x 5.5 m length</td>
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<tr>
<td><strong>NFD 8000</strong></td>
<td>78.5 kN</td>
<td>3.3 diameter x 6.5 m length</td>
</tr>
<tr>
<td><strong>NFD 16000</strong></td>
<td>157 kN</td>
<td>4.5 diameter x 9.0 m length</td>
</tr>
</tbody>
</table>

**ACCESSORIES OPTIONS**
- Paint system for marine environment
- Ex-Prooﬁng
- Skin mounted
- Other options available upon request
- Local control on each reel

**TIME SAVING**
- Increased efficiency and safety
- Operating time reduction
- Integrated control station

**WINCHES AND HANDLING EQUIPMENT**
SERVICE
AFTER SALES | SERVICE
PALFINGER MARINE provides comprehensive, customised and reliable services to customers around the world. Specially trained engineers and experts with extensive know-how ensure fast on-site support, from telephone assistance to on-time delivery. With the world’s largest own service network, PALFINGER MARINE can follow up on your vessels more efficiently than any other service provider in the industry. In addition to our own 33 offices, PALFINGER MARINE has also partnered up with multiple service stations – extending the network to the most remote areas.

Experienced engineers and first rate HSE and quality systems ensure that all requirements are fulfilled during the entire process from design until delivery. All stages through the supply chain are performed in compliance with ISO 9001:2008 and manufacturing is done in state-of-the-art production facilities.

PALFINGER MARINE always aims to be in the forefront when it comes to meeting rules and regulations. All equipment and products are delivered according to applicable requirements from classification companies such as DNV-GL, LR, ABS, BV, RMRS, RRR, RINA, CCS, NKK etc., national and international regulations and standards such as UISC, SOLAS, NORSOK, ISO EN 13852, API 2C to IEC Ex and ATEX directive, NEC and others in addition to customers own company standards.
Our service agreement portfolio offers customised solutions for customer needs on a long-term contractual basis. Depending on the type of products and customer needs, customers get access to a range of service levels varying from basic spare-part pricing to an all-inclusive service plan that covers inspections, service and all spare parts for your equipment at a reduced fixed annual rate – worldwide. These are all aimed at supporting our customers in receiving the full benefit of our products and helps extend their lifespan significantly.

PALFINGER 360 is an all-inclusive service plan that covers inspections, service and all spare parts for your equipment at a reduced fixed annual rate – worldwide.

- Available for a range of products, basically covering all expenditure (foreseen and unforeseen) related to owning/maintaining safety equipment.
- PALFINGER MARINE covers multi-brand servicing, not only own limited products. All vessels can be added – regardless of age.
- Wraps seamlessly around any factory warranty, ensuring that crew and investment are safeguarded – whenever – wherever – for the long journey ahead.

CHOOSE A PLAN THAT FITS YOUR NEEDS
For a selected range of products, ship owners and operators can choose from a range of packages, varying from basic regulatory compliances to all-inclusive packages that cover all servicing, parts and training. Furthermore, a choice of ports is offered, ranging from only economic key ports to worldwide coverage.

<table>
<thead>
<tr>
<th>PALFINGER 360</th>
<th>Standard</th>
<th>Advanced</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>One fixed annually fee regardless of port</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>All annual and 5-yearly inspections</td>
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<td>✔️</td>
<td>✔️</td>
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<tr>
<td>Preventive maintenance</td>
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<td>✔️</td>
<td>✔️</td>
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<tr>
<td>Corrective maintenance and repairs</td>
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<tr>
<td>Hours, travel and expenses</td>
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<td>✔️</td>
<td>✔️</td>
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<tr>
<td>Free access to class approved training centers</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Spare parts and installation hours</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>PALFINGER 360 dashboard</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>One contract, one invoice</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Ports available</td>
<td>Main key ports</td>
<td>Most key ports</td>
<td>All key ports</td>
</tr>
<tr>
<td>Multi-brand coverage</td>
<td>✔️</td>
<td>✔️</td>
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</tr>
</tbody>
</table>
PALFINGER MARINE offers an extensive program for refurbishing and upgrading/modification of equipment for cranes, lifesaving equipment, winches and handling equipment. Our trained and authorised personnel are available worldwide to handle all your repairs, modifications and overhaul of equipment.

PALFINGER MARINE is now positioned to offer complete refurbishments on site or at our facilities in Europe, Asia, South- and North America, and in the Middle East.

Refurbishment can include everything from renovation and repair of exterior and interior surfaces, hydraulic components to complete overhaul/replacement. PALFINGER MARINE also offers a “light version” of the refurbishment service – labelled “refinishing”. This supervised makeover focuses mainly on cosmetic measures while providing our clients with hands-on advice on expected refurbishment needs.

Existing ways of doing operations can be improved by refurbishing/upgrading existing products, developing new and innovative equipment or even simply by adapting existing equipment to new situations.

At PALFINGER MARINE we have the engineering capacity and knowledge to carry out technical studies, and to arrange audit reports on all products in our complete range of brands for cranes, boats, winches and handling equipment.

PALFINGER MARINE preforms on board inspections for system functionality, including reports on status with detailed recommendations. Technical studies are built on our in-house engineering capability, including feasibility studies for product upgrades, risk analysis and evacuation studies. Studies can also be arranged for third party verification by any authorized company such as DNV, Lloyd’s Register and other classification societies.

### Key Features

**In-house engineering total deck solutions**

- Third party verification of all documents and calculations when applicable
- Inspections on vessels and oil rigs conducted by PALFINGER MARINE’s own engineering team
PALFINGER MARINE provides genuine spare parts, not only for all brands registered under PALFINGER in accordance with the original build specifications, but also genuine spare parts for other manufacturers (OEM’s).

**KEY FEATURES**

- 24/7 AVAILABILITY
- SERVICE HOTLINE +43 662 4684 82128
- 100 % GLOBAL COVERAGE

- Worldwide service network for ordering and delivering spare parts
- Spare part kits on cranes, lifesaving equipment, and winches and handling equipment
- Tailored spare kits per product or per vessel covering a range of equipment
- Individual components and spares
- Our service engineers carry the most common (prone to wear) spare parts available when attending vessels for 1 & 5 year inspections
- During inspections required spare parts are listed, quoted and can be delivered to vessel directly
- Life extension of your equipment
- Overall cost saving, better performance and increased safety
- To comply with all applicable regulations
As a full-service provider, PALFINGER MARINE offers solutions that cover every aspect of proactive service and customer support. The global training teams offer training courses for the entire PALFINGER MARINE product range. These courses can be conducted worldwide, both in-house and on-site.

Proper training in the correct operation and maintenance of PALFINGER MARINE deck equipment increases safety onboard and the lifespan of the equipment. PALFINGER MARINE training programs set the standard for operators and service staff covering management, operation, maintenance and safety awareness for the offshore, marine, cruise, naval and wind industry.

We develop and facilitate our training courses using PALFINGER MARINE’s broad expertise and experience, in accordance with international standards, regulations and requirements.

Each year we train thousands of participants in the operation and (preventive) maintenance of cranes, lifesaving appliances, winches and other marine deck equipment.

CERTIFIED MARITIME TRAINING PROVIDER
PALFINGER MARINE is certified as DNV-GL ST-0029 "Maritime Training Provider" which secures:
- Course quality
- Properly designed content
- Clear objectives for results
- Carried out by qualified (certified) instructors
- Positively affects our course results
- Assessed and improved in line with market demands and experience

Each course ends with a practical and theoretical assessment, which ensures that the participants reach the objectives of the course and that their competence is validated.

PALFINGER OFFERS THE FOLLOWING TYPES OF TRAINING:
- Crew training
- Familiarisation programs for class societies, flag states, superintendents and crew members
- On-site and in-house familiarisation training
- Operational training
- Maintenance training
- Technical training
- Computer-based training (CBT) and e-learning modules
- Specific, customised product training on PALFINGER MARINE’s equipment

SERVICE

SERVICE TRAINING BY PALFINGER MARINE

CHOOSE PALFINGER MARINE FOR TRAINING ON YOUR MARINE DECK EQUIPMENT

KNOWLEDGE AND EXPERIENCE
As the original equipment manufacturer (OEM), PALFINGER MARINE’s training instructors gained extensive experience and share their knowledge about all products.

GLOBAL COVERAGE
With 33 fully-owned sales and service stations in 19 countries, we have direct access to most of the key ports in the world. Holding training sessions onsite on a customer’s vessel or installation, training sessions with up to 15 people at a time are possible. That means minimal interruption with onboard activities which guarantees cost-effective and time-efficient solutions for the client.

PRACTICAL APPROACH
In general, our courses consist of 30 % theoretical and 70 % practical instruction. This hands-on approach, often using the client’s own equipment, provides a safe and familiar working environment for the participants attending. Creating awareness and understanding the risks involved with improper use of marine deck equipment is also a key element in these training sessions.