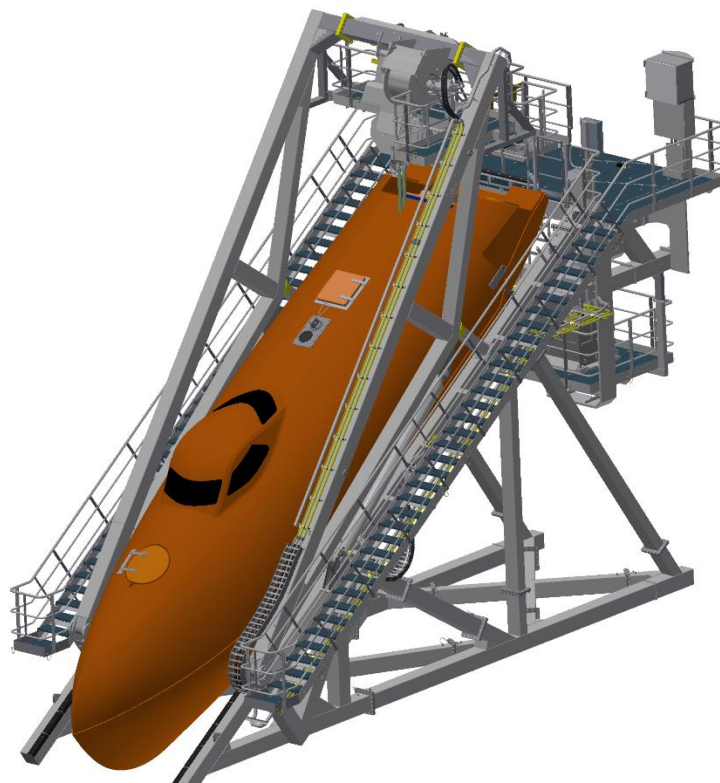




**VIKING
NORSAFE**
Boats and davits

Enterprise No.: NO940411696
www.VIKING-life.com

HD-45 – Free Fall Lifeboat Davit



TECHNICAL SPECIFICATION

VIKING Norsafe Life-Saving Equipment Norway AS
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VIKING Project No.: TBA

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Rev. Date: 30.08.2019

Rev. No: 1

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1. REGULATION AND CERTIFICATION

Applicable rules and regulations	In accordance with IMO/ SOLAS requirements, LSA Code and European Council Directive 2014/90/EU on Marine Equipment (MED) and Norsok R-002, NMA 90
Certificate	MED, DoC to Norsok R-002
Other certificate	Class certificate or flag acceptance on request

2. DAVIT SPECIFICATION

2.1. GENERAL DAVIT

Type	Free Fall Lifeboat Davit
Model	HD-45
Application	Free Fall Lifeboat handling
Drawing reference	G-500957 Deck Mounted G-500952 Cantilever G-500958 Half deck mounted
Execution	Free fall deployment, EOS lowering
Boarding position	Inboard on deck level
Operating position	From deck side and from inside the boat
Davit system weight	32000kg-35000kg, davit incl. winch & HPU (dry weight)
Safe Working Load (SWL)	22000 kg
Trim / list conditions	10° / 20°, 17°/17°
Max. lowering height	45 m (including 2°/5° trim/list condition)
Operation temperature	-20°C till +40°C (other range on request)
Max. hoisting speed	0-12 m/min (0-50% load) 0-12 m/min (0-100% load)
Max. lowering speed	0-12 m/min (0-50% load) 0-12 m/min (0-100% load)
Wire sheaves	Galvanized, equipped with ball bearings
Installation	4 (four) interface welding points
Deck reinforcement requirements	See general arrangement drawing
Davit system H / W / D	See general arrangement drawing
Deck space required	See general arrangement drawing



Viking Norsafe HD-45 free-fall lifeboat davit system is specifically designed for safe and efficient launching and retrieval of Viking Norsafe GES-45 free-fall lifeboat.

Primary way of escape is by free fall. Life boat is then disconnected from davit and slides along the davit launch ramp and into the sea. The davit is also able to seaborne the lifeboat using its internal winch. This performance is secondary means of launching

The Davit system is designed for long time operation in a tough and corrosive offshore environment. The Davit system is also designed to fulfil requirements as given in latest SOLAS and Norsok R-002.

Viking Norsafe has given special attention to the safety principle for davit system. This means to design the equipment as far as possible to avoid great danger or hazard situations during installation, operation and maintenance. In case of danger that cannot be avoided during the design process, other actions have to be taken, like shielding and HSE labelling of the equipment.

The davit system is fitted with following safety systems:

- Spring-centred control levers
- Overload protection
- Load-holding valves
- Failsafe brakes
- Double barrier limit switches
- Operation of the system requires great visibility access to key components such as the lifeboat hook, skid way and hook parking arrangement on the davit.
-
- The HPU, winch and cylinders operation are controlled by separate control stand. Control stand is equipped with a joystick which can sequentially and individually operate the winch, cylinders and davit hook parking arrangement.
- Primary way of escape is free fall. Life boat is disconnected from davit and slide along davit launch ramp and into the sea. The davit is also able to seaborne the lifeboat using its internal winch. This performance is secondary means of launching.
- The hoisting system and winch will primary be operated only for retrieval of the lifeboat after launch test, maintenance or service purposes.
- All equipment is chosen and installed to ensure the lowest possible emission of sound and for good service and repair access.

2.2 WINCH AND WIRE

Type	Zollern ZHP 4.25 winch
Drawing reference	DS-01816
Wire rope type	Galvanized, rotation resistant (certified item)
Wire rope diameter, MBL and spec.	Ø 22 mm, MBL 432 kN, 1960N/mm ²
Inner / outer wire end	Secured to drum / spelter socket

2.3. ELECTRICAL

Electric power supply	690V/3ph/60Hz (other on request)
Electrical cabinet	IP56
Remote control	IP56
Limit switch	IP56
Power consumption	75 kW
Starting method	DOL - Direct on line
Duty rating	S6-40%
Motor space heating	Included, 230V / 108W
Electrical cabinet heating	Heat loss from 42V transformer
Wiring	Included, (only power supply cable required)
Wiring	Included, (only power supply cable required)
Transformer	Included, 230VAC / 24VDC (other on request)
Emergency stop	Yes, mushroom type
Ex Zone	Ex-proof, Zone II 2 G Ex de IIB T3

2.4. PAINTING SYSTEM

Blasting	SA 2.5
Specification	Norsok M-501
System	System 1
Total dry film thickness	280 µm

2.5. DOCUMENTATION

Technical specification davit	According to contract specification
General arrangement drawing	According to contract specification
Electrical wiring diagram	According to contract specification
Starter cabinet drawing	According to contract specification
Product certificate	According to contract specification
Lubrication oil chart	Viking Norsafe standard
Spareparts list	Viking Norsafe standard
Operation & Maintenance manual	Viking Norsafe standard
Installation manual	Viking Norsafe standard
Preservation & storage procedure	Viking Norsafe standard



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3. PACKING

Format

Open flat rack (fully assembled on request)

4. OPTIONS

Note: Some options influence davit weight and performance, some option combinations may be incompatible. Maximum SWL must not be exceeded.

marking means to be supplied by maker, marking means not supplied by maker.

GENERAL DAVIT	
Additional manual handling crane for electric motors	<input type="checkbox"/>
Additional supports for lights, lanterns, starter cabinet etc.	<input type="checkbox"/>
Winterization / cold climate heating / canvas solutions	<input type="checkbox"/>
Commissioning performed by Viking Norsafe or Viking Norsafe Service Partners	<input type="checkbox"/>
Other options on request	<input type="checkbox"/>
ELECTRIC SYSTEM	
Voltage variation	<input type="checkbox"/>
Protection box for remote control	<input type="checkbox"/>
Star Δ starting method	<input type="checkbox"/>
Additional electric cabinet heater	<input type="checkbox"/>
Alternative cabinet size / material / surface protection	<input type="checkbox"/>
PAINTING SPECIFICATION	
Norsok M-501 System 2B	<input type="checkbox"/>
Other painting system and final color	<input type="checkbox"/>
SPARE PARTS	
Spare parts for Startup / Commissioning	<input type="checkbox"/>
Spare parts for Onboard spare	<input type="checkbox"/>
Spare parts for 1 year	<input type="checkbox"/>
Spare parts for 2 years	<input type="checkbox"/>
DOCUMENTATION	
Factory acceptance test procedure	<input type="checkbox"/>
Factory acceptance test report	<input type="checkbox"/>
Inspection and test plan	<input type="checkbox"/>
Shipping, handling and lifting procedure	<input type="checkbox"/>
Packing & unpacking procedure	<input type="checkbox"/>
Commissioning procedure	<input type="checkbox"/>
TAG list	<input type="checkbox"/>



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Winch drawing	<input type="checkbox"/>
Noise test report	<input type="checkbox"/>
Weight and COG datasheet	<input type="checkbox"/>
Weighing report/certificate	<input type="checkbox"/>
Other drawings/documentation/procedures	<input type="checkbox"/>

5. POSSIBLE BOAT FITTING THIS DAVIT SYSTEM

The VIKING Norsafe boats fit the HD-45 davit types and variants.

GES-45

6. YARD SUPPLY / RESPONSIBILITY

Transport	Depending on contract
Deck foundations / reinforcement Assembly, erection and welding to deck	
Wire installation on winch, routing on davit and termination	
All cables to starter cabinet and agreed interface	
Hydraulic oil filling of winch	
Testing according to regulation after installation onboard	
Preservation and maintenance after davit arrived yard and installed	



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