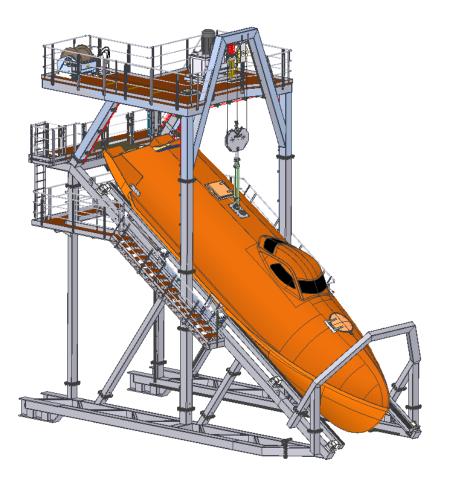


Enterprise No.: NO940411696 www.VIKING-life.com

# SW-45 – Free Fall Lifeboat Davit



**TECHNICAL SPECIFICATION** 

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VIKING Project No.: TBA Rev. Date: 02.10.2019 VIKING Doc. No.: TSD-0043

Rev. No: 4

# **1. REGULATION AND CERTIFICATION**

Applicable rules and regulations

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

# 2. DAVIT SPECIFICATION

## 2.1. GENERAL DAVIT

Туре	Free Fall Lifeboat Davit	
Model	SW-45	
Application	Free Fall Lifeboat handling	
Drawing reference	G-500093 - G-501017	
Execution	Free fall deployment, EOS lowering	
Boarding position	Inboard on deck level	
Operating position	From deck side and from inside	e the boat
Davit system weight	36200 kg, davit incl. winch & H	IPU (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 o	n request)
Max. hoisting speed	25.6 m/min (0-50% load)	Norsok R-002
	12 m/min (0-100% load)	Norsok R-002
Max. lowering speed	25.6 m/min (0-50% load)	Norsok R-002
	12 m/min (0-100% load)	Norsok R-002
Wire sheaves	Galvanized, equipped with ball bearings	
Installation	6 (six) 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 Project No.: TBA Rev. Date: 02.10.2019 Viking Norsafe SW-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-centered 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**

Туре	Zollern ZHP 4.25 winch
Drawing reference	DS-00815
Wire rope type	Galvanized, rotation resistant (certified item)
Wire rope diameter, MBL and spec.	Ø 22 mm, MBL 432 kN, 1960N/mm2
Inner / outer wire end	Secured to drum / wedge socket

### 2.3. ELECTRICAL

Electric power supply	690V/3ph/60Hz (other on request)
Electrical cabinet	IP66
Remote control	IP66
Limit switch	IP66
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 T4

## 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
<b>Operation &amp; Maintenance manual</b>	Viking Norsafe standard
Installation manual	Viking Norsafe standard
Preservation & storage procedure	Viking Norsafe standard



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## 3. PACKING

Format

Open flat rack or 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.

 $\boxtimes$  marking means to be supplied by maker,  $\square$  marking means not supplied by maker.

GENERAL DAVIT		
Additional manual handling crane for electric motors		
-		
Additional supports for lights, lanterns, starter cabine		
Winterization / cold climate heating / canvas solutions		
Commissioning performed by Viking Norsafe or Viking	y Norsafe Service Partner	
Other options on request		
ELECTRIC SYSTEM		
Voltage variation		
Protection box for remote control		
Star $\Delta$ starting method		
Additional electric cabinet heater		
Alternative cabinet size / material / surface protection		
PAINTING SPECIFICATION		
Norsok M-501 System 2B		
Other painting system and final color		
SPARE PARTS		
Spare parts for Startup / Commissioning		
Spare parts for Onboard spare		
Spare parts for 1 year		
Spare parts for 2 years		
DOCUMENTATION		
Factory acceptance test procedure		
Factory acceptance test report		
Inspection and test plan		
Shipping, handling and lifting procedure		
Packing & unpacking procedure		
Commissioning procedure		
TAG list		
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Winch drawing	
Noise test report	
Weight and COG datasheet	
Weighing report/certificate	
Other drawings/documentation/procedures	

# 5. POSSIBLE BOAT FITTING THIS DAVIT SYSTEM

The VIKING Norsafe boats fit the SW-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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