



## **MV Energy Duchess of Ulstein PX121 H DESIGN**



### **TECHNICAL OUTLINE SPECIFICATION**

#### **MULTIPURPOSE FIELD SUPPLY-, PIPE CARRIER, SPECIAL PURPOSE VESSEL**

Rev.: 21/08/2019

**Yard: Hull # 1023 @ ROC  
Delivered 27.05.2019**

**Name of ship: Energy Duchess  
Port of registry: Aalesund  
Distinctive number or letters: LAWS7  
IMO Number: 9740744  
Maritime Mobile Service Identity (MMSI): 259 032 000  
DNV ID: 34240**



## MAIN DESCRIPTION

Type : MULTIPURPOSE FIELD /  
PLATFORM SUPPLY VESSEL.  
Classification:  
\* DNV \*1A1, SF, Fire Fighter (I), Offshore Service  
Vessel, SPS, BIS, CLEAN DESIGN, COMF (V-3),  
DK(+), DYNPOS AUTR, E0, HL (2,8), LFL(\*),  
NAUT OSV (A), OILREC  
  
ERN 99.99.88.78

## MEASUREMENTS

Length o.a. : 83,318m  
Breadth mld. : 18,00m  
Design draught : 6.0m  
Draught max. : 6,70m  
Moulded draught to M.D. : 8,00m  
Lowest service draft : 3,3 / 4,2m (Cargo ship / SPS)  
DWT : 3956,5T  
Gross Tonnage : 3795  
Net Tonnage : 1275  
Deck load, VCG : 1960 / 1750T (Cargo ship / SPS)

## CARGO CAPACITIES

Work/Cargo Deck area: 858m<sup>2</sup> (L 50,4 x B 15 + L 7 x B 14,5)  
Usable Deck area: 850m<sup>2</sup>  
Deck strength: 10t/m<sup>2</sup> aft of #35, 5t/m<sup>2</sup> elsewhere

## DISCHARGE RATES

Fresh Water	: 1061m <sup>3</sup>		200m <sup>3</sup> /hour -	9 bar
Fuel Oil	: 1329m <sup>3</sup> @ 90%	- 8359 bbl	200m <sup>3</sup> /hour -	9 bar
Liquid mud	: 1294m <sup>3</sup> Sg. 2,8 , 10 comb tks	- 8140 bbl	2x 75m <sup>3</sup> /hour -	24 bar
Brine / Slop	: 1294m <sup>3</sup> Sg. 2,8 , 10 comb tks	- 8140 bbl	75m <sup>3</sup> /hour -	18 bar
ORO	: 662m <sup>3</sup>	- 4163 bbl	2 x 75 m <sup>3</sup> ,24 bar & 4x75 m <sup>3</sup>	9 bar/hour
DW/ballast	: 1571m <sup>3</sup>		200m <sup>3</sup> /hour -	9 bar
Methanol	: 155m <sup>3</sup> 4 tanks	- 976 bbl	2 x 75m <sup>3</sup> /hour -	9 bar
Baseoil	: 267m <sup>3</sup> 2 tanks	- 1680 bbl	150m <sup>3</sup> /hour -	9 bar
Cement/barite	: 255m <sup>3</sup> 4 tanks	- 9005 Ft <sup>3</sup>	2 x compr. 30 m <sup>3</sup> /min.-	5,6 bar
Slop	: 506m <sup>3</sup> 4 comb tks	- 3187 bbl	2x75m <sup>3</sup> /hour -	24 bar
Foam	: 8,8m <sup>3</sup>			

Height of cargo rail: 4m

All mud / brine tanks have agitators. Tank washing system with hot/ cold water and chemical injection in washing water for mud and brine tanks.

Inert Gas Generator installed, capacity: 11 Nm<sup>3</sup>/h with 97% nitrogen (N<sub>2</sub>) purity

Flow meter for Fuel Oil (w. print) and FW.

Loading and discharge stations on both sides amidships and aft.

Lashing points on Main Deck;

32 x low lashing points SWL 8T on cargo rail 1200 mm and 200 mm from main deck

28 x high lashing points SWL 8T on cargo rail 2750 mm from main deck

28 x low lashing points SWL 10T on cargo rail 1000 mm and 200 mm from main deck

28 x lashing points in main deck for pipe support

14 x rollers (6 each side and 2 astern) for tugger wire arranged in cargo rail



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**MACHINERY -PROPULSION**

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**PERFORMANCE @ draft 4,8m**

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Main eng. : 2 x Caterpillar 3512C 1628 kW each	Full speed (all generators running) : 14,5 kts ~ 20,1 mt/day
Main eng. : 2 x Caterpillar 32C 994 kW each	Service speed/cons. : 13 kts ~ 12,9 mt /day
Emergency gen. : 99 kW	ECO high speed : 11,5kts ~ 10,3 mt/day
Propellers :2 x Azipull 85, CP 1700 kW each	ECO medium speed : 10,8kts ~ 8,6 mt/day
Bow thruster:2x Tunnel thr. CP 880 kW each	Eco speed/cons. : 10,5 kts ~ 7,7 mt /day
	ECO slow speed : 10 kts ~ 6,7 mt/day
	DP nice weather 2 gen online : 5 mt/day
	DP med. weather 2 gen online : 6 mt/day
	DP rough weather 4 gen online : 6,6 mt/day
	Port consumption : 1,4 mt/ day

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**DECK/RESCUE EQUIPMENT**

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**ACCOMMODATION**

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Lifesaving equipment according to NMA requirement	Total : 30 persons
1 off Fast Rescue Craft: Mare 600 FRB, inboard diesel	Cabins : 16 x 1 (single) bed cabins
1 off (SOLAS approved) TTS Davit	Cabins : 7 x 2 (double) bed cabins
Life rafts : 3x20 pers. each side	Day room Smokers : 1off, B deck
Survival Suits : 30	Day room No smokers : 1 off, A deck
Life Jackets : 34	Mess room : 1 off, A deck
Tugger Winches : 2 x 10t	Hospital : 1 off, Main deck
Capstans : 2 x 10t	Reception : 1 off, Main deck
Windlass/Mooring : 1 double 15t	Laundry : 1 off, Main deck
Cranes : 3t@18m	Gymnasium : 1 off, Main deck
Incinerator : 1 off	Ship`s office : 1 off, C deck
Waste Compactor : 1 off	Conference room : 1 off, C deck



**REEFER SOCKETS ON MAIN DECK:**

6 pcs 200V-260V 16A 2-phase+ground type QX7012 midship port side frame #39

6 pcs 200V-260V 16A 2-phase+ground type QX7012 midship starboard side frame #39



Reefer Connection PS



Reefer Connection PS



Reefer Connection SB



Reefer Connection type

**NAVIGATION EQUIPMENT**

- 1 off S-Band ARPA radar, 26" color display
- 1 off X-Band ARPA radar, 26" color display
- 1 off 22" Radar slave Monitor
- 2 x DGPS for navigation
- 1 x ECDIS system, + Conning
- 3 x Gyro
- 1 off Echo Sounder
- 1 off Doppler speed Log
- 1 off DP system AUTR
- 3 off MRU's
- 3 off Wind sensors
- 2 off Seatex DPS 110
- 1 off Cyscan Mark IV Laser DP reference system

**COMMUNICATION EQUIPMENT**

- 1 off MF/HF SSB Simplex Radio Station w/ DSC
- 1 off Navtex receiver
- 2 off Inmarsat C (with SSAS & LRIT)
- Inmarsat Fleet Broadband
- 1 off VSAT system
- 2 off VHF with DSC
- 1 off VHF handset
- 3 off portable UHF's
- 3 off fixed UHF's

**TELEPHONE SWITCH BOARD:**

Intercom: Ulstein VCOM

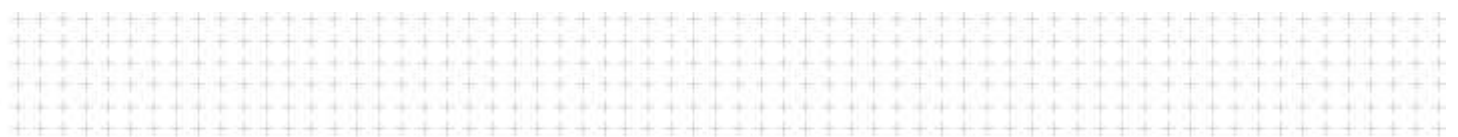
**FIRE FIGHTING SYSTEM:**

According to Class requirement  
Fire fighting in Engine Room by Water mist /  
Novec 1230 and foam  
In Incinerator Room and Paint Store by sprinkler





**GOLDEN  
ENERGY  
OFFSHORE**



## Golden Energy Offshores PX 121 H series General

Golden Energy Offshores PX 121 series are state of the art new vessels with high capacities and good station keeping capabilities.

The hull form, with the ULSTEIN X-BOW®, and the diesel electric propulsion system, ensures exceptional performances with regards to fuel consumption, sea keeping, station keeping, speed, stability and cargo capacity.

Low fuel consumption with low emissions and a ballast treatment plant makes the vessels environmental friendly.

The cargo systems ensure safe and efficient loading and discharging of the Vessel.

The propulsion system comprises two azimuth type propellers, each driven by an electrical motor.

Two tunnel thrusters are installed in the fore part of the Vessel.

The vessels have very large deck capacities for this class of vessels and are prepared with foundation for crane and can perform as a construction vessel. It has also been prepared for installation of ROV for survey and underwater inspections. The compliance with IMO Resolution MSC.266(84) Code of safety for special purpose ships will allow the vessel to have more charterers personnel onboard if required.

The vessel has the notation FiFi1 and can perform firefighting operations. Oil rec notation ensures the vessel will be able to assist in case of oil spill at sea.

Compliance with MEPC 197(62) Inventory of Hazardous Materials ensures the vessel is built environmental friendly.

### Chartering & Operation Managers:

Golden Energy Offshore Management AS,  
St. Olavs plass 1  
N-6002 Ålesund, Norway.

Tel: +47 70 10 26 71 / +47 97 42 88 84

Web: [www.geoff.no](http://www.geoff.no)  
[chartering@geoff.no](mailto:chartering@geoff.no)

