HAPPY S-TYPE



HAPPY SKY HAPPY STAR



INTRODUCTION

BigLift Shipping is one of the world's leading heavy lift shipping companies, specialised in the world-wide ocean transportation of heavy lift and project cargoes, with a history dating back to 1973. BigLift strives for innovation, excellence and operational reliability, adhering to the highest Health, Safety, Environment and Quality standards, and operates to strict time schedules.

A great variety of heavy and over-sized cargoes for long-standing clients in the oil & gas, mining and power generating industries, are carried worldwide by its modern fleet of 14 specialised heavy lift vessels and two MC-Class module carriers.

A team of dedicated, highly skilled professionals, with years of experience and the mindset to think creatively, enables us to offer innovative and safe solutions for clients' technically and logistically complex requirements. Careful planning, engineering, coordination and supervision ensure that safe transportation is all in a day's work.

In 2013 and 2014 two Happy S-type vessels joined the BigLift fleet. Both vessels were equipped with two Heavy Lift Mast Cranes of 900 mt, which can be combined to realise a lifting capacity of 1,800 mt. Recently, Happy Star's cranes were upgraded to 2*1,100 mt, enabling a (combined) lifting capacity of 2,200 mt. The cranes on both vessels are prepared for the mounting of a flyjib, which further extends their lifting height and outreach.

The forward position of the S-type's superstructure means that the vessels have a single, large cargo hold and a wide, open deck area. Furthermore, the S-types have a notation for open sailing, which provides flexibility for large and high cargoes. The vessels also have Finnish Ice Class notation 1A.

A key factor in the safety and reliability of these super heavy lifters is that the design allows cargo operations to be performed without the use of stability pontoons during lifting. Furthermore, in response to requirements in the market, both vessels' cranes are built for unmatched lifting height and outreach, offering superior lifting capabilities.



HAPPY STAR HAPPY SKY

HAPPY STAR

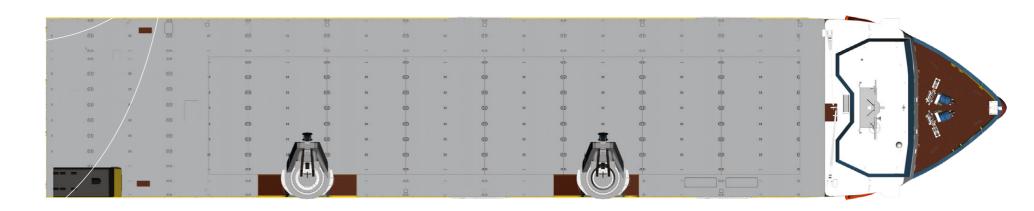
Happy Star offers unique lifting capabilities for the heavy lift and project cargo market. The 18,374 tdwt vessel features two 1,100 mt Heavy Lift Mast Cranes which make her ideally suited for the handling of heavy cargoes all over the world.

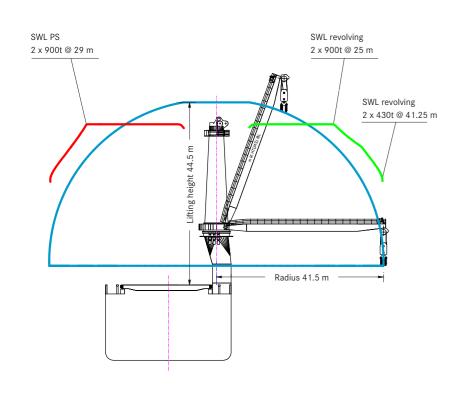
Given her high crane pedestals and lengthened jib, her lifting height is unrivalled in the worldwide heavy lift fleet. With a beam of 29 metres, the vessel has sufficient anti-heel capacity and stability to use the cranes to their full capacity - 2,200 mt at 21 metres, 1,800 mt at 25 metres, 1,600 mt at 28 metres and 1,000 mt at 41 metres - with a lifting height of close to 47 metres above the main deck.

Stability is guaranteed without the need for a stability pontoon during loading or discharging operations. At 156 metres long, her length and the forward position of her superstructure provide a single, large cargo hold and a wide, open deck area. With the weather deck extending over the full width of the vessel, her load space can be used to its full potential. She has 8 pontoon hatch covers, with 15 t/m2 carrying capacity over the full length and beam. The tweendeck is adjustable in height and it is possible to sail with open weather deck hatches at a draught of up to 8 metres.

The hull was designed using the latest technology and special attention was given to optimising







PRINCIPAL DIMENSIONS

Length overall	156.0 m
Length p.p.	147.6 m
Breadth moulded	29.0 m
Breadth extreme	29.1 m
Summer draft	9.5 m
Draft open sailing	7.5 m

CRANES

2 x 1,100 mt SWL

COMBINABLE 2,200 mt

TROLLEY 37.5 mt SWL

HATCH OPENINGS AND ALLOWABLE LOADS

HATCH OPENINGS

Weather deck 96.0 x 17.87 m Tween deck 89.6 x 17.87 m

ALLOWABLE LOADS

 $\begin{tabular}{lll} We ather deck hatch covers & 15.0 t/m^2 \\ Tween deck hatch covers & 15.0 t/m^2 \\ Tank top & 20.0 t/m^2 \\ \end{tabular}$

FLOOR SPACE

 Weather deck
 3,280 m²

 Tween deck
 1,716 m²

 Tank top
 1,624 m²

MAIN ENGINE

 Wärtsilä
 8,775 kW

 Bowthruster
 1,000 kW

 Service speed
 16 kn

CAPACITY

Grain = bale 20,535 m³

If tween deck installed 18,677 m³

DEADWEIGHT

At Summer draft 19,000 mton inc. tween deck hatch covers, pillars

REGISTRATION

The Netherlands

CLASS

Bureau Veritas **★** 100 A1, Ice class 1A (Finnish) strengthened for heavy cargoes



HAPPY STAR HAPPY SKY

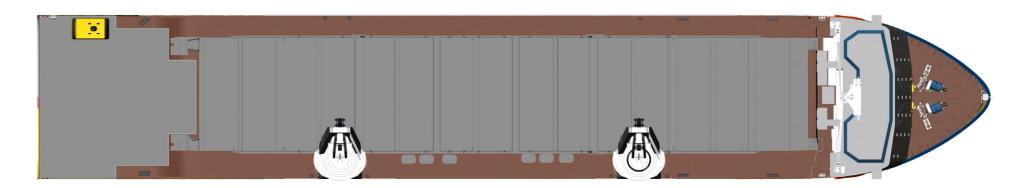
HAPPY SKY

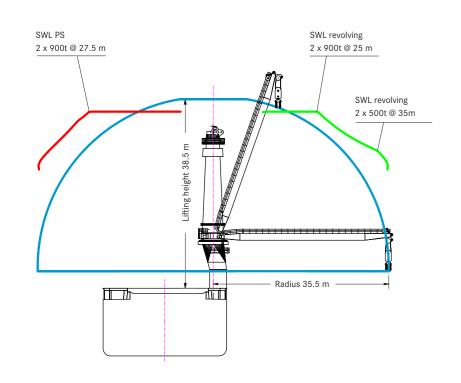
Happy Sky has excellent lifting and handling capabilities and is a well-tuned heavy lift vessel offering efficient and safe transportation solutions, which meet customer requirements. With her two 900 mt Heavy Lift Mast Cranes, she is in the top class of modern heavy lift vessels.

Happy Sky's lifting curves range from 1,800 mt at 21 metres, 1,600 mt at 25 metres to 1,000 mt at 32 metres, with a lifting height of 41 metres above the main deck. Lifting stability is achieved without the need for stability pontoons

during loading or discharging operations. The 17,775 tdwt vessel is 155 metres long and her length, combined with the forward position of her superstructure, provide a single, large cargo hold and a wide, open deck area. She is equipped with folding hatch covers, a large poop deck and cargo rails to facilitate the full use of the vessel's deck area for cargo stowage. Happy Sky's tweendeck is adjustable in height and she is allowed to sail with open weather deck hatches at a draught of up to 7.5 metres. Utilising modern design methods, special attention was given to the optimisation of her powering performance, which resulted in a good working speed. Besides all this, she has Finnish/Swedish 1A Ice Class notation.







PRINCIPAL DIMENSIONS

Length overall	154.8 m
Length p.p.	145.8 m
Breadth moulded	26.5 m
Breadth extreme	26.6 m
Summer draft	9.5 m
Draft open sailing	7.5 m

CRANES

2 x 900 mt SWL

COMBINABLE 1,800 mt

TROLLEY 37.5 mt SWL

HATCH OPENINGS AND ALLOWABLE LOADS

HATCH OPENINGS Weather deck 96 x 17.7 m Tween deck 92 x 17.7 m

ALLOWABLE LOADS

Weather deck hatch covers	12.5 t/r
Tween deck hatch covers	12.5 t/r
Tank top	20.0 t/r

FLOOR SPACE

Weather deck	3,000 m ²
Tween deck	1,742 m²
Tank top	1,530 m ²

MAIN ENGINE

Wärtsilä	8,775 kW
Bowthruster	1,000 kW
Service speed	16 kn

CAPACITY

Grain = bale	20,561 m
If tween deck installed	17,068 m

DEADWEIGHT

At Summer draft 17.775 mton inc. tween deck hatch covers, pillars

REGISTRATION

The Netherlands

CLASS

Bureau Veritas ■ 100 A1, Ice class 1A (Finnish) strengthened for heavy cargoes



