HAPPY S-TYPE
KEY IN HEAVY LIFT
INTRODUCTION

BigLift Shipping is one of the world’s leading heavy lift shipping companies, specialised in the worldwide 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 15 specialised heavy lift vessels. 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 the new Happy S-type vessels joined the BigLift fleet. Both vessels are equipped with two Heavy Lift Mast Cranes of 900 mt, which can be combined to realise a lifting capacity of 1,800 mt. 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. The S-type vessels 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 requests from the market, both vessels’ cranes have been built for unmatched lifting height and outreach, offering superior lifting capabilities. The cranes on both vessels are also already prepared for mounting a flyjib, which extends lifting height and outreach even more.
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.

### Hatch Openings and Allowable Loads

<table>
<thead>
<tr>
<th>Hatch Openings</th>
<th>Allowable Loads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather deck</td>
<td>Weather deck hatch</td>
</tr>
<tr>
<td>Tweendeck</td>
<td>Tweendeck hatch covers</td>
</tr>
<tr>
<td>Tank top</td>
<td>Tank top</td>
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</tbody>
</table>

### Floor Space

<table>
<thead>
<tr>
<th>Component</th>
<th>Floor Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather deck</td>
<td>3,000 m²</td>
</tr>
<tr>
<td>Tweendeck</td>
<td>1,742 m²</td>
</tr>
<tr>
<td>Tank top</td>
<td>1,530 m²</td>
</tr>
</tbody>
</table>

### Principal Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length overall</td>
<td>154.8 m</td>
</tr>
<tr>
<td>Length p.p.</td>
<td>145.8 m</td>
</tr>
<tr>
<td>Breadth moulded</td>
<td>26.5 m</td>
</tr>
<tr>
<td>Scantling draft</td>
<td>9.5 m</td>
</tr>
<tr>
<td>Draft open sailing</td>
<td>7.5 m</td>
</tr>
</tbody>
</table>

### Cranes

- 2 x 900 mt SWL
- 1,800 mt COMBINABLE
- 37.5 mt SWL Trolley
- 37.5 mt SWL SWL PS
- 2 x 900 @ 27.5 m SWL PS
- 2 x 500 @ 35 m SWL PS
- 2 x 300 @ 20 m SWL PS
- 2 x 300 @ 12 m SWL PS
- 2 x 200 @ 9 m SWL PS
- 2 x 100 @ 6 m SWL PS

### Main Engine

- Wärtsilä: 8,775 kW
- Bowthruster: 1,000 kW
- Service speed: 15 kn

### Capacity

- Grain = bale: 20,561 m³
- If tween deck installed: 17,068 m³

### Deadweight

- At Scantling draft: 17,775 mton
- Inc. tween-deck hatch covers, pillars

These particulars are believed to be correct, but without guarantee, and they must not be used as basis for Charter Parties or contracts without explicit written authority.
HAPPY STAR

Happy Star offers unique lifting capabilities for the heavy lift and project cargo market. The 18,374 tdwt vessel features two 900 mt Heavy Lift Mast Cranes which make her ideally suited for handling 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 - 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. Stabilty 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 her powering performance, resulting in a good working speed. Happy Star has Finnish/Swedish 1A Ice Class notation.

HATCH OPENINGS AND ALLOWABLE LOADS

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<tbody>
<tr>
<td>Weather deck</td>
<td>94.0 x 17.87 m</td>
</tr>
<tr>
<td>Tween deck</td>
<td>89.6 x 17.87 m</td>
</tr>
</tbody>
</table>

CRANES

- SWL PS: 2 x 900 t @ 29 m
- SWL revolving: 2 x 900 t @ 25 m
- SWL revolving: 2 x 430 t @ 41.5 m

PRINCIPAL DIMENSIONS

- Length overall: 156.0 m
- Length p.p.: 147.6 m
- Breadth moulded: 29.0 m
- Scantling draft: 9.5 m
- Draft open sailing: 7.5 m

DEADWEIGHT

At Scantling draft 18,374 mton inc. tween-deck hatch covers, pillars

REGISTRATION

The Netherlands

CLASS

LRS X100 A1, ice class 1A (Finnish) strengthened for heavy cargoes

MAIN ENGINE

- Wartsila: 8,775 kW
- Bowthruster: 1,000 kW
- Service speed: 15 kn

CAPACITY

- Grain = bale: 20,335 m³
- If tween deck installed: 18,677 m³

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