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 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 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 unrivaled 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 optimizing her powering performance, resulting in a good working speed. Happy Star has Finnish/Swedish 1A Ice Class notation.

**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
- 2 x 900t @ 29 m
- 2 x 900t @ 25 m
- 2 x 1,100t @ 23 m
- 2 x 430t @ 41.25 m
- Radius 41.5 m

**Lifting Height and Allowable Loads**
- Lifting height: 44.5 m
- SWL PS: 2 x 900t @ 29 m
- SWL revolving: 2 x 1,100t @ 23 m
- SWL revolving: 2 x 430t @ 41.25 m

**Hatch Openings and Allowable Loads**
- **Hatch Openings**
  - Weather deck: 96.0 x 17.67 m
  - Tween deck: 69.6 x 17.67 m
- **Allowable Loads**
  - Weather deck hatch covers: 15.0 t/m²
  - Tween deck hatch covers: 15.0 t/m²
  - Tank top: 20.0 t/m²

**Floor Space**
- Weather deck: 2,300 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

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 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**

### Combineable SWL
- **1,800 mt**

### Trolley
- 37.5 mt SWL

### Lifting Height
- **38.5 m**
- **Radius**: 35.5 m

### Hatching Space and Allowable Loads

### Hatch Openings
- **Weather deck**: 96 x 17.7 m
- **Tweendeck**: 92 x 17.7 m

### Allowable Loads
- **Weather deck hatch covers**: 12.5 t/m²
- **Tweendeck hatch covers**: 12.5 t/m²
- **Tank top**: 20.0 t/m²

### Floor Space
- **Weather deck**: 3,000 m²
- **Tweendeck**: 1,742 m²
- **Tank top**: 1,530 m²

### Main Engine
- **Wärtsilä**: 8,775 kW
- **Boat thruster**: 1,000 kW
- **Service speed**: 16 kn

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

### Deadweight
- **At Summer draft**: 17,775 mt
- **Inc. tween-deck hatch covers, pillars**: 17,068 mt

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| **Class** | LRS ● 100 A1, Ice class 1A (Finnish/Swedish)  
Strengthened for heavy cargoes |
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<tbody>
<tr>
<td><strong>Principal Dimensions</strong></td>
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<tr>
<td>Length overall</td>
<td>154.80 m</td>
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<tr>
<td>Length p.p.</td>
<td>145.80 m</td>
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<tr>
<td>Breadth moulded</td>
<td>26.50 m</td>
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<tr>
<td>Breadth extreme</td>
<td>26.64 m</td>
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<tr>
<td>Summer draft</td>
<td>9.50 m</td>
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<tr>
<td>Draft “open sailing”</td>
<td>7.50 m</td>
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| **Deadweight** | Scantling  
17,775 mton  
inc. tween deck hatch covers, pilars |
| **Tonnage** |  |
| International |  
GT | 15,989 |
| NT | 4,989 |
| Panama |  
- | 14,160 |
| **Capacity** | Grain = bale  
20,561 m³  
if tween deck installed, 17,068 m³ |
| **Floor space** |  |
| Weather deck | 3,000 m³ |
| Tween deck | 1,742 m³ |
| Tank top | 1,530 m³ |
| **Hatch openings** |  |
| Weather deck | 96 x 17.7 m  
sailing with open hatches possible |
| Tween deck | 92 x 17.7 m |
| **Heights** |  |
| Heights adjustable in steps of 50 cm | 12.50 m  
with no tween deck  
maximum 8.83 m |
| Minimum height | 2.83 m |
| **Allowable loads** |  |
| Weather deck hatch cover with pillars | 4.0 t/m² |
| Tween deck hatch cover with pillars | 12.5 t/m² |
| Tank top | 4.0 t/m² |
| **Cranes** |  |
| Combinable | 1,800 mt  
SWL |
| Situated on starboard side | 2 x 900 mt  
SWL |
| Fitted with trolley | 37.5 mt  
SWL |
| **Main engine** | Wärtsilä 8L46C  
8,775 kW |
| Bowthruster | 1,000 kW |
| Speed | 16 kN |
| **Container capacity** | 1,237 TEU |

**HAPPY SKY**

Happy Sky  
Amsterdam  
The Netherlands  
2013

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