

Sustainable and Inclusive Growth

# Hanwha Ocean Ecotech



## Hanwha Ocean Ecotech

111, Yulchonsandan 3-ro Gwangyang-eup, Gwangyan-si,

Jeollanam-do, Korea

TEL (061) 780.3000

FAX (061) 780.3600

[www.hanwhaoceanecotech.com](http://www.hanwhaoceanecotech.com)



# Contents

## 01. Company Introduction

- History timelines
- Location & Transportation
- Organization Chart

## 02. Facility & Capacity

- Factory and workshop status
- Production performance
- Production facilities
- Major product lines
- Future-oriented vision

# History timelines

## Vision 2030

### 2020

2034. 12

Production target – 180,000 tonners

- ① Sales target – 500 Billion won
- ② Business profits - 10%

2023. 5

Changed company name to Hanwha Ocean Ecotech

9<sup>th</sup> CEO assigned (C. K. Lee)

2024. 3

Expansion of Production yards (192,096 m<sup>2</sup>)

### 2010

2010. 4

Incorporation as DSME's affiliated company

2010. 10

Acquisition ISO-9001, ISO-14001 and OHSAS-18001

2012. 4

Selected as “100 good company to work for employees” by GWP Korea

2015. 10

Construction and operation of pre-outfitting shop

2016. 4

LNG re-liquefaction system(PRS®) production

### 2000





2007.11.

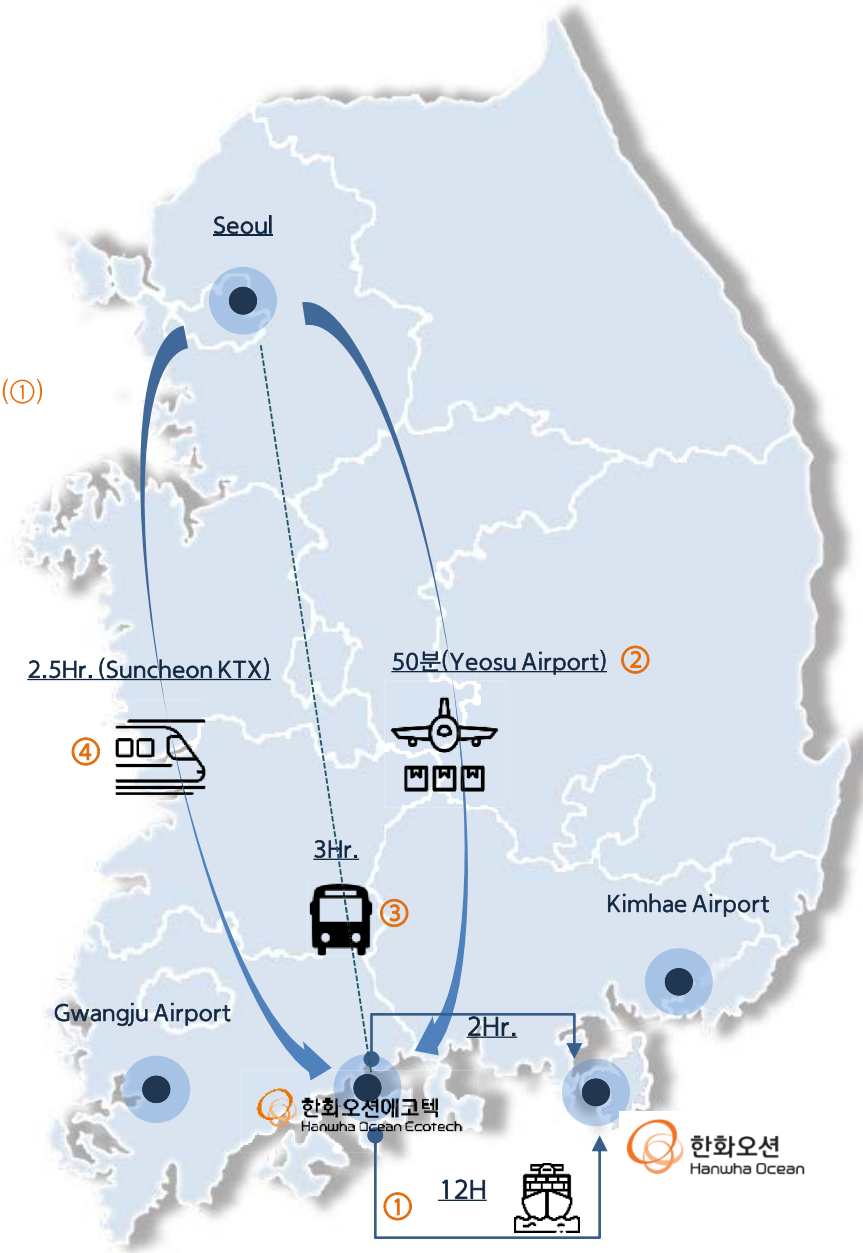
Establishment of 2 corporation  
(Samwoo Heavy Industry.,LTD and  
Samwoo Propeller.,LTD)



# Location & Transportation

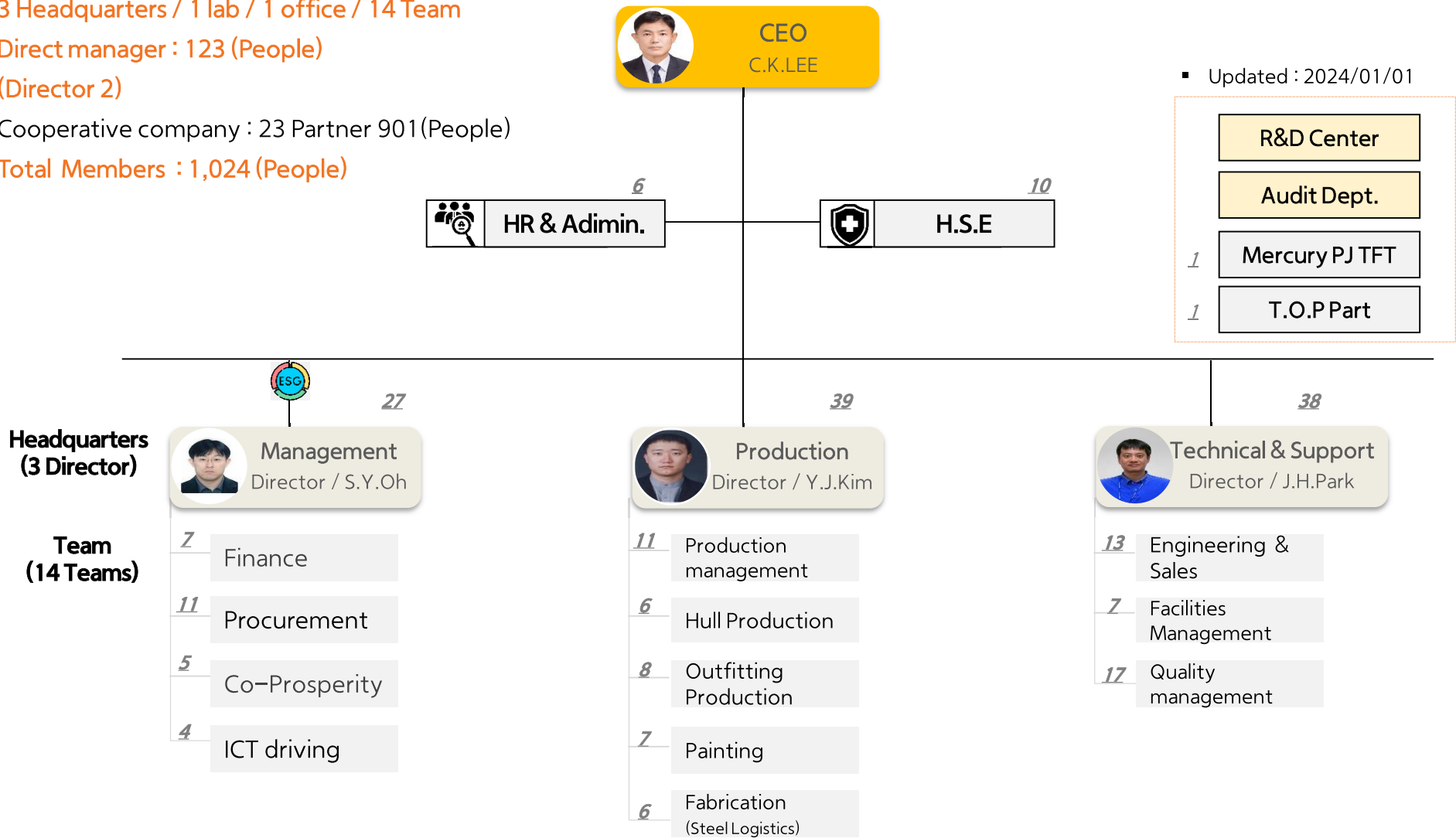
## Transportation hub on the ROK's southern coast (with the port, airport, highway and rail system.)

-  Gwangyang International Port(Shipment & Marine Logistics)  
The hub port of global direct, indirect and transshipment connection the Asia, Europe, North America and Africa.  
Hanwha Ocean Ecotech <-> Hanwha Ocean Geoje Yard (Max. 3,000ton in 12hr) – ①
-  Domestic airport to travel everywhere in Korea within 1 hour  
Yeosu Airport: Seoul 3times/day -(②), Sacheon Airport: Seoul 4times/day, Kwangju Airport: Seoul 2times/day
-  Highway system to arrive at the capital area within 3 hours (③) and Hanwha Ocean in 2 hours.  
The traffic hub traveling to the capital area in 3 hours with 5 highways, 8 national way and 18 local and main roads.  
5 highway: (Suncheon to Wanju, Daejeon to Jinju, Gwangju to Suncheon, Mokpo to Gwangyang and Pusan to Suncheon)
-  KTX and Railroad (Available to reach in the capital area in 2.5hours) -(④)  
2 Major wide area railroad with double tracking:  
North<->South (Jeolla Line), East<->West (Kyoungjoen Line)



# Organization chart

- Re-organization : Jan. 1<sup>st</sup>, 2024
- 3 Headquarters / 1 lab / 1 office / 14 Team
- Direct manager : 123 (People)  
(Director 2)
- Cooperative company : 23 Partner 901 (People)
- Total Members : 1,024 (People)





# Factory and Workshop status

- Total Work Area : **615,611 m<sup>2</sup>** , Manufacture Max. Capacity : **120,000 Ton / Year**
- **One -Stop Production System** / Securing a stable production base (Hanwha Ocean)



# Factory and Workshop Status

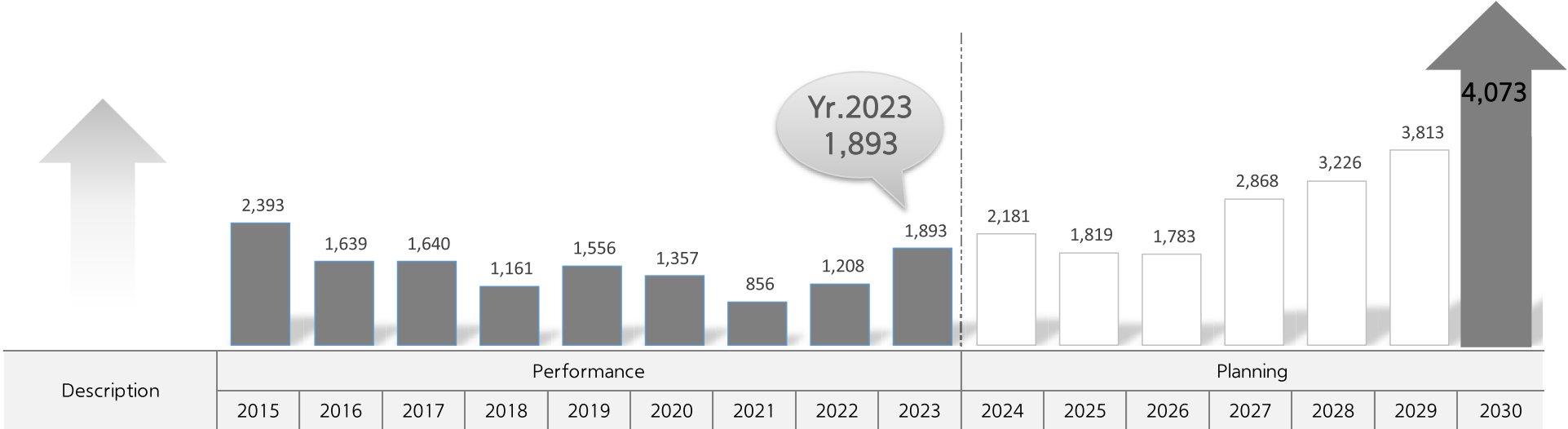
- Manufacturing the product such as blocks for the container ship and LNGC.
- Furthermore optimized facilities for particular equipment and non-ferrous products.

Description		Area(m²)	Capacity	Remarks
Steel Logistics Center (Unloading, Storage, Pre-treatment)		26,576	500,000 Ton/Year	
		5,940		
Assembly		106,498	120,000 Ton/Year	
Outfitting		27,145		
Pre-erection		86,525		
Equipment	Pump Mast	9,058	24 Ship/Year	
	Vent Mast			
	FRS / PRS			
	Unit	16,740	24 Ship/Year	
Painting	Blasting	4,050	1,720,000 m²/Year	
	Painting	10,350		
Total area(m²)		292,882		

# Production Performance

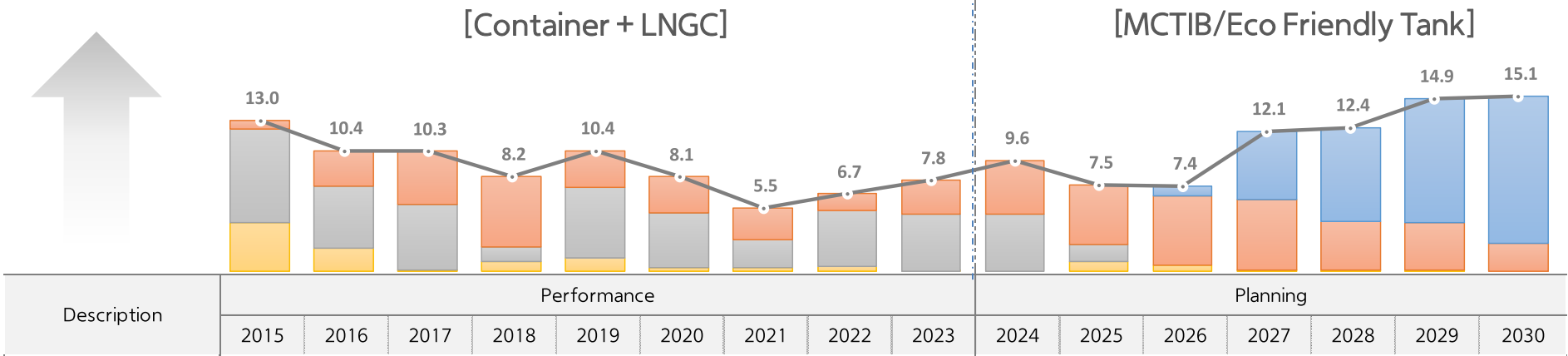
Annual Sales (100 million won)

Target sales for Yr.2030  
500 billion won



Production (10 Thousand Ton)

Etc. Cont. LNGC MTIB+Eco Friendly Tank Production(10 thousand tons)





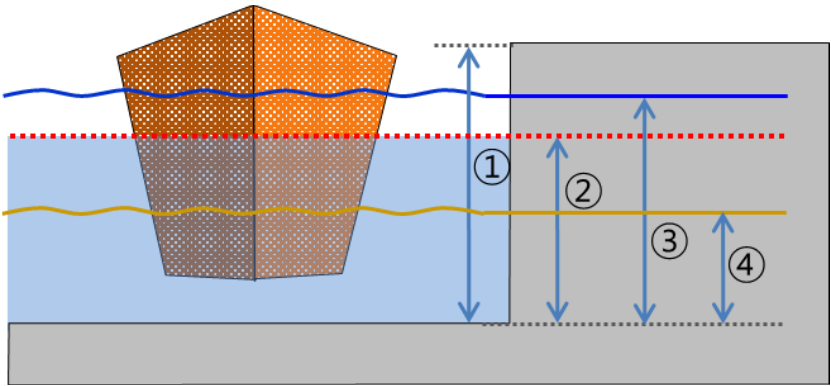
# Production Facilities

## Quay wall (1 Yard)

- Establishing the marine transportation system for heavy structures using port infrastructure and facility of industrial area in “Free Economic Zone of Gwangyang bay area”.
- Arranging the optimized and specialized manufacturing center by unifying the process from preparing raw material to shipping the final products.



Length of Quay		355 m
Fender Type		BP-Fender(23ea)
Max. Capacity		3,000 ton
Barge specification	Draft	5.5 m
	Max.	20,000 P (14,000 dwt)
	Min.	3,000 P (2,000 dwt)



Height of Quay ①	12 m
Average Draft ②	9 m
High Tide ③	11 m
Ebb Tide ④	7 m

# Production Facilities

## Indoor Shop 1 & Equipment Shop (1Yard)

- The stable manufacturing of pre-assembled products with in-door facilities and holding the maximum capacity for producing Hatch Cover in Korea.
- The securing advanced industrial technology to producing the high valued equipment such as BOG reliquefaction system and fuel gas supply system(FGSS).



Bay 1	Bay 2	Bay 3	Bay 4
270x24x14m	270x38x16m	270x38x23m	270x38x23m
O.H.Crane	50+25 ton	2	
	30~10/5 ton	15	
	50 ton	1	
Semi Gantry Crane	2.8 ton	11	

\* RT Room(Bay 1) : 25x5x5m

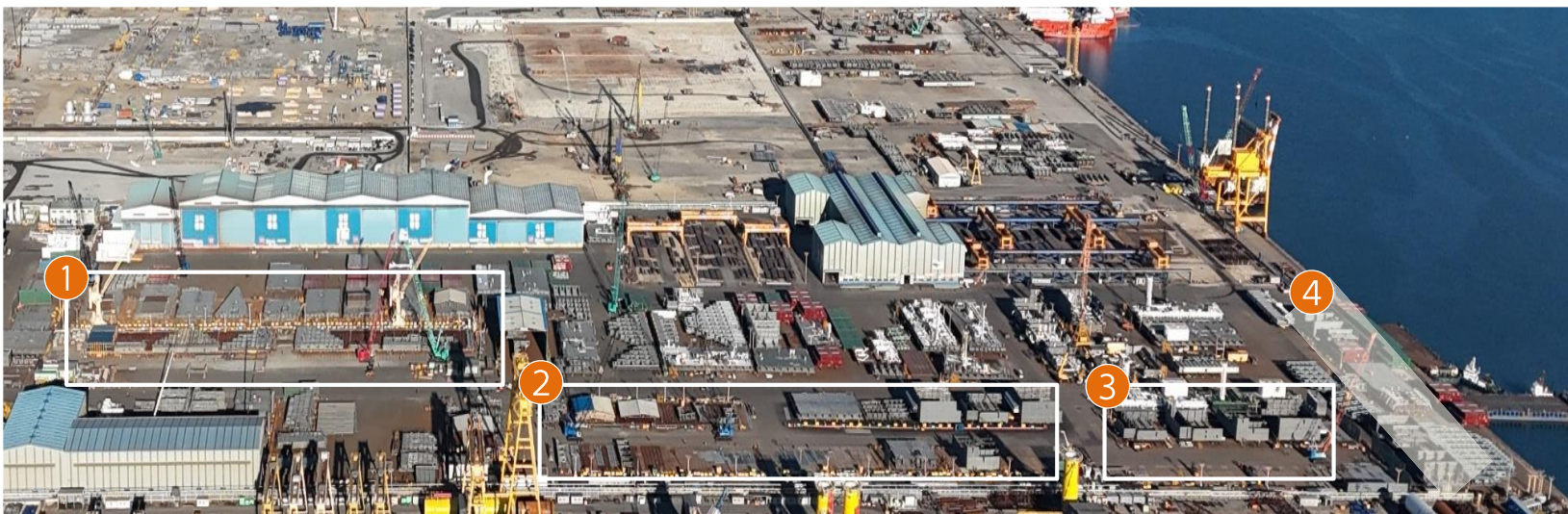


Bay 1	Bay 2	Bay 3
192x30x18m	173x25x18m	173x30x18 m
O.H.Crane	80/30 ton	3
	60/20 ton	2
	50 ton	1

# Production Facilities

## Outdoor Assembly Area (1, 2, 3) & H/Zone (1Yard)

- The core producing area for the huge structure such as T-BHD(P.E) of container ship and LNGC T/Deck unifying pipe units.
- The securing the specialize work places to manufacturing huge structures such as the cargo tanks enduring max 2,000ton weights.



1	Outdoor Assembly Area 1	2	Outdoor Assembly Area 2	3	Outdoor Assembly Area 3	4	Heavy Zone
	250x80m		285x88m		194x70m		170x25m

\* Bearing Capacity of Heavy Zone : 2,000 Ton

Jib Crane	20 ton	2
Crawler Crane	300 / 250 ton	1 / 4
Tower Crane	14 ton	1
Modular Transporter	1,400 ton	1
Transporter	550 / 320 / 250 ton	5



# Production Facilities

## Painting Shop & HAPs reduction equipment (1Yard)

- The largest painting facility for shipbuilding industry in Free Economic Zone of Gwangyang bay area.
- By establishing the reduction equipment for the hazardous air pollutants to contribute the improvement of local environmental issues and the local development with the mutual cooperation.



Description	Blasting # 1 (Non Metal)	Blasting #2 (Block)
Size	45 x 40 x 12 m	45 x 50 x 18 m
Capacity	86 ton/Mon. 1,029 ton/Year	8,541 ton/Mon. 102,494 ton/Year
Air Blaster	12EA Nozzle (2 x 6)	16EA Nozzle (4 x 4)



Description	Painting #1~3	Painting #4~5
Size	45 x 50 x 18 m	45 x 40 x 12 m
Capacity	8,541 ton/Mon. 102,494 ton/Year	86 ton/Mon. 1,029 ton/Year
Gas Heater	400,000 Kcal / Hr. – 5EA, 1,000,000 Kcal / Hr. – 3EA	

Note) HAPs: The regulation to reduce the “Hazardous Air Pollutants” by monitoring and managing the emission process and facility.

# Production Facilities

## Pre-Outfitting Shop & Steel Outfitting Shop (1Yard)

- Preparing the proper facility to manage the external influences in advance by operating the particular factory for LNGC pre-piping and outfitting work and progress.
- The specialized area for LNGC piping system to carry out maximized and stable the output with 24 LNGC building.



Bay 1	Bay 2	Bay 3	Bay 4	Bay 5
30x25x16m	30x25x16m	30x25x16m	30x25x16m	57x35x16
O.H.Crane		2.8 ton		6



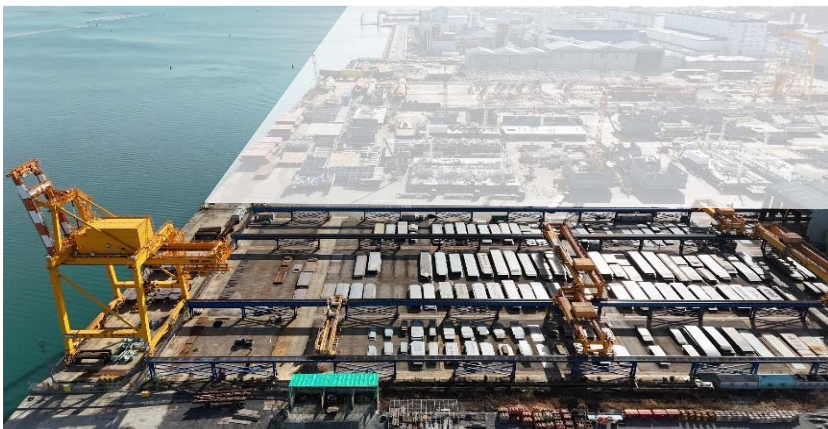
Bay 1 : 140x18x12m		
O.H.Crane	2.8 ton	2
	5 ton	2
	10 ton	1



# Production Facilities

## Steel Logistics Center (1 Yard)

- With the optimized facility for pre surface treatment process, having exceptional capacity by **unifying the incoming, sorting and surface treatment** which is the first step of block manufacturing.



□ Storage Area (Unloading/Stock/Sorting)

Description	Bay 1	Bay 2	Bay 3
#1 area	150x30x4.7m	150x50x4.7m	150x30x4.7m
#2 area	100x38m	100x37m	92x28m
B.T.Crane		30 Ton	1
LM.E.O.Crane		30 Ton(30m)	5
		25 Ton(30~50m)	6
		20 톤(30~38m)	4



□ Surface Treatment Facility

Description	A-Line	B-Line
Size	110x27x17m	110x27x17m
Capacity	42,000 Ton/Month	
Thickness	60 T	150 T
Max. Width	5,500 mm	3,500 mm
Max. Length	23,000 mm	15,000 mm

# Production Facilities

## Indoor Shop 2 & PE2 Area (2Yard)

- Specialized LNGC products be produced stably at the indoor shop and PE2 Area be utilized 600 Ton Gantry Crane to turn over and lift the large blocks



Bay 1	Bay 2	Bay 3	Bay 4	Bay 5
320x46x12m	320x42x17m	320x42x25m	320x48x31m	320x26x12m

Gantry Crane	150 Ton or more	2
	100~150 Ton	4
	100 Ton or less	14
Semi Gantry Crane	35 Ton	2



Bay 1	Bay 2
110x105m	120x105m

Gantry Crane	Lifting Weight	Height	Width	Rail Length
	600 Ton	55m	105m	220m

# Major Production Lines

## Key Line-up for Container Carrier

- Holding the maximum production record of Hatch Cover which is the one of major parts in container ship.
- Constantly providing the Trans Bulk Head block which is the structure dividing the cargo area by using the enough and specialized yard because this product is necessary to have the huge working area.



- Hatch Cover



- Trans bulkhead



- Lashing Bridge



- Side Shell Block



- Rudder



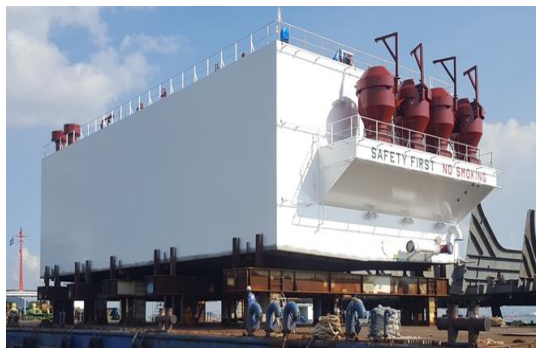
# Major Production Lines

## Key Line-up for Liquefied Natural Gas Carrier

- Unifying Trunk Deck and Pipe Unit integration: Unifying and providing as 1 assembly with Trunk Deck which is the top part of the cargo tank, Pipe unit, Gas dome and Vent Mast. (Max. Capacity 24 ships/year)
- Cargo Machinery Room is the one of the important and particular part and provided as 1 completed massive structure including all core equipment such as Compressor, Motor, Cargo Handling and FGSS.
- Manufacturing the BOG liquefaction system such as FRS, PRS, Pump tower and Vent mast requiring the high degree engineering and production ability.



• Trunk Deck + Pipe Unit 일체화



• Cargo Machinery Room



• LPGC Cargo Tank

# Major Production Lines

## Key Line-up for Liquefied Natural Gas Carrier



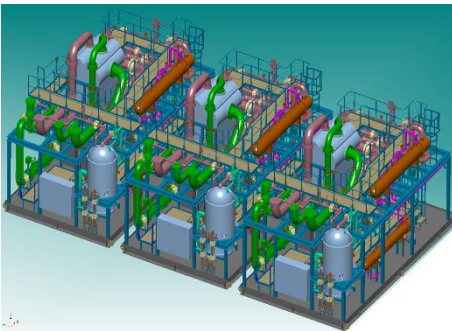
- PRS/FRS  
(Full Re-gasification system /  
Partial Re-liquefaction System)



- FGSS  
(Fuel Gas Supply System)



- HP Compressor



- CHES  
(Cryogenic heat exchange system)



- Vent Mast



- Pump Tower



# Major Production Lines

## Other Reference (Offshore Project)

- The reliable offshore business partner having lot of high quality references for the global projects.



**Leg(Jack-up Rig/WTI)**



**Pipe Rack**



**Fixed Platform Deck**



**Heavy Lift Crane**

## Marine Engineering Project

- TOTAL CLOV FPSO
- EXXON MOBIL Arkutun Dagi Fixed Platform
- CHEVRON SNX Fixed Platform
- CHEVRON Wheatstone Fixed Platform
- 2,500Ton Heavy Lift Crane for Angola
- DONG Hejre Field Fixed Platform
- PETRONAS FLNG
- INPEX Ichthys FPSO
- CHEVRON Mafumeira sul Fixed Platform
- MAERSK CJ70 Jack Up Rig

# Future-oriented Vision

## Future-oriented Vision

Hanwha Ocean Ecotech will lead the growth as play the role of key supply chain for marine & large offshore Structure Production and eco-friendly energy part.

- Optimized workplaces and stable securing workforce focused on container ships and gas carriers.
- A unified production system from procurement of raw materials to delivery of finished products.
- Unrivalled technology and continuous improvement in quality

We will reward customers' trust through this.

Finally, ours human-centered and smart factory will be future for all executives and customers as the safety-first work place.

Thank you.



Sustainable and Inclusive Growth



*[www.hanwhaoceanecotech.com](http://www.hanwhaoceanecotech.com)*