



Challenge & Revoution

Along with Korean shipbuilding histroy more than half a century

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history more than half a century



DAESUN

Delivers Value

Value Creator

Leading medium size shipyard
Challenge & Revolution for the next half century



 **DAE SUN SHIPBUILDING & ENGINEERING CO.,LTD.**

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Brief History

Daesun shipbuilding and engineering co.,ltd,established with private capital in 1945 as the first shipyard in Korea, has consistently grown with experienced shipbuilding expertise, constant technology development, and customer-oriented management, along with Korean shipbuilding history. As a result, it has been acknowledged as one of the strongest medium-size shipbuilders in the world.



1945 Established under the Name of
Dae Sun Shipbuilding & Iron Work

1964 Constructed No.1 Building Berth
at Yeongdo Shipyard

1997 Completed Reclamation Construction at
Dadae Shipyard

2007 Replacement of Floating Dry dock
(L.C. : 1,500 M.T.)

2008 Completed the Construction of
Mega-block Assembly yard at DaDae Shipyard

2011 Installed 2 units of Goliath Cranes(600Ton) and
constructed Block Assembly shop at Dadae shipyard

2012 Delivery of 500th Vessel

2014 KOEXIM became a major shareholder

2018 Sucessfully delivered 160M Coastal Car Ferry



ORGANIZATION



Planning Team / Production Team / Health and Safety Environment Shipbuilding Team / Design Team /
Business Team / Accounting Team / Human Resource Team / General Affairs Team

No strike and argument has occurred between the management and employees since the beginning of Dae Sun
This shows that Dae Sun value its all employees by providing good working environment and welfare.



We foster global expertise through HRD process and all employees are well acquainted
with their jobs which help us aim at perfection on shipbuilding process.

“Our employees are always pursuing on time delivery and top quality”

Description	Office Staff	Engineer	Workman	Employment
				Total
Administration Part	60	80	-	140
Design Part	10	110	-	120
Production Part	30	240	1,300	1,570
Total	100	430	1,300	1,830

Description	Annual Capacity	Production Capacity
		Max. Vessel Size
Shipbuilding	ABT 13Units	DWT 62,000Tons

R&D

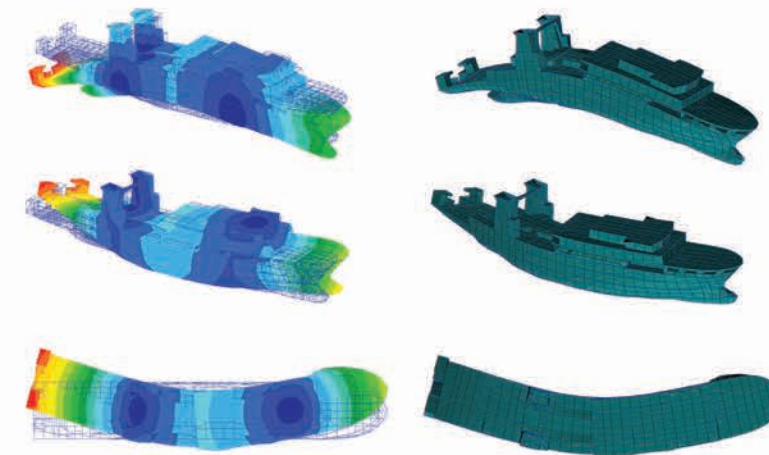
R&D is most important part of the shipbuilding process to meet continuously changing customer's needs and new regulations. Dae Sun is operating five independent R&D team which is closely communicating with production team and design team to make our ideal design happen in the actual shipbuilding yard.

Dae Sun is also preparing for the application of LNG ready system to the specifications to meet new environmental requirement.



- LNG propelled vessel development team
- CFD interpretation team
- Fuel Optimizing team
- Ship Safety Enhancement team
- Engineering Procurement Development team

Mode Shapes of the Hull Girder Vertical Vibration



Vibration response Curves

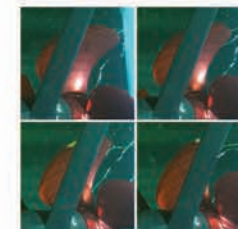


Model Test

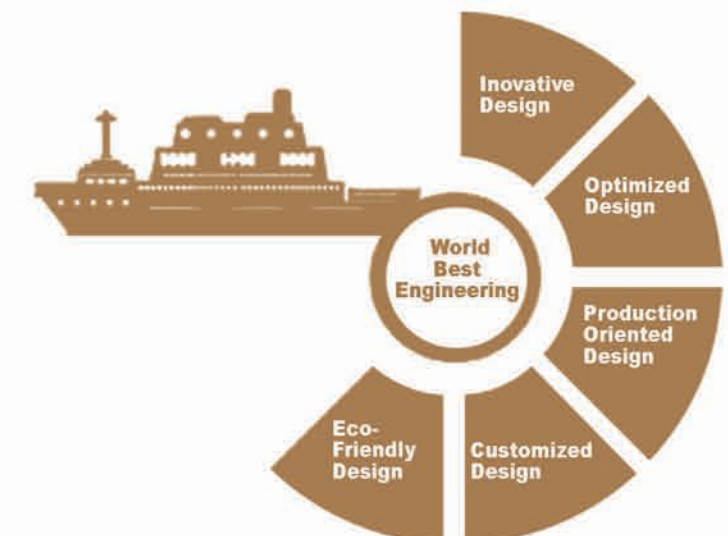
Propeller Rotation



Cavitation Patterns



Paint Test Result



Quality Assurance



Based on advanced technical skills and accumulated construction method, independent quality assurance team is strictly following company's policy on quality assurance system (Dae Sun QAS) to ensure that all vessels being constructed in Dae Sun shipyard are in compliance with building specifications and client's requirements.

Dae Sun takes a position of the leader of medium sized shipyard in Korea by strenuously improving quality control system which will eventually help our client benefit from the top quality vessels after delivery.

Quality Monitoring System

Construction
Survey
Application

1st Survey
Dae Sun QA
Team

2nd Survey
in the presence of
buyer's representatives,
class surveyor,
Dae Sun QA

HSE Health and Safety Environment



We place a high value on the occupational safety and health along with safe working environment for all of employees and overseers dispatched from the client working in the shipyard. In line with our HSE policy, we have been abiding by the rules and instructions stipulated in OHSAS & KOSHA 18001 to safeguard all workers. Our HSE Team is simulating various possible disasters which can occur in the course of construction activity and carry out precautionary drills to prevent possible accidents. We are confident that we are able to meet strict safety standard of major oil companies and shipping companies carrying oil products.



**We Value our Customers
And Provide top quality**



Many of customers in the world are satisfied with the quality ships built by Dae Sun. Dae Sun's fuel efficient container ships, tankers / bulk carriers are receiving exceptional reputation in the market.

Dae Sun has been consistently looking for the way to build the top quality vessel since its inception by understanding buyer's genuine needs and communicating with the customer's operation team. Dae Sun will continue to develop our technology to meet changing global requirements and environmental regulations. Dae Sun will breathe and live with our clients to understand what our clients really need to maximize profit through new building orders.



SHIPBUILDING PORTFOLIO

DYNAMIC / ASSURABLE / EFFICIENT / SUPERB / UNIQUE / NICE SHIP for the CLIENT

Based on the philosophy of challenge and pioneer spirit, Dae Sun has been building various types of ships such as container carrier, Bulk Carrier, Product and Chemical Tanker, Gas Carrier, Multipurpose Ship and Care Ferry to Build our customer's dream.

Dae Sun's container carrier and product tanker are receiving premium charter rate in the market. Superb quality of all vessels constructed in Dae Sun will justify your investment in new tonnage.

Major Products

- Tanker (P/C & STST) : 3,500 DWT ~ 60,000 DWT
- Container Carrier (Geared & Gearless) : 500TEU ~ 2,600TEU
- Bulk Carrier (General Bulk, Multi Purpose, Coal Carrier, Cement Carrier) : 10,000 DWT ~ 62,000 DWT
- Purse Seiner : 80m Class
- Car Ferry (Coastal Ro-Ro Ferry, International Ferry, Ro-Ro Carrier) : 130m ~ 180m Class
- LPD : 120m ~ 140m Class
- EP Project (Design & Material Procurement)
- Fishery Guidance Vessel

Container Carrier 600TEU ~ 2600TEU

Dae Sun has been winning continuous new contracts proving to be one of the most assured shipyards toward customers' satisfaction even in this depressed newbuilding market.



1,800Teu Container (KMTCL)

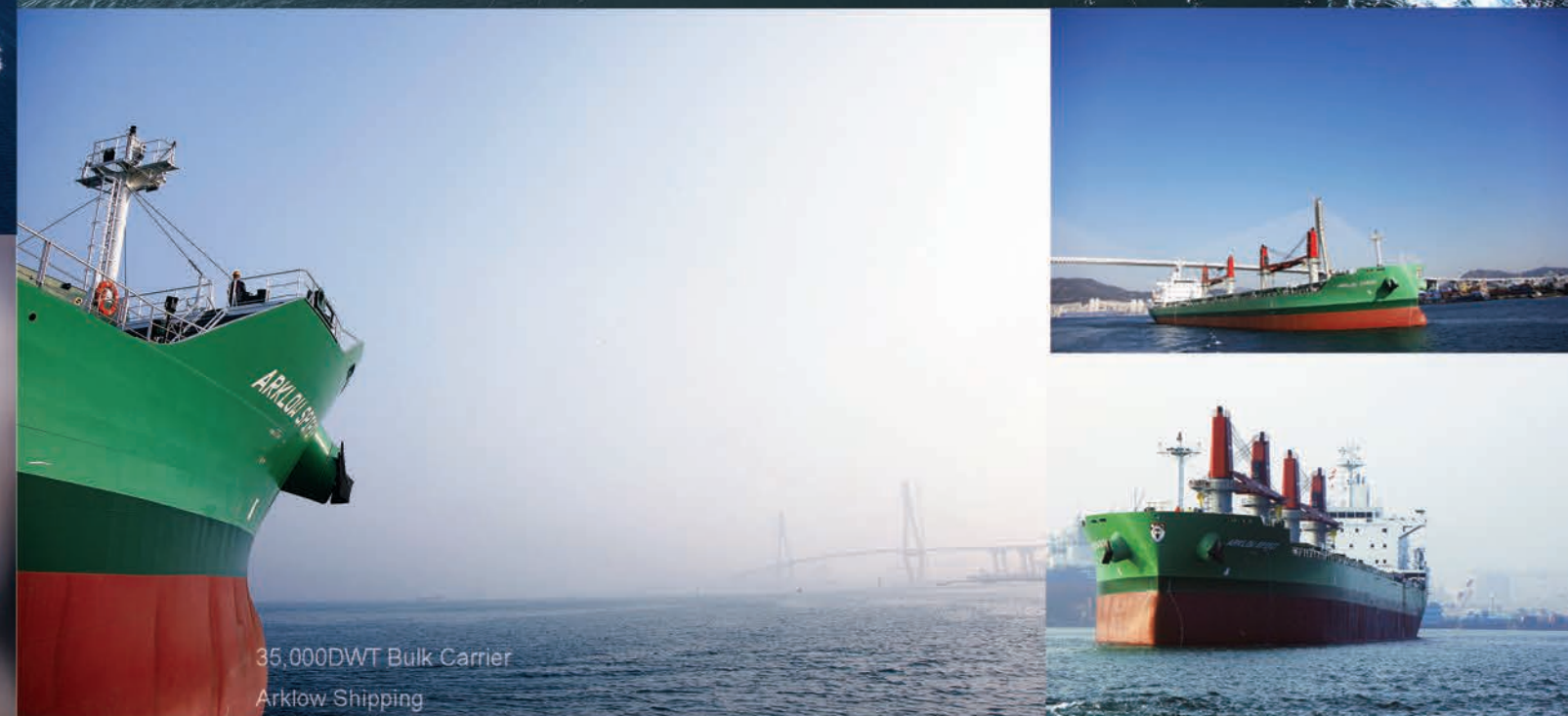
Bulk Carrier & Multi Purpose Vessel

Dae Sun has built various types of bulk carrier such as handy, ultra max bulk carrier multi purpose carrier and cement carrier, design to carry coal, special cargoes to meet customer's varied needs.

35,000DWT Bulk Carrier
Leros/Greece



35,000DWT Bulk Carrier
Arklow Shipping



17,500DWT MPV
(Ministry of Transport State
Company for Maritime Transport)

Tanker 3,500DWT ~60,000DWT

Eco - friendly design, high propulsion efficiency, fuel efficiency Dae Sun' s highly efficient tankers are receiving premium charter rate in the market recently delivered MR tankers and Stainless Steel Tanker are being chartered to the oil major on the back of performance of the vessels



25K Product / Chemical Tanker



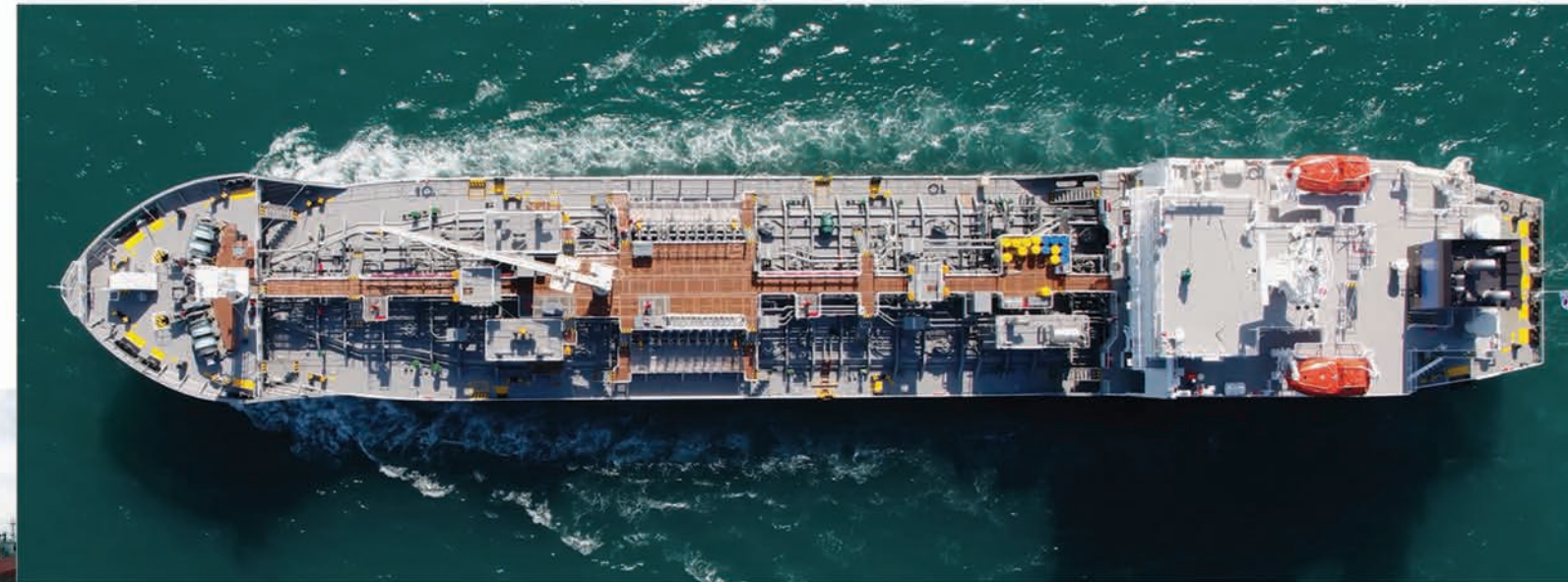
51K Product /Chemical Tanker



13K Chemical Tanker



6.5K Chemical Tanker



SUS Chemical Tanker

Dae Sun has been marketing this small chemical tanker design since 2014 and has taken orders for 16 of these ships to date.

Stainless steel is a general name given to a whole family of high alloyed corrosion resistant steels in which chromium is the main alloying element. It is important that the exact type of stainless steel 316L , 316LN etc inside your chemical tankers tanks for clad s/steel, solid s/steel ,steam coils , ladders , supports ,pump shell etc.

It is widely accepted that under oxidising conditions for steel with a chromium content of at least 12%, an impervious and largely invisible oxide film forms on the surface which is self healing acts as a barrier between the metal and its environment and this effectively reduces corrosion rate. In reducing conditions the film however breaks and the air formed film will not be repaired and corrosion will be enhanced in damaged areas. Chromium improves hardness and wear resistance.

The inclusion of Nickel as alloying element improves the strength and corrosion resistance.



Navios 50,000DWT MR
Product / Chemical Tanker



A correct procedure and correct consumables should be used for welding of stainless steel to prevent weld joints to crack. It is important that the heat input during welding affected zone and exposure to the sensitising temperature range for the shortest possible time. Spatter and rough surfaces can result in local breakdown in passivity resulting in pitting. Precautions should be taken before welding commences to prevent any spatter formed from adhering to the surface adjacent to the weld by employing masking tape or by applying suitable temporary coating. The welds should be smooth free from porosity, inclusions and cavities and carried by competent welders.

RO-RO Car Ferry & Carrier

The RO-RO Car Ferry is the vessel designed to carry wheeled cargo with passenger accommodation. Dae Sun is building Eco-friendly RO-RO Car Ferry for the domestic buyer dedicated to the transportation of passengers and wheeled cargo from the land to JEJU island.



Dae Sun has also developed conceptual design of 180m class international Car Ferry design to cope with growing demands in Ro-RO Car Ferry fleet replacement.

LPD

An amphibious transport dock, also called a landing platform/dock (LPD), is an amphibious operation support ship which embarks, transport, and lands elements of a landing force for humanitarian relief and the tactical operation. Dae Sun has developed LPD on the basis of commercial specifications to achieve competitiveness and price considering versatile usage of this vessel. Indonesian Navy delivered three (3) LPDs and built their two (2) LPDs at their shipyard with the technical support and EP (Engineering & Procurement) contract with Dae Sun. Now, SIMA PERU (Peruvian Naval Shipyard) is about to make launching of its 1st LPD whose materials and designs were procured by Dae Sun.



120m Class Landing Platform Dock

Other Ship



Fishery Guidance Vessel



Nuclear Waste Carrier



80M Purse Seiner



Training & Researching ship

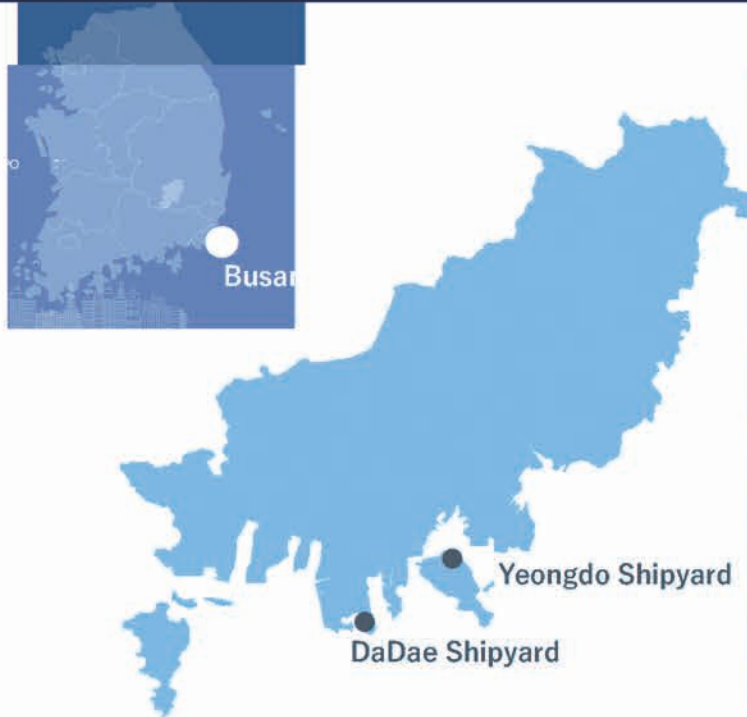
Dae Sun has been operating special task force for the designing and the construction of special ships to secure on-time delivery and ship's performance to maintain special purpose of the vessels



YEONGDO SHIPYARD

Yeongdo Shipyard located in Busan, Korea is the Best shipyard optimized to build small container carrier, tanker and special purpose vessel.

It also has a floating dry-dock used for the final jointing of mega block.



MAIN FACILITY



Dry Dock

109m x 19m x 7.7m



Deck House

Fabrication & Assembly



Building Berth

122m x 25m



Floating Dock

Lifting Capacity 15,000T
15,000T, 190M LOA, 34M Beam



Situated at the center of the port of Busan, which provides optimum geographical advantages the shipyard has built over 500 ships of various types.

DAE SUN is uniquely positioned to satisfy the present and future requirements of its clients by developing cutting edge technologies, taking advantage of geographical benefits and the regular training specialized workforce.

DADAE SHIPYARD

Dadae shipyard located in Busan Korea is well organized shipyard having every facility to build the vessel on the ground.

DAE SUN is uniquely positioned to satisfy the present and future requirements of its clients by developing cutting edge technologies, taking advantage of geographical benefits and the regular training specialized workforce.



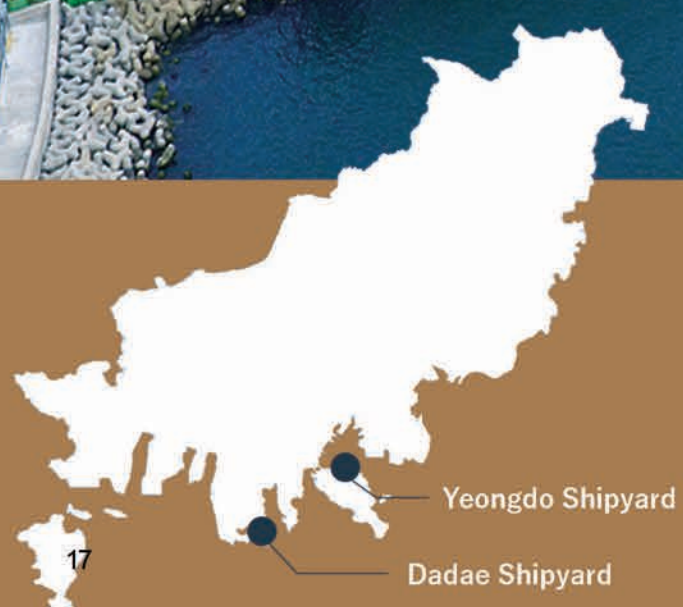
Blasting & Painting Shop



Block Fabrication & Assembly shop(Shelter)



600Ton Goliath Crane



Yeongdo Shipyard

Dadae Shipyard



LOAD OUT

