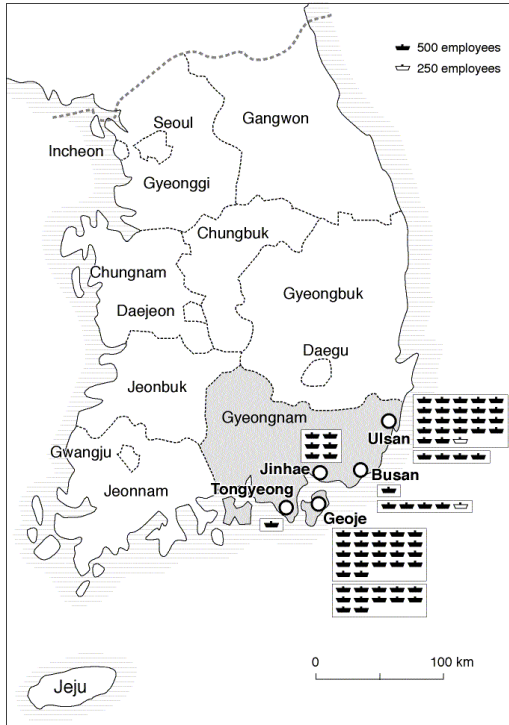


Overview of Korean Shipbuilding Industry

Shipbuilding companies were created in Korea Japanese Colonial Period 1910 and Japanese shipbuilders



worked in shipbuilding across major ports across the country, including Busan, Incheon, Cheongjin, Mokpo, Jinnampo, Cheongmu and Wonsan. After the Korean War, Korean shipbuilders began to grow, mainly in repairing U.S. warships. In the 1950s, ships were mainly imported from foreign countries. From 1951 to 1954, 324 ships were imported from Japan, the United States, and Norway. From the 1960s onwards, as the economy grew under the 5-year plan for economic development, the demand for ships increased. Domestic shipbuilders also built ships, but due to the lack of technology and funds, they were not able to build enough of the required quantities. In the 1970s, the Korean government began to intensively nurture the shipbuilding industry, and in 1972, the opening of the world's largest modern Ulsan shipyard led to the development of Korea's shipbuilding technology.

South Korea's has the 18th largest shipping industry in the world. About 7 million gross tons of maritime transport is registered in the country.

By ship type, Korea Shipyards commanded 65% of global orders for high value-added vessels such as VLCCs and LNG carriers, and 64% of orders for environmentally friendly vessels such as LNG or LPG powered vessels.

History of the shipbuilding industry in Korea

The history of the shipbuilding industry in Korea, which is surrounded by seas on three sides, dates to ancient times. Squeezed between Japan and China, Korea mastered the construction of wooden ships in the 600s, managed to have a permanent sea power during the 500-year "Yi Dynasty" period between 1392-1910, and became the first country in the world to have a fleet of ships made of metal in the 16th century. While Korea had the naval power and technological superiority to win all naval wars against Japan, which wanted to occupy the region, at the end of the 16th century, it lost its technological superiority over time, came under Japanese influence from 1895, and was completely annexed by the Japanese in 1910.

1910-1945: Shipbuilding industry during the Japanese colonial period

In Korea, which was occupied by Japan in 1910 and a Japanese colony until 1945, the Japanese seized some of the companies as well as all political and economic institutions. The Japanese policy of dominating the shipbuilding industry has made shipping a marginal industry for the Koreans. II. At the end of World War II, the Japanese established small-scale shipyards on the Korean Peninsula, with the exception of one, the others producing simple ships for the local market. The first modern shipyard for the Japanese's own war policies was established in Busan in 1937 by the Mitsubishi Group. This shipyard, which was nationalized after independence and renamed "Taehan" and operated by the state-owned Korean Shipbuilding and Engineering Company, formed the core of the South Korean shipbuilding industry, becoming the country's largest and most technologically advanced shipyard until 1974.

1945-1960: Post-independence Syngman Rhee Era

While Korea gained its independence with the withdrawal of Japan at the end of World War II, the shipyards established by the Japanese during the colonial period and the Korean shipyards seized by the Japanese were again in the hands of the Koreans. However, these shipyards could not be operated efficiently due to management and technology problems, qualified workforce and financing problems, raw material and input problems, as well as political, economic and social instability in the country. With the division of Korea in 1948, the north of which was occupied by the Soviet Union and the south by the USA following the Japanese withdrawal, 80-85% of pre-partition industrial establishments and more than 90% of energy capacity remained in the north. While all the economic infrastructure remaining in South Korea's hands was destroyed due to the Korean War that started in 1950 and lasted for three years, one of the industries that was most affected by the war was the shipbuilding industry, and no significant development was achieved in the shipbuilding industry until the 1960s.

Some economic developments in the 1948-1961 period played an important role in the development process of the following years. One of them is the land reform carried out between 1948-1950 with the support of the Americans. The land reform in South Korea has greatly changed the class balance of power. After the Korean War, the South Korean government, which received a large amount of military and economic aid due to its strategic importance for the United States, used these aids especially in the creation of the educational infrastructure and in the financing of the import substitution policies implemented in this period. Import substitution policies were not successful in terms of the formation of an industrial structure in the country, but led to the establishment of private companies entirely owned by South Koreans. These family companies, called "Chaebol" and operating in various fields, grew over time and formed the basis of South Korean industrial production and exports in the following years. In terms of the shipbuilding industry, one of the developments that can be considered important in this period is the opening of naval engineering departments at universities (Amsden, 1992, p.274). Another important development is the first Shipbuilding Incentive Law enacted in 1958. This law, which was put into practice together with an investment program, is important in terms of showing the government's interest in the sector, even if it has not been actually implemented.

1960s: Park Jeong-hui and the start of planning

South Korea; Although it made its main breakthrough in the shipbuilding industry in the 1970s, the development of the sector started in the 1960s. These are the years when a rapid development process started not only in the shipbuilding sector but also in the whole economy. With " Park Jeong-hui ", who came to power with a military coup in May 1961, a radical change took place in South Korea's political and economic development program. Park Jeong-hui's priority has been the development of the country through industrialization. Since 1962, General Park has aimed at an export-oriented industrialization process with economic planning. The government has implemented a strict incentive policy based on selective and reciprocity to direct the private sector according to the plan objectives. By nationalizing the banking sector, it enabled the private sector to use financial incentives effectively. Thus, in South Korea, which established an export-oriented production structure starting from the First Plan (1962-67), it was initially aimed to develop exports in labor-intensive industries and to develop heavy industry in the same period. While the Shipbuilding Industry Incentive Law was enacted in 1962, incentive laws were put into effect for other sectors as well. The economic relations established with Japan in 1965 played a very important role in the financing needs and technology transfer of the shipbuilding industry, especially in the 1970s. During the Second Five-Year Plan (1967-1971), financial incentives provided to the sector with incentive laws were further developed. The South Korean government increased both the steel ship rate and production capacity by directing the shipyards from wooden shipbuilding to steel shipbuilding in the 1960s. In these years, incentives to increase the domestic input rate were put into practice in the shipbuilding industry, which is dependent on imports for many inputs, especially steel, and which has not developed technological capacity. In 1965, the South Korean government undertook to finance a project to develop standard ship design models jointly conducted by universities and the Korean Shipbuilding and Engineering Corporation (KSEC) to improve shipbuilding quality. The developed block construction technology has made significant contributions to the shipbuilding industry. The approval of South Korean ship design and technology by the American Shipping Bureau in 1966 opened up the export of steel ships.

“BIG THREE”

Big Three" shipbuilders of South Korea are Hyundai, Samsung and Daewoo.

Samsung Heavy Industry

Since its foundation in 1974, Samsung Heavy Industries has won orders for 1,285 ships (as of December 2020) from the world's leading shipping companies, and successfully delivered 1,179 of them, being recognized for its outstanding technology and excellent quality.

Since the construction of the first shuttle tanker in Korea in 1995, the company has won orders for 64 out

of 136 shuttle tankers ordered worldwide, taking a 47% market share, and proving overwhelming quality competitiveness.

In the gas chain sector, Samsung HI developed the world's largest LNG carrier of 266,200m³ in 2008 and the first membrane-type LNG carrier in Korea in 2011, further enhanced competitiveness in building LNG carriers. In 2013 Samsung started to build an eco-friendly, high-efficiency engine LNG carrier with innovatively improved fuel efficiency.

In addition, the company won the leader status by constructing the world's largest containership of 23,000TEU in 2017. Company has one of the largest shipyards in the world which located in Gyeongsangnam-do, Geoje.

The Company built 6 Evergreen A class ships which have capacity around 23,992 TEU and are the largest container ships in the world. The ships are built for Evergreen Marine and launched in 2021.

Hyundai Heavy Industry

In March 1972, Hyundai Heavy Industries, which took the first step to build a shipyard in Mipo Bay, Ulsan, which was nothing more than a wasteland, set the first record of completing the world's largest shipyard in the shortest period of two years and three months, while simultaneously setting the record for the world's largest shipyard in LIVANOS, Greece. It is also a living witness of the global shipbuilding industry that successfully built the company's 260,000-ton class ultra-large tanker (VLCC) and created the modern myth that completed the construction of the ship along with the completion of the first shipyard in the world's shipbuilding history.

The shipbuilding and offshore division is based on the latest production facilities, including 8 large-scale construction docks and 10 ultra-large Goliath cranes, excellent human resources, and outstanding technology, as well as marine development-related vessels such as drill ships, LNG carriers, LPG carriers, and gas carriers, as well as oil tankers, container ships, merchandising ships, automobile carriers, passenger and cargo ships (ROPAX), and the latest ships such as Aegis destroyers and submarines, we build a variety of ships with quality and timely supply to our customers, leading the world's shipbuilding and Korea.

HHI has ship manufacturing facility in Ulsan, a South Korean city located on the south-eastern tip of the Korean Peninsula, is the largest shipyard in the world. The shipyard extends over 4km along the coast of Mipo Bay in Ulsan and covers an area of 1,780 acres. One of the world's largest ship The Globe was built in this shipyard.

Daewoo Shipbuilding & Marine Engineering co., Ltd.(DSME)

On October 11, 1973, it was newly inaugurated as the Okpo Shipyard of the Korean Shipbuilding Corporation. On September 26, 1978, Daewoo Shipbuilding Industrial Co., Ltd. was established. In 1993, it achieved the world's No. 1 ship order and built the first combat submarine in the Republic of Korea. It was merged into Daewoo Heavy Industries on October 6, 1994. With the dissolution of the Daewoo Group, in 2000 Daewoo Heavy Industries was divided into Daewoo Shipbuilding Industry, Daewoo General Machinery (now Doosan Infracore), and Daewoo Heavy Industries, a liquidation corporation.

Independent Daewoo Shipbuilding Industries graduated from the Workout in 2001 and was ranked No. 1 in the world for LNG ships that same year. In 2002 it was changed to its current name. In 2005, the world's first LNG-RV was built and delivered. In 2006, it surpassed \$10 billion in orders, and in 2012, it was the first shipyard in the world to surpass \$10 billion in annual orders for the marine plant sector. DSME has since grown into the world's premium shipbuilding and offshore contractor who is specialized in building various vessels, offshore platforms, drilling rigs, FPSO/FPUs, submarines, and destroyers. The shipyard which spans an area of 4.9 million meters squared encompasses the world's largest dock with a million-ton capacity and is optimized for building high-tech motor vessels using cutting-edge equipment, including a 900-ton goliath crane. DSME manufactures high-quality products based on its vast IT expertise, well-managed shipbuilding technologies, superb fixed-platform construction capacities, large-scale project management know-how, and submarine/destroyer construction technologies.

City	Shipyards for New Build	Shipyards for Repair
Anjeong	Sungdong Shipbuilding & Marine Engineering Co	Sungdong Shipbuilding & Marine Engineering Co
Busan	HJ Shipbuilding & Construction Company, Ltd.	HJ Shipbuilding & Construction Company, Ltd.
	Orient Shipyard Co.,Ltd. Busan Yard	Orient Shipyard Co.,Ltd. Busan Yard
	Dae Sun Shipbuilding & Engineering	-
Yeongam	-	Daebul Shipbuilding Co. Ltd.
Yeosu	Daehan Shipbuilding Co Ltd	Yeosu Ocean Co. Ltd.
Geoje	Samsung Heavy Industries Co Ltd (Geoje Shipyard)	-
	Daewoo Shipbuilding & Marine Engineering Co	-
	Samkang S&C Co., Ltd.	Samkang S&C Co., Ltd.
Gwangyang	Samwoo Heavy Industry Co., Ltd.	-
Changwon	Jinhae Shipyard (K Shipbuilding)	-
Mokpo	Hyundai Samho Heavy Industries (Hshi)	-
Okpo	Daewoo (Dsme) - Okpo Shipyard	-
Ulsan	Hyundai Mipo Dockyard (Hmd)	-
	Hyundai Heavy Industries (Hhi) Ulsan	