Dynamic BUSAN

Busan Metropolitan City

Marine Equipment Directory

As an emerging hub for the global ocean economy, Busan Metropolitan City accounts for more than 30% of the nation's total marine equipment certified as World-Class Products of Korea.

MOTIE
MINISTRY OF TRADE, INDUSTRY & ENERGY

BUSAN METROPOLITAN CITY

KOMEA
Korea Marine Equipment Association

Integrated Marine Cluster Inspiration

Bolstered by excellent cluster business environments, Busan-based World-Class Korean Product-certified marine equipment enterprises manufacture and supply high-quality, superior-performing marine equipment.

Busan Metropolitan City

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What Are World-Class Products?

World-Class Korean Products are preeminently recognized by the Korean government for their value and proven track record in terms of global market share as well as for their significant potential as next-generation growth engines. Ranking fifth or higher in terms of global market share, World-Class Products have been certified under a Ministry of Trade, Industry and Energy (MOTIE) program since 2001 in line with the national drive to promote international trade by fostering high-quality, technology-driven products and services.

The World-Class Korean Products program, operated by the Korea Trade-Investment Promotion Agency (KOTRA) and supported by related industry associations under the umbrella of MOTIE, also aims to endorse the reliability and safety of the designated products for foreign buyers, clients and consumers.

World-Class Korean Marine Equipment From Busan Totals 22

The number of World-Class product Korea-Marine Equipments of Busan numbers 22, exceeding 30% of the total, showcasing that the souther most port city is a hub of global shipbuilding & offshore industry.

Beyond Korea, Heart of Global Shipbuilding Industry

'Busan for High Quality Marine Equipment'

It is a pleasure and a privilege for me to have this opportunity to introduce the Busan-based maritime industry, especially marine equipment enterprises, on the occasion of the publication of the Directory of Busan Metropolitan City's World-Class Korean Products -- Marine Equipment.

Located at the southern-most tip of the Korean Peninsula, Busan is home to the lion's share of Korea's maritime industry, including shipbuilders, offshore plant suppliers, shipping companies, port logistics operators, ship repair yards, marine equipment and service providers.

Blessed with an optimum business environment, marine equipment enterprises in Busan manufacture and supply high-quality, superior-performing products based on the World-Class Korean Product Regime, the brainchild of the "Korea for Quality" initiative that originated some 30 years ago.

Accounting for more than 30% of the nation's total marine equipment certified as World-Class Products of Korea, the Busan marine equipment industry leverages the latest technology and management innovations to meet and even exceed the expectations of clients and stakeholders throughout the world, contributing to the dynamic and sustainable growth of the ocean economy in the 21st century.

On our odyssey to be the value-added hub for the global shipbuilding and offshore industry, Busan established the Marine Financial Center last year to provide various financial services and incentives for domestic and international investors to include securing new markets, cost reduction for shipbuilding and logistics operations, etc.

Most recently, Busan revealed its vision to build a comprehensive maritime network encompassing marine services, ship inspection, testing & certification, and technology research to complement the existing world-class shipping, shipbuilding and marine financing infrastructure already in place in order to realize "Busan -- A Global Maritime Hub."

Believing that the current storm buffeting the global marine economy will give way to calm seas and clear sailing, I bid all of our friends, supporters and stakeholders around the world good health and good fortune. Furthermore, I hope that all readers of this publication will gain a better understanding of Busan Metropolitan City's World-Class Korean Products -- Marine Equipment to become reliable, long-term business partners in the era of the ocean economy.

Suh Byung-soo
Mayor of Busan Metropolitan City

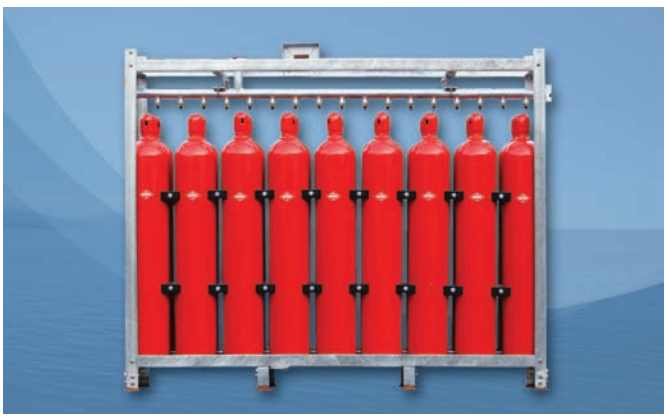
NK Co., Ltd.

Simple & Reliable System to Arrest Fire Breakout

NKs' versatile and unique actuating devices enable simple and reliable actuation of the carbon dioxide fire extinguishing system. With the use of copper tube for the control lines, the cost of the actuating system is extremely low.

NK's high pressure CO_2 fire extinguishing system has been approved by government authorities and classification societies in leading countries and equipped on over a thousand ships.

The product features total & semi-total flooding systems for engine room, pump room, cargo holds, etc., and manual release system for cargo holds.



Product & Company at a Glance

- HS Code: 8424100000
- Certified Year: 2002
- Certifications: ISO 9001 / 14001, OHSAS 18001, G9 IMO, G8, USCG AMS, ABS, LR, DNV&GL, BV, RINA, KG, JG
- Tel: 82-51-204-2211~3
- Fax: 82-51-204-2215
- Website: www.nkcf.com

Ballast Concert of Simplicity & Efficiency

Since its foundation in 1980, NK has accumulated expertise and experience in the global market, with a strong reputation for excellence and customer support. NK has expanded its marketing and production capacities through a group of companies in Korea and overseas, focusing on high-end, high value-added products and knowledge-led business hybrids for environment-friendly systems.

NK is pursuing a new corporate vision with a new paradigm for next-generation business valued by customers for its brand and services in the energy and environment portfolio. NK's concerted research & development program with continued investment over the last decade has generated business incubation and strategic partnerships with advanced foreign companies to spur its business.

NK's Business Areas

- Shipboard Fire Control Systems
- Shipboard Ballast Water Treatment Systems
- High Pressure Gas Cylinders
- Natural Gas Vehicle (NGV) Cylinders
- Environment-Protection Technologies

Yoowon Industries Ltd.

Quiet Operation, No-Load Motor Start-up

Since its establishment, Yoowon Industries has been producing and supplying high-quality steering gears and other ship machinery and parts to major shipbuilding companies at home and abroad.

Yoowon manufactures its products with the highest standards for all ship classifications, such as ABS, DNV, LT, GL, BV and KR.

Yoowon also obtained the international standard ASME U & PP as well as ISO 9001 and ISO 14001 certifications.

The company's steering gear features trouble-free, quiet operation, no-load motor start-up, compact arrangement and easy installation. Its steering gear line-up consists of M Series (mechanical pump control), T Series (electrical pump control) and C Series (valve control).

Product & Company at a Glance

- HS Code: 8487909090
- Certified Year: 2002
- Certifications: ISO 9001/ISO 14001
- Tel: 82-51-205-8541
- Fax: 82-51-205-8540
- Website: www.yoowonind.com

Optimum Application of Mechatronics

With constant customer feedback and encouragement, Yoowon Industries has made huge advances in technology and research and development on the basis of its production philosophy through extensive experience since its foundation in 1977 in line with the growth of the shipbuilding industry in Korea.

Despite ever-increasing international competition, the company has risen to the challenge with its own technology and design of oil filters for F.O. and L.O. applications, hydraulic steering gears, marine deck machinery, etc. coupled with a highly competitive price and fast delivery.

Featuring scientific and advanced technology and just-in-time delivery, Yoowon's experience has led to the optimum application of "mechatronics" to provide customers with the very best service possible.

Yoowon Industries Products

- Ram-type Steering Gears
- Rotary Vane-type Steering Gears
- Auto Filters
- Deck Machinery

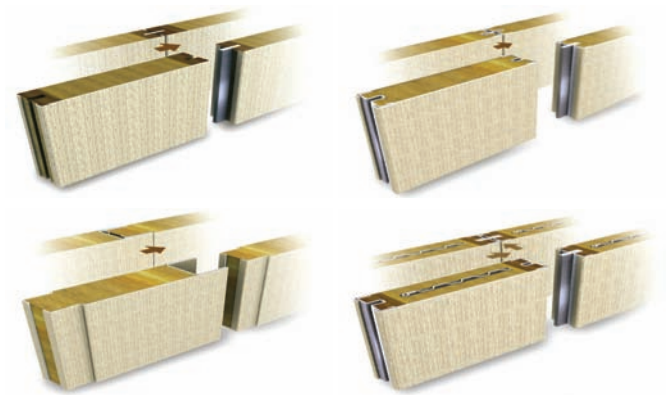
BN BIP Industries Co., Ltd.

Fireproof, Noise Reducing, Lighter Weight

BN BIP's wall panel can be constructed as a partition on a case-by-case basis and comes in a variety of colors to satisfy any customer. Certified by ABS, LG, GL, DNV, BV, USCG and BBG, BIP's panel system is characterized as fireproof, noise reducing, lightweight and easy to install. It also has acquired the CE Mark.

The company's products are wide-ranging according to specific applications: standard wall panel system (spline joint), insert-type wall panel system, removable-type wall panel system, A-60-class wall panel, high noise reduction wall panel, and lightweight wall panel.

Most of these products are 0.6mm thick galvanized steel sheet finished with decorative material.



Product & Company at a Glance

- HS Code: 7308909000
- Certified Year: 2003
- Certifications: ISO 9001 / 14001, ABS, BV, DNV, GL, KR, LR, NK, TC
- Tel: 82-51-519-2000
- Fax: 82-51-519-2015
- Website: www.bn-bip.com

Interior Solutions That Stand the Test of Time

BN BIP was established in 1978 to provide solutions for local manufacturing marine interiors. Since the beginning, the company has built a global reputation based on the simple idea that quality products stand the test of time.

BN BIP is dedicated to providing sensible turnkey solutions for marine accommodations onboard any kind of ship and offshore platform. It is through a relentless commitment to improve its products and services that BN BIP remains a leader in marine interiors.

The company manages quality and services strictly in accordance with ISO 9001 and its well-established Quality Assurance System.

The BN BIP Accommodation System also has obtained certificates of approval from classification authorities around the world including MED, IE, USCG, DNV, TC, LR, ABS, BV, KR, GL, etc.

BN BIP Products & Services

- Ceiling Panels
- Floating Floors
- Cabin Units
- Bathroom Units
- Engineering Design

STACO Co., Ltd.

Aesthetic Appeal & Outstanding Durability

STACO's wall panel designs offer not only aesthetic appeal but also outstanding durability with a variety of colors.

Furthermore, the company's products feature sound absorption, fire protection and safety capabilities in addition to western designs and unique finishes.

Applications of STACO's products range from maritime accommodation to super-luxurious cruise vessels as well as the interior of offshore plants.

With a huge share in overseas markets, the company is determined to create a new paradigm of optimal utilization and functionality of space with high quality and advanced designs, while moving to the next level, spreading across the world's oceans.

Product & Company at a Glance

- HS Code: 7308909000 - Certified Year: 2003
- Certifications: USCG, JG, ABS, DNV, BV, GL, KR, LR, NK, CE/MED (BV), RMRS, ISO 9001
- Tel: 82-51-831-7000 - Fax: 82-51-831-7007
- Website: www.staco.co.kr

STACO Global Total Accommodation System

STACO, established in 1992, is the leading global specialist in wall panels, ceiling panels, cabin doors, unit toilets and unit cabins for general commercial ships, as well as high value-added ships such as cruise vessels. STACO products are supplied as turnkey systems in terms of design, production, installation and maintenance, demonstrating first-class excellence.

Quality assurance comes with duties and responsibilities, as the company optimizes the value of products in meeting the requirements of customers through quality control programs.

Manufactured and tested in compliance with ISO9001 quality standards, STACO products also have earned certificates from the major classification societies and government authorities, such as USCG, CE/MED and JG, representing quality improvements and quality management.

STACO Products

- Unit Cabins, Unit Toilets
- Cabin Doors
- Wall & Ceiling Panels
- Interior Furnishings, Marine Engineering, Installation

Daechang Solution Co., Ltd.

Solutions Indispensible to Marine Engine Components

Specializing in the production of cast steel parts for marine engines, Daechang Solution has over a 60% share of the global market for bearing supports, indispensible parts for marine engines.

Daechang's main bearing supports for medium and large-size marine diesel engines have earned high marks from marine engine builders, shipowners and classification societies all over the world.

Other marine engine parts available from the company include centerpieces, chain wheels and piston crowns.

Product & Company at a Glance

- HS Code: 8409993030
- Certified Year: 2006
- Certifications: RINA, NK, MAN, LR, KR, ISO 9001, GL, DNV, CCS, BV, ABS
- Tel: 82-51-264-0831
- Fax: 82-51-264-0830
- Website: www.dcm.co.kr

DAECHANG SOLUTION Producing Core Products for Shipbuilding

Daechang Solution, formerly Daechang Metal Co., Ltd., is a Korea-based company engaged in the manufacture of marine diesel engine components.

The company's products consist of marine engine components, including main bearing supports, main bearing girders, crank chain wheels, cylinder covers and piston crowns; stem posts, including propeller bosses, tillers, rudder lower/upper castings, rubber horns and rubber carriers; power plant facilities, including dummy rings, diaphragms, valve bodies and turbine castings; and industrial machinery, including roll chocks, blade brackets, roll tires, stands, roller arms, kiln support rollers, rotor assemblies, roller bodies and others.

On December 14, 2012, the company acquired a 66.53% stake in U&S CO., Ltd., which is mainly engaged in the manufacture of liquefied natural gas-related facilities.

Daechang Solution Business Areas

- Shipbuilding & Marine Plants
- Generator Facility Parts
- Industrial Machinery

DongHwa Entec Co., Ltd.

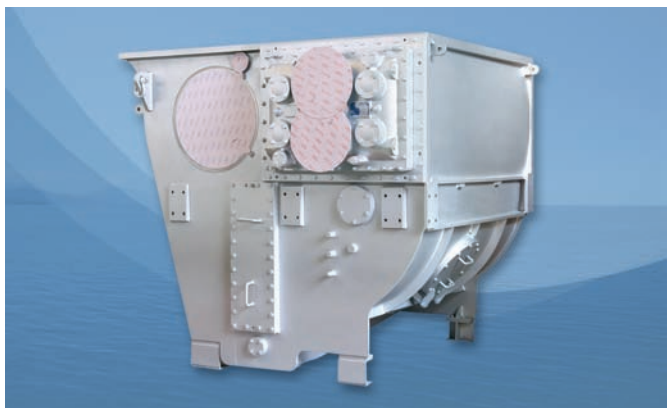
Optimized for Both Low-Speed & High-Speed Engines

DongHwa Entec has successfully developed and manufactured air coolers for both low-speed and high-speed engines. As a result, DongHwa Entec has grown into the global leader of the air cooler market with a 50% market share.

One of its products, the Charged Air Cooler is used to raise the temperature of compressed air supplied by the turbocharger in order to improve the power and efficiency of diesel engines.

This product is comprised of Fin & Tube, Tube Sheet, Casting and Water Chamber.

DongWha Entec's products for general ships include Cargo Drain Cooler, COPT Vacuum Condenser, Drain Cooler, Electric Heater, Energy Conservation System, Fresh Water Generator, Fuel Gas Supply System, VLG Vaporizer, MGO Cooling Unit, Oil-Water Separator, Oil Heater, Plate-Type Heat Exchanger, etc.



Product & Company at a Glance

- HS Code: 8419509000
- Certified Year: 2007
- Certifications: BV, DNV, GL, KR, LR, NK, ABS, ISO 9001, ASME
- Tel: 82-51-970-1000
- Fax: 82-51-970-1001
- Website: www.dh.co.kr

DongHwa Entec Energy, Environment, Engineering & Technology

Since its foundation in February 1980 as a manufacturer of heat exchangers for marine, petrochemical and power generation industries, DongHwa Entec has focused on research & development, product performance improvement as well as new product development while establishing the most competitive facilities and production processes.

An expert in energy systems and heat exchangers with advanced research and development capability and mature energy application ability, DongHwa Entec has secured thermal fluid-based technology and skilled manufacturing technology to supply high-efficiency, high-quality products to customers around the world. The company is a total solution provider that also addresses problems related to a clean and pleasant environment, while maintaining customer satisfaction as its top priority.

DonHwa Entec Business Areas

- Ships
- Gas Facilities
- Plants
- Maintenance

Tanktech Co., Ltd.

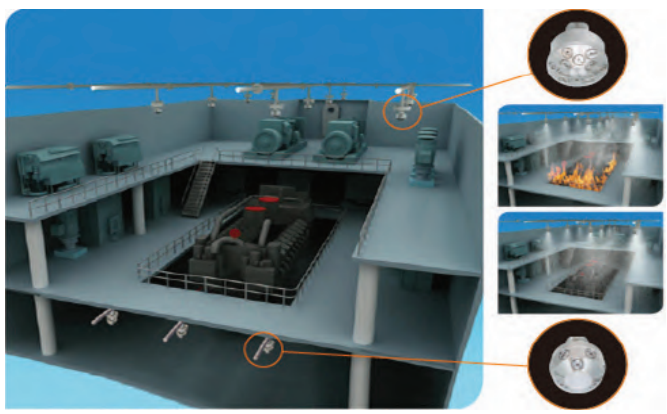
Exceptional Cooling Effect of Water Mist

Tanktech's X-MIST SYSTEM extinguishes or controls fires by cooling, oxygen displacement by water vapor and radiant heat attenuation.

An environment-friendly system, its protected volume can be increased to 16,000m³ (with height remaining at 15.5 meters) in accordance with IMO MSC.1/Circ. 1385 for an extinguishing time of less than 10 minutes. The system includes bilges, casing, etc.

The exceptional cooling effect of water mist from the system is a result of the dispersion of water into very fine droplets, which increases the total surface area available to absorb heat and maximizes the evaporation rate of the water.

As a manufacturer of special safety equipment for inflammable fuel tanks and marine cargo tanks, Tanktech has been pursuing high-quality products and excellent service ever since its foundation.



Product & Company at a Glance

- HS Code: 8531.10-2000
- Certified Year: 2009
- Certifications: ISO 9001/ISO 14001
- Tel: 82-51-979-16002
- Fax: 82-51-979-1601
- Website: www.tanktech.co.kr

TKT TANKTECH Value Partner for Global Offshore/Onshore Projects

Over the past several years, Tanktech has continued to grow as Korea's main offshore/onshore product manufacturer. The company has steadily strengthened its operations, mainly in Far East Asia, where it has become a critical partner in ongoing offshore/onshore projects. Tanktech has an impressive 21-year legacy of partnership with valued customers in successfully applying technology-based solutions and solving their toughest problems.

The company's products and solutions have received certification and approvals under ISO9001, OHSAS18001, ASME Code "U", ASME Code "S", "GL" Welding Shop, DNV Sus Pipe, WPS, etc. The Tanktech yard includes a machining shop, nonferrous metal shop, assembly fabrication shop, shot blasting & painting shop, DE Shop, flow test shop, R&D center and other facilities.

Tanktech Business Areas

- Shipbuilding Equipment
- Steel Structures
- Rudders

DongHwa Entec Co., Ltd.

Distilling Sea Water Into Fresh Water With 2 Models

DongHwa Entec's fresh-water generator (FWG) produces fresh water from seawater and comes in two models - low-pressure evaporation type and reverse osmosis type.

Currently, most merchant ships in the world are equipped with the low-pressure evaporation type to produce fresh water using steam or jacket water, which is a waste heat source from the engine. These FWGs are largely divided into shell & tube type and plate type.

In this system, seawater is vaporized under vacuum by an external heat source and salinity is removed from the vaporized seawater and fresh water is obtained by condensation, maintaining a salinity level not to exceed 0~10ppm. FWGs consist of vaporizer, condenser, demister, salinometer, distillate pump, ejector and steam injector.

DongHwa's fresh-water generator is actively exported to Japan, China, Singapore, and Brazil.

Product & Company at a Glance

- HS Code: 8419.50-9000
- Certified Year: 2009
- Certifications: BV, DNV, GL, KR, LR, NK, ABS, ISO 9001, ASME
- Tel: 82-51-970-1000
- Fax: 82-51-970-1001
- Website: www.dh.co.kr

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Since its foundation in February 1980, as a manufacturer of heat exchangers for marine, petrochemical and power generation industries, DongHwa Entec has focused on research & development, product performance improvement as well as new product development while establishing the most competitive facilities and production processes.

An expert in energy systems and heat exchangers with advanced research and development capability and mature energy application ability, DongHwa Entec has secured thermal fluid-based technology and skilled manufacturing technology to supply high-efficiency, high-quality products to customers around the world. The company is a total solution provider that also addresses problems related to a clean and pleasant environment, while maintaining customer satisfaction as its top priority.

DongHwa Entec Business Areas

- Ships
- Gas
- Plants
- Maintenance

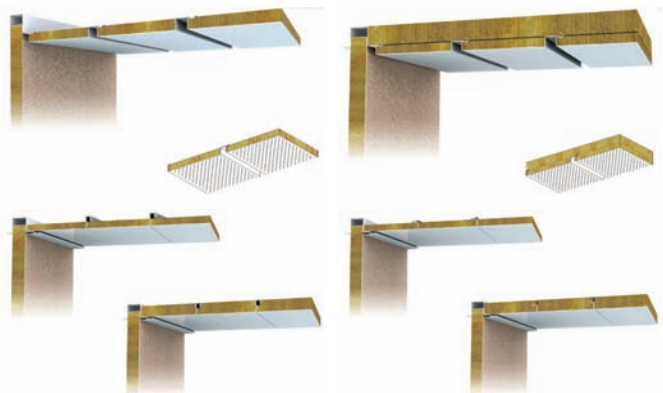
BN BIP Industries Co., Ltd.

Comfortable Rooms With Better Design

BN BIP's Ceiling Panel System is used for accommodations. It can be constructed as a partition on a case-by-case.

BN BIP's basic products offer more aesthetic and comfortable rooms with better designs than competitors.

The BN BIP panel system, which has already obtained certificates from several classification societies (e.g. ABS, LR, GL, DNV, BV, USCG and SBG), is characterized as fireproof, sound insulating, light weight and easy to install. Moreover, it also received the European "CE MARK", a symbol of certified quality.



Product & Company at a Glance

- HS Code: 7308.90.9000 - Certified Year: 2009
- Certifications: ISO 9001 / 14001, ABS, BV, DNV, GL, KR, LR, NK, TC
- Tel: 82-51-519-2000 - Fax: 82-51-519-2015
- Website: www.bn-bip.com

Interior Solutions That Stand the Test of Time

BN BIP was established in 1978 to provide solutions for local manufacturing marine interiors. Since the beginning, the company has built a global reputation based on the simple idea that quality products stand the test of time.

BN BIP is dedicated to providing sensible turnkey solutions for marine accommodations onboard any kind of ship and offshore platform. It is through a relentless commitment to improve its products and services that BN BIP remains a leader in marine interiors.

The company manages quality and services strictly in accordance with ISO 9001 and its well-established Quality Assurance System.

The BN BIP Accommodation System also has obtained certificates of approval from classification authorities around the world including MED, IE, USCG, DNV, TC, LR, ABS, BV, KR, GL, etc.

BN BIP Products & Services

- Ceiling Panels
- Floating Floors
- Cabin Units
- Bathroom Units
- Engineering Design

STACO Co., Ltd.

Aesthetic Approval & Style Plus Safety

STACO ceiling panels offer aesthetic appeal and style, as well as safety while featuring a stable profile body and panel finishing.

They are designed to endure high pressure in order to maintain structural safety. The interval, end, and length of the profile are flexibly designed in order to meet the diverse needs and demands of customers. Finishing panels with paint and PVC film with various patterns, STACO ensures the optimization of space. STACO provides the best level of safety through continuous R&D as a global leader in the ship interiors market.

Installation is a key component of the overall production and service aspect. Based on a well-organized system, product supply is executed as a one-stop process, from design and manufacture through to installation. Customer satisfaction is ensured through strict supervision and management.

Product & Company at a Glance

- HS Code: 7308.90.9000
- Certified Year: 2010
- Certifications: USCG, JG, ABS, DNV, BV, GL, KR, LR, NK, CE/MED (BV), RMRS, ISO 9001
- Tel: 82-51-831-7000
- Fax: 82-51-831-7007
- Website: www.staco.co.kr

STACO Global Total Accommodation System

STACO, established in 1992, is the leading global specialist in wall panels, ceiling panels, cabin doors, unit toilets and unit cabins for general commercial ships, as well as high value-added ships such as cruise vessels. STACO products are supplied as turnkey systems in terms of design, production, installation and maintenance, demonstrating first-class excellence.

Quality assurance comes with duties and responsibilities, as the company optimizes the value of products in meeting the requirements of customers through quality control programs.

Manufactured and tested in compliance with ISO9001 quality standards, STACO products also have earned certificates from the major classification societies and government authorities, such as USCG, CE/MED and JG, representing quality improvements and quality management.

STACO Products

- Unit Cabins, Unit Toilets
- Cabin Doors
- Wall & Ceiling Panels
- Interior Furnishings, Marine Engineering, Installation

BN BIP Industries Co., Ltd.

Flexible Design, Simple Installation, Moderate Prices

The BN BIP bathroom unit offers various benefits, including flexible design; high quality; easy handling; simple installation; and competitive pricing.

These units can be fitted to various marine facilities, including not only cruise ships, but also cargo carriers as well as offshore installations at sea like oil rigs and so forth.

The BN BIP bathroom units are available in either shower type, the larger bathroom type, or the common type without a shower or bath for vessels with shared bathing facilities, and can be supplied and/or fitted according to the customer's specific requirements.

Product & Company at a Glance

- HS Code: 9406.00.9090
- Certified Year: 2009
- Certifications: ISO 9001 / 14001, ABS, BV, DNV, GL, KR, LR, NK, TC
- Tel: 82-51-519-2000
- Fax: 82-51-519-2015
- Website: www.bn-bip.com

Interior Solutions That Stand the Test of Time

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BN BIP Products & Services

- Ceiling Panels
- Floating Floors
- Cabin Units
- Bathroom Units
- Engineering Design

STACO Co., Ltd.

Installation in Any Space Regardless of Unit Type

STACO's bathroom units, part of its unit toilet, feature very fast, convenient installation. They come in three types - shower type, bath type, and shared unit type.

They are actively selected for ships as well as for hotels, houses and buildings on land thanks to their outstanding functionality and ease of installation - they can be installed in any space regardless of the unit type.

Selecting practical, high-quality hardware makes it easier to maintain product quality over an extended lifetime.

STACO is deepening its bid to effectively combine modern design with diverse functions toward becoming a company consistently leading new trends in bathroom units.

Product & Company at a Glance

- HS Code: 9406-00-9090
- Certified Year: 2010
- Certifications: USCG, JG, ABS, DNV, BV, GL, KR, LR, NK, CE/MED (BV), RMRS, ISO 9001
- Tel: 82-51-831-7000
- Fax: 82-51-831-7007
- Website: www.staco.co.kr

STACO Global Total Accommodation System

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STACO Products

- Unit Cabins, Unit Toilets
- Cabin Doors
- Wall & Ceiling Panels
- Interior Furnishings, Marine Engineering, Installation

BN COSMO Co., Ltd.

Designed for Fireproof Functionality & Luxurious Appearance

BN COSMO's flagship marine door is especially designed for use in ships requiring fireproof functionality.

Meeting the requirements of SOLAS and IMO, the product is constructed with superior fireproof materials and sound insulation along with luxury design, leading a new system trend in fire prevention doors and fully meeting the needs of customers. The product can be manufactured for any ship type - general, special, and passenger ship.

Different kinds of fire doors are currently produced in four types - A Class, B Class, C Class, and H Class - depending on the designated section. As an affiliate of BN Group, a global conglomerate leading the world's shipbuilding market, COSMO is equipped with the world's largest production capacity combined with excellent manpower and advanced production facilities.

Product & Company at a Glance

- HS Code: 7308300000
- Certified Year: 2010
- Certifications: ISO 9001, ISO 14001, MED
- Tel: 82-051-519-2075
- Fax: 82-51-582-7175
- Website: www.bn-cosmo.com

Advanced, Price-Competitive Marine Fire Door Leader

Established in 1992, COSMO Co., Ltd. develops and manufactures marine fire doors.

The company also offers accessories, such as lock set, vent louvers, kickout panels, scuttles and windows, door closers, and hinges. COSMO has a certified quality system based on ISO 9001 & ISO 14001 standards to promote and maintain overall quality. To further improve its operation, COSMO monitors the achievement of quality standards on a regular basis.

Along with new developments, regulations and requirements, internal and official tests are carried out in various laboratories. These tests consist primarily of fire protection E.G. IMO RES.A.754(18), weather & gas tightness and sound reduction.

Continuous development of new designs and improvement of existing door types has been carried out since 1992.

BN BIP Industries Co., Ltd.

Easy Installation, High Noise Reduction, Distinctive Design

BN BIP's cabin unit system was primarily developed for passenger ships. It is a complete cabin unit, consisting of walls, ceiling, bathroom, fixed furniture, piping, door and electrical components.

All components, as well as the final layout of each cabin, are designed using a special CAD system to ensure high quality and compatibility.

The major advantages of the products are fast installation, light & rigid construction, flexibility, high noise reduction, easy verification of design, etc.

The cabin units are assembled in a controlled environment, thereby reducing the possibility of damage and ensuring quality.

Product & Company at a Glance

- HS Code: 9406.00.9090 - Certified Year: 2010
- Certifications: ISO 9001 / 14001, ABS, BV, DNV, GL, KR, LR, NK, TC
- Tel: 82-51-519-2000 - Fax: 82-51-519-1002
- Website: www.bn-bip.com

Interior Solutions That Stand the Test of Time

BN BIP was established in 1978 to provide solutions for local manufacturing marine interiors. Since the beginning, the company has built a global reputation based on the simple idea that quality products stand the test of time.

BN BIP is dedicated to providing sensible turnkey solutions for marine accommodations onboard any kind of ship and offshore platform. It is through a relentless commitment to improve its products and services that BN BIP remains a leader in marine interiors.

The company manages quality and services strictly in accordance with ISO 9001 and its well-established Quality Assurance System.

The BN BIP Accommodation System also has obtained certificates of approval from classification authorities around the world including MED, IE, USCG, DNV, TC, LR, ABS, BV, KR, GL, etc.

BN BIP Products & Services

- Ceiling Panels
- Floating Floors
- Cabin Units
- Bathroom Units
- Engineering Design

Yoowon Industries Ltd.

Technology, Design & Competitive Price

The automatic solid-liquid separation filters of Yoowon Industries Ltd. are used to clean many types of fluids, including lubrication oils.

The notch wire element around which a specially treated fine stainless wire is wound in the shape of a cage allows extremely accurate fabrication of the filtration dimension due to its simple design and durable construction.

Moreover, the element is not susceptible to corrosion or change of material quality. Any impurities filtered by the element can be removed easily by backwashing and use of the air blow.

Product & Company at a Glance

- HS Code: 8431.39
- Certified Year: 2010
- Certifications: ISO 9001/ISO 14001
- Tel: 82-51-205-8541
- Fax: 82-51-205-8540
- Website: www.yoowonind.com

Quiet Operation, No-Load Motor Start-up

With constant customer feedback and encouragement, Yoowon Industries has made huge advances in technology and research and development on the basis of its production philosophy through extensive experience since its foundation in 1977 in line with the growth of the shipbuilding industry in Korea.

Despite ever-increasing international competition, the company has risen to the challenge with its own technology and design of oil filters for F.O. and L.O. applications, hydraulic steering gears, marine deck machinery, etc. coupled with a highly competitive price and fast delivery.

Featuring scientific and advanced technology and just-in-time delivery, Yoowon's experience has led to the optimum application of "mechatronics" to provide customers with the very best service possible.

Yoowon Industries Products

- Ram-type Steering Gears
- Rotary Vane-type Steering Gears
- Auto Filters
- Deck Machinery

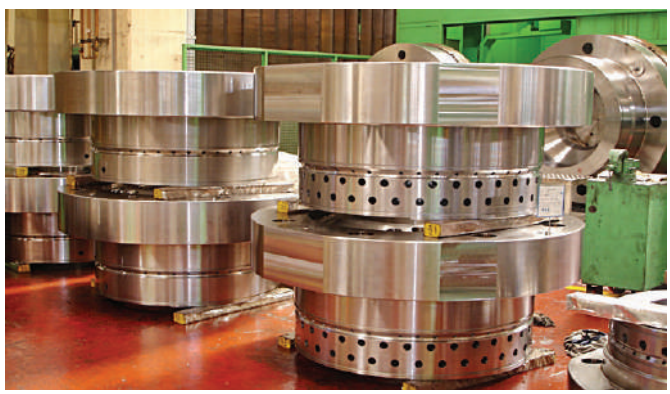
Daechang Solution Co., Ltd.

Solutions Generating Benefits of Marine Diesel Engines

Daechang Solution's Cylinder Cover is a leading solution for the safe, efficient functioning of marine diesel engines powering ships around the world.

Daechang Solution has acquired ISO 9001, ISO 9002 and other quality certifications. Furthermore, as a leading company certified by Busan Metropolitan City, Daechang also has acquired "Single PPM" and "INNO-BIZ" certificates.

Daechang Solution's major clients include Hyundai Heavy Industries Co., Ltd., Doosan Engine Co., Ltd., and STX Metal of Korea, Mitsubishi Heavy Industries, Mitsui Engineering & Shipbuilding, Toshiba, Hitachi Zosen, and Kawasaki of Japan and Dalian Marine Diesel and Hudong Heavy Machinery of China.



Product & Company at a Glance

- HS Code: 8409.99-3030
- Certified Year: 2012
- Certifications: RINA, NK, MAN, LR, KR, ISO 9001, GL, DNV, CCS, BV, ABS
- Tel: 82-51-264-0831
- Fax: 82-51-264-0830
- Website: www.dcm.co.kr

DAECHANG SOLUTION Producing Core Products for Shipbuilding

Daechang Solution, formerly Daechang Metal Co., Ltd., is a Korea-based company engaged in the manufacture of marine diesel engine components.

The company's products consist of marine engine components, including main bearing supports, main bearing girders, crank chain wheels, cylinder covers and piston crowns; stem posts, including propeller bosses, tillers, rudder lower/upper castings, rubber horns and rubber carriers; power plant facilities, including dummy rings, diaphragms, valve bodies and turbine castings; and industrial machinery, including roll chocks, blade brackets, roll tires, stands, roller arms, kiln support rollers, rotor assemblies, roller bodies and others.

On December 14, 2012, the company acquired a 66.53% stake in U&S CO., Ltd., which is mainly engaged in the manufacture of liquefied natural gas-related facilities.

Daechang Solution Business Areas

- Shipbuilding & Marine Plants
- Generator Facility Parts
- Industrial Machinery

Panasia Co., Ltd.

Environmentally Friendly & Optimally Designed Solutions

The ballast water treatment system of Panasia Co., Ltd. is a combination treatment system that takes advantage of filtration and UV irradiation, the most environmentally friendly and optimally designed solution for every kind of vessel that is easy to install and operate.

Adopting a 100% physical treatment technology, GloEn-Patrol™ effectively disinfects harmful aquatic organisms and pathogens in ballast water without producing any toxic substance during ballasting and de-ballasting.

Panasia is in the process of acquiring certifications for its technology used in GloEn-Patrol™ to give full assurances to customers.

Product & Company at a Glance

- HS Code: 8479-89-9099
- Certified Year: 2012
- Certifications: ISO 9001/ISO 14001, OHSAS 18001
- Tel: 82-51-831-1010
- Fax: 82-51-831-1399
- Website: www.worldpanasia.com

PANASIA Global Leader in Smart & Green Technology

Panasia is a professional company specializing in environmental facilities including a variety of ship automatic control & gauging equipment, ship ballast water treatment systems, emission gas control systems and others. It supplies best-quality products to customers overseas as well as to Korean shipyards.

Especially, since its establishment in 1989, Panasia has achieved outstanding success for over 25 years, starting from technology development in the field of ship draft and tank gauging systems and research, development, and commercialization of GloEn-Patrol™, for filtration, sterilization and treatment of ship ballast water, which is primarily blamed for contaminating local marine ecology, and PaNO™, to cut more than 80% of nitrogen oxide emissions, blamed for global warming, with Panasia's technologies and know-how accumulated over a quarter century.

Major Panasia Products

- Ballast Water Treatment Systems
- Emission Gas Control Systems
- Sea Water Coarse Filtration
- Tank Gauging Systems

NK Co., Ltd.

'Green Promise for the People'

NK's ballast water treatment systems, in particular, are world-famous due to USCG AMS acceptance and DNV type approval.

They are supplied to shipyards, ship owners, offshore topside producers and major marine product distributors.

Its NK-O3 Blueballast system consists of oxygen generator, ozone generator, ozone injector, air compressor and water chiller.

Under its company vision 'Green Promise for the People,' NK maintains its managerial ideology for green world management and practices ethical management in its daily business based on ISO 9001 (QMS), ISO 14000 (EMS) and ISO 18000 (OHSAS).

Product & Company at a Glance

- HS Code: 8479-89-9099
- Certified Year: 2013
- Certifications: ISO 9001 / 14001, OHSAS 18001, G9 IMO, G8, USCG AMS, ABS, LR, DNV&GL, BV, RINA, KG, JG
- Tel: 82-51-204-2211~3
- Fax: 82-51-204-2215
- Website: www.nkcf.com

Ballast Concert of Simplicity & Efficiency

Since its foundation in 1980, NK has accumulated expertise and experience in the global market, with a strong reputation for excellence and customer support. NK has expanded its marketing and production capacities through a group of companies in Korea and overseas, focusing on high-end, high value-added products and knowledge-led business hybrids for environment-friendly systems.

NK is pursuing a new corporate vision with a new paradigm for next-generation business valued by customers for its brand and services in the energy and environment portfolio. NK's concerted research & development program with continued investment over the last decade has generated business incubation and strategic partnerships with advanced foreign companies to spur the business.

NK's Business Areas

- Shipboard Fire Control Systems
- Shipboard Ballast Water Treatment Systems
- High Pressure Gas Cylinders
- Natural Gas Vehicle (NGV) Cylinders
- Environment-Protection Technologies

Daeyang Electric Co., Ltd.

Waterproof, Anti-Vibration, Price Competitive

On the strength of technology innovation and development, Daeyang Electric's variety of fluorescent lights for marine applications has maximized the satisfaction of clients around the world due to reinforced technical specifications to be waterproof and resistant to vibrations within the ship's hull.

The products also are impact-resistant, protecting against shocks caused by waves and explosion-proof to prevent vessel fires.

Daeyang Electric's quality and technology competitiveness is rated alongside that of the leading global companies in the field.

However, based on its know-how and expertise, Daeyang can supply marine fluorescent lighting at moderate prices compared to international competitors.

Product & Company at a Glance

- HS Code: 9405.40.9000
- Certified Year: 2014
- Certifications: LCIE, ABS, DNV, KR, NK, CCS, OHSAS 18001, ISO 14001
- Tel: 82-51-200-5214
- Fax: 82-51-200-5260
- Website: www.daeyang.co.kr

DAEYANG Specialist in Electrical Devices & Equipment

Daeyang is a leader in marine lighting, marine communication systems, nautical instruments and marine power systems. Based on over 30 years of experience in the marine and shipbuilding supply industry, its superior products are acknowledged by various customers throughout the world. Customer satisfaction is the company's first and only priority as it puts endless efforts into exceeding expectations.

With a high level of investment (10% of annual turnover) in research and development, the company's R&D center is one of the most renowned research centers in the industry for its innovation and track record in product development. Daeyang operates various sites around Busan, Incheon, and Seoul and has overseas liaison offices in Japan, U.S.A, Europe, China and South Asia for immediate response to customer requirements.

Daeyang's Major Business Areas

- Lighting
- Electrical / Electronics

K.C. Ltd.

I.C.C.P. SYSTEM/Anti-fouling System (M.G.P.S.)/Shaft Earthing

The corrosion protection I.C.C.P. system of K.C. Ltd. is designed based on the total wetted surface area of the hull, including the surfaces of rudders/propellers and mean current density. Its marine growth prevention system (M.G.P.S.) includes ANFOSYS (electric anode type) optimized for flow rates lower than 5,000m³/h.

Designed based on total sea water flowrate and lifetime, KC's anti-fouling system was developed to prevent the adhesion of marine fouling to seawater service lines by using the Cu++ ion produced from a copper anode and anti-corrosive layer of Al2(OH)3 produced by the aluminium anode.

In its product portfolio, K.C. also offers ECHLOSYS (chlorination type) optimized for flow rates higher than 5,000m³/h. The system is designed to prevent the adhesion of marine growths to the internal pipelines of ships through the chemical reaction of chlorine compounds produced from the electrolysis of seawater.

Product & Company at a Glance

- HS Code: 8543.70.9090
- Certified Year: 2013
- Certifications: ISO 9001, CE Mark, CCS
- Tel: 82-51-831-7720
- Fax: 82-51-831-7726
- Website: www.iccp-mgps.com

Devoted to Design, Quality + R&D

K.C. Ltd. has devoted itself to the design and production of corrosion protection, anti-fouling and related equipment. With prominent quality and numerous supply references, the company is well known to renowned shipping and shipbuilding companies worldwide.

Thanks to the sustained, high-value orders earned through the ceaseless R&D of high-quality products and the best service beyond warranty, K.C. has established an excellent financial position with no liabilities.

The managing board and employees are proud of keeping the most qualified manpower with the company, earning strong trust from customers around the world.

K.C. Major Products

- I.C.C.P. SYSTEM: CATHSYS
- Anti-Fouling Systems (M.G.P.S.): ANFOSYS, ECHLOSYS
- Shaft Earthing Device: CATHSED

Hanla IMS Co., Ltd.

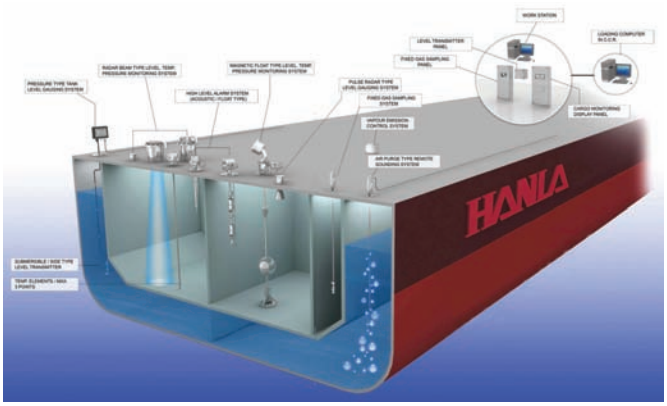
Easy to Control Cargo Levels Within Vessel

Hanla IMS, combining leading-edge technology with engineering expertise, supplies level monitoring systems, which are easy to install and integrate, to monitor and control liquid cargo levels within the vessel.

Fully meeting all safety requirements, Hanla IMS systems are recognized globally for providing maximum return on investment, contributing to enhanced development and building a better world.

Hanla IMS's production of level monitoring systems reached US$8.1 million in 2013, accounting for 6% of the US$136.6 million global volume. Hanla's export of level monitoring systems in 2013 represented 39.1% of all Korean exports in the segment.

Hanla IMS is committed to best quality, best technology and best service based on its comprehensive product portfolio, which extends to ballast water treatment systems (BWTS), with the rapidly expanding market for eco-ships around the world.



Product & Company at a Glance

- HS Code: 9026102000
- Certified Year: 2014
- Certifications: ISO 9001 / ISO 14001
- Tel: 82-51-601-7000
- Fax: 82-51-831-1850
- Website: www.hanlaims.com

Beyond Challenge, Tech & Management Innovation

Since starting business in the marine equipment industry in 1989, Hanla IMS has supplied reliable products to customers around the world for over 25 years. Based on its long experience and expertise, the company has developed its own technologies for production of loading computers, remote valve control systems, deck machinery, LED lighting and ballast water treatment systems (BWTS), growing continuously to become the foremost company in its field.

As a specialist with a comprehensive ballast system portfolio, the company designated "3B" as its new campaign logo.

The 3B logo not only refers to Ballast water treatment systems, Ballast valve control systems and Ballast gauge systems, but also to Best quality, Best technology and Best service.

Hanla IMS Business Areas

- Shipbuilding & Marine Parts
- Plants
- LED

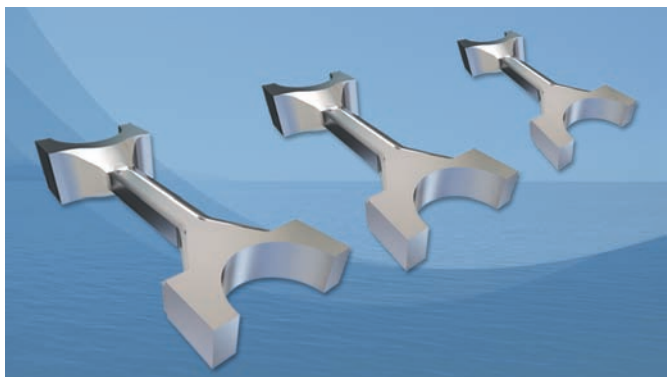
Hyunjin Materials Co., Ltd.

Increased Mechanical Strength for Efficient Operation

Owing to its extensive expertise accumulated since its establishment in 1978, Hyunjin Materials has become a specialized manufacturer of connecting rods in addition to various other marine equipment, turbine shafts for wind power generation facilities, crankshafts, piston rods, cylinder covers for ship engines, etc.

In 2013, Hyunjin Materials had the third largest share of the global market in terms of connecting rod production at US$13.5 million or 17% of the world's total production (US$77 million).

ISO 14001 and OHSAS 18001 as well as 'Green Growth' and ASME certified, Hyunjin Materials is an environment-friendly, future-oriented company pursuing harmony of humans and technology. Therefore, the company is well-known abroad for its technology prowess and excellent product quality.



Product & Company at a Glance

- HS Code: 8409993030 - Certified Year: 2014
- Certifications: ISO 14001 / 9001, OHSAS 18001, ASME, KEPIC, ABS, BV, CCS, DNV, GL, KR, LR, NK, RINA, etc.
- Tel: 82-51-602-7700 - Fax: 82-51-602-7777
- Website: www.hjmco.co.kr

HYUNJIN MATERIALS Environment-Friendly, Future-Oriented Company

Hyunjin Materials Co. Ltd. provides high-quality products to international power generation specialized companies, shipbuilders, engine builders and manufacturers of industrial equipment based on key technologies in basic industrial sectors including a hybrid forging process for advanced metal materials. It also has served wind power generation and high-quality production technology-based power generation facilities, petrochemical, shipbuilding, and industrial plants since its foundation in 1978.

In addition, the company pursues continuous technology development and quality improvement to grow as a manufacturer of global metal materials and operates a competitive business to lead advanced metal industries with conversion to high value-added industries and profitable businesses through production of new products and entry into new markets requiring high technology.

Hyunjin's Business Areas

- Power Generation Industry
- Crankshafts
- Shipbuilding Industry
- Industrial Plants

Offshore Industrial Environment

Busan City can provide a new market, advanced technology acquisition, production/logistics cost reductions, and an advanced quality of life to companies investing in Busan

Benefits for Heavy Industry companies located in Busan

Securing New Markets

Excellent potential for securing large customers
HHI, SHI and other shipbuilding companies are all just one hour away

Advanced Technology Acquisition

Opportunities to obtain advanced technology and experience through cooperation with leading global companies
Research with world-class global institutes

Production Cost Reductions

Prompt supply of components and easy quality control
Due to presence of top-notch machinery components companies, supply of resources is faster and quality control is easier

Logistics Cost Reductions

Logistics cost/Lead time reductions
Export/import costs via Busan up to 16% lower, while lead time savings of 13% can be expected

Advanced Living Infrastructure

Safe and comfortable business and residential environment
Advanced medical services, globally competitive international schools, Close proximity to world's largest department store and other excellent shopping

*Global Industrial Logistics Complex(Area : 33㎢, Project Cost : Approx 10 billion USD. Project Period : 2008~2020)

Busan, the optimal offshore supply base for the Arctic and the Far East

Accessibility to the Arctic Region

Access to Natural Resource Fields

The Arctic Area & Busan

Main Oil Fields

58.1% of the Arctic's natural resources are buried in Siberia*

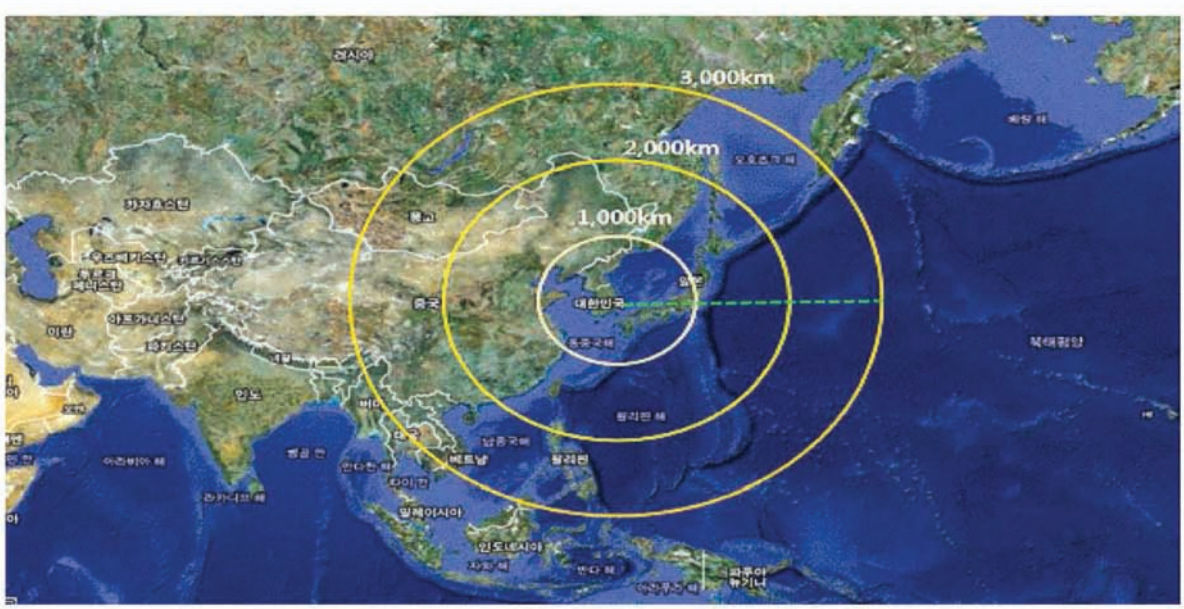
Path to the Site

Busan can play a leading role as a bridgehead to the Arctic Area

Benefits

Industrial Capability	■ Highly-educated labor force and leading global offshore plant companies like Hyundai Heavy Industries
Ice-Free Port	■ Ice-free 365 days a year, Busan is the nearest ice-free port in the Far East
World's 5th Largest Port	■ Massive cargo and heavy equipment handling capacity

Accessibility to Russia's 25 Oil/Gas Fields at Sakhalin and Kamchatka

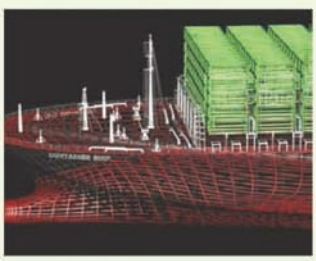


* West and East Siberia Basins; Source: U.S Geological Survey, IEA Report

Competitiveness of the Korea Institute of Marine Plant Technology

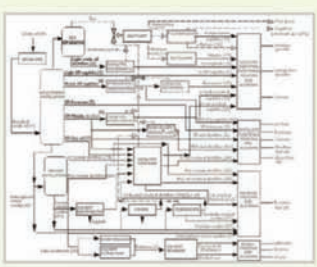
The Korea Institute of Marine Plant Technology, to be completed in 2017, will offer the best environment for integrated technological innovation

Engineering Center



- **Will support development of offshore plant equipment technology**
  - Design, convey, install, etc.
- **Will support technology transfers from leading companies**
  - Technological innovation by adopting BM of global companies

Test Bed



- **Will support performance evaluation of offshore plant equipment**
  - Deep water high pressure chamber, process equipment test base, etc.
- **Will support equipment certification**
  - Field testing using artificial oil wells, etc.

R&D Center

- **Will support offshore plant equipment research innovation**
  - Fundamental technology, concept design, etc.
- **Will support technology from leading companies**
  - Technological innovation by adopting BM of global companies

Education Center

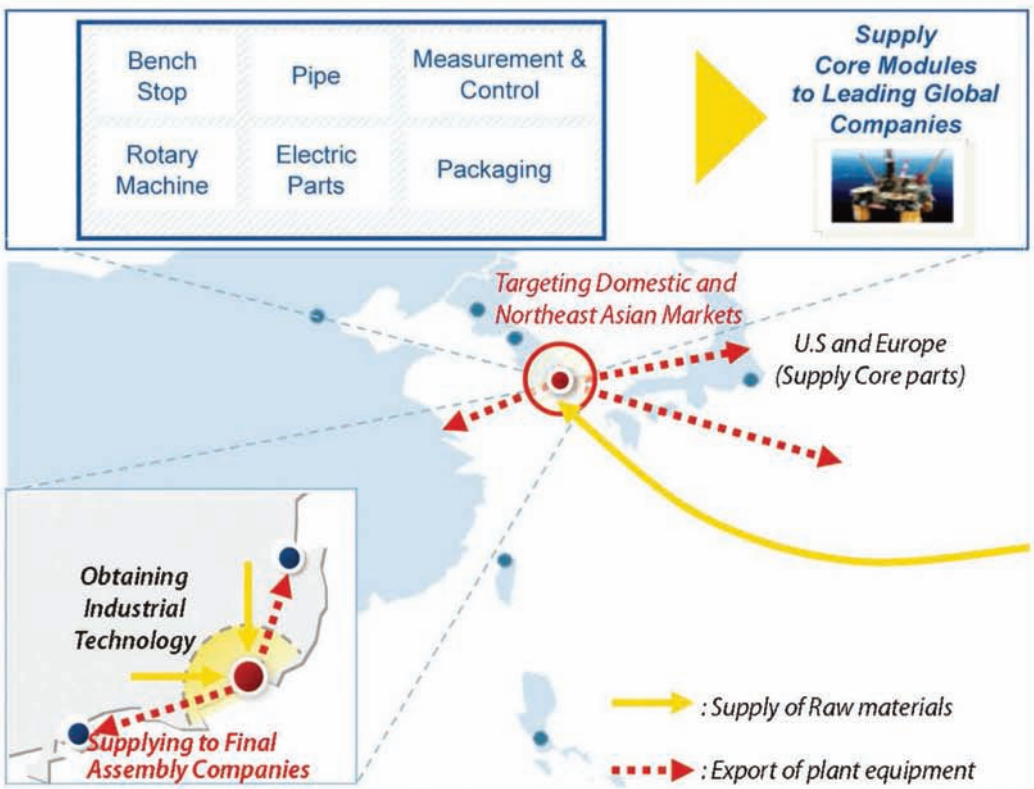
- **Will provide education programs for fundamental technology development**
  - Concentrated on exploration, design, production, installation, operation/management
  - Additional training for employees; advanced education programs

Korea Institute of Marine Plant Technology

Introduction of Business Model : Supply of offshore plant equipment

Busan is optimized for the adoption of a new Business Model, manufacturing core equipment for offshore plants and supplying it to leading global and Korean companies

Conceptual Map of Business Model



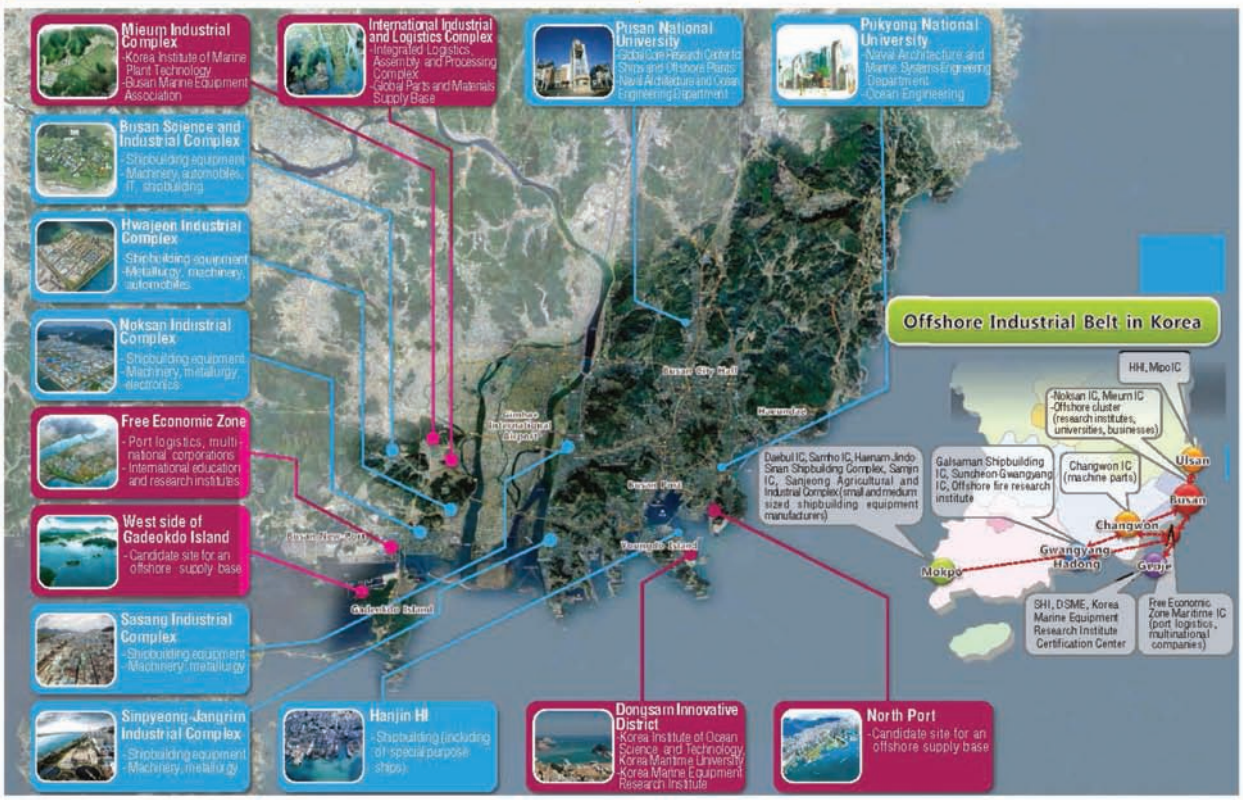
Description of BM and Value Proposition

Description	■ **Production and delivery of offshore equipment to Korean and other shipbuilding companies** - Production of high-tech equipment utilizing Korean technology in the shipbuilding and precision machinery fields - Quick delivery to leading global and Korean shipbuilding companies	
Value Proposition	**Market & Tech**	■ Working with HHI, SHI and DSME ■ Utilization of competitive machinery companies
	Costs	■ Many industrial complexes just 1 hour away ■ High-quality diverse labor force ■ LME*, ensuring rapid supply of resources
	Logistics	■ Busan Port, ranked globally as Top 5 Port ■ Gimhae Airport, the 3rd largest in Korea ■ Rapid KTX** rail connections to Seoul
	Quality of Life	■ Myeongji City, a ready-made residential area for foreigners ■ Top-notch education/healthcare services

Core Center for Manufacture and Delivery of High-tech Offshore Plant Equipment to Leading Global and Korean Companies

* London Metal Exchange ** Korea's High Speed Train network

Offshore Industrial Belt in Busan



Incentives

Busan Investment Attraction Fund	Amount	- USD180 million
	Target	- Major conglomerates, foreign investment corporations, and large-scale investments
	Use	- Long-term and price leases - Cash grants and low-interest loans
Cash Grants	Employee Training Grants	- Amount : up to KRW500,000 per month for each employee when hiring 20 or more new employees - Limit : KRW200 million in total - Period : up to 6 months
	Employee Training Grants	- Amount : up to KRW500,000 per month for each employee when hiring 20 or more new employees - Limit : KRW200 million in total - Period : up to 6 months
	Subsidies for Consulting	- Amount : up to 30% of consulting fees (accounting, legal, etc.) - Limit : KRW20 million in total - Period : up to 6 months
Subsidies for Land Purchase and/or Rental Fees	Purchase	- Subsidies of up to 30% of the purchase price
	Exemption from Rental Fees	- High-tech businesses investing USD 1 million or more : 100% - Businesses located in the FLZ : 100% - Manufacturing businesses investing USD 5 million or more : 50~70%
	Subsidies	- Rent subsidies are available and awarded based on the positive economic impact of the foreign investment.
Tax Exemption/ Reduction	Corporate Tax/Income Tax	- First 3 years : 100%, Next 2 years : 50%
	Local Tax (Acquisition Tax, Registration Tax, Property Tax)	- Acquisition/ Registration Tax : 100% - Property Tax : First 7 years : 100%, next 3 years : 50%
	Tariffs	- FTZ : Tax-free - FTZ : 3 years exemption for capital goods

BUSAN
METROPOLITAN CITY

Address: (47545) 1001, Jungang-daero, Yeonje-gu, Busan, Korea
Tel: 82-51-120
Homepage: www.busan.go.kr

KOMEA
Korea Marine
Equipment Association

Address: (07241) 8F, 33, Gukhoe-daero 76-gil, Yeongdeungpo-gu,
Seoul, Korea
Tel: 82-2-783-6952/4
Fax: 82-2-785-7647
Email: komea@komea.kr
Homepage: www.komea.kr

Busan Metropolitan City

Marine Equipment Directory