



NAVAL & SPECIAL SHIP BUSINESS UNIT

THE WORLD'S
NO.1 SHIPBUILDER

 **HYUNDAI**
HEAVY INDUSTRIES CO.,LTD.



THE WORLD's NO. 1 SHIPBUILDER

HYUNDAI HEAVY INDUSTRIES

Hyundai Heavy Industries (HHI) is an integrated heavy industry company consisted of 6 divisions; Shipbuilding, Special & Naval Ships, Offshore & Engineering, Industrial Plant & Engineering, Engine & Machinery and R&D.

Since 1985, HHI has been ranked as the top shipbuilder in the world in terms of number of ships built per year, and has maintained the leading position in the world shipbuilding market ever since.

In 2015, HHI became world first to build and deliver 2,000 quality vessels of varying types to ship owners worldwide. HHI has earned the reputation of a top-notch shipyard.

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Hyundai Shipbuilding Capability

Hyundai Heavy Industries operates 11 dry dock equipped with 9 Goliath cranes and modern construction facilities in Ulsan. Each dry dock and facility is specially designed to build ships the most efficiently for that ship type.

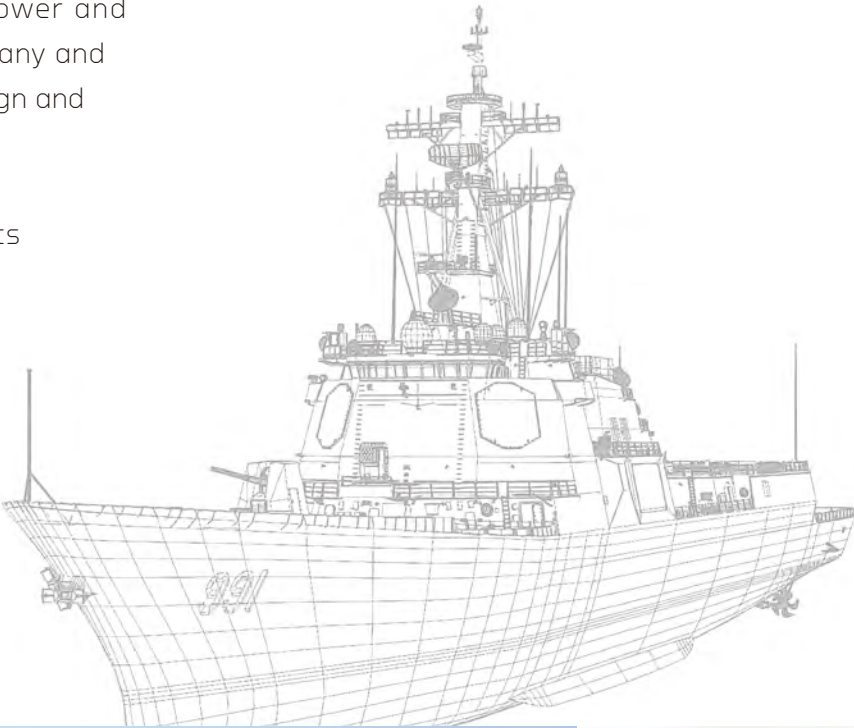
Dry dock No. 6, 7 and Ship Lift are allocated for sophisticated small and medium size special vessels such as naval and customized service vessel. This prestigious shipbuilding mission is assigned to a dedicated organization named Naval & Special Ship business Unit (NSSBU), which has specialized manpower with independent building facilities located in the company’s secured zone.

Site	7,200,000m ²			Works		1,600,000m ²						
Dock	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	Ship Lift	NO. 8	NO. 9	No. 10	Gunsan
Length	390m	500m	672m	380m	380m	260m	170m	120m	460m	460m	700m	700m
Width	80m	80m	92m	65m	65m	43m	25m	20m	70m	70m	115m	115m
Depth	12.7m	12.7m	13.4m	12.7m	12m	12m	11m		12.7m	12.7m	18m	18m
Crane	1×1,290t Goliath	1×1,290t Goliath		1×200t Jib		1×200t Jib		1×60t Jib	1×900t Goliath	1×900t Goliath	1×1,600t Goliath	1,650t Goliath
	2×450t Goliath	1×450t Goliath		1×150t Jib		1×150t Jib			2×30t Jib		-	2×40t
				1×80t Jib							-	1×30t
Max. size DWT	700,000		1,000,000	400,000		150,000	15,000	3,000 Lifting Cap.	500,000		1,300,000	130,000
Outfitting quay	Combined length: 5,000m											

Naval & Special Ship Business Unit(NSSBU)

NSSBU has been carrying out the special task, having specialized manpower and streamlined modern facilities. As a licensed national defense industrial company and engineering consultant, NSSBU has the advanced technology necessary to design and build modern, reliable naval ships of various proven and advanced hull forms.

With round-the clock intensive R&D activities, HHI is now ready to provide its customers with comprehensive services from initial feasibility studies for top level requirements to integrated logistic support as a lifetime after sales service.

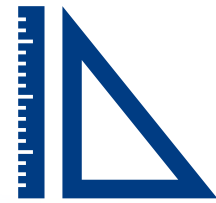


Scope of Service

Tailored Solution Provider

HHI SNSD provides A to Z package service from development of design to lifetime after sales service in accordance with the customer's requirement. SNSD has the ideal experience and expertise to ensure delivery of such service to the satisfaction of the customer on time within budget.

1 DESIGN & ENGINEERING



Tailored design solution



2 CONSTRUCTION



Highest quality & on-time delivery



3 SYSTEM INTEGRATION



Linking any systems physically and functionally



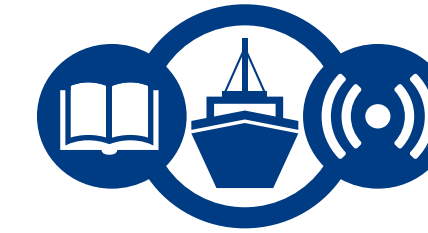
4 TEST & TRIAL



Delivering vessel in "ready to operate" state



5 INTEGRATED LOGISTICS SUPPORT & LIFECYCLE SUPPORT



Providing optimized support for the vessel



6 TRAINING & TECHNICAL ASSISTANCE



Operational / maintenance training for customers



Production Range

Destroyer



HDD-11000



HDD-10000



HDD-5000

Frigate



HDF-4000



HDF-3800



HDF-3500



HDF-3100



HDF-3000



HDF-2500

Corvette/FAC



HDC-1400



HDC-500

Submarine



HDS-3000



HDS-1800



HDS-500



HDS-400

Logistic Support Vessel



HDA-34000



HDA-24000



HDA-23000



HDA-22000



HDA-10000



HDA-8000

Multipurpose Support Vessel



HDM-4000



HDM-3000

Amphibious Vessel



HDL-17000



HDL-13000



HDL-10000



HDL-7000

Patrol Vessel



HDP-5000



HDP-4000



HDP-3000



HDP-2000



HDP-1500



HDP-1000

Training Vessel



HDT-5500



HDT-4500



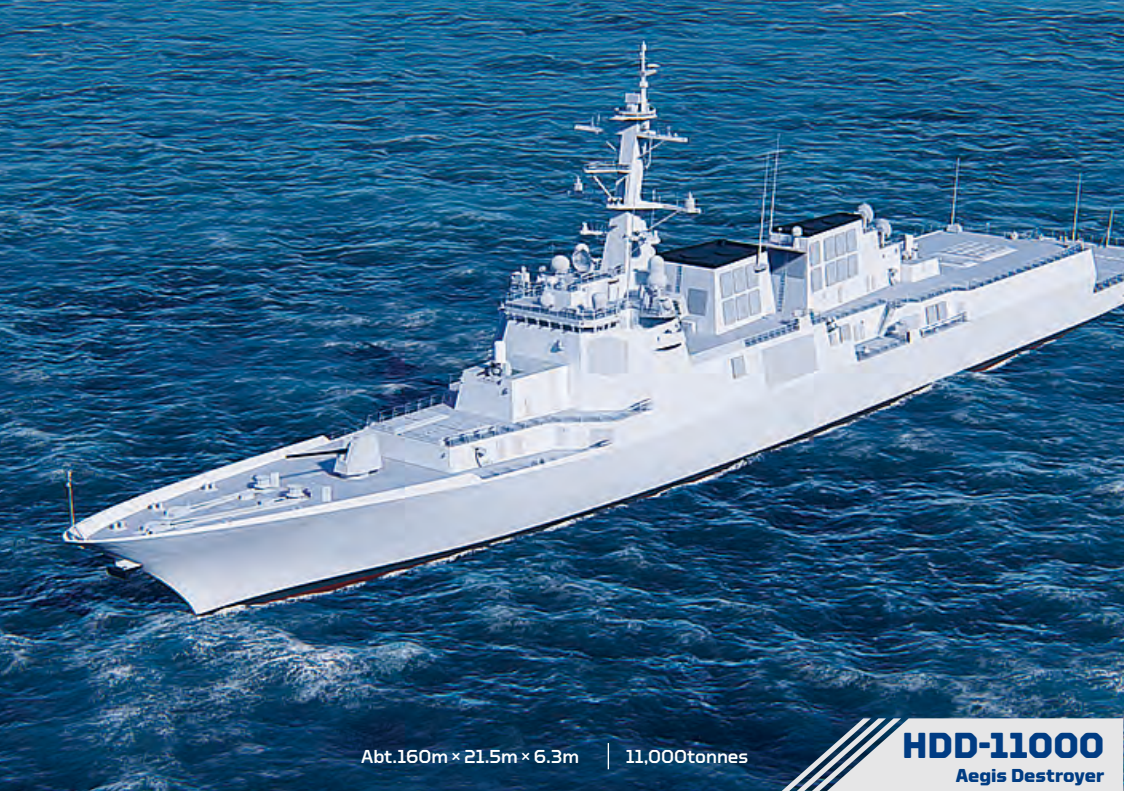
HDT-1000



HDT-500

Defense & Security

- Destroyer
- Frigate
- Corvette / FAC
- Submarine
- Logistic Support Vessel
- Multipurpose Support Vessel
- Patrol Vessel
- Training Vessel
- Amphibious Vessel



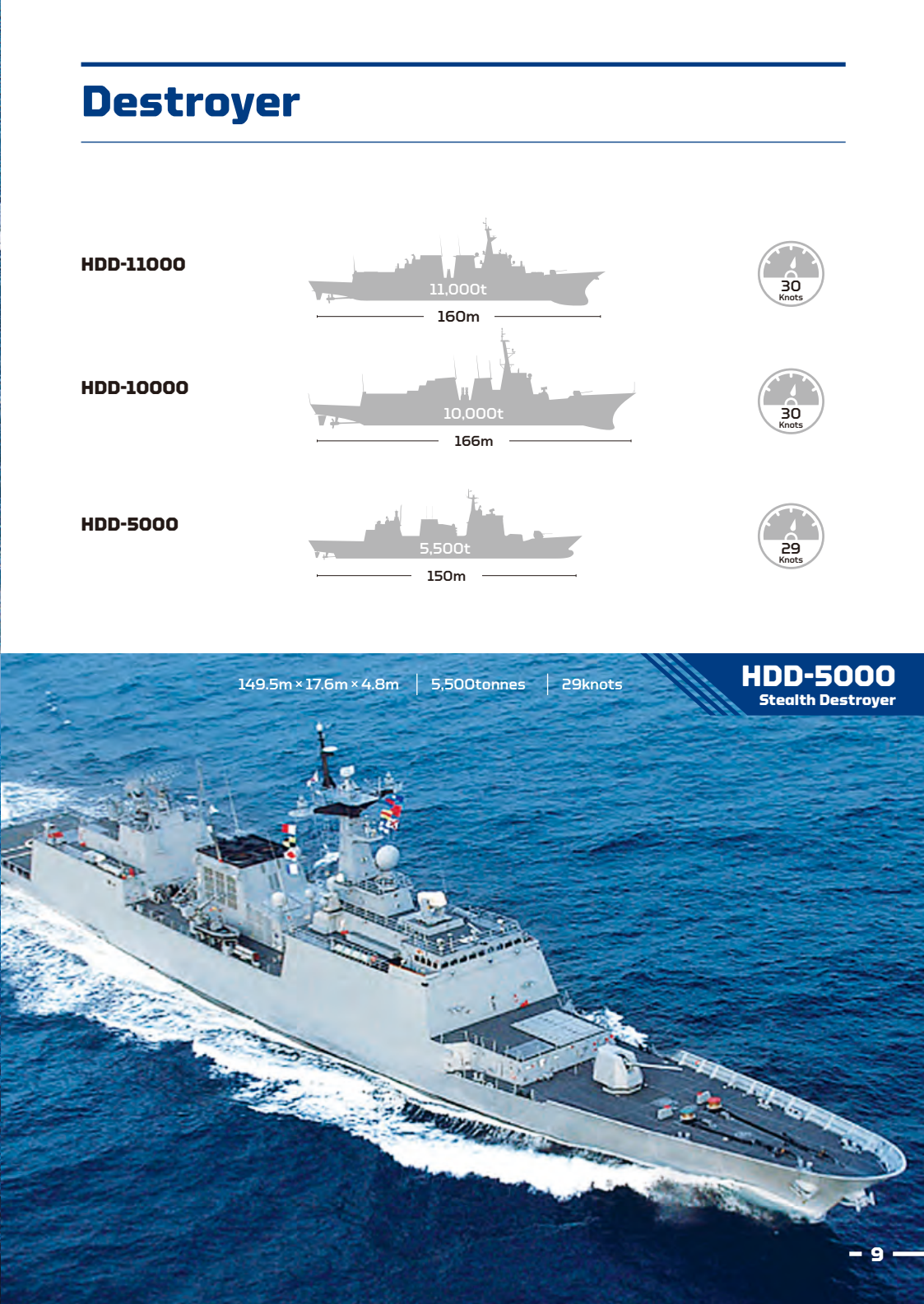
Abt.160m × 21.5m × 6.3m | 11,000tonnes

HDD-11000
Aegis Destroyer



166m × 21m × 6.1m | 10,000tonnes | 30knots

HDD-10000
Aegis Destroyer

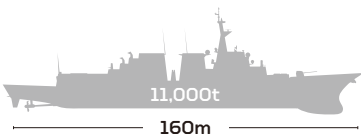


149.5m × 17.6m × 4.8m | 5,500tonnes | 29knots

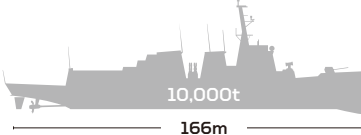
HDD-5000
Stealth Destroyer

Destroyer

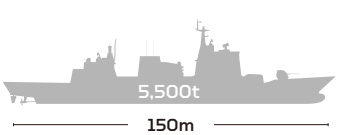
HDD-11000



HDD-10000



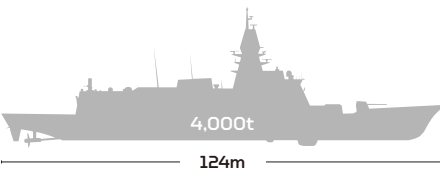
HDD-5000



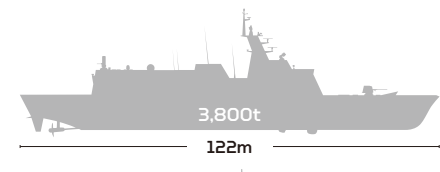
Frigate / Corvette

Fast Attack Craft

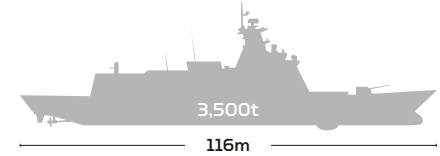
HDF-4000



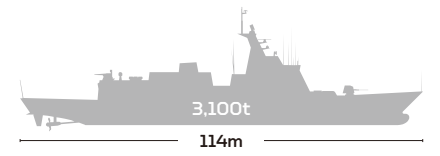
HDF-3800



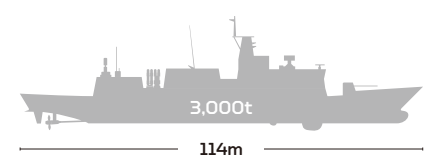
HDF-3500



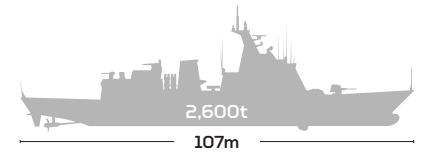
HDC-3100



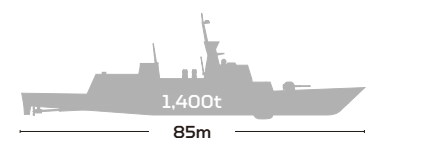
HDF-3000



HDF-2600



HDC-1400



HDF-4000 | Abt. 124m × 14m × 4m | 4,000tonnes | 30knots



HDC-3100 | 114m × 14.8m × 3.7m | 3,100tonnes | 25knots



Abt. 116m × 13m × 4m | 3,500tonnes | 30knots



107m × 13.8m × 4m | 2,600tonnes | 25knots



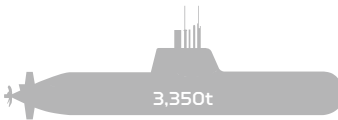
HDF-3000 | Abt. 114m × 12m × 4m | 3,000tonnes | 30knots



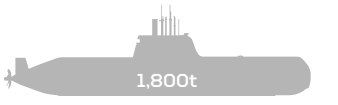
HDC-500 | 63m × 9m × 3m | 500tonnes | 25knots

Submarine

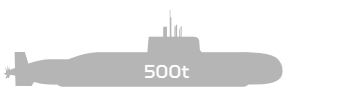
HDS-3000



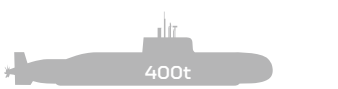
HDS-1800



HDS-500



HDS-400



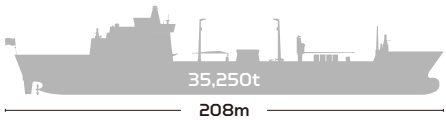
HDS-3000

HDS-1800

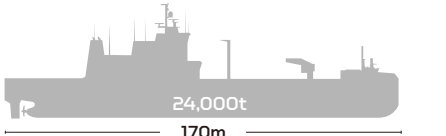


Logistic Support Vessel

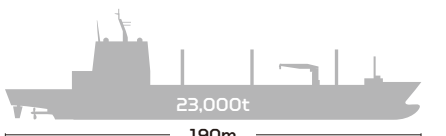
HDA-34000



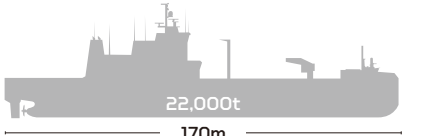
HDA-24000



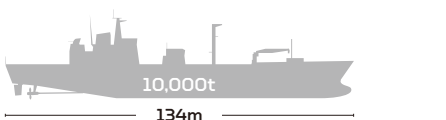
HDA-23000



HDA-22000



HDA-10000



170m × 24.5m × 12.5m | 24,000tonnes | 16knots

HDA-24000



130m × 17.8m × 6.5m | 8,000tonnes | 20knots

HDA-8000



HDA-23000

190m × 25m × 8m | 23,000tonnes | 24knots



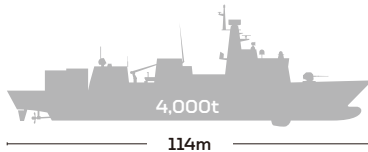
HDA-10000

134m × 18m × 9.5m | 10,000tonnes | 19knots

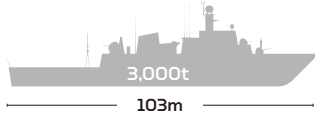


Multipurpose Support Vessel

HDM-4000



HDM-3000



HDM-4000

114m × 17m × 4.6m | 4,000tonnes | 23knots

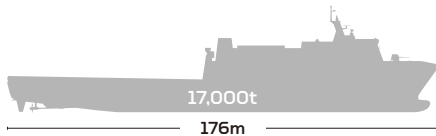
HDM-3000

103m × 15m × 3.0m | 3,000tonnes | 22knots

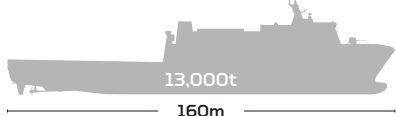
Mine Laying Operation

Amphibious Vessel

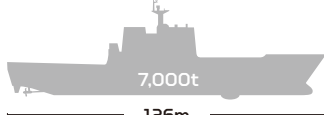
HDL-17000



HDL-13000



HDL-7000





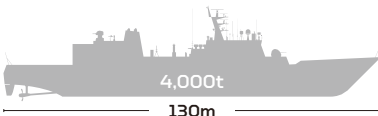

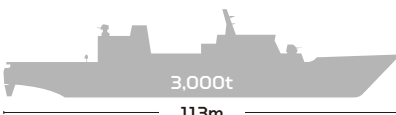

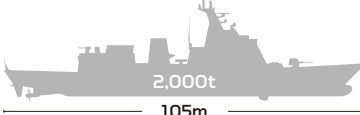

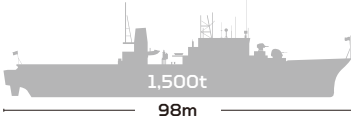

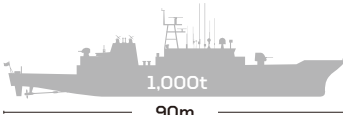

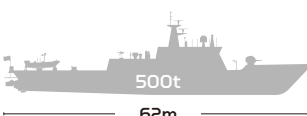

176m × 25.0m × 12.5m | 17,000tonnes | 18knots

HDL-17000

126m × 19m × 5.4m | 7,000tonnes | 23knots

HDL-7000

Patrol Vessel

HDP-5000	 5,000t 146m	 23 Knots
HDP-4000	 4,000t 130m	 25 Knots
HDP-3000	 3,000t 113m	 28 Knots
HDP-2000	 2,000t 105m	 30 Knots
HDP-1500	 1,500t 98m	 35 Knots
HDP-1000	 1,000t 90m	 21-30 Knots
HDP-500	 500t 62m	 35 Knots

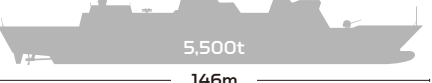

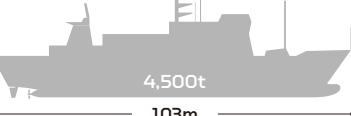

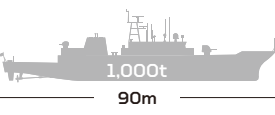





HDP-5000 146m × 14.2m × 6.8m | 5,000tonnes | 23knots

HDP-3000 113m × 14.2m × 6.8m | 3,000tonnes | 28knots

HDP-1000 90m × 12m × 5.5m | 1000tonnes | 35knots

Training Vessel

HDT-5500	 5,500t 146m	 15 Knots
HDT-4500	 4,500t 103m	 17 Knots
HDT-1000	 1,000t 90m	 21-30 Knots
HDT-500	 500t 62m	 35 Knots

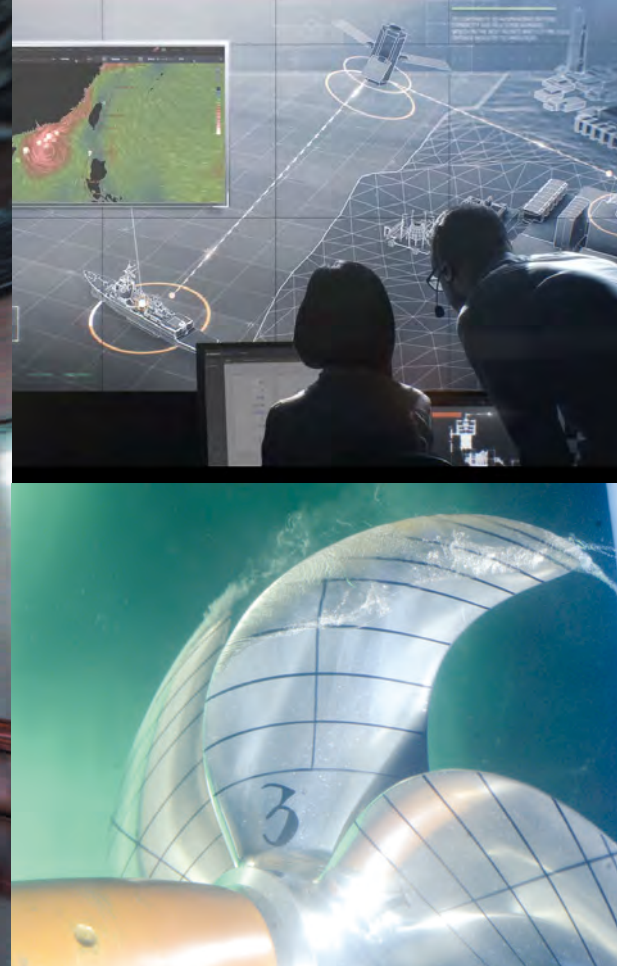


146m × 18.4m × 9.5m | 5,500tonnes | 15knots

103m × 15.6m × 7.3m | 4,500tonnes | 17knots

HDT-5500

HDT-4500



R&D Activities

Advanced Technology

Modern Warship Technology

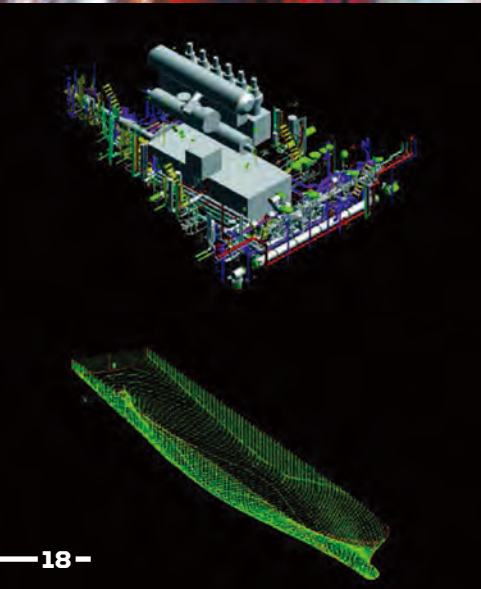
Modern warship technology advances other myriad branch of technologies and poses at the highest technological level. Therefore, R&D is essential for naval shipbuilder to remain at the forefront of technical development. HHI places strong emphasis on keeping abreast of the principle and has established intensified R&D works. HHI operates four renowned in-house research institutes; HMRI (Hyundai Maritime Research Institute), HIRI (Hyundai Industrial Research Institute), HEMRI (Hyundai Electro-Mechanical Research Institute) and TDI (Techno Design Institute).

Research & Development

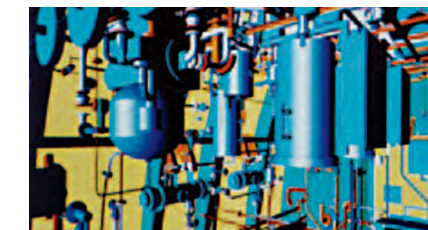
The comprehensive R&D activities of HMRI comprise all preproduction phases including computer aided hull/propeller design and manufacturing. Also included in HMRI's activities are research topics such as optimum hull form development, resistance and propulsion, seakeeping, structure & vibration, and acoustics signature control. The HIRI was established in 1983 to research new welding technology and factory automation.

Computer Integrated Shipbuilding

In HHI, almost all functions of the shipyard are covered by many grades of computer systems from daily administration of staff to all requirements for ship design research, and manufacturing processes. HHI's Information Technology Division, a centralized service bureau, works round-the-clock. HHI has proven capability of ship signature control with CAE program for RCS, IR, URN, EMI/EMC analysis along with ship performance analysis program like weapon and sensor coverage analysis.



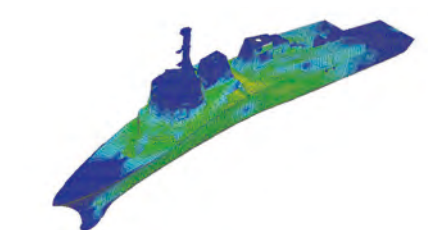
3D Hull Module Design



3D Machinery Design



Stealth Line



Hull Structure Analysis



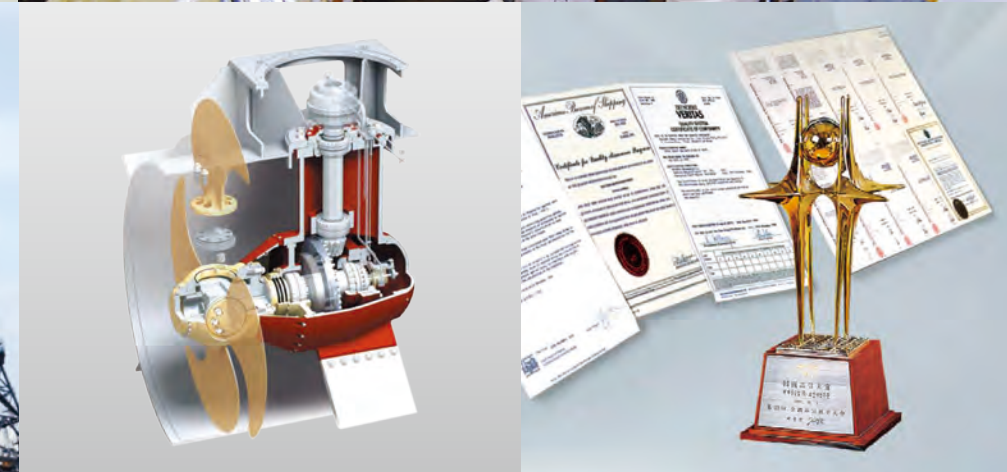
Quality Management

HHI is constantly pursuing total quality in ship construction to satisfy the requirements of the ship owners, with its perfection philosophy. The philosophy is conspicuously in evidence at HHI's Ulsan shipyard where all workers are encouraged to participate in the betterment of quality standards through a total quality control (TQC) system.

Quality control starts with incoming materials and parts, and continues throughout the building stage of a ship and onto final sea trials. HHI's quality control department is, in many ways, the hub of the shipyard. The department, consisted of veteran engineers who are well acquainted with latest international rule and standard for commercial and military ship including those of US Navy, NATO, and etc., is completely independent, both in organization and actual operation, and has the full power to carry out all necessary quality control work.

In an attempt to ensure quality production, HHI's own high standard system was established. All construction process and methods of production in each stage are defined and stipulated in the standard manual. The quality control department conducts internal audits and verifies compliance with the customer requirement and the standard manual.

HHI could now win further international credentials in the high standard of its own Q.A. system through acquiring ISO 9001 Certificate from DNV Q.A. on May 29, 1992, for the first time in the world.





Technical Logistics Support

Apart from building quality ships, HHI provides integrated logistic support for the client's effective operation and maintenance for the life of ship, which is epitomized;

- Training of client's personnel
- Supply of documentation
- Supply support for spares
- Other ordinary measures as may be required by the client.

HHI also offers a technical assistance program for local shipyard construction by supplying design, despatch of engineer, training of local shipyard personnel, to meet client's demand to increase local content.





Amenities

HHI provides its employees, foreign residents, and visitors with accommodation and recreational facilities for a more comfortable life.

HHI also provides a guest house, a luxurious hotel, bungalows, apartments of various sizes, bachelor dormitories, a general hospital, a gymnasium, a recreation center, department stores and other facilities.

All of these help our employees and residents from the world to enjoy a more convenient, healthy lifestyle. A number of activities are also arranged at HHI to promote pleasant, harmonious relationship among people.

Welfare Facilties

· Football Ground	· Hyundai Department Store	· Golf Driving Range
· Hotel Hyundai in Ulsan	· Performance Hall	· Hospital
· Hotel Hyundai in Kyongju	· Musical Performance	· Hyundai Foreign School

HHI Global Network

Hyundai Heavy Industries

Americas

Atlanta

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Fax: 81-6-6261-5818

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Singapore 038987
Tel: 65-6337-2366
Fax: 65-6337-8966

Tokyo

8th Fl. North Tower Yurakucho Denki Bldg.,
1-7-1, Yuraku-Cho, Chiyoda-Ku, Tokyo 100-
0006, Japan
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Tel: 44-20-8741-0501
Fax: 44-20-8741-5620

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Planta 0, 28046 Madrid, Spain
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Fax: 34-91-733-2389

Moscow

World Trade Center, Ent. 3 #1604,
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Moscow, 123610, Russia
Tel: 7-495-258-1381
Fax: 7-495-258-1382

Oslo

Roadhusgaten 20, 0151 Oslo, Norway
Tel: 47-2310-0890
Fax: 47-2310-0899

Rotterdam

Folkert Elsingastraat 7, 3067 NW,
Rotterdam, The Netherlands
Tel: 31-10-212-1567
Fax: 31-10-212-5134

Middle East and Africa

Abu Dhabi

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Al Khobar

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Dubai

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