GLOBAL LEADER OF
TOTAL DEFENSE SOLUTIONS

Hanwha Defense

EMBRACE NEW CHALLENGES AND INNOVATE TO BUILD A SUSTAINABLE FUTURE

By leveraging our innovative businesses, Hanwha continues to contribute to the sustainable growth of our society around the world.

Founded in 1952, **Hanwha** has grown to become a Fortune Global 500 company. Our business expertise and synergies in mechatronics/aerospace/defense, chemicals & eco-friendly energy, finance, and construction & services, have built us into the 7th largest business enterprise in the Republic of Korea. With constant challenges and innovations, we're focused on providing fundamental solutions to the toughest challenges our society faces today, while leading a sustainable future that will enrich people's lives.

As we look to the past to build a brighter tomorrow, we remain steadfast in our commitment to help our customers grow with us.

SUSTAINABLE GROWTH

USD 60.7B
Total Sales
(As of 2021 (E))

USD 199B
Total Assets
(As of 2021 (E))

Top 7
Business Enterprise in the Republic of Korea
(Total asset basis as of 2020)

469
Global Networks
(As of 2020)

80
Domestic Affiliates
(As of 2020)

70+
Years of History
(Founded in 1952)

GLOBAL LEADER PROVIDING TOTAL DEFENSE SOLUTIONS

Hanwha Defense is expanding its global business as a total defense solutions provider through its deep expertise and cutting-edge technology.

Hanwha Defense has built a world-class portfolio in the areas of artillery systems, armored vehicles, air defense systems and unmanned ground systems based on innovative technology and broad experience. Against this backdrop, we're now reinforcing our position as a sustainably growing and globally competitive defense manufacturer. Our world's most advanced self-propelled howitzer, the K9 has been exported to several countries around the world. And now it accounts for half of the global market with its excellent performance. What's more, we are becoming a worldwide powerhouse in defense industry by developing a new, leading-edge product, such as REDBACK, a next-generation infantry fighting vehicle, which participates in competitive bidding with advanced U.S. and European companies. Looking ahead, Hanwha Defense will offer innovative and trusted defense products and services to take the lead in the global defense market.

HISTORY

1977–1999

1977 Established as a defense industry company
1995 Mass produced the K77 fire direction center vehicle and the K200A1 armored personnel carrier
1998 Mass produced the KAAV (Korea amphibious assault vehicle)
1999 Mass produced the K9 SPH and the CHUNMA surface-to-air missile

2000–2016

2001 Exported the K9 SPH to Turkey
Exported the BARRACUDA 4×4 armored wheeled vehicle to Indonesia
2008 Mass produced the K21 IFV
2013 Exported the TARANTULA 6×6 armored wheeled vehicle to Indonesia
2014 Exported the K9 SPH to Poland
2015 Mass produced the BIHO air defense system and the M-SAM
Exported the BARRACUDA 4×4 to Vietnam
2016 Exported the KAAV to the Philippines
Began development of the lithium battery for submarines

2017–2022

2017 Exported the K9 SPH to India, Finland and Norway
Exported the K10 ARV to Norway
2018 Exported the K9 SPH to Estonia
2019 Selected as the final two candidates for Australia's Land 400 Phase 3 program
2020 Mass produced AAGW, 120 mm self-propelled automatic mortar carrier
2021 Awarded contract for ROK amphibious bridging and ferrying system
Exported the K9 SPH, K10 ARV to Australia
2022 Exported the M-SAM to UAE
Exported the K9 EGY Solution to Egypt (K9, K10, and K77)

ARTILLERY SYSTEMS

Hanwha Defense has developed a diversified portfolio of artillery systems to bolster national defense.

K9 THUNDER
SELF-PROPELLED HOWITZER

The K9 THUNDER features a high level of firepower with its long shooting range and rapid firing speed. An improved variant of the K9, the K9A1 is in production with key improvements for operations, such as an automatic fire control system, driver night vision periscope and auxiliary power system. The K9 has been exported to several countries.

SPECIFICATION

Effective Range of Fire	40 km
Maximum Rate of Fire	6 rounds per minute
Ammunition Capacity	48 rounds
Combat Weight	47 tons

K10
AMMUNITION RESUPPLY VEHICLE

The K10 ammunition resupply vehicle is the world's first robotic ammunition carrier, which supplies ammunition to the K9 Thunder self-propelled howitzer. It has been exported along with the K9.

SPECIFICATION

Ammunition Capacity	Projectile 104 rounds Propellant 504 units
Transfer Rate	10 rounds per minute
Maximum Speed	67 km/h
Combat Weight	47 tons

K77
FIRE DIRECTION CENTER VEHICLE

The K77 fire direction center vehicle is an armored vehicle designed to command and operate artillery units and fire control. It maximizes artillery power by assigning fast and accurate shooting mission on targets.

SPECIFICATION

Maximum Speed	56 km/h
NBC Protection	Positive pressurized system
Fire Command System	BTCS A1
Combat Weight	20 tons

EVO-105
EVOLVED WHEELED SELF-PROPELLED HOWITZER

The EVO-105 is a self-propelled 105 mm towed howitzer armed on a 5 ton truck. Equipped with automatic fire control and positioning systems, the artillery is designed to maximize operational efficiency.

SPECIFICATION

Effective Range of Fire	11.3 km
Maximum Rate of Fire	10 rounds per minute
Ammunition Capacity	60 rounds
Combat Weight	18 tons

LAUNCHER SYSTEMS

Hanwha Defense has a range of launcher systems, from land based to sea launched, with our unrivaled competitiveness in the field of launch systems that require sophisticated and comprehensive technology and experience.

M-SAM
MEDIUM RANGE SURFACE-TO-AIR MISSILE LAUNCHER

The MSAM can be mounted on a ground transportation vehicle. The MSAM is a vertical launcher loaded with 8 rounds of medium range surface-to-air missiles that can be fired in rapid succession.

KVLS
KOREAN VERTICAL LAUNCHER SYSTEM

The KVLS can launch multiple guided missiles (anti submarine, anti-air, and anti-surface) vertically from a naval ship. The system serves as the standard for vertical launch systems of the surface combatants operated by the Republic of Korean Navy.

ARMORED VEHICLES

Hanwha Defense has a wide range of armored vehicles each designed to be extremely mobile and flexible in response to the future battlefield environment.

REDBACK
INFANTRY FIGHTING VEHICLE

The futuristic tracked armored vehicle is equipped with the world's best protection systems, including configurable armor, laser warning and active protection devices, and enhanced sensors. With proven powertrain, innovative in-arm suspension, and a durable rubber track, the REDBACK ensures superior battlefield mobility in its class.

SPECIFICATION

Crew + Dismounts	11 (3+8) persons
Armament	30 mm cannon, 12.7 mm RCWS, 7.62 mm coaxial machine gun
Maximum Speed	70 km/h
Cruising Range	560 km

K21
INFANTRY FIGHTING VEHICLE

The K21 is a world-class infantry combat vehicle with significantly enhanced firepower, survivability and maneuverability. The IFV is also capable of performing rapid, three-dimensional movements in the digitalized battlefield environment of the future. Armed with a 40 mm cannon, it can carry out safer troop transport and combat missions. The K21 is the only armored vehicle that can travel on water among equivalent models.

SPECIFICATION

Crew	12 persons
Armament	40 mm cannon, 7.62 mm machine gun
Maximum Speed	70 km/h (land), 6 km/h (water)
Combat Weight	26 tons

K21-105
MEDIUM TANK

The K21-105 has a 105 mm turret mounted on the proven K21 chassis. It has strong firepower and maneuverability that enables the vehicle to conduct a wider variety of tactical operations than main battle tanks.

SPECIFICATION

Armament	105 mm cannon, 7.62 mm coaxial machine gun
Maximum Speed	70 km/h
Cruising Range	450 km
Combat Weight	25 tons

TIGON
ARMORED WHEELED VEHICLE

Developed by our own advanced technology, the TIGON 6×6 armored wheeled vehicle can be mounted with various weapon systems. With add-on armor, the vehicle can be optimized for any operational goal, either in offensive or defensive situations.

SPECIFICATION

Crew	11 persons
Maximum Speed	100 km/h (land), 8 km/h (water)
Cruising Range	800 km
Combat Weight	21 tons

120 mm SELF-PROPELLED AUTOMATIC MORTAR CARRIER

By mounting the 120 mm self-propelled mortar onto the K200A1 armored personnel carrier, this weapon system improves the performance and range of firepower compared to a conventional mortar. Its automated fire control system guarantees far more rapid and accurate firepower support.

SPECIFICATION

Armament	120 mm self-propelled mortar, 12.7 mm machine gun
Maximum Speed	70 km/h (land), 6 km/h (water)
Effective Range of Fire	12 km
Combat Weight	14 tons

KMRAP
KOREA MINE RESISTANT AMBUSH PROTECTED

The KMRAP is an infantry mobility vehicle, which prioritizes crew safety in the event of the explosion of land mines and improvised explosive devices. To that end, the vehicle maximizes survivability with V-shaped hulls and mine protection sheets designed specifically for the battlefield environment.

SPECIFICATION

Crew	12 persons
Maximum Speed	110 km/h
Cruising Range	600+ km
Combat Weight	19 tons

KAAV
KOREA AMPHIBIOUS ASSAULT VEHICLE

The KAAV is an amphibious troop transport vehicle that can be utilized both for assault shipping at sea and combat support on land. First introduced in 1998, the KAAV has been highly valued for its versatility and maneuverability, as well as for increasing the survival rate of troops. The KAAV serves as the ROK Marine Corps' core asset for landing operations.

SPECIFICATION

Crew + Dismounts	24 (3+21) persons
Maximum Speed	72 km/h (land), 13 km/h (water)
Cruising Range	480 km (land), 7 hrs (water)
Combat Weight	23 tons

AIR DEFENSE SYSTEMS

Hanwha Defense's high-end technology, developed through hands-on experiences, plays a pivotal role in the Republic of Korea's advanced air defense systems.

BIHO

AIR DEFENSE SYSTEM

BIHO is a weapons system that combines a self-propelled anti-air gun with a short-range anti-air guided missile system. This air defense system is designed to maximize the strength of the gun and missile systems. The system demonstrates a superior defense capability against multiple types of aerial targets, including aircraft and helicopter, penetrating at low altitude.

SPECIFICATION

Combat Weight	26.5 tons
Detection Range	21 km
Tracking Range	7 km
Fire Power	30 mm twin guns, missiles
Maximum Speed	60 km/h
Effective Range of Fire	Gun: 3 km, missile: 6 km
Maximum Rate of Fire	Gun: 2×600 rounds/min Missile: 45 sec/round

AAGW

ANTI-AIRCRAFT GUN WHEELED VEHICLE SYSTEM

The AAGW is the latest air defense system to defend the points of interest for allied forces, as well as protect friendly mobile troops from low altitude infiltration by enemy aircraft. Using a wheeled vehicle platform, it is able to provide close-in support to friendly forces. The system is also capable of self-targeting threats with the help of electro-optical and visual targeting equipment.

SPECIFICATION

Combat Weight	26.5 tons
Tracking Range	7 km
Maximum Speed	90 km/h
Armament	30 mm twin guns
Effective Range of Fire	3 km

BIHO II

NEXT-GENERATION AIR DEFENSE SYSTEM

BIHO II is a next-generation air defense system and a powerful solution against all aerial threats. Based on our high-end technology accrued from years of experience, BIHO II features high maneuverability and excellent reaction time, improving the survivability for allied troops as well as enhancing the air defense for major facilities.

SPECIFICATION

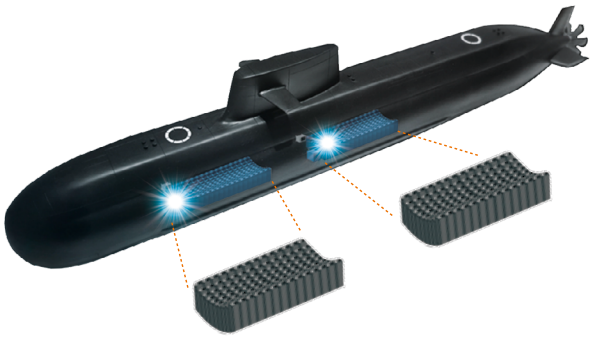
Total Weight	30 tons
Crew	3 persons
Armament	30 mm, 40 mm cannon (ABM, NATO)
Effective Range of Fire	3~4 km
SAM	~25 km
Radar	3D AESA radar, C RAM radar

ENERGY STORAGE SYSTEM

Hanwha Defense has developed military grade lithium-ion battery systems for submarines. It provides our naval force with more efficient energy to increase its underwater power.

LITHIUM BATTERY SYSTEMS FOR SUBMARINES

As the next-generation energy storage system, lithium-ion batteries can extend the underwater eudurance of submarines by replacing conventional lead-acid batteries. The up-to-date energy storage system is expected to provide world-class stability and fast operational response for submarine operations.



UNMANNED GROUND SYSTEMS

Hanwha Defense is dedicated to R&D for the future battlefield environment. Combining our integrated system with field specific core technology, we deliver comprehensive modern combat systems enough to lead the fourth industrial revolution in the defense sector.

TACTICAL UNMANNED GROUND VEHICLE

A sophisticated and comprehensive manned/unmanned combat system for the future battlefield, the Tactical Unmanned Ground Vehicle is designed to minimize the potential loss of life and enhance effective operations.

INTELLIGENT UNMANNED GROUND VEHICLE

The Intelligent Unmanned Ground Vehicle can enhance survivability and combat performance of infantry units by transporting heavy equipment or wounded troops in high-intensity battle situations. Additionally, the I-UGV can provide supporting fire for infantry units by using mounted RCWS. Capable of being remotely operated, it also can be used in autonomous mode for follow-me or waypoint navigation features.

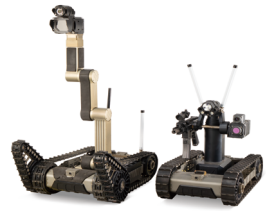
UNMANNED ARMORED RECONNAISSANCE VEHICLE

The Unmanned Armored Reconnaissance Vehicle is remotely or autonomously operated along the front edge of armored/mechanized units. This unmanned combat vehicle system can perform various types of missions/tasks—such as surveillance/reconnaissance, target acquisition/designation, and security operations—as a part of an armored reconnaissance unit.

EODD ROBOT

EXPLOSIVE ORDNANCE DETECTION AND DISPOSAL ROBOT

The EODD is a small, unmanned robot system remotely operated by military engineers or explosive ordnance disposal units. It is designed to detect minefields and improvised explosive devices with ground penetration radar. It can also neutralize IEDs with water disruptors or various mission toolkits.



SMALL SURVEILLANCE ROBOT

This small robot is remotely operated and designed to conduct surveillance/reconnaissance missions autonomously, reducing soldier fatigue and improving mission efficiency.

REMOTE CONTROLLED WEAPON STATION

Remote Controlled Weapon Station (RCWS) is a state-of-the-art system to be operated remotely. Fitted with day/night detection/tracking and remote shooting capabilities, the RCWS can be mounted on various platforms such as armored vehicles, navy vessels, and many more.

TANKS AND ARMORED VEHICLES

ADVANCED

This advanced station can be mounted on self propelled howitzers, armored vehicles and small tactical vehicles. The K3, K4 or K6 machine guns can be installed on the station selectively. The surveillance and strike system is remotely controlled with the operator under protection inside the vehicle.

MULTIPLE WEAPON COMBINATION

Mounted with the K4 or K6 armored surveillance and strike system, an amphibious assault vehicle can remotely control the system and smoke grenade launcher through its operation system. Targets are automatically tracked even during stops and maneuvers for accurate shooting.

NAVAL VESSELS

Equipped with the K6 armored surveillance and strike system on its exterior, this ship-based weapon station is remotely controlled from the steering room for automatic target tracking and shooting during maritime maneuvers.

Hanwha Defense

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