



A GLOBAL COMPANY THAT LINKS  
PEOPLE TO TECHNOLOGY

**HWASEUNG**





## THE WORLD OF GLOBAL HWASEUNG

You can only see a tiny part of the world with your eyes.

But a bigger world can be seen if you believe in it.

For countless values that are yet to be discovered and a wide world of opportunities,

and a new future that everyone dreams and wishes for,

the global road links people to technology -

Hwaseung sees afar and thinks big.



## Synergy between Hwaseung and the world

Across an area of 510 million km<sup>2</sup>,  
there are five oceans and six continents,  
over 230 countries and 7 billion people -  
But the world seen through the eyes of  
Hwaseung is uncountable.  
With constant innovation based on macroscopic  
insight since its foundation,  
Hwaseung manages the future by seeing  
greater value in this world.



**HWASEUNG** in the **WHOLE WORLD**



# Hwaseung engages the world

## Hwaseung creates value

Since its foundation in 1953, Hwaseung has actively responded to the changing world and achieved growth with constant challenges and innovation.

Currently, with a global network that embraces the world with businesses in automotive parts, advanced materials, footwear ODM, chemical and trade networks, Hwaseung is enhancing competencies in overseas business and accelerating growth to become a GLOBAL STANDARD group that enriches the future life for humanity.

### BUSINESS AREAS OF HWASEUNG

#### Automotive Parts

With the greatest market share in weatherstrips and hoses in Korea, we are striving to become one of the BIG 3 companies in the global marketplace.

#### Advanced Materials

We provide the very best products and technologies that win global recognition as Korea's No.1 rubber materials company.

#### Footwear ODM

We are shaping the world's best brand with trends that keep us one step ahead of global brands.

#### Chemical

We are enhancing global competitiveness in the future chemical industry by developing high-value products.

#### Trade Networks

We are constantly developing new businesses by building a global network with 21st-century strategic business in mind.



**We expand the world of Global Hwaseung  
with pride in technological skills and quality**

Our differentiated technological skills, quality and advanced R&D acknowledged around the globe are the stepping stones toward becoming a first-class company that ranks among the world's best. Global group Hwaseung that links people to technology reinforces R&D and channels all of its energy to achieve higher values in its products, while also constantly developing new products and materials to rewrite history for humanity.

**| HWASEUNG AUTO BIZ R&D CENTER |**

Founded in 1991, the R&D center of Hwaseung R&A achieved localization of automotive rubber parts, and received a presidential citation for commercialization of new technology with high-intensity PVA fiber, and achieved many other invaluable research accomplishments. We are now taking one bold step forward to prepare for the future of chemicals to create new value for the 21st century.

**| HSI C&D CENTER |**

This C&D Center is founded based on the technology and know-how of Hwaseung Industries, and is achieving sustainable development even amid the fierce competition of the global era by providing the best solutions based on strategic technology developed from technical cooperation.





## CHINA

We have affiliates in all business sectors of China to promote our competitive edge throughout the world.

HSDT  
HSB  
HSD  
QINGDAO OFFICE HSQ  
HSC  
CFCC  
HSS HSTN HST HSR HSP

## Southeast ASIA

It is Hwaseung's strategic production base with various businesses located in Vietnam, Indonesia, India, etc.

HSI AUTO  
HSMI  
HSNI

HS VINA HVC HVT CC VINA  
HSPL IBS(HSL HSG)

HII  
HWI

## Middle East & EUROPE

We are expanding our sales foundation in Europe and the Middle East by winning recognition for our brand power in the European market.

FRANKFURT OFFICE

HSTR

# GLOBAL HWASEUNG

## AMERICAS

We are supplying goods to America's Big 3 automakers by winning recognition for superior quality.

HSNA

DETROIT OFFICE

HSAH HSAA HSAU

## South AMERICAS

We are expanding the global market by building large-scale manufacturing plants in Mexico and Brazil.

HSAM

HSAB

## AFRICA

We are constantly growing by developing new inroads in the emerging market of Africa with its infinite potential.



# Automotive Parts

Our automotive parts business has the biggest market share in weatherstrips and hoses, and we are accelerating our global expansion into China, US, South America, India and Turkey and striving to become one of the BIG 3 companies in the global marketplace.



## AUTOMOTIVE PARTS

### HWASEUNG R&A

#### China

HST  
HSB  
HSC

#### US · South America

HSAH  
HSAA  
HSAU

HSAM  
HSAB

#### India

HSI AUTO

#### Turkey

HSTR

### HWASEUNG T&C

As the main company for automotive parts in Hwaseung, Hwaseung T&C has secured its place at the top of Korea in high-pressure and low-pressure hoses for cars as well as weatherstrips.

Based on world-class technology, quality and price competitiveness, it is promoting its global status by supplying products to the world's leading automakers such as Hyundai, Kia and Ssangyong as well as FCA, GM and BMW. In particular, its weatherstrips are winning recognition for their quality and have even been selected as a World Class Product of Korea by the government.

Hwaseung R&A has founded local subsidiaries in base regions of the world to enhance global competitiveness, and is taking a leap into the next-generation global leader in automotive parts through strategic interaction with global partners.



HWASEUNG AUTO BIZ R&D CENTER

WEATHERSTRIP





AUTOMOTIVE  
PARTS

HWASEUNG R&A

China

HST

HSB

HSC

US · South America

HSAH

HSAA

HSAU

HSAM

HSAB

India

HSI AUTO

Turkey

HSTR

HWASEUNG T&C

With the world's top-level technology in rubber forming, Hwaseung R&A is diversifying business based on active R&D in future technology and new business.

3D BLOW MOLDING SYSTEM TECHNOLOGY

In the 3D blow molding manufacturing process, the extrusion line and post-processing line are unified by the automated robot system, which minimizes human workforce. The process also made it possible to recycle defective products and reduce the weight of parts.

ENCAPSULATION

It is Korea's first innovative automated system that combined three processes into one, which minimizes the workspace and simplifies the process. Product performance is also improved by reinforcing NVH.



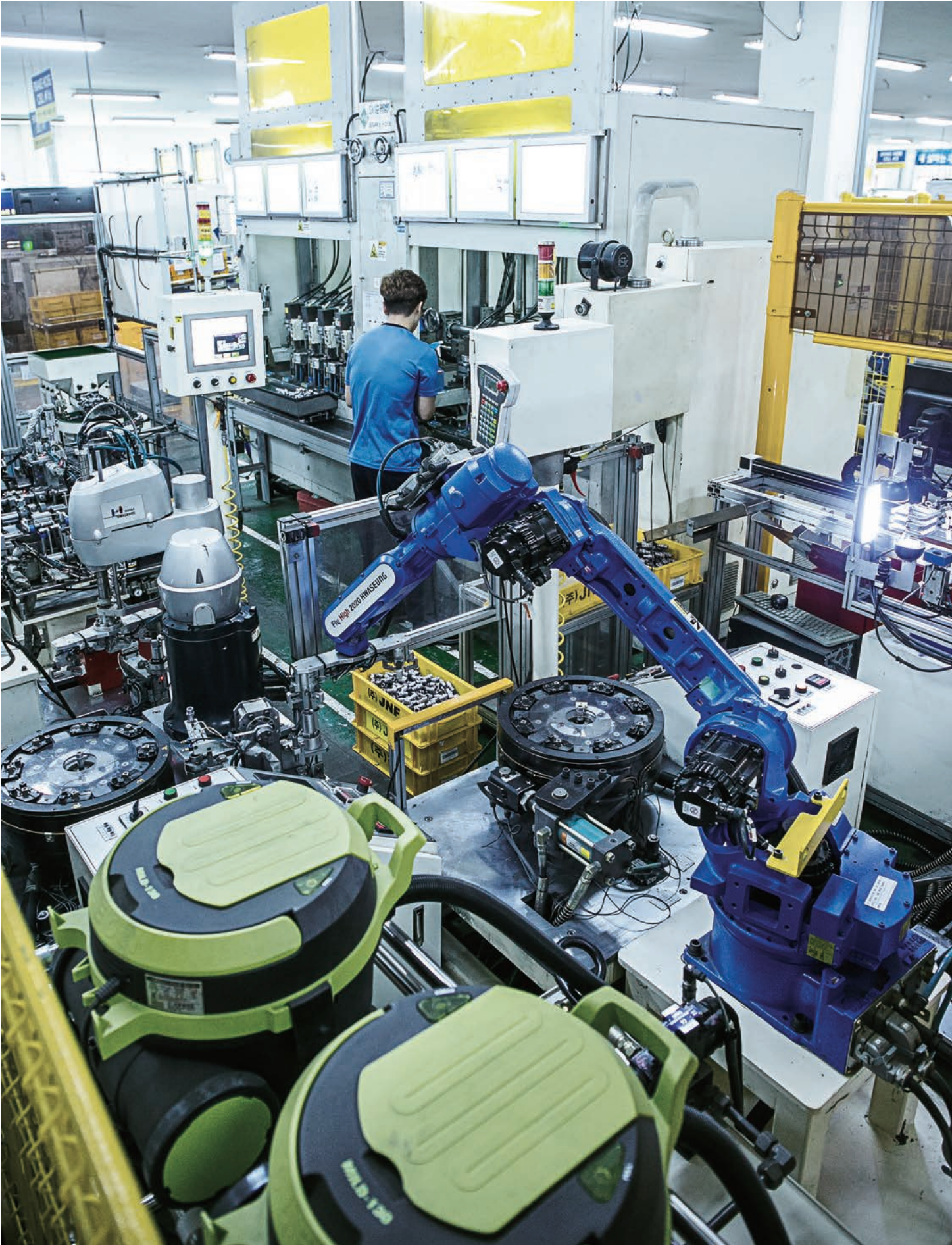
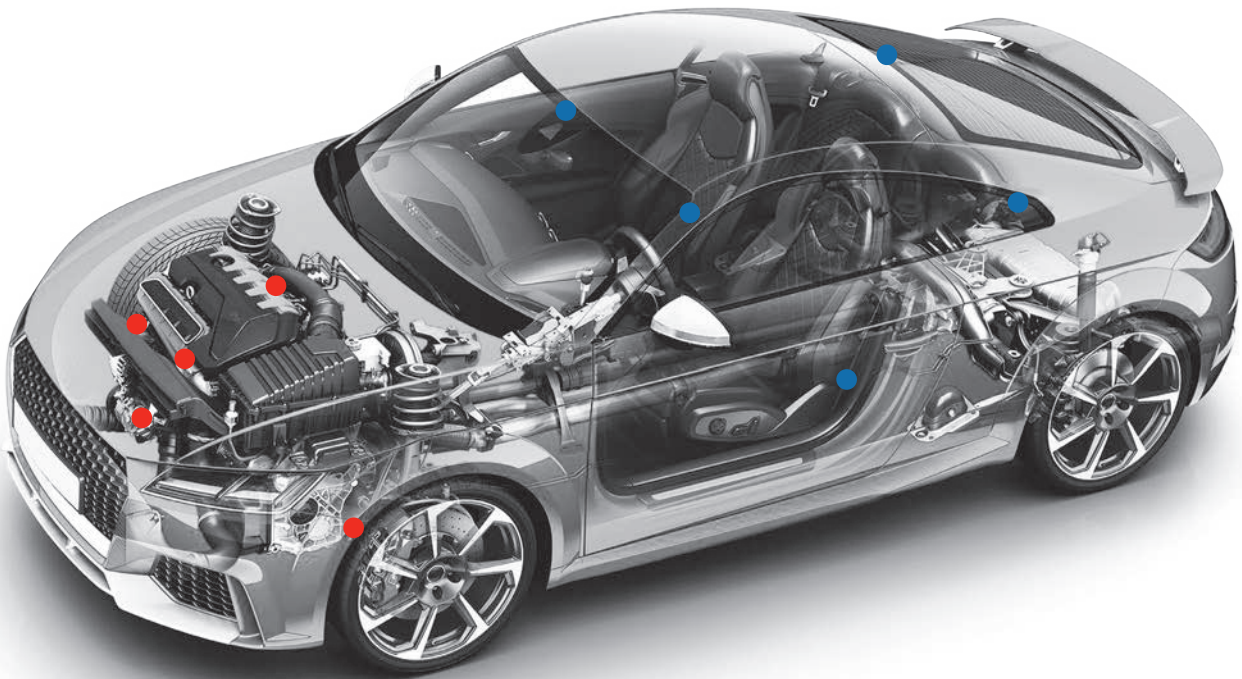
3D BLOW MOLDING  
SYSTEM TECHNOLOGY



ENCAPSULATION

● FLUID SYSTEM \_ HOSES

● SEALING SYSTEM \_ WEATHERSTRIP





AUTOMOTIVE PARTS

HWASEUNG R&A

China

HST

HSB

HSC

US · South America

HSAH

HSAA

HSAU

HSAM

HSAB

India

HSI AUTO

Turkey

HSTR

HWASEUNG T&C

HST HECHENG VEHICLE PARTS(TAICANG) CO.,LTD.

Founded in Taicang, China, HST is setting a great example of a successful global subsidiary with its localized management. It supplies high-quality products such as weatherstrips, high-pressure and low-pressure hoses to the world's leading automakers.

HSB BEIJING HECHENG R&A VEHICLE PARTS CO.,LTD.

Weatherstrips and low-pressure hoses, which are manufactured by Hwaseung's best technology and advanced facilities with the goal of becoming No.1 in automotive parts in China, compete with local brands in China and the domestic market for joint venture car brands.

HSC HWASEUNG VEHICLE PARTS (CHONGQING) CO.,LTD.

Founded in Chongqing, China, HSC is Hwaseung's network in China after HST and HSB, and a manufacturing site established to deliver automotive parts to a more extensive range of China.



HSI AUTO HSI AUTOMOTIVES PRIVATE LTD.

HSI AUTO, established in Chennai, India, is showing high growth in line with the growth of the automotive industry in India. It is leading the Indian automotive parts market and is also serving as the production base to enter Europe and Southwest Asia.

HSTR HWASEUNG TR OTOMOTIV SANAYI VE TIC. LTD. STI

Located in Kocaeli, Turkey, which is situated close to Europe, HSTR is an advanced base being used to target the European market. It is creating higher value by supplying high-quality weatherstrips and hoses to various European countries.





AUTOMOTIVE PARTS

HWASEUNG R&A

China  
HST  
HSB  
HSC

US · South America

HSAH  
HSAA  
HSAU  
  
HSAM  
HSAB

India  
HSI AUTO

Turkey  
HSTR

HWASEUNG T&C

HSAH HWASEUNG AUTOMOTIVE AMERICA HOLDINGS INC.

It is a holding company handling everything in the Americas, with the Detroit R&D Center and production, logistics and management systems. It has built a strategic alliance with leading automakers and is reinforcing competitiveness by developing innovative products.

HSAA HWASEUNG AUTOMOTIVE ALABAMA LLC.

It is acknowledged for having superiority of quality in the local market with its cutting-edge production facilities and automated systems. It aims to enter the Americas in the automotive parts industry and expand the markets to include the North American automotive industry, while also opening up an export channel in South America.

HSAU HWASEUNG AUTOMOTIVE USA LLC.

It is North America’s leading automotive hose manufacturer selected by FCA as the major primary band company, winning recognition for Hwaseung’s technology and brand power.

HSAM HWASEUNG AUTOMOTIVE MEXICO, S. DE R.L. DE C.V.

It was founded in 2014 to secure productive capacity as demand rapidly increased in South America. It is contributing greatly to increasing local jobs while also expanding markets in South America.

HSAB HWASEUNG AUTOMOTIVE INDÚSTRIA DE BORRACHA E COMERCIO BRASIL LTDA.

It was founded in 2015 in Brazil with great influence in the local economy and industries, and secured Hwaseung’s production base in South America, serving as a bridgehead to expand the South American market that is emerging as a key market.

AUTOMOTIVE PARTS

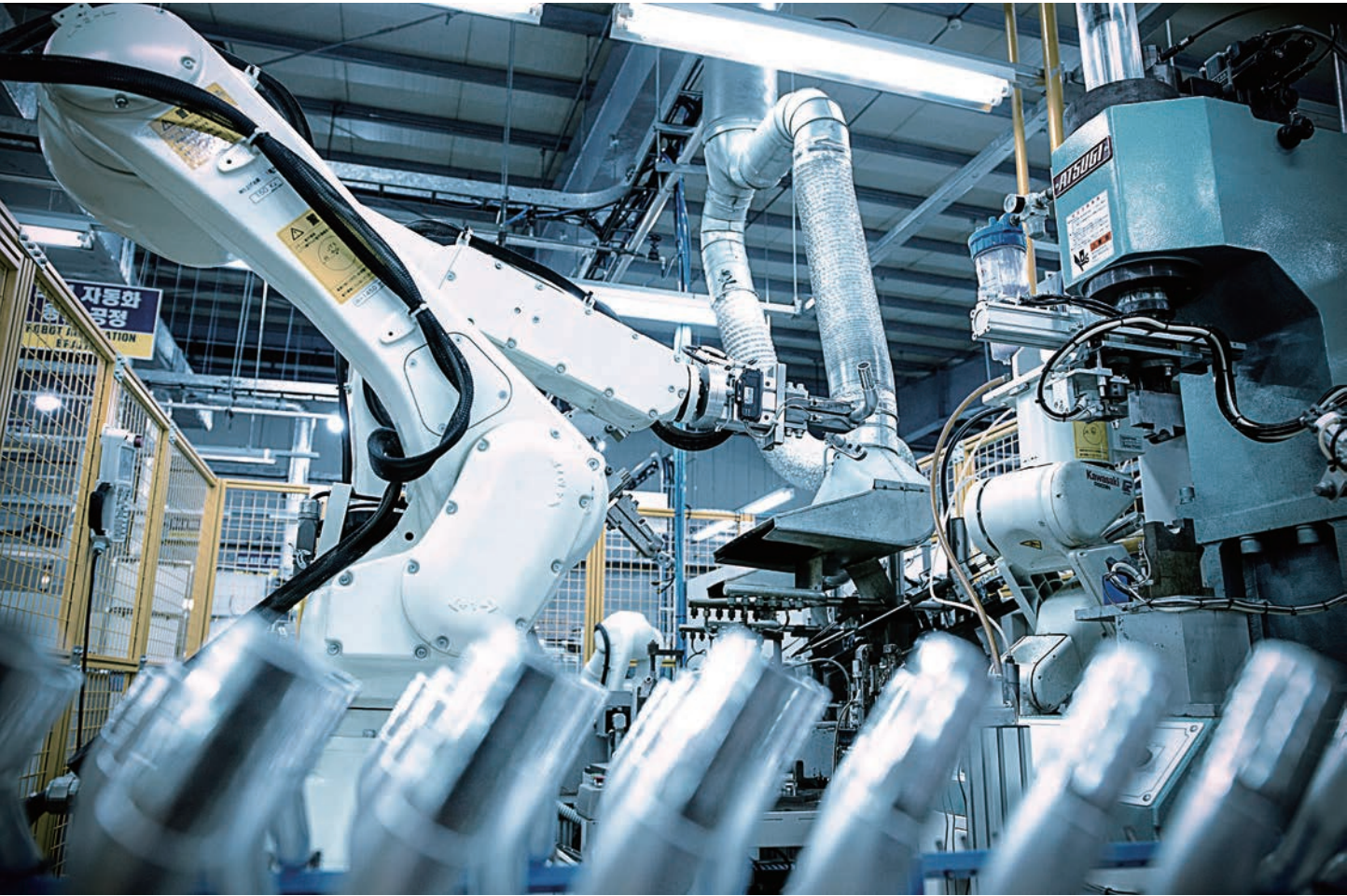
HWASEUNG T&C

Taking the initiative in global management, Hwaseung T&C is enhancing its global competencies in automotive parts by differentiating quality based on constant technological innovation.

As a result of achieving world-class quality by making bold investments in advanced automated facilities that adopted the cutting-edge production methods of advanced countries like Germany and Japan, Hwaseung T&C supplies car doors, products for trunk ceilings, air conditioners, power steering and various other hoses, as well as hose pipe assembly products to Korean and global automakers, thereby expanding the market based on quality and trust.



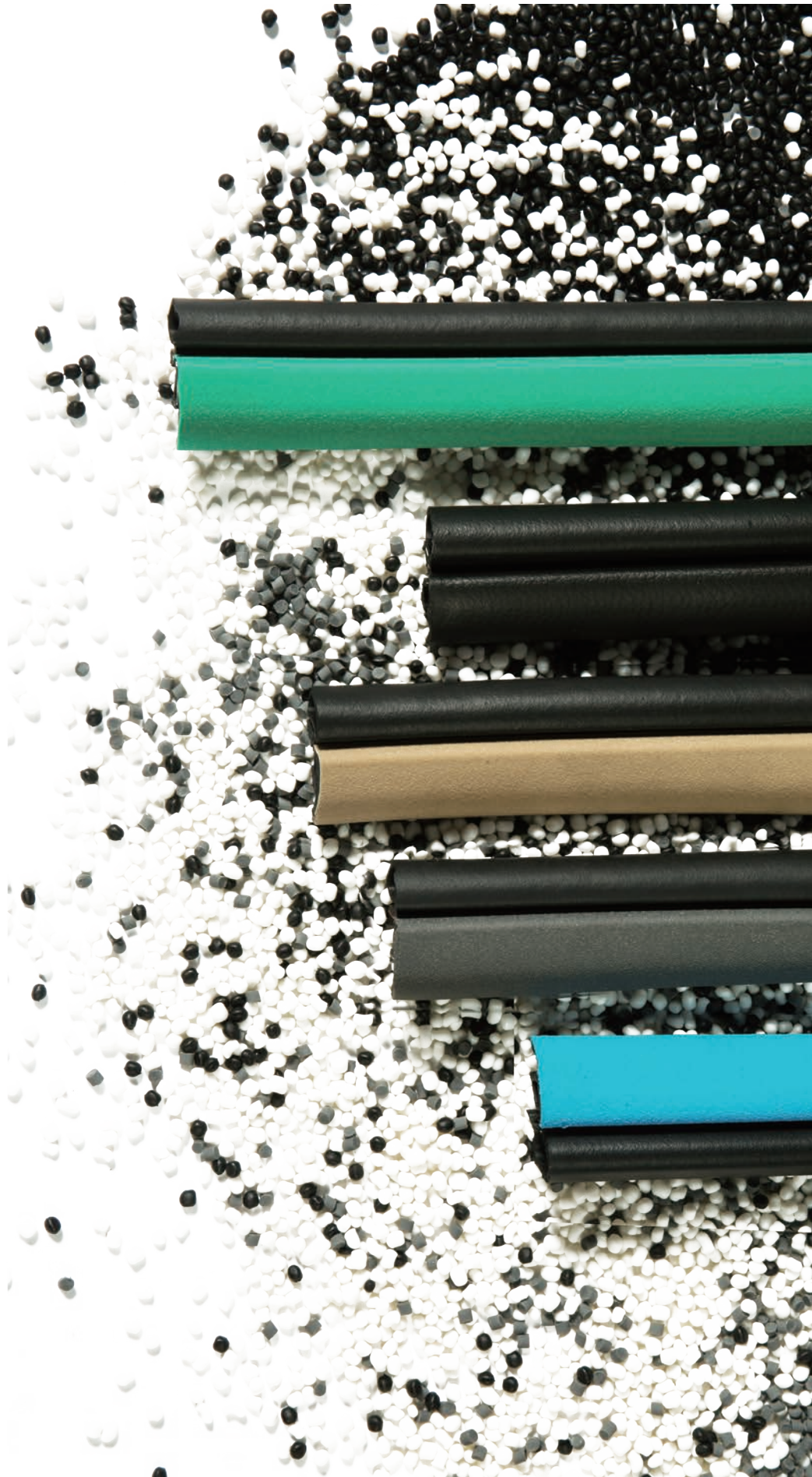
HWASEUNG T&C AUTOMATED PRODUCTION LINES





# Advanced Materials

Based on over 40 years of technology, Hwaseung possesses proprietary technology of mixing rubber in 1,500 different ways, and is also showcasing a new compound technology and higher-value brands.



## ADVANCED MATERIALS

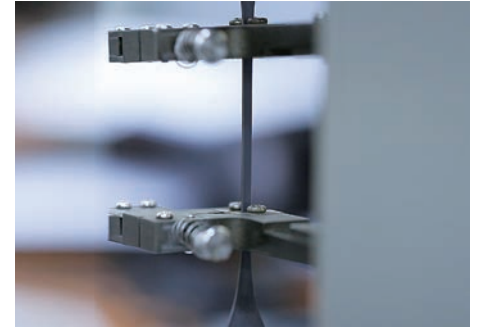
### HWASEUNG MATERIAL

China  
HSR

India  
HSMI

With world-renowned technological competencies, Hwaseung Material is Korea's No.1 and the world's No.3 materials company that has developed over 1,500 types of compounds including TPE, silicone and chemical material CMB since its foundation in 1978 as Dongyang Chemical Engineering. Its independent world-renowned core technology in precise measurement and manufacturing of materials is the driving force that led to Hwaseung Material's growth into a global company.

As a result of focusing on developing future new materials technology and higher-value products, it has been able to develop thermoplastic materials and is contributing to reducing the weight of automotive parts. It is also concentrating on developing parts in shipbuilding materials, defense and aviation. Also, it is increasing investments in developing new materials with excellent performance such as thermoelectric elements applying nanotechnology, eco-friendly antibacterial materials, and CFRP and GFRP in high-technology composite materials that can replace metal.



MES(Manufacturing Execution System) AND POP(Point Of Production system) THAT MANAGES ALL PROCESSES FROM CLIENT ORDER REGISTRATION TO SHIPPING WITH REAL-TIME DATA





ADVANCED MATERIALS

HWASEUNG MATERIAL

China  
HSR

India  
HSMI

**HSR** HWASEUNG SPECIAL RUBBER (TAICANG) CO., LTD.

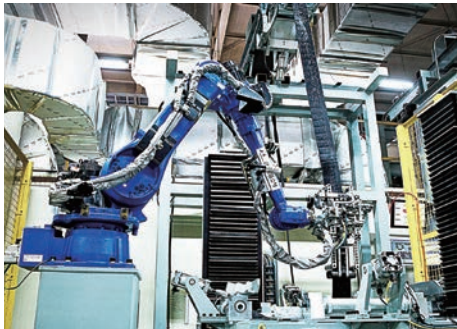
Fully initiated in 2008, HSR in Taicang, China produces competitive products with a combination of excellent local human resources and Hwaseung's great technology.

CMB and TPE, possessing world-class quality, are attracting the spotlight in the global market, and constant investments in facilities and improvement of the business structure are accelerating growth.

**HSMI** HWASEUNG MATERIAL INDIA PRIVATE LTD.

Having achieved automation in the entire manufacturing process by pursuing flawless quality and a high-quality management system since its foundation, HSMI is expanding its global network with a focus on India through ensuring price competitiveness in addition to high quality.

HSMI will diversify its products by constantly upgrading quality and developing future-oriented new materials.



HWASEUNG MATERIAL  
AUTOMATED PRODUCTION LINES



[ HWASEUNG MATERIAL'S GLOBAL BRAND ]

Dynamic Vulcanized Elastomer™  
**THERMOPRENE™**

Advanced elastomer solution  
**XENOMER**

Hwaseung Material has built a stable market foundation in Korea as Korea's biggest TPE and CMB manufacturer, and is acknowledged for its quality by Korea's leading automakers with its brand THERMOPRENE and XENOMER, and by world-renowned auto parts makers in Japan, China, India and the Americas.



With a stable market foundation in Korea as Korea's biggest CMB maker, Hwaseung Material has developed its own brand XENOMER that is now being exported worldwide.

CMB products created with an innovative mixing technique and production process are known to have more outstanding functionality and consistent quality than competing products.

Hwaseung Material's TPE brand THERMOPRENE is an eco-friendly and future-oriented new material that has both the smooth texture of rubber and the recyclable feature of plastic, winning recognition by not only Korean automakers but also the world's leading automakers.



# Footwear ODM

Having built its trust and technology based on footwear manufacturing, Hwaseung discarded the conventional OEM method and switched to the ODM method in which the company takes charge of everything from product planning to development and manufacturing, and has now become the best partner of world-renowned brand Adidas Group.



## FOOTWEAR ODM

**Korea**  
HWASEUNG ENTERPRISE

**Vietnam**  
HS VINA  
HVC  
HVT  
CC VINA  
HSPL

**China**  
HSD  
HSQ

**Indonesia**  
HWI

Hwaseung Enterprise is the holding company of Hwaseung Vina, the major ODM company of the footwear business in Adidas Group, and is a strategic partner of Adidas Group.

It has worked with Adidas since the launching of Adidas NEO that has led Adidas to achieve remarkable growth, and also secured leading market share in NEO label manufacturing. Also, it is securing its place in the global market by being ranked second in market share for Adidas sneakers manufacturing.

Hwaseung Vina has been ranked first in delivery, process automation and productivity among Adidas's partners with its innovative production strategy 'Speed to Market', thereby maximizing customer satisfaction. Exhibiting a remarkable growth with every passing year, Hwaseung Vina is now looking out for a greater future by expanding its product portfolio and business scope to actively respond to global market trends.





**HS VINA** HWISEUNG VINA CO., LTD.

Hwaseung Vina, which is the world’s biggest footwear production base, is the ‘Global No.1 Shoes Factory’ achieving win-win growth with the world-renowned brand Adidas Group. It has captivated the global footwear industry with a remarkable progress rate every year, and now it is adding a global myth to Hwaseung’s history by manufacturing top-class products such as Adidas NEO, Adidas Running, Reebok, and Reebok Royal.

**HSPL** HSPOLYTECH CO.,LTD.      **HVC** HWISEUNG VIETNAM CHEMICAL CO., LTD.

**HVT** HWISEUNG VUNGTAU CO., LTD.    **CCVINA** CHANG CHUN VINA CO.,LTD.

Hwaseung has focused on Vietnam as its global production base for footwear, due to abundant human resources and various policy benefits. With growing confidence based on stable quality and productivity, HVT and CC VINA are enhancing competencies for Hwaseung’s future footwear industry. In particular, it has established HSPL in line with the growth of Adidas Group and improved product capacity, while also devoting itself to producing high-quality global products.



**HSD** JANGCHUN SHOE MANUFACTURING DALIAN CO.,LTD. / HSQ\_QINGDAO JANGCHUN SHOE MANUFACTURING CO., LTD.

HSD in China is remarkably growing into an advanced production base for world-renowned footwear brands such as Adidas and Reebok. The plant is specializing in manufacturing solely in order to provide a stable supply and take aim at the massive domestic market in China. Established in Qingdao for stabilized supply of output, HSQ is adding confidence to world-renowned brands and securing Hwaseung a firm place in China.

**HWI** PT. HWISEUNG INDONESIA

Established in Semarang, Indonesia as a key global plant in addition to Vietnam and China, HWI initiated production in October 2016 and its goal is to manufacture 2 million shoes a month by 2018. Having attained deeper cost reduction while improving efficiency with an automated smart factory, HWI plans to expand its share in Adidas Group while also taking over the new supply of high-priced products.





# Chemical

Hwaseung boldly enter a frontier of infinite value in the chemical sector with solutions that enrich and provide happiness for all of humanity.

Based on advanced science and technology, HSI C&D Center is engrossed in evolving the sustainable future values of Hwaseung.



## CHEMICAL

### HWASEUNG INDUSTRIES

China  
HSP  
CFCC

Indonesia  
HII

HUNOMIC  
HSI C&D CENTER

Chemical company, Hwaseung Industries CO., LTD. secures competitiveness in the global market by creating value with technological advantage, and fulfills technology management with constant R&D. Based on excellent technological skills and confidence in top quality, it is manufacturing and supplying various products to the world such as BOPP, BOPET, solar cell material EVA sheets and chemical materials.

Expanding its business scope to chemical materials, Hwaseung Industries CO., LTD. is creating a sustainable high-efficiency profit structure with high-functional and value-added items such as coating agents for automotive weatherstrips, flocking adhesives, rubber hose release agents, high-functional adhesives for footwear, and resins for synthetic leather. It will open up a greater future by developing high-performance advanced materials to create synergy in the chemical business.



#### **HSP** HWASEUNG PHOTOVOLTAIC MATERIAL(TAICANG) CO.,LTD.

Established in Taicang, China, HSP is an advanced base for Hwaseung's global eco project that will lead the photovoltaic materials industry.

#### **HUNOMIC** HUNOMIK CO.,LTD.

HUNOMIC is supplying inter-unit films and materials to Korea as well as overseas, using Hwaseung's film technology and quality.

#### **HII** PT.HWASEUNG IBS INDONESIA

HII supplies adhesives for footwear, resins and chemical products to footwear and synthetic leather factories.

#### **CFCC** COATWELL FINE CHEMICAL (ANHUI) CO.,LTD.

CFCC is winning recognition from global automakers as well as various industries in China by manufacturing and selling coating agents for cars as well as various chemical products.





HWASEUNG INDUSTRIES

China  
HSP  
CFCC

Indonesia  
HII

HUNOMIC  
HSI C&D CENTER

MAJOR PRODUCTS PART of BUSINESS



FILM

The company is accelerating development of high-performance and higher-value products based on cutting-edge technology in packaging materials, industrial films and photovoltaic sheets that we can encounter in daily life.



CHEMICAL

The company has original technologies in weatherstrip coating agents, footwear and industrial adhesives, resins for synthetic leather, and other chemical products. It concentrates its research competencies in developing eco-friendly products.



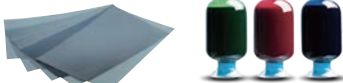
SHOES MATERIAL

As the best partner of Adidas, the company develops various materials applied to the upper part and soles of footwear. In particular, it is studying and developing biodegradable and eco-friendly biomaterials and breathable materials for healthcare.



HIGH-TECH MATERIAL

The company conducts R&D to develop convergence materials such as displays, secondary cells and solar cells that lead the future advanced materials industry, as well as cutting-edge materials and products in various industries.



HSI C&D CENTER

Founded based on Hwaseung Industries' technology and know-how, HSI C&D Center 'THE BRIDGE' is broadening the development infrastructure of future advanced technology with a new paradigm of C&D(Connecting & Development).

Based on various parts and materials technologies, the company is developing high-performance film materials, adhesives for higher value-added industries, and technology-intensive future energy materials. It is also focusing on the convergence of advanced materials, thereby leading next-generation technologies in materials and securing original technologies. Furthermore, it is constantly promoting joint R&D by building strategic alliances with the world's leading firms and research centers.





# Trade Networks

Trade networks, which is Hwaseung's strategic business, leads Hwaseung to help it become a global general trading company with competitive edge through its businesses in resources, steel, industrial rubber, general trade, and integrated procurement of various raw materials based on a global network that spans five oceans and six continents.



## TRADE NETWORKS

### HWASEUNG NETWORKS

Having established its grounds as a global general trading company in Asia, Europe and the Americas as well as the Middle East and Africa, Hwaseung Networks is enhancing its competency to become one of Korea's Big 3 general trading companies by focusing on six business fields: resources, steel, food, renewable energy, raw materials, and corporate MRO service.



Hwaseung Networks sets a new paradigm for general trading companies and is focusing on developing specialized items such as eco-friendly and future alternative energy to provide a new concept of business services. The company is also securing a global distribution channel by establishing localization strategies based on a stronger bond with relevant countries. Hwaseung Networks has expanded its form of trade from intermediary trade to sourcing, and is developing a future business environment by securing the One Flow System of resources, logistics and supply.





TRADE NETWORKS

HWASEUNG NETWORKS  
GLOBAL NETWORK  
HSNA  
HSNI  
HSTN

HWASEUNG INDUSTRY  
GLOBAL NETWORK  
HSS  
IBS (HSL / HSG)

HWASEUNG EXWILL

HWASEUNG NETWORKS  
GLOBAL NETWORK

**HSNA** HWASEUNG Networks America Corp.

As a bridgehead for Hwaseung’s entry into the Americas, HSNA established multilateral grounds for growth with its sales office in LA, while also expanding its global marketing network throughout the Americas.

**HSNI** HWASEUNG NETWORKS INDIA PRIVATE LTD.

It is an advanced base for global business with a marketing scope expanding from India to Europe, Middle East and Africa. It is building a broad sales foundation by expanding its business scope such as opening up new markets or developing new products.

**HSTN** HWASEUNG HAOTIAN (TAICANG) INTERNATIONAL TRADING CO., LTD.

Established in Taicang, which is rapidly emerging as a rising industrial zone in China with local subsidiaries of global firms concentrated, HSTN is serving as an outpost for global expansion.

HWASEUNG INDUSTRY  
GLOBAL NETWORK

**HSS** HWASEUNG(SHANGHAI) INT’L TRADE CO.,LTD.

Expanding its business scope based on the massive Chinese market, HSS is serving as a hub of East Asia with Shanghai at its heart with the second largest export and import volume in the world.

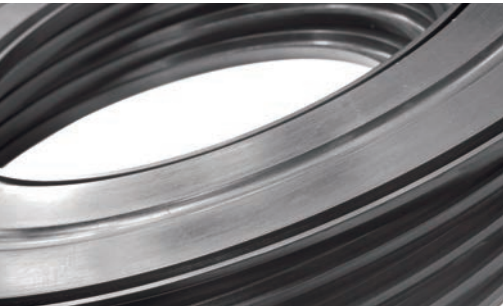
**IBS** INTERNATIONAL B2B SOLUTION  
HSL HS LOGISTICS / HSG HS GLOBAL

Securing its place as a general trading company in Vietnam, IBS has reinforced the trading network by establishing HSL and HSG in 2016. Established for Hwaseung’s overseas logistics transport, HSL provides one-stop services including confidence in various imported and exported cargo in Vietnam, as well as logistics security, import-export inspections and customs clearance. HSG also offers advanced services to Hwaseung Vina and the logistics sector in Vietnam as a transport subsidiary specialized in inland transport.

TRADE NETWORKS

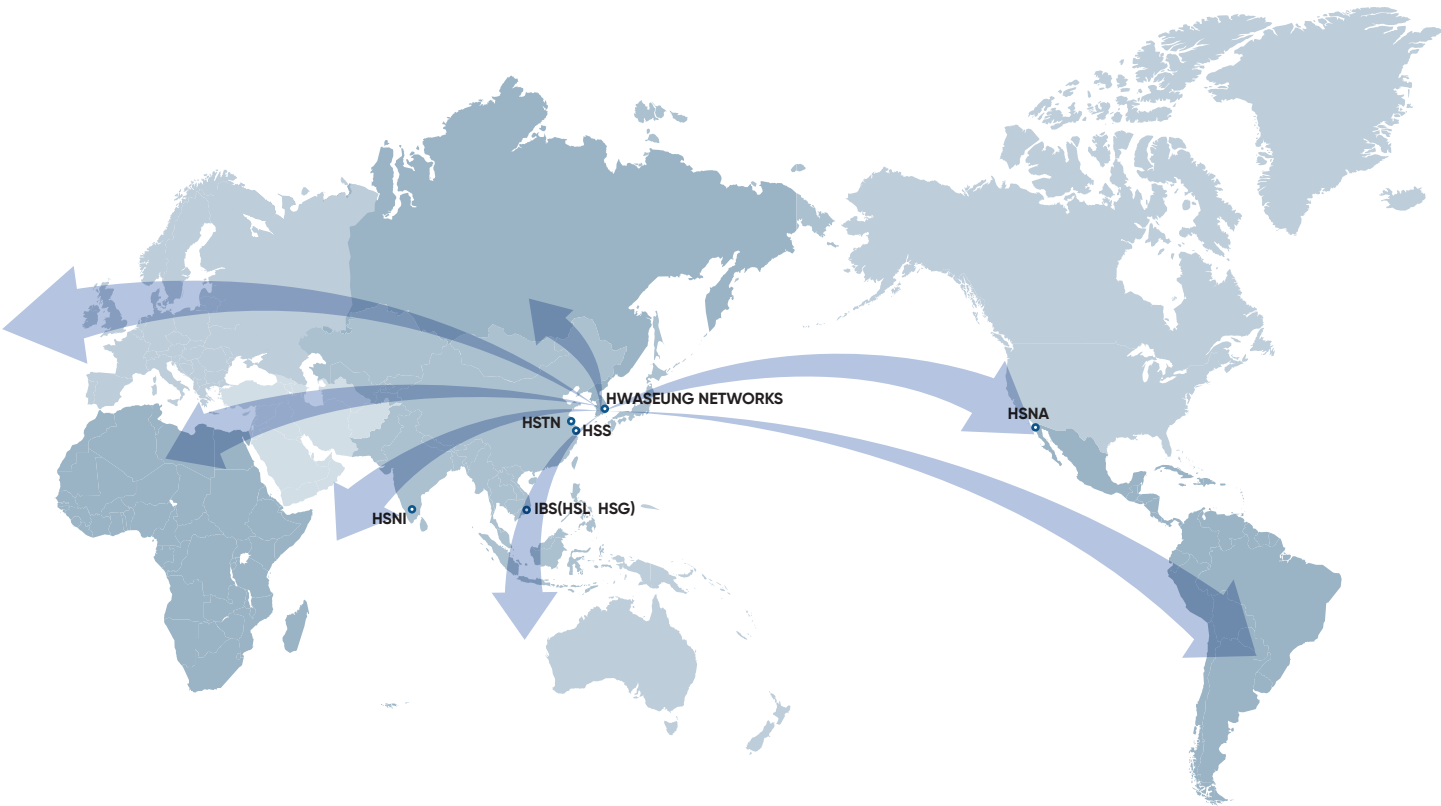
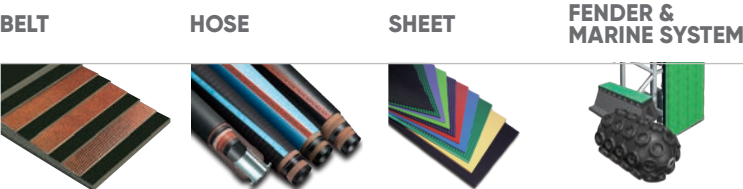
HWASEUNG EXWILL

Hwaseung Exwill is an industrial rubber company that manufactures and distributes conveyor belts, industrial hoses, shipping buffers, and dust-protective rubbers. It is a company specialized in industrial rubber products that has contributed to the development of key industries and mid/large industrials of the world, including POSCO, Korea Hydro & Nuclear Power, Korea Railroad Corporation, and Hyundai Heavy Industries.



With constant research and bold investments to become the cradle of world-class products, Hwaseung Exwill remarkably reduced the risk of accidents in industrial fields by succeeding in developing colored conveyor belts in 2016 where the abrasion can be identified by the naked eye. Focusing all its competencies and seeking global growth in line with the trend of global industry, Hwaseung Exwill is taking a giant leap forward by preparing new values with industrial rubber, logistics, distribution, harbor, civil engineering, and engineering solutions.

MAJOR PRODUCTS PART of BUSINESS





# Social Contribution

We hope our care turns into warmth today  
and our support into hope tomorrow -  
By communicating and sharing,  
Hwaseung is fulfilling the corporate philosophy  
of 'Unity' that increases value for one another.



## Beauty : Beautiful people Unity : Happiness in sharing

### Sponsoring World Art Therapy Association

Hwaseung holds art therapy camps every summer and winter for children with developmental disorders in cooperation with World Art Therapy Association, and supports various art therapy programs.



### Sponsoring the Korean Association for Children with Leukemia and Cancer

Having joined the inauguration of the Busan branch of the Korean Association for Children with Leukemia and Cancer in 2003, Hwaseung is constantly offering sponsorships and carrying out various events and support projects for children with leukemia and cancer.



### Sponsoring Educational Development

Hwaseung is providing support through Busan Metropolitan City Office of Education so that all children have equal educational opportunities.

### Sponsoring Culture, Arts and Sports

Hwaseung is participating in creating a more beautiful world by sponsoring various cultural events, artistic performances and sporting events.



### Hwaseung Dream Project

It is a social contribution program in which the disabled and adolescents striving to achieve their dreams are matched one-on-one with Hwaseung employees to learn and experience the things they have always wanted to learn.

### With Hwaseung (Weekend Farm)

It is a welfare program for Hwaseung employees that opens a family farm for the employees to harvest their own crops and donating at least 50% of the harvest to nearby welfare facilities.









