

ENGINEERING CO.,LTD.

PRECISION INDUSTRY CO.,LTD.

MOTOR TECHNIC CO.,LTD.



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**SHIN-HWA**  
[www.shinhwa-eng.com](http://www.shinhwa-eng.com)

CREATE  
NEW  
FUTURE







# CREATE NEW FUTURE!

SHINHWA IS A LEADER IN GLOBAL  
AUTOMOTIVE PARTS TECHNOLOGY

The world leader in auto parts manufacturing

Shinhwa Group is constantly striving to create a new future by challenging the best quality and zero defects based on the best technology in high-tech industries such as automobile parts, automation line construction, and new casting technology development.





A future-leading company  
that realizes its dream with  
creation and passion

**SHIN-IWA**





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## CEO MESSAGE

We are making every effort with a sense of mission  
to lead the corporate culture in the 21st century.

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Hello? Welcome to Shinhwa Group

Since its founding in 1995, Shinhwa has been creating a new myth as a specialized aluminum casting company equipped with the production of automated production lines and auto parts and the best technology through endless challenge spirit and new technology development.

From the core parts of automation to the casting method through automated production facilities and technical alliance based on the best experts and cutting-edge technology, Shinhwa Group is doing its best to produce the best products through innovative research and efforts with the spirit of challenge and creation.

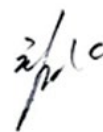
Shinhwa Group supplies the highest quality products to its aluminum customers with aluminum casting experience and extrusion know-how based on mold technology.

By successfully building a future growth engine system with expansion of overseas market and bold R & D investment, Shinhwa Group is growing as a national aluminum material company based on its global competitiveness.

We will lead the quality innovation of the aluminum material industry with the "quality first" campaign with all our employees.

In addition, Shinhwa Group will challenge for a better future by building a foundation for the global manufacturing industry through full-scale R&D investment and aggressive expansion of the global production sales network.

CEO KWI-HYUN, LEE







# CREATE NEW FUTURE!

“새로운 미래를 창조하라!”



## COMPANY OVERVIEW

### Best Auto Parts Manufacturer

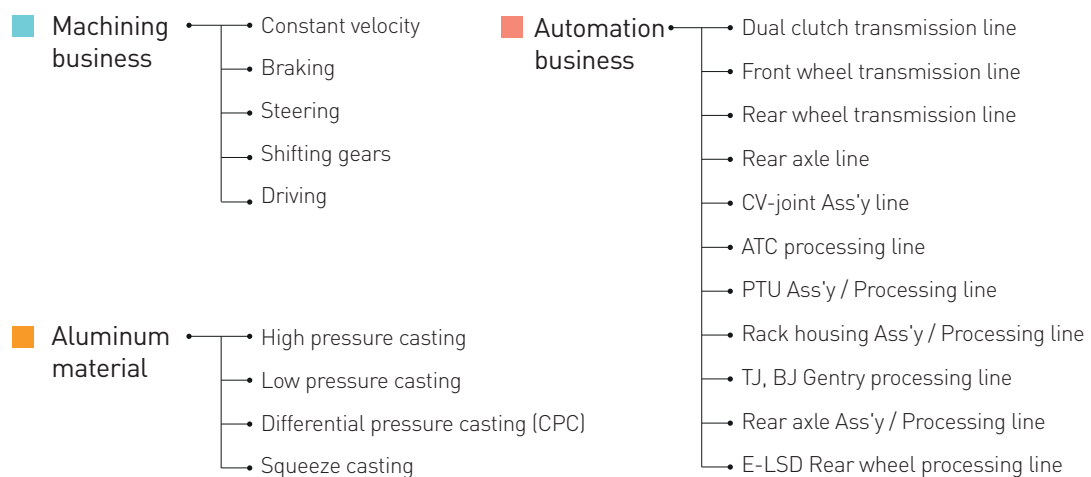
Shinhwa Group is making every effort with a sense of mission to lead the corporate culture in the 21st century through practice management based on trust.

In order to become a world-class auto parts manufacturer, Shinhwa is constantly investing in the challenge spirit and the development of new technology.

In addition to the production of automated production lines and automobile parts, we are also making a new myth as an aluminum casting company equipped with the best technology

From the core parts of automobiles to the casting method through automated production facilities and technical alliance based on the best experts and state-of-the-art technology, we will do our best to produce the best products through innovative research and efforts in the spirit of challenge and creation.

### Business Field





## SHIN-IWA VISION

BUSINESS SLOGAN

**CREATE  
NEW FUTURE!**

### Differentiated Technology Competency

- Processing business
- Material business
- Automation business

### GLOBAL Business Strategy

- Expansion to domestic companies
- Pioneering overseas market

### Establishment of RightCorporate Culture

- Global Talent Development
- Creation of unique brand
- Establishment of operating system



## OUR HISTORY

### Practice management based on trust since its founding

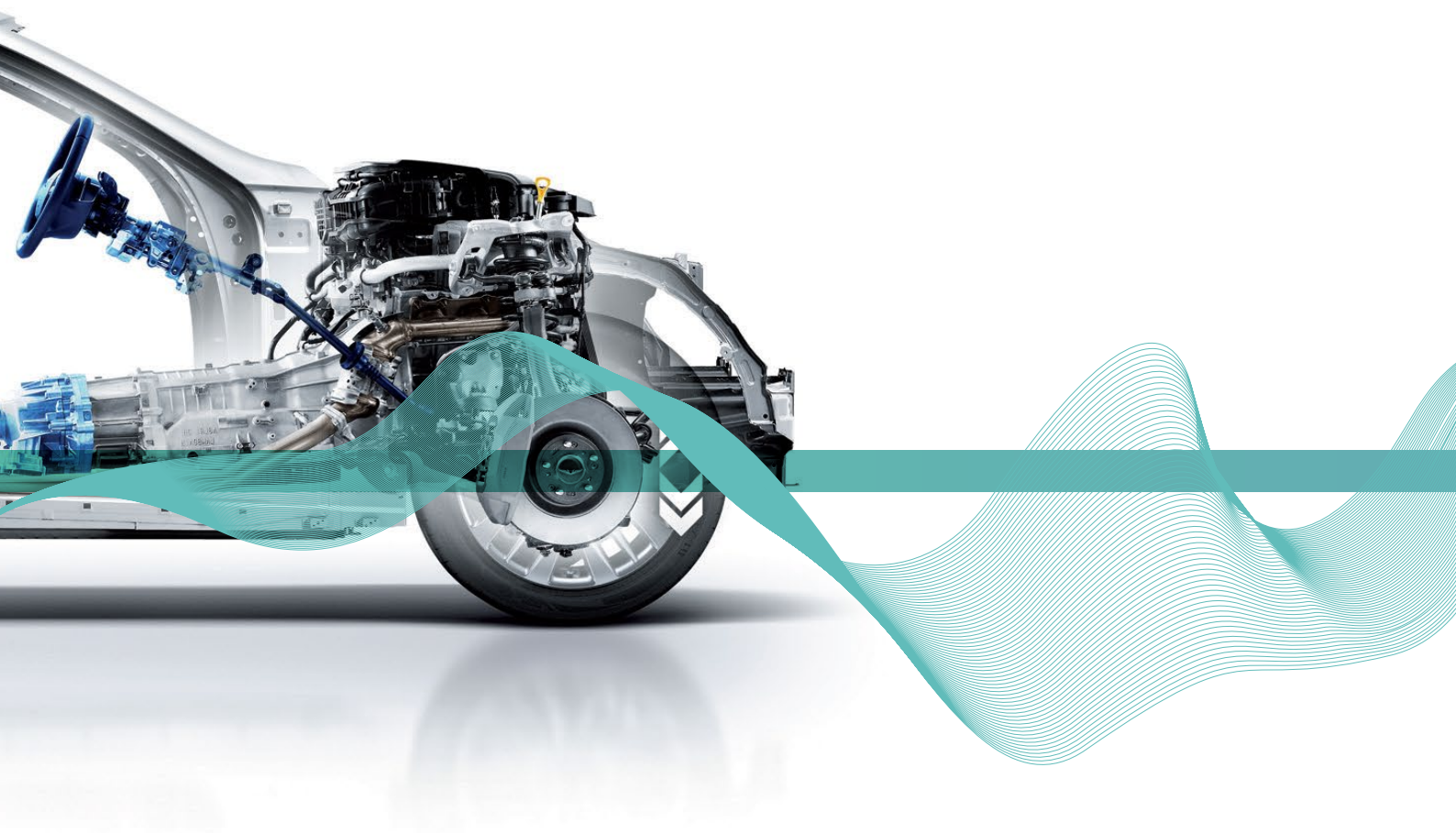
1995	1995. 02	Established Shinhwa ENG Co., Ltd.
	1997. 02	Registered as a company of Hyundai Wia Co., Ltd
2001	2001. 10	Purchased Shinhwa ENG Plant 1 [Seongsan-dong, Changwon-si]
	2003. 03	Started the production of auto parts [Drive-Shaft] [Finished product]-300,000 units / year
~		
2005	2004. 05	Purchased Shinhwa ENG Plant 2 [Namsan-dong, Changwon-si]
	2004. 08	Expanded Drive-Shaft Line-1.8 million units / year
	2005. 10	Acquired Gwangdeok Co., Ltd. (Paryong-dong, Changwon-si) : Shinhwa ENG Plant 4
2007	2007. 08	Established Shinhwa P.I.C Co., Ltd. (Seongsan-dong, Changwon-si) -Shinhwa P.I.C Plant 1
	2008. 10	Expanded Drive-Shaft Line- 3 million units / year
~		
2010	2009. 03	Established 6-stage A/T mission parts line-1.6 million units / year
	2010. 09	Established Outer-Race, Tripod-Housing heat treatment / grinding line-600,000 units / year
	2010. 12	Expanded Drive-Shaft Line- 5 million units / year
2011	2011. 05	Purchased Shinhwa P.I.C Plant 2 (Namsan-dong, Changwon-si)
	2011. 11	Plant acquisition (Paryong-dong, Changwon-si): Shinhwa Motech Plant 1
~		
2015	2012. 05	Plant acquisition (Paryong-dong, Changwon-si) : Shinhwa ENG Plant 1-Processing Plant (ShinhwaMotech)
	2012. 12	Achieved quality 4.5 STAR for Hyundai Wia
	2013. 01	Registered as a company of Hyundai Mobis
	2013. 01	Plant acquisition (Paryong-dong, Changwon-si) : Expanded Shinhwa Motech Plant 2
	2013. 08	Plant acquisition [Paryong-dong, Changwon-si] : Expanded Shinhwa ENG Plant 5
	2014. 05	Started mass production and delivery of C/P-MDPS rack housing for Lfa / UM model of Hyundai Mobis
	2014. 10	Mass production and delivery of GETRAG DCT 6-speed transmission case and housing (430,000 units per year)
	2015. 05	Chrysler First Partner Registration
2016	2016. 04	Delivered Chrysler Knuckle and ARMs
	2017. 08	Plant acquisition (Paryong-dong, Changwon-si) : Extension of Shinhwa P.I.C Plants 3 and 4
~		
2019	2018. 10	Received PTU gear order (Hyundai Wia)
	2018. 12	Production and delivery of INNER SHAFT ASS'Y (Hyundai Wia)
	2019. 02	Started mass production and delivery of PTU COVER/HOUSING(Hyundai Wia)
	2019. 04	SHINHWAA AUTO USA Corporate Establishment



# QUALITY No.1 INNOVATIVE FRONT-RUNNER

From the core parts of automobiles to the casting method through automated production facilities and technical alliance based on the best experts and state-of-the-art technology, we will do our best to produce the best products through innovative research and efforts in the spirit of challenge and creation.







**MAIN PRODUCT**



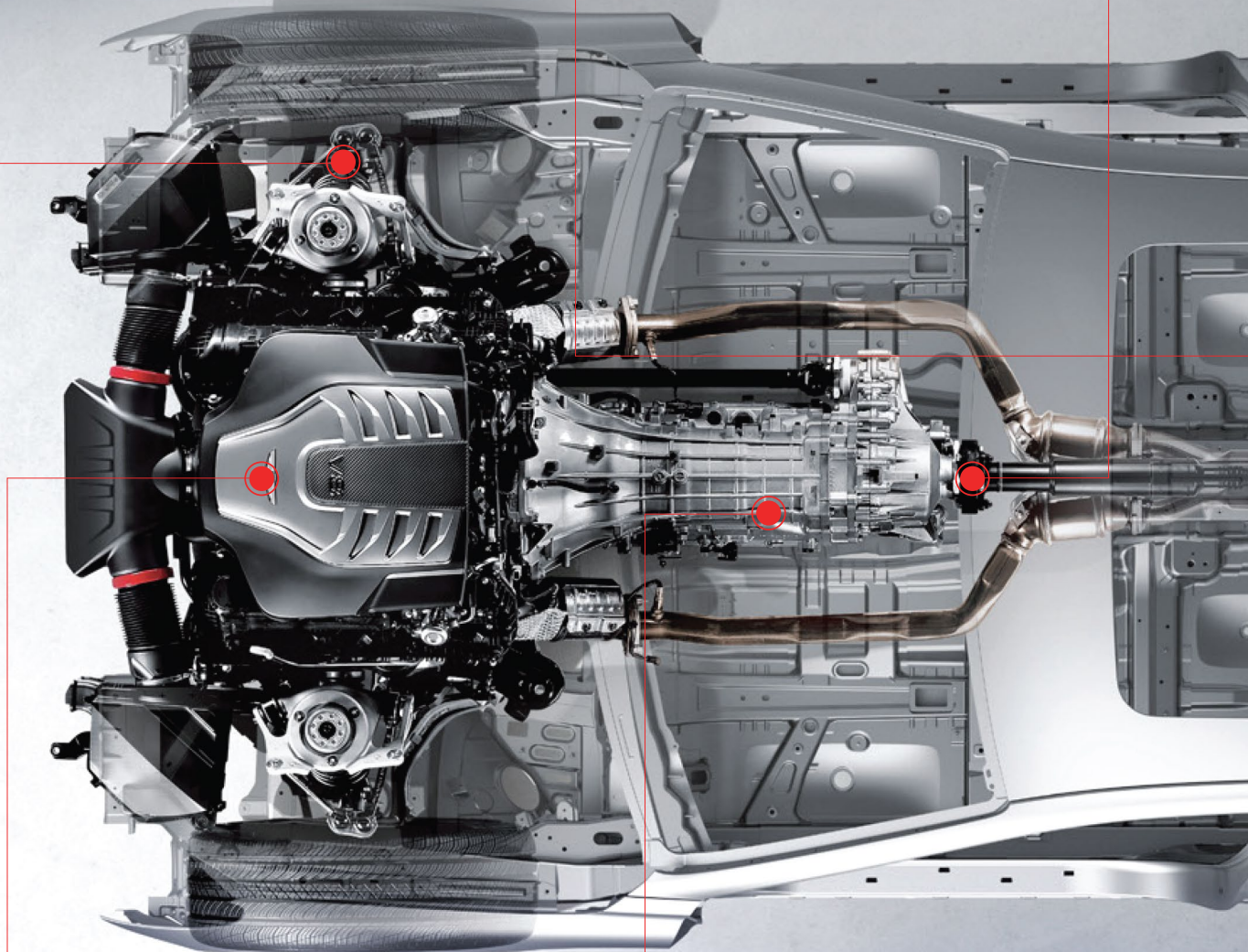
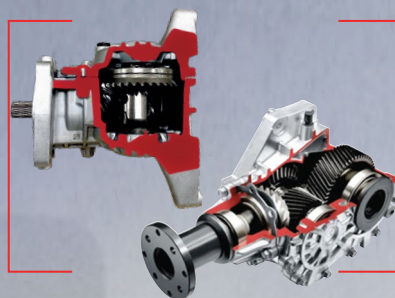
CV-JOINT  
(Drive Shaft/Inner Shaft Ass'y/Outer-Race/Tripod-Housing/EV Platform IDA Ass'y)

CV-JOINT



Driving  
(AXLE/PTU/E-LSD/Hypoid-Gear/Pinion-Shaft)

DRIVING

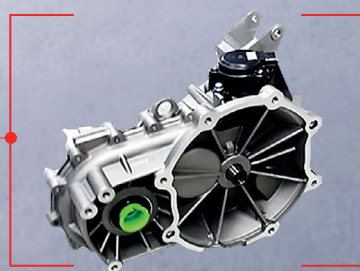
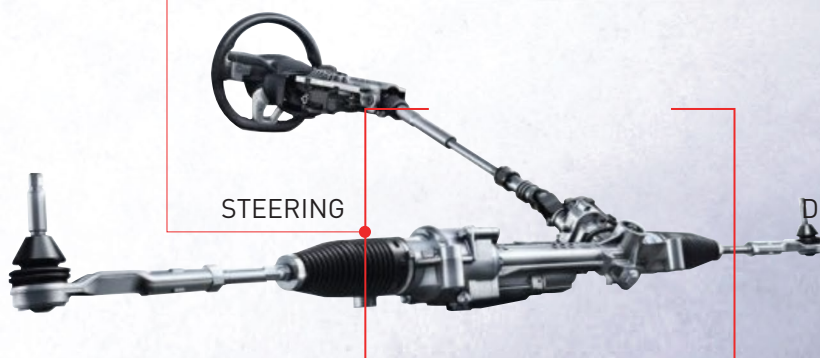


STEERING

DECELERATOR

Steering (Rack Housing/Main Housing)

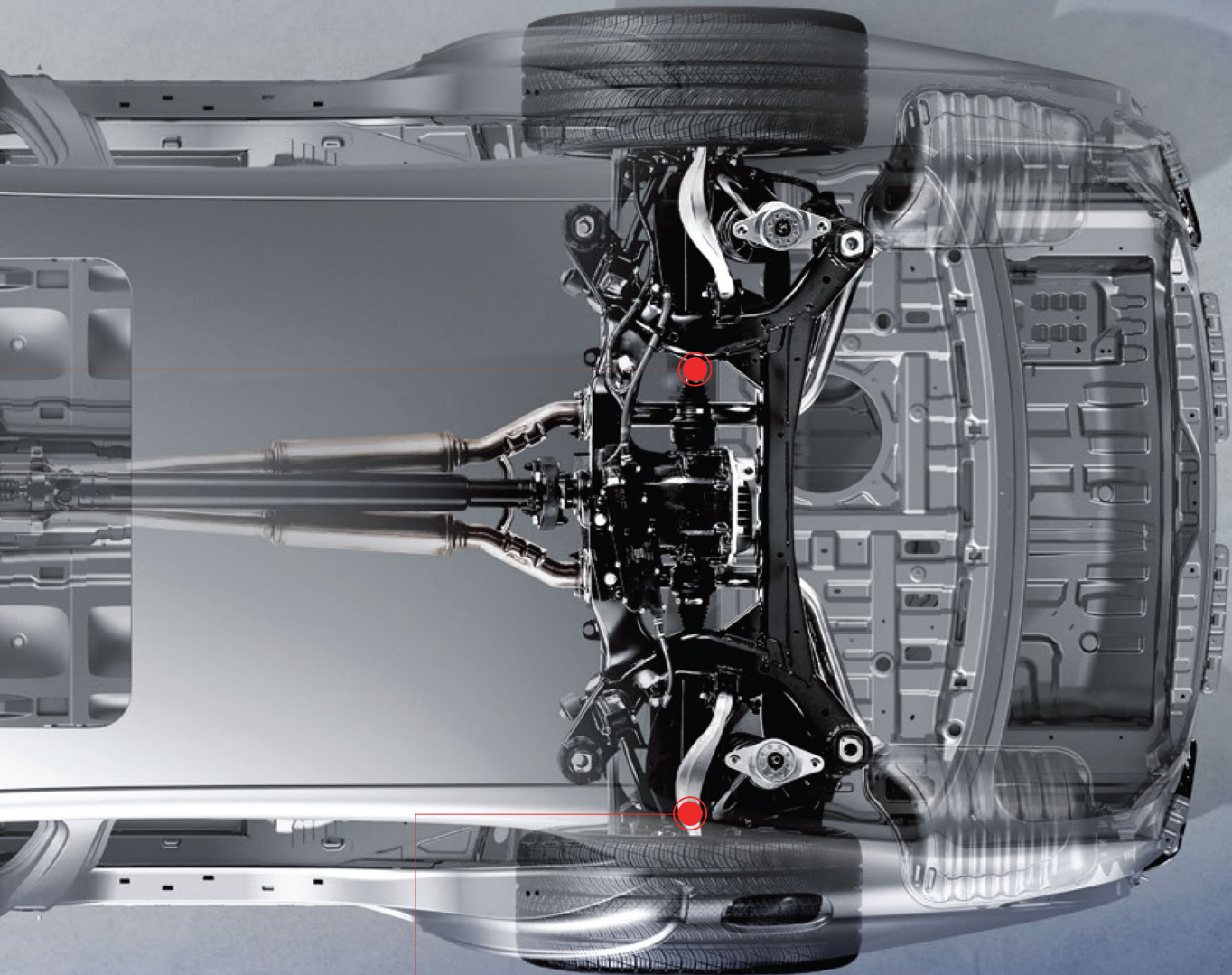
Electric Vehicle Deceleration HOUSING & COVER





## SHINHWAVE GROUP Automotive Parts Business Sector

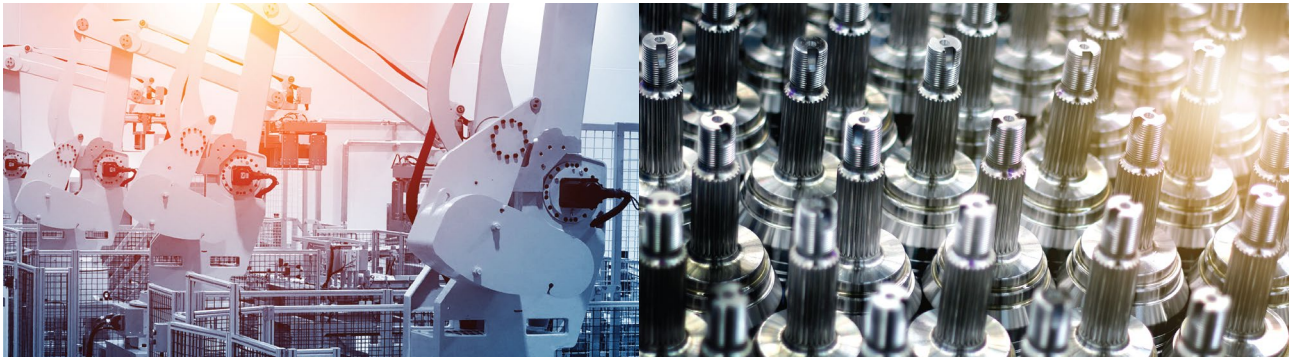
Shinhwa Group has the best technology in the development and manufacture of key auto parts leading the development of the automotive industry.



BRAKING



Brake (Caliper Body/Torque Member/BMC Ass'y)



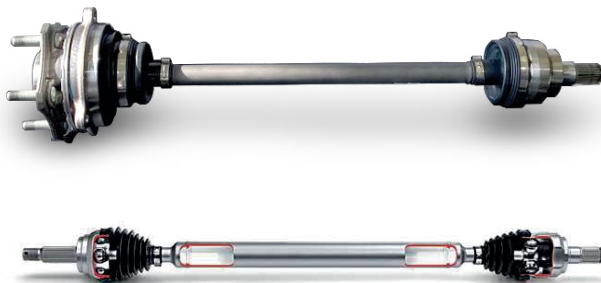
## CV-JOINT

CV-JOINT (Drive Shaft / Inner Shaft Ass'y / Outer-Race / Tripod-Housing / EV Platform IDA Ass'y)

Shinhwa Group has been supplying high-quality constant-velocity joint parts for Sportage, Tucson, Kona, Avante and Genesis based on the constant-velocity joint technology accumulated over 20 years in the Changwon plant. Recently, it is supplying IDA HUB integrated CV-J Ass'y. Through the state-of-the-art automatic production line, we are trying to achieve zero defect rates and responding quickly to customer needs, realizing high customer satisfaction.

EV Platform IDA Ass'y / CV JOINT

Outer-Race / Tripod-Housing



Inner Shaft Ass'y

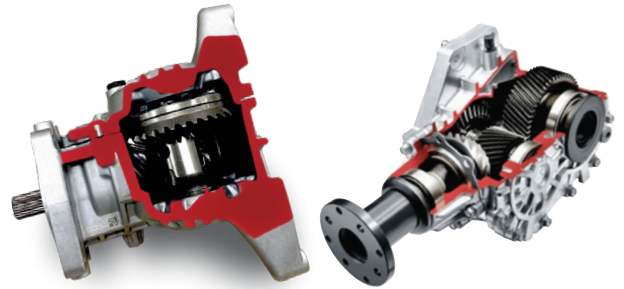






## DRIVING

Driving (AXLE / PTU / E-LSD / Hypoid-Gear / Pinion-Shaft)



Drive is a device that realizes AWD by absorbing various conditions of the vehicle and transmitting the driving force of the engine from the transmission. Shinhwa Group processes and manufactures cover housings for AXLE, PTU, and E-LSD, and supplies hypoid gears through continuous heat treatment.

### AXLE



### PTU



### E-LSD



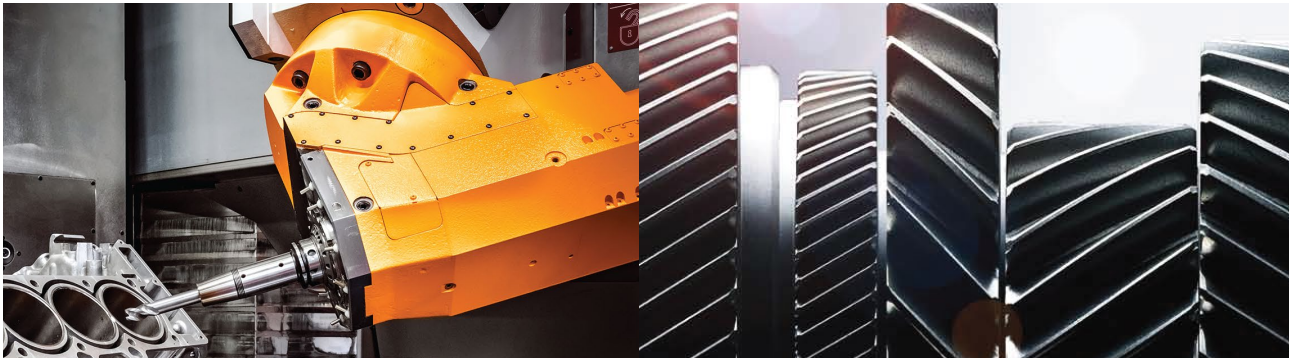
### HYPOID-GEAR



### PINION-SHAFT





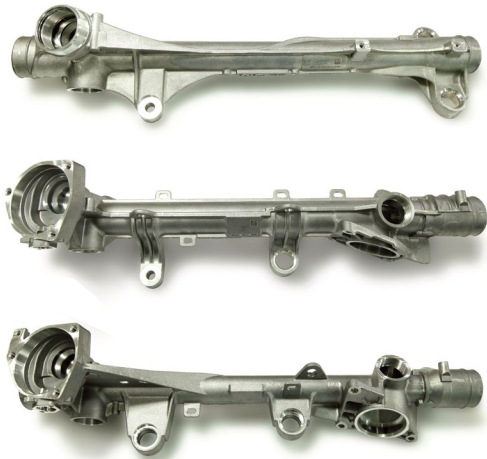


## STEERING

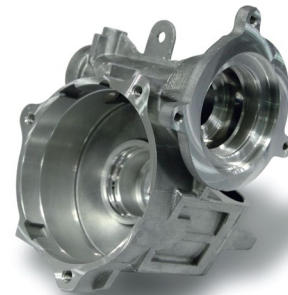
Steering (Rack Housing / Main Housing)

The Electronic Steering System (EPS) is a system for changing the direction of the vehicle as intended. Shinhwa Group mass-produces Rack Housing / Main Housing, and is conducting R&D for better product development. In addition, we are increasing customer satisfaction through thorough inspection.

RACK HOUSING



MAIN HOUSING





## DECELERATOR

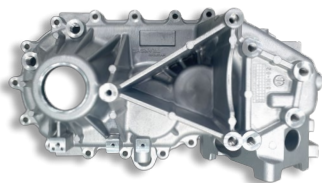
Electric Vehicle Deceleration HOUSING & COVER

Electric vehicle reducer is a gearbox that reduces motor speed and increases torque in electric vehicles and fuel cell vehicles, and transmits them to the wheels.

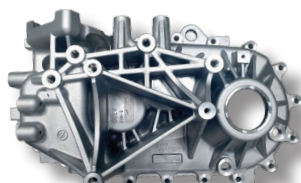
Shinhwa Group produces housing and case products for reducers that are part of the environmentally friendly hybrid and electric vehicle system plans.



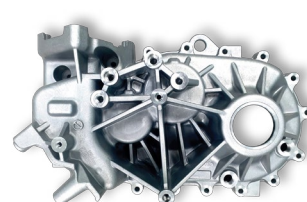
### ELECTRIC VEHICLE HOUSING & CASE



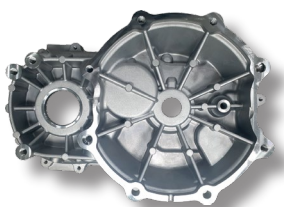
AE EV CASE



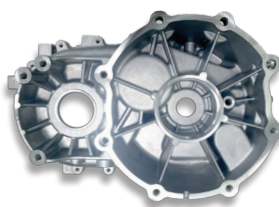
OS EV CASE



FEFC CASE



AE EV HSG



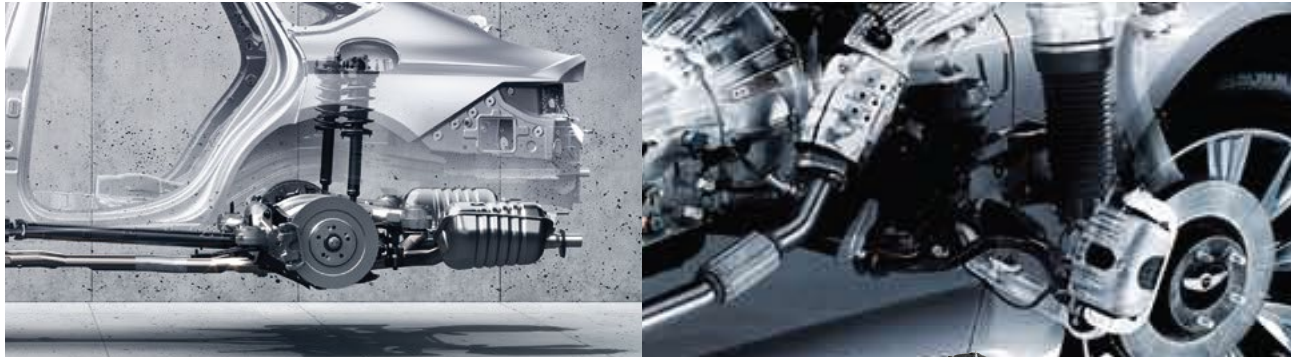
OS EV HSG



FEFC HSG







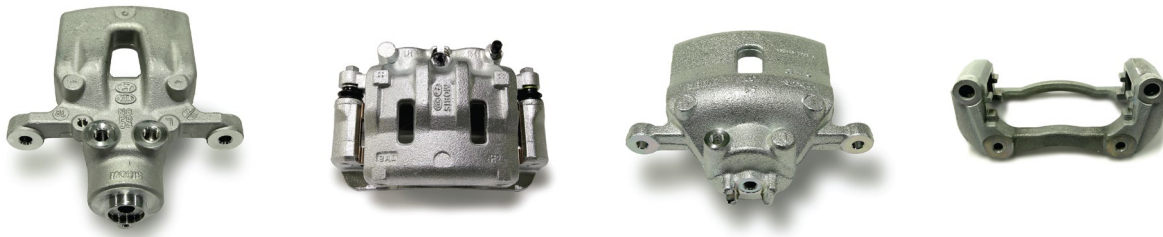
## BRAKING

Brake (Caliper Body / Torque Member / BMC Ass'y)

The braking system is a system that enables the vehicle to slow down, stop and park according to the driver's will. Shinhwa Group produces Caliper Body / Torque Member / BMC Ass'y, produces products suitable for braking systems of all vehicles, and continues to research and develop for the best quality.

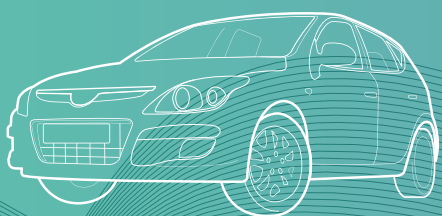


### CALIPER BODY / TORQUE MEMBER



### BMC ASS'Y





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## OUR COMMITMENT

## R&D MEASUREMENT CENTER

Shinhwa Group carries out bold and continuous R&D and investment to build cutting-edge technology and innovative automated production lines in the automotive industry.

Playing a pivotal role in Shinhwa Group, the Technical Institute is striving to lead the automotive parts technology with endless challenge and innovation.

We are actively responding to occupy a leading position in the fast-growing aluminum suspension and body parts market.

In addition, Shinhwa Group is actively striving to meet the diversified and progressive needs of the automotive industry in partnership with global sourcing and quality and performance checks on all products produced.







#### Industrial Asset Management

#### Availability centered for high pressure

US 5725044 (US)  
Japanese patent NO.2735794  
Japanese patent NO.2916102  
Korean patent application NO.7060  
Korean patent application NO.43143

#### Multi case system for low system

US 5725044 (US)  
Japanese patent NO.2735794  
Japanese patent NO.2916102  
Korean patent application NO.7060  
Korean patent application NO.43143

#### Excellence

#### Availability centered for high pressure

High pressure die casting using synthetic resins and cavities of salt  
Cost reduction 20 ~ 30%  
Weight loss 20%~40%

#### Multi case system for low system

Low pressure die casting due to increased mechanical value and reduced production cycle  
Productivity increase 40% ~ 60%  
Cost reduction 20%~40%

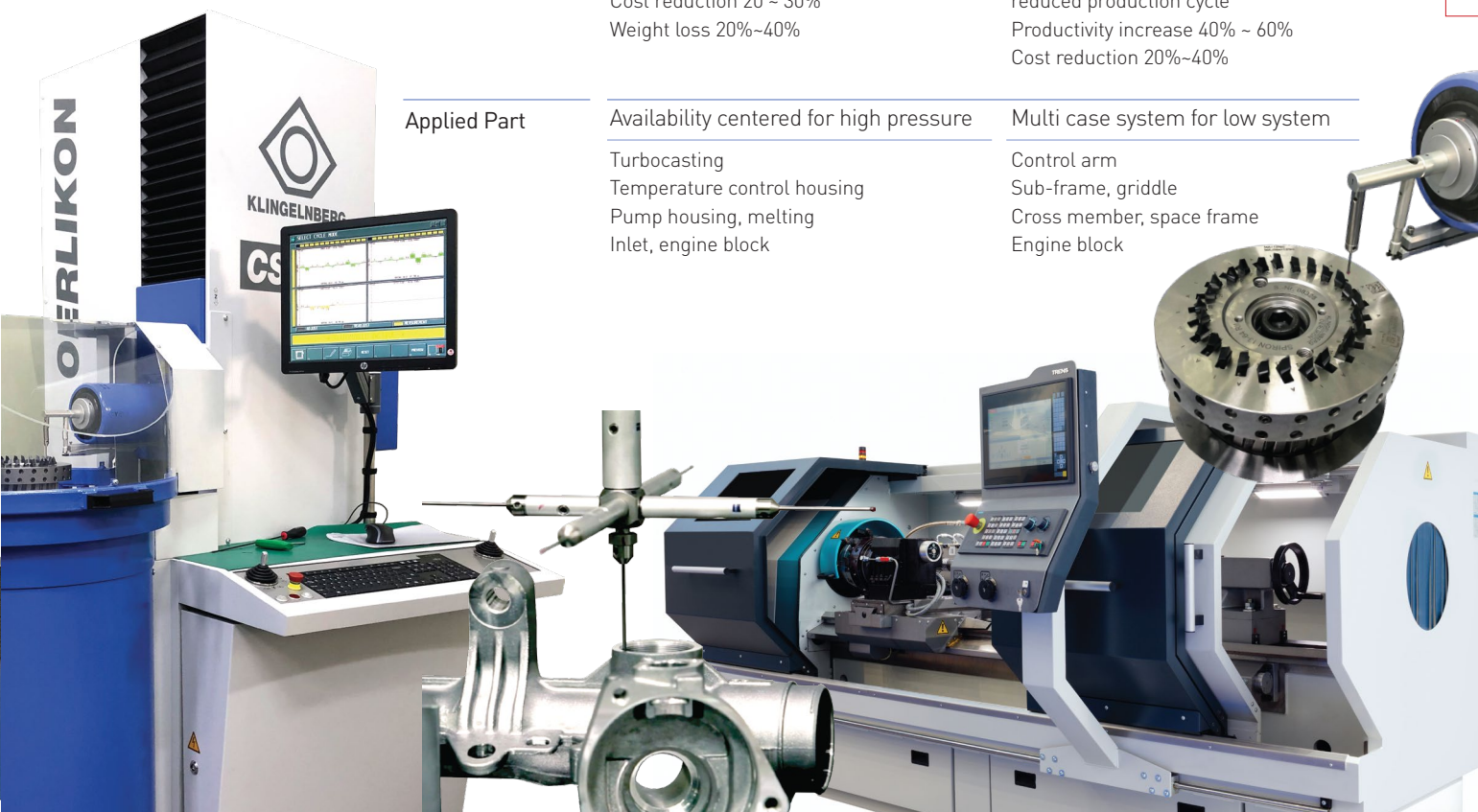
#### Applied Part

#### Availability centered for high pressure

Turbocasting  
Temperature control housing  
Pump housing, melting  
Inlet, engine block

#### Multi case system for low system

Control arm  
Sub-frame, griddle  
Cross member, space frame  
Engine block





## DOMESTIC NETWORK

### SHINHWA ENG



[ Shinhwa ENG Plant 1 ]



[ Shinhwa ENG Plant 2 ]



[ Shinhwa ENG Plant 3 ]



[ Shinhwa ENG Plant 4 ]



[ Shinhwa ENG Plant 5 ]

### SHINHWA P.I.C



[ Shinhwa P.I.C Plant 1 ]



[ Shinhwa P.I.C Plant 2 ]



[ Shinhwa P.I.C Plant 3, 4 ]

### SHINHWA MOTECH



[ Shinhwa Motech Plant 1, 2\_Materials ]



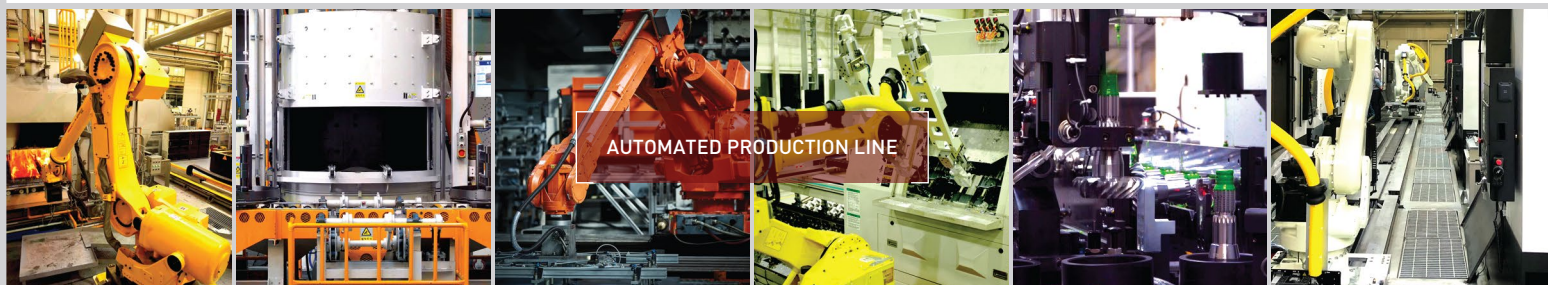
[ Shinhwa Motech Plant 3\_Paryong Processing Plant ]



[ Shinhwa Motech Plant 4\_Namsan Processing Plant ]



[ Shinhwa Motech Plant\_Haman Campus ]



[ SHINHWAVE AUTO USA ]



SHINHWAVE ENG	Plant 1	27, 137 beongil, Sengju-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-714-1950   f. 82+55-274-3154, 274-1950
	Plant 2	21-33, 474beongil, Gongdanno, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-275-1949   f. 82+55-275-8822
	Plant 3	18, 8 beongil, Pyeongsan-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-275-7501   f. 82+55-275-7502
	Plant 4	25, 14 beongil, Charyong-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-275-1950   f. 82+55-274-3154
	Plant 5	28, Jukjeon-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-275-1950   f. 82+55-252-1950
SHINHWAVE P.I.C	Plant 1	21-34, 474beongil, Gongdanno, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-275-7930   f. 82+55-275-7931
	Plant 2	69, Seongju-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-714-1950   f. 82+55-286-7931
	Plant 3 / 4	20, Jukjeon-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-275-7930   f. 82+55-233-3835
SHINHWAVE MOTECH	Plant 1 / 2 (Materials)	11, 40 beongil, Jukjeon-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-253-3280   f. 82+55-253-3295, 299-6533
	Plant 3 (Paryong Processing Plant)	25, 14 beongil, Charyong-ro, Uichang-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-275-1950   f. 82+55-251-3863
	Plant 4 (Namsan Processing Plant)	69, Seongju-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, Korea t. 82+55-714-1950   f. 82+55-286-7931
	Haman Campus	330-2, Gwangjeong-no, Haman-myeon, Haman-gun, Gyeongsangnam-do, Korea t. 82+55-583-8491   f. 82+55-583-8494
SHINHWAVE AUTO USA		2535 West Tech Lane, Auburn, AL 36832, USA
SHINHWAVE CHINA PLANT		No.28 Xinyan East Road, Shizhuang, Juantu Town, Jianyin City, Wuxi City







## BUSINESS NETWORK

SHINHWA CHINA PLANT

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# GLOBAL SHINHWA GROUP

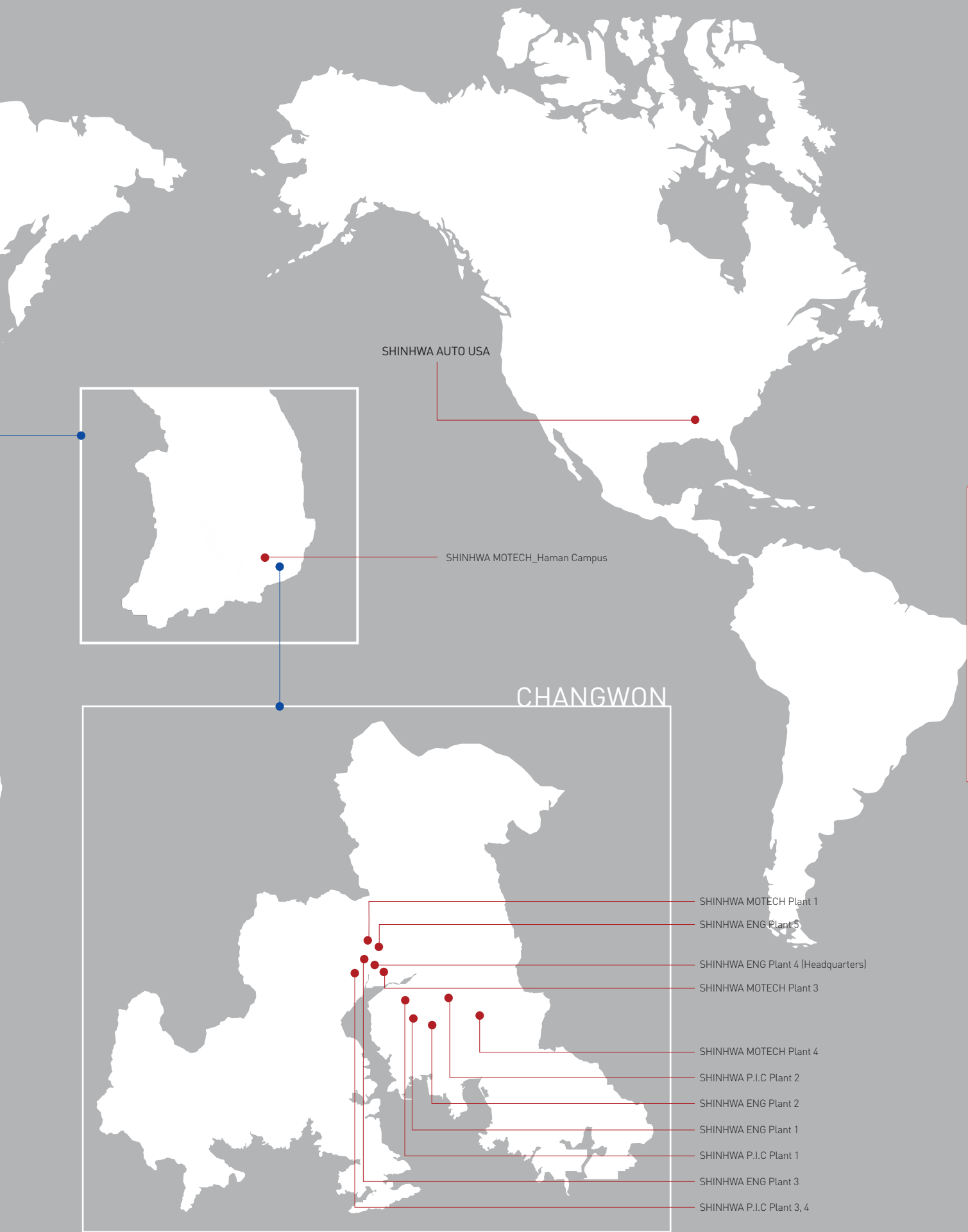
With 15 factories in three countries,  
Shinhwa Group is leading the globalization of Korea's auto parts industry  
by securing high-tech and product competitiveness.

## BUSINESS LOCATIONS IN KOREA

Focus on technological innovation, including product quality,  
technology and automated production

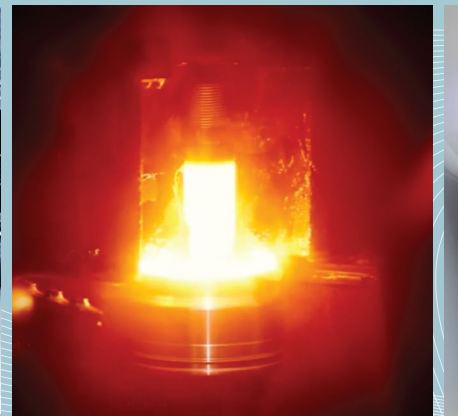
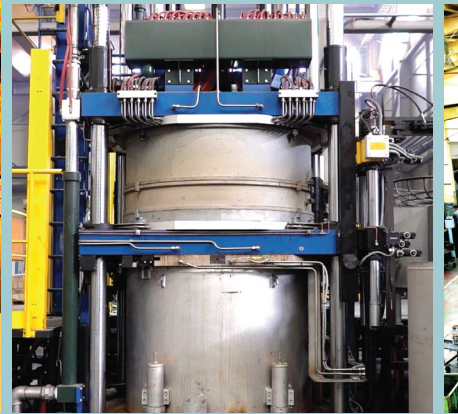
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By establishing a close network between R&D centers and manufacturing plants and distribution centers,  
Shinhwa Group can maintain zero quality defects and maximum customer satisfaction.

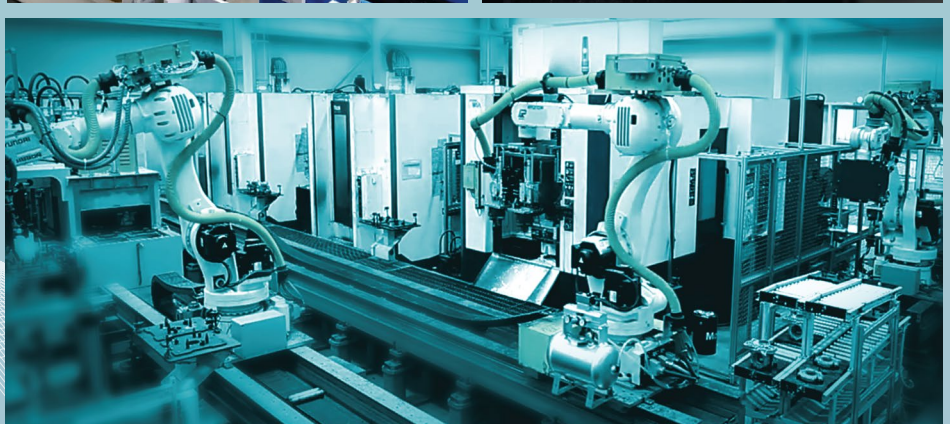
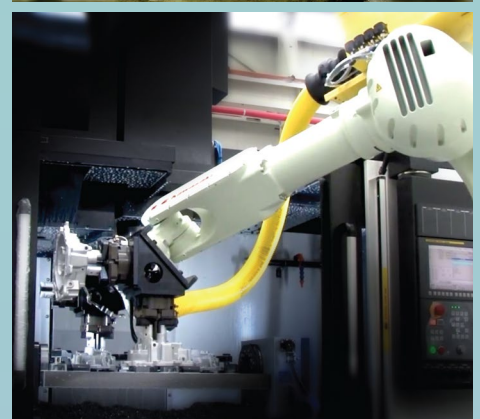
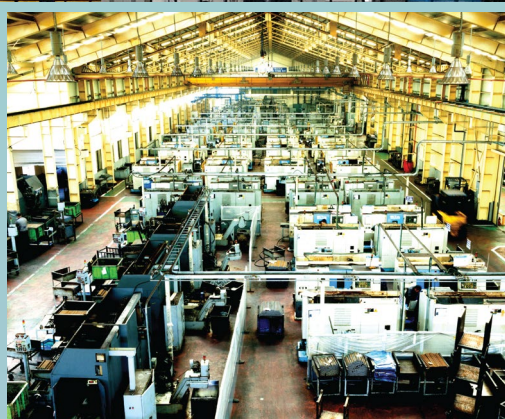
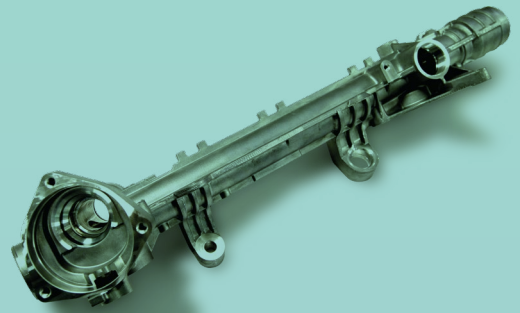


## AUTOMATION LINE FACILITY

We aim to join the ranks of the world's top automobile module manufacturers. From the very beginning, Shinhwa Group has steadily accumulated technology and expanded its product line to produce sophisticated automotive parts through the automated line process.





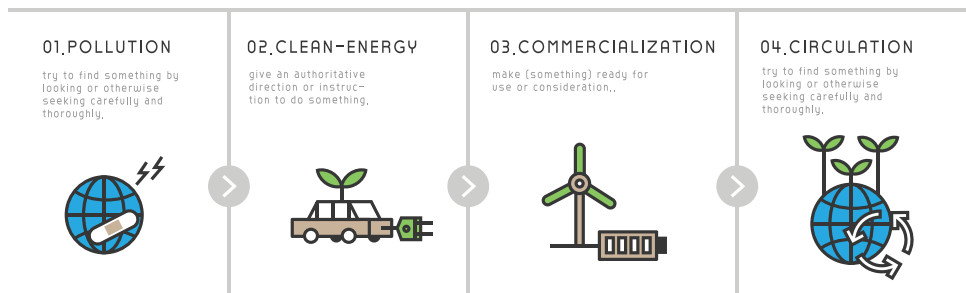






# Human, And technology for nature and the environment

To enrich our lives,  
we add the advanced technology of the Shinhwa Group.



## The future right in front of your eyes

Shinhwa Group's Advanced Automation Process  
- Reducing environmental pollution





“

Since 2013,  
Shinhwa Group has been manufacturing decelerators,  
which are essential parts of Hyundai Motor's eco-friendly  
electric and hydrogen cars. Through the best technology  
and advanced automation process,  
we have kept our promise with our customers  
by challenging zero defect rates.

”

## Electric Vehicle Deceleration

Electric car

OS EV CASE/HSG : Kona, Niro, Stonic

AE EV CASE/HSG : Ioniq



## Electric Vehicle Deceleration

Hydrogen car

FEFC CASE/HSG : Nexa

