



**we
think;**

tomorrow for 'togetherness'

Company Presentation



HYUNDAI SUNGWO GROUP



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GROUP INTRODUCTION



Management Philosophy

Based on the spirit of challenge and talent management toward innovative technologies, Hyundai Sungwoo is committed to customer satisfaction and takes the lead in making life easier and technology more valuable.



Be the One Automotive Company



GROUP INTRODUCTION

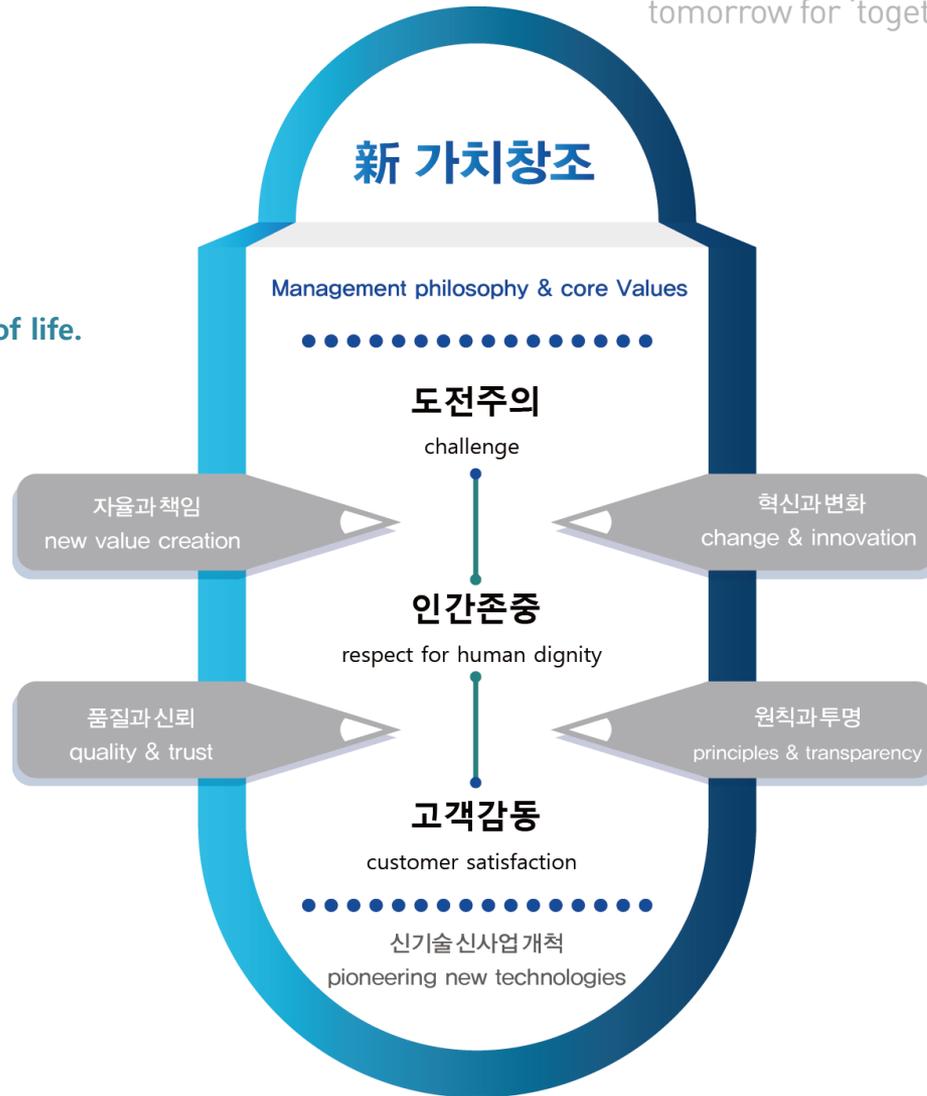
we
think;

tomorrow for 'togetherness'



Management Philosophy

Hyundai Sungwoo Automotive Korea
creates a solid value that is invisible
but serves as a basis and foundation of life.





1. Group Introduction

Company Name	Product	Location	Sales (\$ million)	
			2014	2015
Hyundai Sungwoo Casting	Iron-Casting	Pohang	206	188
Hyundai Sungwoo Metal	Alloy-Wheel	Chungju	300	325
Hyundai Sungwoo Solite	Battery	Gyeongju	332	300
Auto-Barn Motors	Logistics, etc.	Seoul	27	30
Longkou Hyundai Sungwoo Automotive	Alloy Wheel	Shandong, China	80	88
Hyundai Sungwoo Auto USA	Alloy-Wheel Battery	Alabama, USA	138	140
TOTAL			1,083	1,071



1. Group Introduction

Company Name	Product	Location	Capacity(y)	Sales (\$ million)	
				2013	2014(P)
Hyundai Sungwoo Casting	Iron-Casting	Pohang	148,000 tons	190	192
Hyundai Sungwoo Metal	Alloy-Wheel	Chungju	5,600,000 pcs	306	281
Hyundai Sungwoo Solite	Battery	Gyeongju	7,300,000 pcs	270	311
Auto-Barn Motors	Logistics, etc.	Seoul		31	26
Longkou Hyundai Sungwoo Automotive	Alloy Wheel	Shandong, China	2,000,000 pcs	83	79
Hyundai Sungwoo Auto USA	Alloy-Wheel Battery	Alabama, USA		142	130
TOTAL				1,022	1,019



2. Products

Engine Parts



Transmission Parts



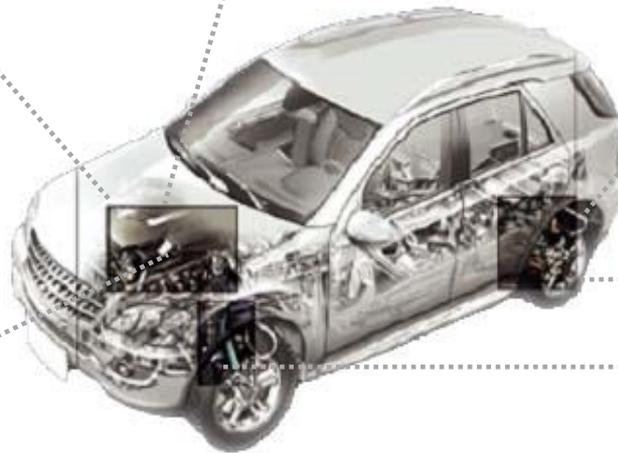
Alloy Wheels



Batteries



Chassis Parts





3. Brief History

May. 1987	Founded Seohan Precision Industry Co., Ltd.
Jul. 1988	Established Pohang Iron-Casting Plant
May. 1995	Established Chungju Alloy-Wheel Plant
Oct. 2000	Company name changed to Sungwoo Automotive Co., Ltd.
Nov. 2001	'\$100 Million Export Tower' awarded by 'The Korea Int' Trade Association'
Sep. 2008	Overseas AI-Wheel Plant in Longkou, China constructed
Jan. 2009	Acquired Hyundai Enercell to enter Automotive battery business
Apr. 2009	Acquired Sungwoo Logistics Co., Ltd. to enter logistics business
May. 2010	AI-Wheel Plant (2 nd) in Chungju constructed
Apr. 2012	Expanded Battery Plant in Gyeongju and established a technology institute in Chungju
Dec. 2012	'\$400 Million Export Tower' awarded by 'The Korea Int'l Trade Association'
May. 2013	Company renamed Hyundai Sungwoo Automotive Korea Co., Ltd
June. 2014	Awarded 2014 The Proud for Best Brand in customer value from KMAC
Mar. 2015	Awarded for the second consecutive year, 2015 Creative Management from JoongAng Ilbo
May. 2015	Divided company by each business field (Hyundai Sungwoo Casting / Metal / Solite)



GROUP INTRODUCTION

4. Office & Plant Location

Chungju
(Hyundai Sungwoo Metal)



Seoul
(Hyundai Sungwoo Holdings)



Pohang
(Hyundai Sungwoo Casting)



Gyeongju
(Hyundai Sungwoo Solite)



Frankfurt Office



Beijing Office



China Plant
(AL-Wheel)



Tokyo Office



Sungwoo USA
(Alabama)





HYUNDAI SUNGWOO CASTING



1. Production Plant Overview (Pohang Plant)

Area

- ▶ Ground : 153,320m²
- ▶ Building : 41,230m²

Employee

- ▶ Engineers : 73
- ▶ In-line Operators : 273

Capacity

Division	Equipment	Capacity(y)	Unit
Casting Molding Line	4	148,000	ton
Machining Tool	20	3,700,000	ea



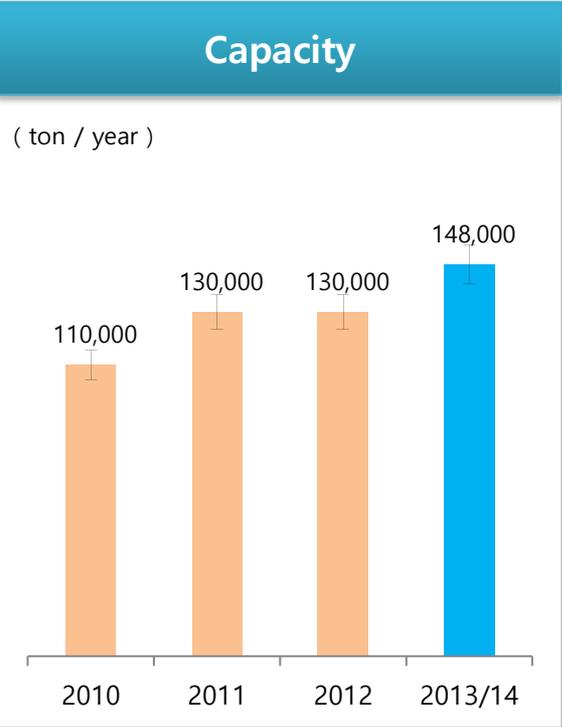
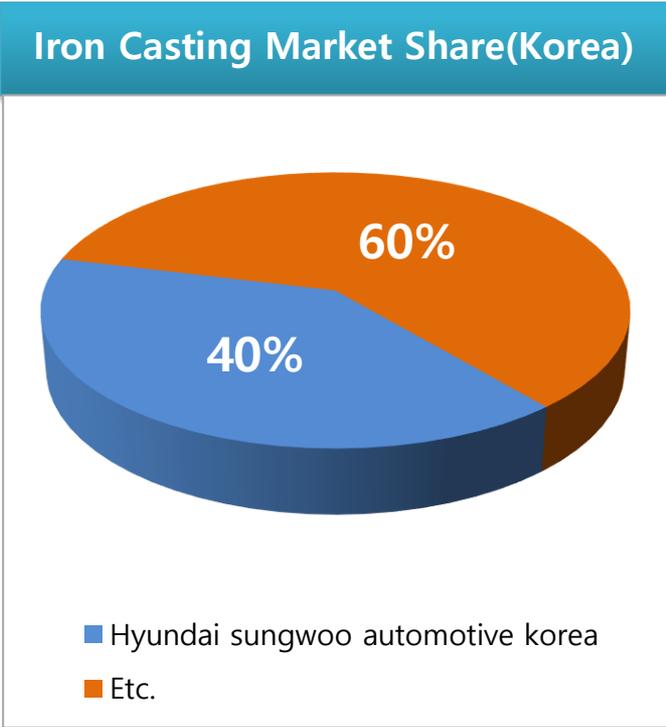
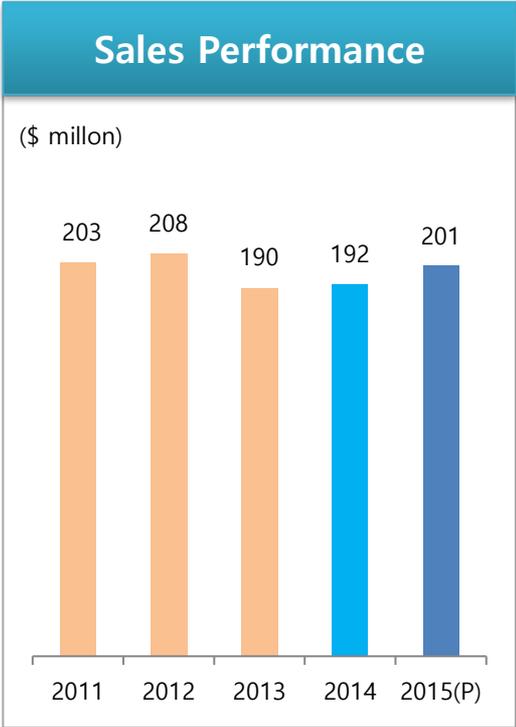
Revenue

- ▶ 2013 : \$190 million
- ▶ 2014 : \$192 million



2. Sales & Market Share

▪ **Customers :**





3. Main Products

Description		Product	Remark
Cast-Iron Materials	Automobile	Compact Car	HYUNDAI & KIA (Korea) DAIMLER (Germany) EXEDY (Japan)
		R V	
		Commercial Vehicle	
	Industrial	Railroad	TIMKEN, AMSTED RAIL (USA)
		Marine Engine	
Machining & Assembly		CLUTCH, DISC, DRUM, HUB, BRACKET, FLY WHEEL, SPEED GEAR ETC	



Automobile Parts

1. Engine Parts

Fly Wheel



Ring Gear



Cap Bearing



3. Transmission Parts

Clutch



Clutch



2. Chassis Parts

Brake Disc



Knuckle



Brake Drum



Hub



Control Arm



Industrial Parts

1. Marine Parts

2. Train Parts

Fly Wheel



End Cap



End Cap



Backing Ring

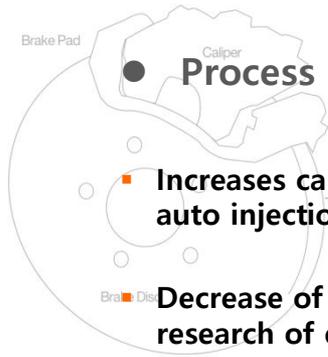


Backing Ring





4. Main Technology



● Process Technology

- Increases capacity by process automation such as auto injection and auto inoculation systems
- Decrease of distribution loss by improving research of each process
- Application of environmentally-friendly processes which decreases fume, dust, and scrap sand mixing

▶ Manufacturing grey cast iron for high carbon brake discs



Present



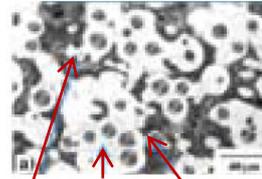
After improvement

● Material Technology

- Possession of a new material mix which is tough and high in strength
- Application of material technology to reduce error rates
- Weight lightening via shape design optimization for each material

▶ ADI(Austempered Ductile Iron) material development

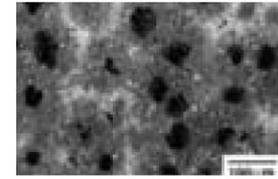
Nodular graphite cast iron



Pearlite Ferrite Graphite



ADI (Austempered Ductile Iron)



Ausferrite or Bainite Graphite



HYUNDAI SUNGWOON METAL



1. Production Plant Overview (Chungju Plant)

Area

- ▶ **Ground : 80,580m²**
- ▶ **Building : 47,000m²**

Employee

- ▶ **Engineers : 65**
- ▶ **In-line operators : 320**

Capacity

Division	Q'ty(line)	Capacity (y)	Unit
Casting Machine	82	5,600,000	pcs
Flow Forming Line	4	2,000,000	pcs
Machining Line	40	5,600,000	pcs
Painting Line	3	6,000,000	pcs



▲ 1st Plant



▲ 2nd Plant

Revenues

- ▶ **2013 : \$306 million**
- ▶ **2014 : \$281 million**



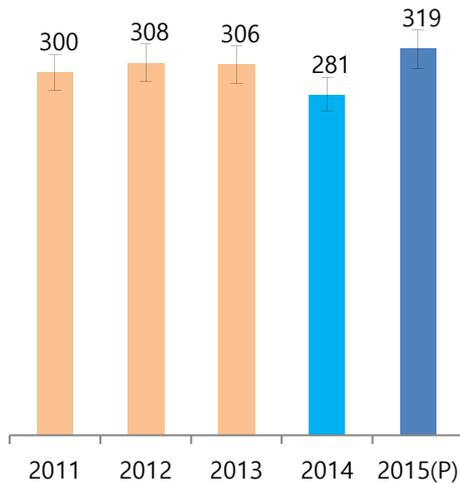
2. Sales & Market Share

▪ Customers :

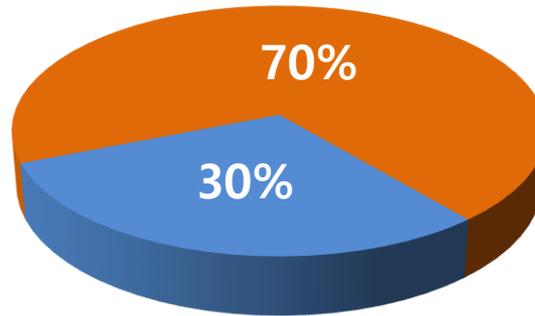


Sales Performance

(\$ million)



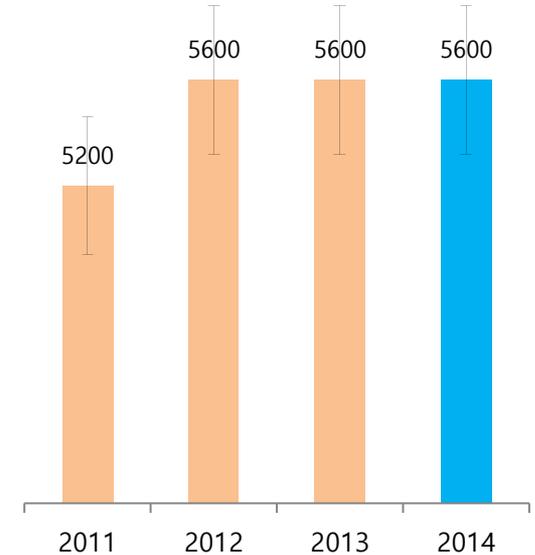
AI-wheel Market Share(Korea)



■ Hyundai sungwoo automotive korea
 ■ Etc.

Capacity

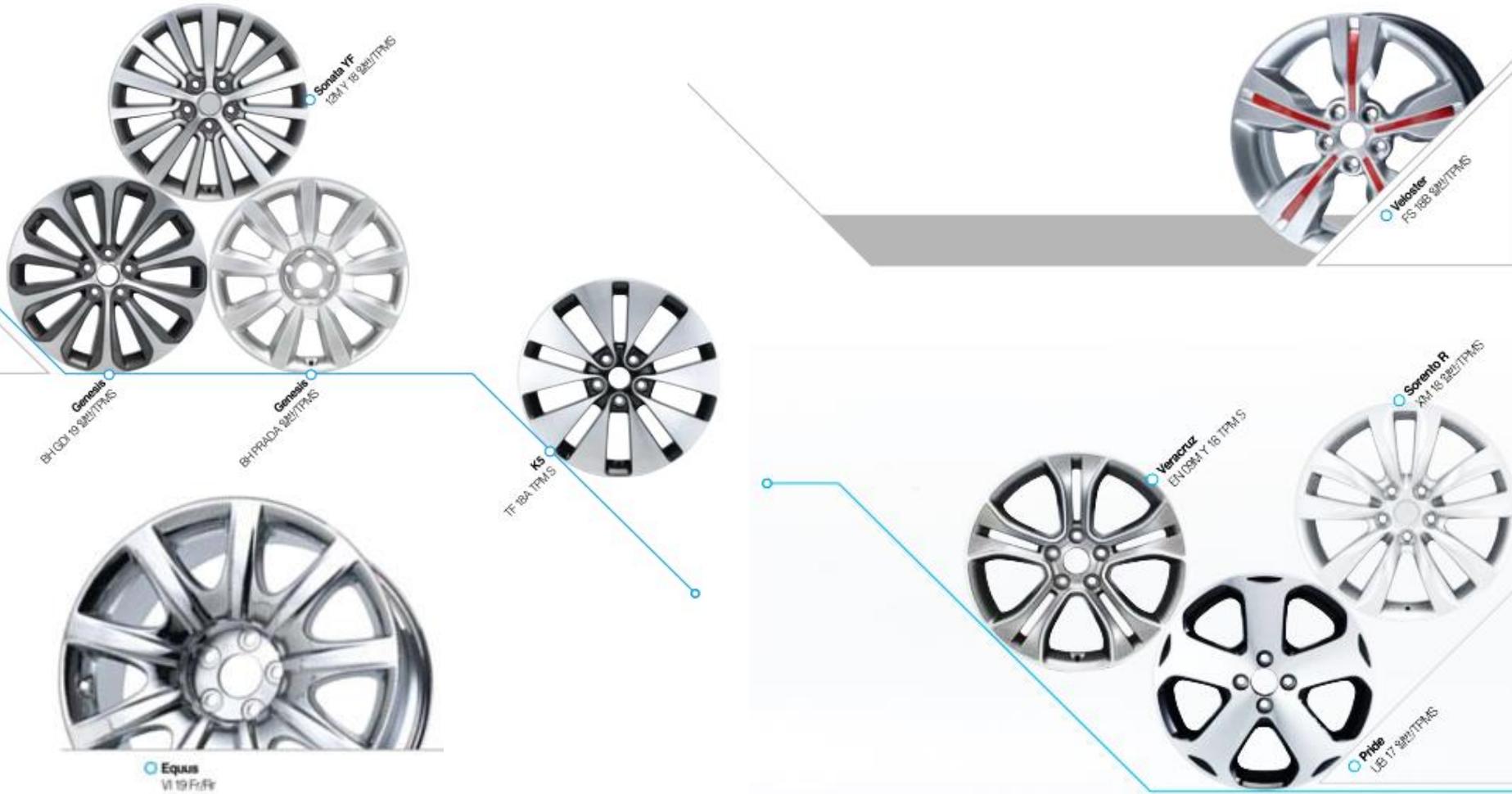
(million pcs / EA)





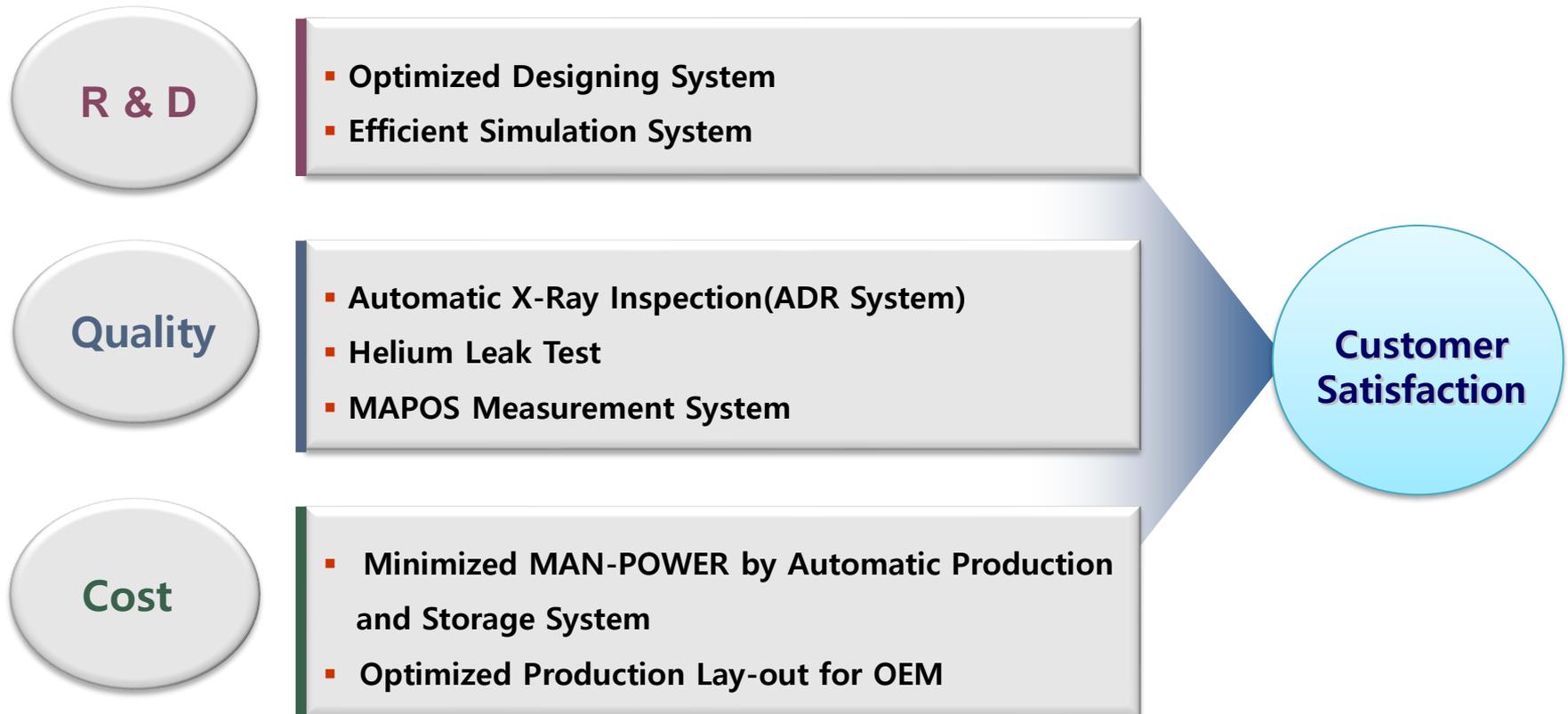
3. Main Products

Alloy Wheel





4. Main Technology





5. Certificates

ISO/TS 16949



CERTIFICATE

Management system as per
ISO/TS 16949:2009
(3rd edition, 2009-08-15)

Exemptions of certification with the above standard have been granted and are set forth in accordance with ISO/TS 16949:2009 clause 8.4.

SUNG WOO AUTOMOTIVE (2nd Factory) CO., LTD.
#546-10, Yongin-dong, Chungbuk, 380-250, Chungbuk, Korea

with the above facilities accordingly approved.

Scope
Design & Development and Manufacture of Aluminum Wheel for Automotive Application

ISO Registration No. 0132518
Certificate Registration No. 01 111 022028

Valid from 2015-08-15
Valid until 2018-08-15

This certification was conducted in accordance with the TUV AUSTRIA CERT auditing and certification procedures and is subject to regular surveillance audits.

TUV AUSTRIA CERT Center
Lengwengstrasse 33
4154 Grafing
www.tuv-austria.com

ISO14001



CERTIFICATE **TUV NORD**

Management system as per
ISO 14001 : 2004

In accordance with TUV NORD CERT procedure, it is hereby certified that
SUNG WOO AUTOMOTIVE CO., LTD.
#524-4, Yongin-dong, Chungbuk, 380-250, Chungbuk, Korea

applies a management system in line with the above standard for the following scope

Design & Development and Manufacture of Aluminum Wheel for Automotive Application

ISO Registration No. 01 111 022028
Certificate Registration No. 01 111 022028

Valid from 2015-08-15
Valid until 2018-08-15

This certification was conducted in accordance with the TUV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TUV NORD CERT Center
Lengwengstrasse 33
4154 Grafing
www.tuv-nord.com

EN ISO9001



CERTIFICATE **TUV NORD**

Management system as per
EN ISO 9001 : 2008
in accordance with ISO 9001:2007

In accordance with TUV NORD CERT procedure, it is hereby certified that
SUNGWOO AUTOMOTIVE CO., LTD.
#524-4, Yongin-dong, Chungbuk, 380-250, Chungbuk, Korea

with the location **SUNGWOO AUTOMOTIVE CO., LTD. 4F (Park Tower, #516)**
Bongmyong-dong, Songpa-gu, 150-850, Seoul, Korea

applies a management system in line with the above standard for the following scope

Design & Development and Manufacture of Aluminum Wheel for Automotive Application

ISO Registration No. 01 111 022028
Certificate Registration No. 01 111 022028

Valid from 2015-08-15
Valid until 2018-08-15

This certification was conducted in accordance with the TUV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TUV NORD CERT Center
Lengwengstrasse 33
4154 Grafing
www.tuv-nord.com

OHSAS18001



CERTIFICATE
OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

kfg Korea Foundation for Quality

HYUNDAI SUNGWOOL AUTOMOTIVE KOREA CO., LTD. / CHUNGLU FACTORY
CHUNGLU FACTORY / 344, Chungbuk-dong, Chungbuk, Chungbuk-gwanak, 380-250, Korea
CHUNGLU 2nd FACTORY / 710, Chungbuk-dong 2nd, Chungbuk, Chungbuk-gwanak, 380-250, Korea

Valid from 2015. 11. 20. 2016. 11. 20.
Issue date 2015. 11. 20.
Final assessment date 2015. 11. 20.
Initial assessment date 2015. 11. 20.

Korea Foundation for Quality certifies that The Occupational Health and Safety Management System of the above organization has been audited and has complied with the requirements of the following standard

K-OHSMS 18001:2007 / OHSAS 18001:2007

DESIGN, DEVELOPMENT AND PRODUCTION OF ALUMINUM WHEELS FOR AUTOMOTIVE APPLICATION

Scope of certification
K-OHSMS 18001:2007 / OHSAS 18001:2007

Signature: Daehyun Nam, Director

VIA(Japan)



試験合格承認書
Certificate of Accreditation

TO: **SUNGWOO AUTOMOTIVE CO., LTD.**

該企業獲得日本工業規格(VIA)認證證書, 其範圍如下:
この企業は、VIA規格に準拠して、自動車用アルミニウムホイールの設計・開発・製造・生産の業務を営んでおり、その品質管理システムがVIA規格に適合していることが確認された。

The accreditation is based on a certificate of this inspection and compliance with the JISQ 10000 for Approval of Testing Equipment. On the basis of the accreditation, VIA Inspection Unit reports from the laboratory performed on request indicated by the holding of the certificate.

承認範囲
品質管理
VIA A-204
品質管理システム
VIA G-204
品質管理システム
VIA G-204
品質管理システム
VIA G-204
品質管理システム

試験番号: 2011.08.00
試験日: 2011.08.00
試験場所: 380-250, Chungbuk, Korea
試験官: 田中 誠二
試験官の資格番号: 380-1
試験官の所属機関: VIA
試験官の登録番号: 380-1

この試験は、VIA規格に準拠して実施されたものであり、その結果は、VIA規格に適合していることを示している。

KBA(Germany)



CONFIRMATION **TUV AUSTRIA**

Management System as per
German and International Road Traffic Laws

In accordance with TÜV AUSTRIA CERT procedure, it is hereby certified that
Sungwoo Automotive Co., Ltd.
#26-1, Yongin-dong, Chungbuk, 380-250, Korea

applies a management system in line with the above standard for the following scope

development and production of vehicle components (wheels)

Confirmation Registration No. 20 122 020178
Valid until 2015-08-21

View: 2012-08-22

This certification was conducted in accordance with the TÜV AUSTRIA CERT auditing and certification procedures and is subject to regular surveillance audits. This is a certificate that, for the manufacturing of components, the holder has implemented the requirements of the German and international road traffic laws. The certification is based on the results of the audit and the assessment of the manufacturer's quality management system. The certification is subject to regular surveillance audits.

TUV AUSTRIA CERT Center
Lengwengstrasse 33
4154 Grafing
www.tuv-austria.com

I.Q.A(Brazil)



Q Instituto de Qualidade

Certificado de Conformidade para Rodas
(Certificate of Conformity for Wheels)

O IQA - Instituto de Qualidade concede a Certificação de Conformidade para Rodas (CERTIFICADO) aos produtos fabricados pelo fabricante. Este certificado foi emitido em conformidade com os requisitos da Norma ISO 9001:2008.

O IQA - Instituto de Qualidade reconhece a adesão do fabricante ao Sistema de Certificação de Conformidade para Rodas, em conformidade com os requisitos da Norma ISO 9001:2008.

Empresa / Company: **SUNGWOO AUTOMOTIVE CO., LTD.**
Representante Legal / Legal Representative: **SHG Logistics de Transporte de Cargas Ltda**
Endereço / Address: **Av. Paulista, 1111 - 05 - Andar - Cj. - 01 - Sala 1604 - 01311-014 - São Paulo/SP - 05512-010**
Número do Certificado / Certificate Number: **380-0502**
Descrição do Referência / Reference Document: **Forma INMETRO 4446 - 03/10/2013 e NBR 6122:2003**
Modo de Certificação / Certification Method: **Inspeção de Sistema de Gestão de Qualidade em Produto, com Verificação Periódica - Quality System Evaluation and Product Tests, with Periodical Evaluations**
Módulo / Module: **SUNGW003**
Resultado de Ensaio / Testing Report: **048-0302-01-2008 em 01/05/2012 e 11/05/2012**

Lista de Rodas Aprovadas
Fabricante: **THK 1 - França/Wheel: 54753 2mm / França/Wheel: 54753 2mm**
Data de Avaliação: **04/08/2012**
Fabricante: **441 - Alemanha / Wheel System: 46253 2mm / Alemanha / Wheel System: 441 - Alemanha**
Data de Avaliação: **04/08/2012**
Fabricante: **104 - França/Wheel: 5474 2 mm / França/Wheel: 5474 2 mm**
Data de Avaliação: **04/08/2012**
Fabricante: **104 - França/Wheel: 5474 2 mm / França/Wheel: 5474 2 mm**
Data de Avaliação: **04/08/2012**

ARAI(India)



ARAI The Automotive Research Association of India

TYPE APPROVAL CERTIFICATE FOR CONFORMANCE TO AIS-1001

TYPE APPROVAL CERTIFICATE NO. AC 1014 DATE: 11/05/2012
(TEST REPORT NO.: BH/307012-013104/014)

1.0 NAME AND ADDRESS OF APPLICANT: **SHG SUNG WOO AUTOMOTIVE CO., LTD.**
#26-1, Yongin-dong, Chungbuk, 380-250, (KOREA)

Contact Person: **Mr. Hwang Young Kyu**
Tel No.: **82-42-853-2018**
Fax No.: **82-42-853-2079**
Email Address: **shg@swa.com.kr**

Name and Address of the Component Manufacturer: **SHG SUNG WOO AUTOMOTIVE CO., LTD.**
#26-1, Yongin-dong, Chungbuk, 380-250, (KOREA)
E-mail Contact: **30052012**

2.0 CUSTOMER LETTER REFERENCE
3.0 DETAILS OF THE COMPONENT UNDER TYPE APPROVAL:
Name and Specification of the Component: **TRUCK TIRE (with Rim Size: 21.5 X 16)**

Part No. of the Component: **52910-31200**
Drawing No. of the Component: **52910-31200-000**
Identification Observed on the Component: **J 15 X 16, OFFSET 53, 52910-31200**

4.0 APPLICABLE STANDARDS: **IS 1000-1:2002**

ISO/TS 16949 (China Plant)



CERTIFICATE

Management system as per
ISO/TS 16949:2009
(3rd edition, 2009-08-15)

Exemptions of certification with the above standard have been granted and are set forth in accordance with ISO/TS 16949:2009 clause 8.4.

LONGKOU SUNGWOOL AUTOMOTIVE CO., LTD.
Jingyi Road No. 56, High Tech Industrial Park, 207116, Longkou City, Shandong Province, P.R. CHINA

with the above facilities accordingly approved.

Scope
Manufacture of Aluminum Wheel for Automotive Application
without product design responsibility according to section 7.3.

ISO Registration No. 0132518
Certificate Registration No. 01 111 022028

Valid from 2015-08-15
Valid until 2018-08-15

This certification was conducted in accordance with the TUV AUSTRIA CERT auditing and certification procedures and is subject to regular surveillance audits.

TUV AUSTRIA CERT Center
Lengwengstrasse 33
4154 Grafing
www.tuv-austria.com



6. Overseas Production Plant Overview (China)

Area

- ▶ Ground : 52,800m²
- ▶ Building : 21,835m²

Location

Dongjiang High-tech Industrial Park,
XingYu St.58# LongKou-City,
Shandong Province, China

Employee

- ▶ Engineers : 20
- ▶ In-line operators : 356

Product

14~18" Al alloy wheel for OEM

Revenues

- ▶ 2013 : \$83 million
- ▶ 2014 : \$79 million

Capacity

Division	Equipment	Capacity(y)	Unit
Casting Machine	39	2,000,000	pcs
Machining Line	14	2,000,000	pcs
Painting Line	1	2,000,000	pcs



History

- 2007. 08 Longkou Sungwoo Automotive established.
- 2008. 09 Completed Alloy wheel plant, Longkou, Shandong.
- 2008. 09 Approved by HMMA(N.America) ISIR.
- 2008. 11 Commenced to supply wheels for Korea Hyundai Kia Motors.
- 2009. 04 ISO/TS16949 certified(TUV).
- 2012. 05 Expanded production capacity to 2million pcs.
- 2015. 02 Determined increase more line 1.5million pcs per year (to be completed by September 2015)



HYUNDAI SUNGWOOLITE



1. Production Plant Overview (Gyeongju Plant)

Area

- ▶ Ground : 81,295m²
- ▶ Building : 32,815m²

Employee

- ▶ Engineers : 64
- ▶ In-line Operators : 253



Capacity

Division	Capacity	Unit
Gyeongju Plant	7,300,000	pcs

Sales

- ▶ 2013 : \$278 million
- ▶ 2014 : \$311 million



2. Sales & Customers

◆ Customers

OEM



Etc.

- ▶ Domestic aftermarkets
- ▶ Overseas markets (Middle East, Europe, Japan, Africa, North America, etc.)





3. Main Products

1. Automotive Battery(Passenger)

- CMF



- TAXI



2. Automotive Battery(Commercial)

- Large CMF



- Imported cars



3. Agricultural Battery



4. Industrial Battery



5. Marine Battery





4. Main Technology

● New technology development

- Develops special alloy technology for improved anti-corrosion
- Researches the enhancement of using high-density active material for increasing battery life-span
- Develops an additive to enhance starting capacity and battery life span
- Develops product design technology for product safety

● New product development

- Strengthens the competitiveness through product line diversification and quality improvement
- Develops products with high performance and light weight
- Develops industrial battery with long-life span

● Production technology development

- Designs products and develops optimized process & line design
- Builds production system for decreasing manufacturing cost and increasing productivity

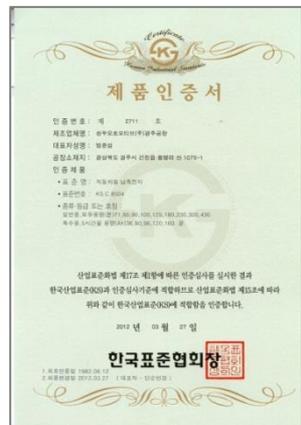
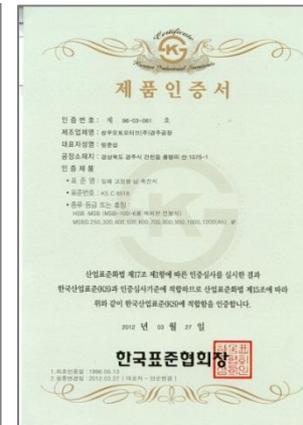
● Quality test

- Performs the quality tests for each process
- MS Testing : Weather resistant test, combined environment test, vibration test, synthetic lead analysis viscosity measurement, moisture content measurement
- ES Testing : Capacity test, high rate discharge test, temperature & humidity test



5. Certificates

ISO/TS16949, ISO 14001, OHSAS18001, QS9000, UL, KS C 8504 and KS C 8518





R&D and etc.



1. R&D Centers

Staff

Executive	2
Principal	4
Associate Engineer	4
Senior Engineer	14
Assistant Engineer	15
Research Engineer	11

Total 50



▶ Chungju R&D Center

- Develops technology of Alloy-wheels
- Manufacture & test prototypes



▶ Gyeongju R&D Center

- Develops batteries with advanced technology
- Improves a variety type of battery products



▶ Pohang R&D Center

- Develops Iron-casting product with advanced technology
- Manufacture & test prototypes



2. Major Areas of Study

Future



- Development of carbon composite parts
- Technology development for energy storage
- Development of advanced materials

Wheel



- Design & structural analysis
- Reliability test & evaluation
- Development of high value products

Casting



- Technological development for lightweight materials
- Improvement of high quality products
- Development of new hybrid products

Battery



- Technological development for durability improvement
- Optimization of battery design
- Development of next generation battery



3. Social Contribution Activities

Sustainability management



▶ Sponsoring Regional welfare ◀



▶ Sponsoring Motor sports experiential event for children ◀



▶ Supporting scholarship assistance for students ◀



3. Social Contribution Activities

Sustainability management



▶ Regional welfare participation ◀



▶ Sponsorship for Veterans ◀



▶ Sponsoring events for disabled children ◀



Solite INDIGO Racing Team



Racing Team Introduction

Formed with top mechanics and drivers in the motor sports field since Establishment of the team in 1997 by Hyundai-Sungwoo Automotive Korea, Indigo Racing Team has achieved excellent results in Korean pro racing championships since its inception until now, and is one of the top class racing teams in Korea which is incessantly working hard to maintain its pride as a renowned racing team.



GENESIS COUPE GT



GENESIS COUPE 3800



Fomula 1800, Fomula 3

4 Drivers



오 일 기



최 명 길



김 재 현



서 주 원

7 Mechanic part employees

3 Management part employees

Vehicle Possession

- ❖ GENESIS COUPE GT
- ❖ GENESIS COUPE
- ❖ TUSCANI GT
- ❖ i30
- ❖ Formula 1800
- ❖ Formula 3
- ❖ VELOSTER Turbo
- ❖ GENESIS COUPE Twin Turbo



Main Records

Year.	Main Record
2014	1 st , 4 th overall in Korea Speed Festival series "Genesis Coupe 10 class" 1 st , 4 th overall in Korea Speed Festival series "Genesis Coupe 20 class"
2013	2 nd , 5 th overall in Korea Speed Festival "Genesis Coupe class"
2012	1 st , 3 rd overall in Korea Speed Festival "Genesis Coupe class"
2011	1 st , 2 nd overall in Korea Speed Festival "Genesis Coupe class"
2010	1 st overall in Korea Motor Sports Grand Festival "GT-class" / 1 st , 2 nd G-Coupe class
2009	1 st , 3 rd overall in "Super 3800" / 2 nd , 4 th overall in "Super 2000"
2006	2 nd overall in Korea Motor Championship series "GT1"
2005	2 nd , 3 rd overall in Korea Motor Championship series "GT1"
2004	1 st , 4 th overall in Korea Motor Championship series "GT1" / 3 rd , 5 th in "Formula"
2003	1 st , 3 rd overall in Korea Motor Championship series "GT1" / 1 st , 4 th in "Formula"
2002	1 st , 2 nd overall in Korea Motor Championship series "GT1" / 2 nd , 4 th in "Formula"
2001	2 nd , 5 th overall in Korea Motor Championship series "GT1" / 2 nd in "Formula"
2000	3 rd , 4 th overall in Korea Motor Championship series "GT1" / 2 nd in "Formula"
1999	2 nd , 4 th overall in Korea Motor Championship series "Formula"
1998	3 rd overall in Korean Motor Championship series "Formula"
1997	2 nd overall in "Touring A" / Found a Indigo Racing Team





Thank you