
SAMBO AUTO

Company Profile



To be a Global Leader of the Auto Parts is our dream

✓ Outline

1. Overview
2. History
3. Sales Portfolio
4. Facilities
5. Quality Assurance

✓ Products

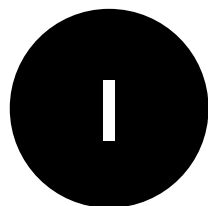
1. Products Overall
2. Flagship Parts

✓ Technology

1. Developing Procedure
2. Design Tool
3. Specialized Techniques

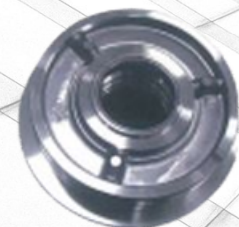
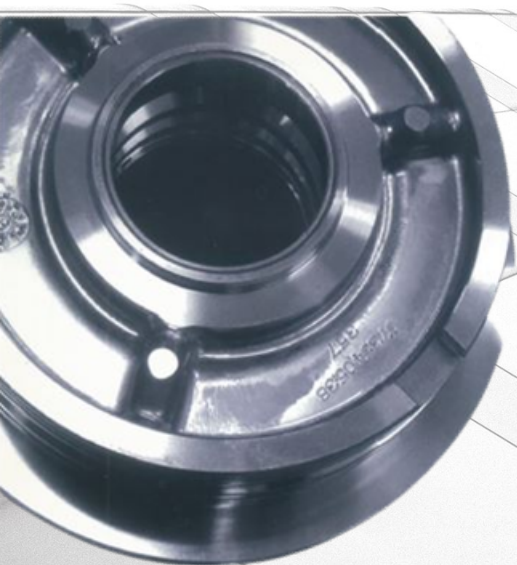
✓ Competitiveness

1. R&D Investment
2. Key Competency



Outline

1. Overview
2. History
3. Sales Portfolio
4. Facilities
5. Quality Assurance



1. Overview

General Information



244 persons



Business

Auto parts by AL Die-Casting



Products

Powertrain parts, Steering parts
Motor Housing & Reducer case for EV



Customers

Global GM, GM Korea, Hyundai & Kia,
BorgWarner, RIVIAN

● Yesan Plant (HQs)

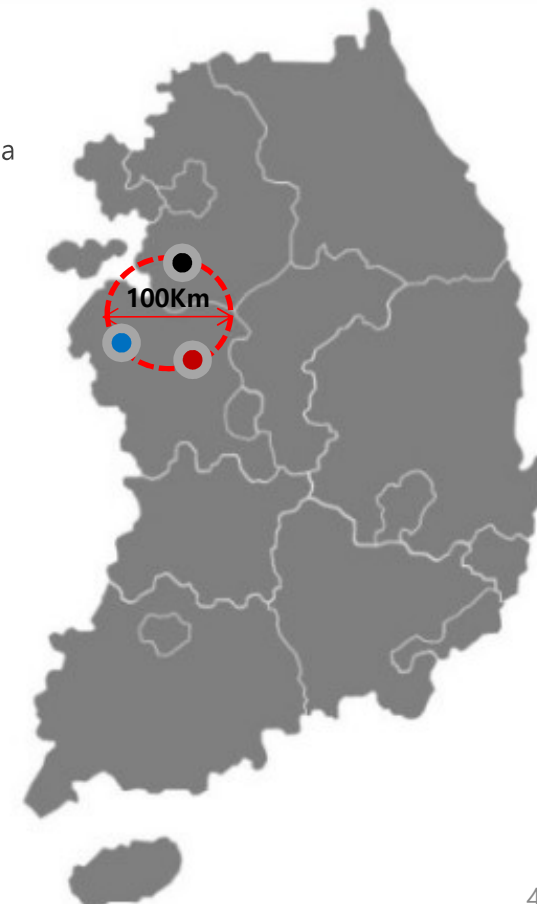
Address : Yesan, Chungcheongnam-do, Korea
Land area : 39,669 m² (427,000 ft²)
Manufacturing : Casting, Machining, Molding

● Seosan Plant

Address : Seosan, Chungcheongnam-do, Korea
Land area : 33,057 m² (355,823 ft²)
Manufacturing : Machining, Assembly

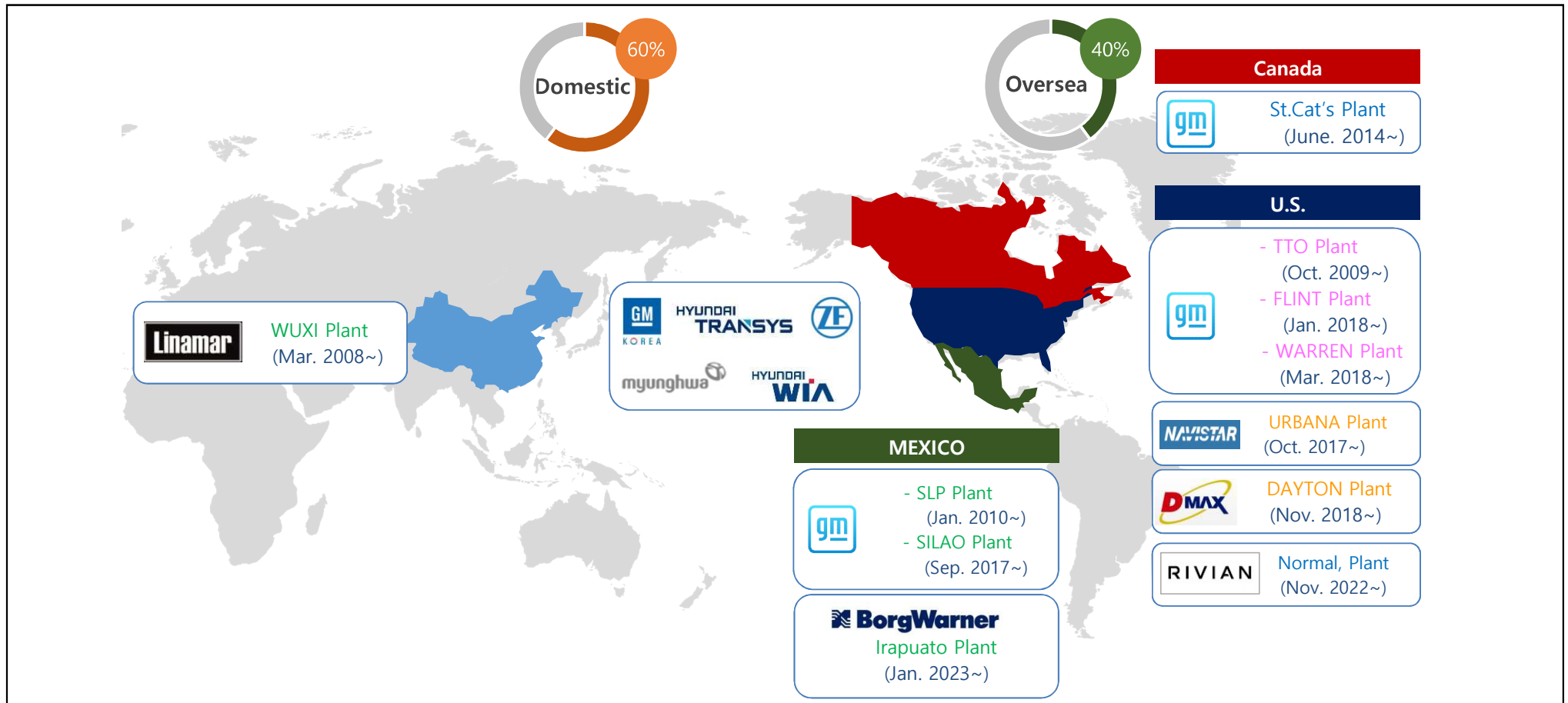
● Sales office

Danwon-gu, Ansan-si, Gyeonggi-do, Korea



1. Overview

Major Customers



2. History



01

02

03

04

05

06

07

08

1997
Registered "ISO 9002"

2004
Registered "ISO 14001 & TS 16949"

2017
Awarded 2015 ~ 2017
GM 『Supplier of the year』

2020
Awarded 2018-2020
GM 『Supplier Quality Excellence』

- 1987**
Established Die Casting Plant in Ansan
- 1996**
Established 2nd Die Casting Plant in Yesan
- 2005**
Company Renamed "INNO METAL"
- 2013**
Company Renamed "SAMBO AUTO"

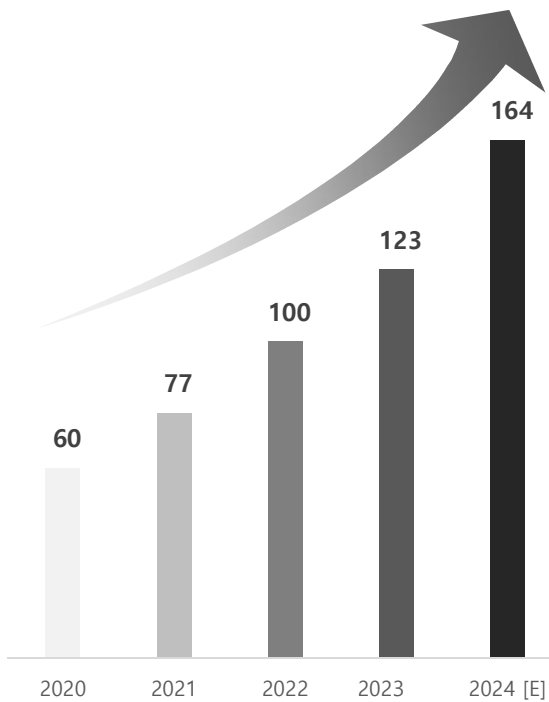


3. Sales Portfolio

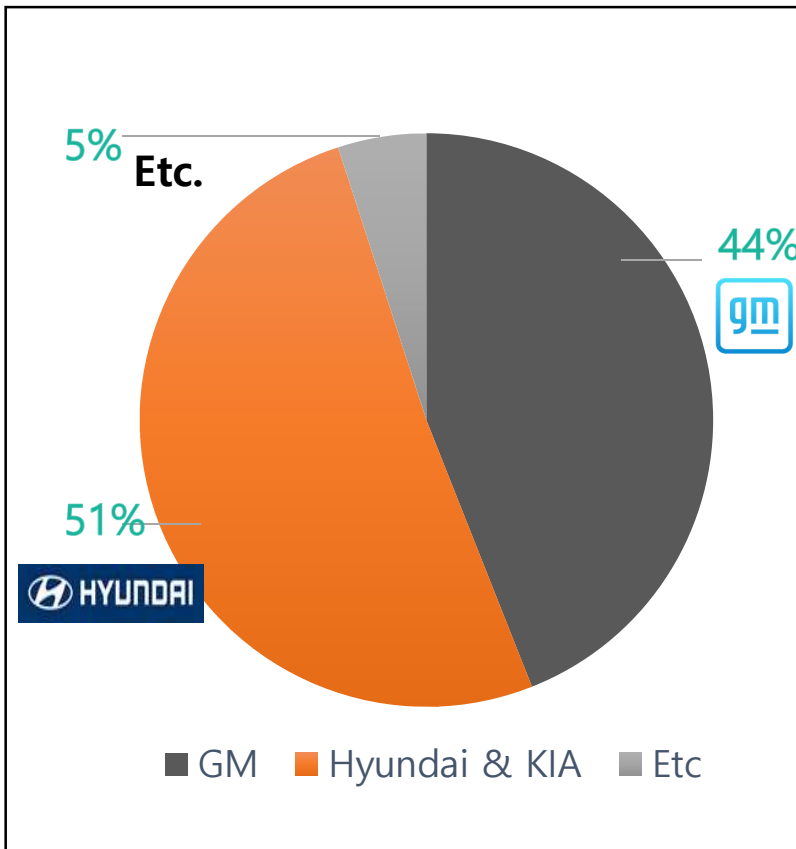


Sales

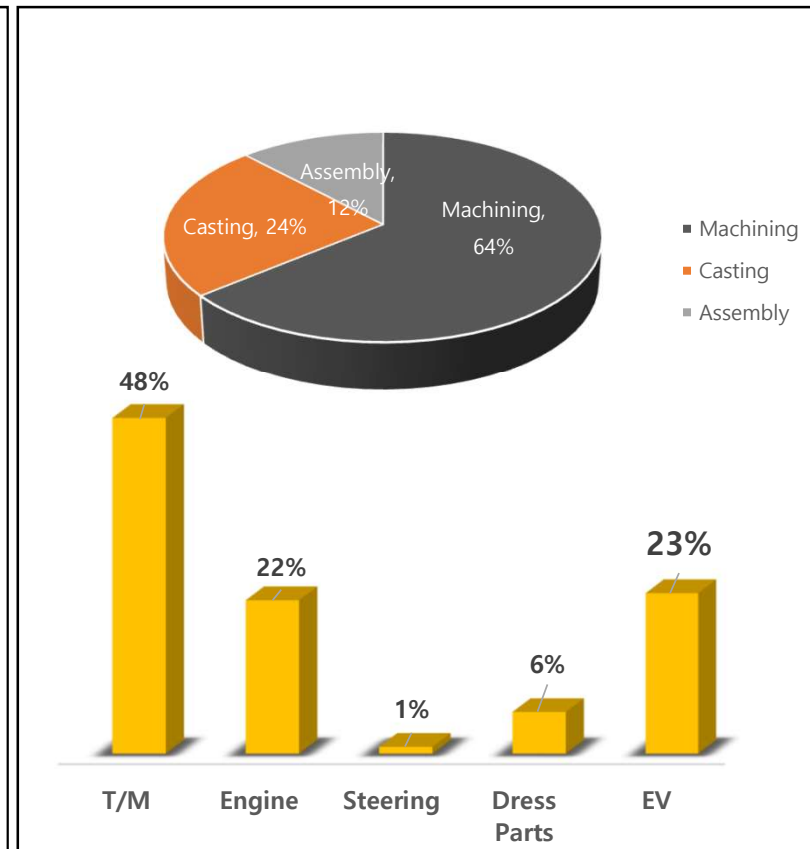
[unit: million US\$]



Customers



Products / Manufacturing



4. Facilities

Casting

Item	Unit	
Die-casting M/C	350 Ton	3
	500 Ton	2
	650 Ton	3
	800 Ton	7
	900 Ton	3
	1250 Ton	4
	1650 Ton	1
	2500 Ton	1
	Sub-total	24
Melting Furnace	Rapid Melting M/C	4
	Holding & Melting Furnace	5
	Holding Furnace	21
	Sub-total	30
Shot blast M/C	Conveyor Type	1
	Apron Type	2
	Hanger Type	1
	Sub-total	4

Machining

Item	Description	Unit
MCT	MCT (TC)	162
	H-MCT	2
	V-MCT	11
	Sub-total	175
CNC	CNC Lathe	61
	Sub-total	61
Manufacturing facilities	Rotary Milling M/C	3
	Balancing M/C	4
	Auto Measuring M/C	26
	Auto Washer	30
	High pressure washer	3
	Ultrasonic washer	2
	Leak Tester	29
	Press Machine (Assy)	21
	Robot	76
	Sub-total	194

Mold

Item	Unit
High Spindle M/Center	1
Vertical M/Center	2
Electronic Discharge M/C	4
Die Spot M/C	1
CNC Lathe	3
Copy Milling M/C	2
Vertical Milling M/C	1
Surface Grinding M/C	3
Radial Milling M/C	2
Others	8
Total	27



5. Quality Assurance



Quality Certificates

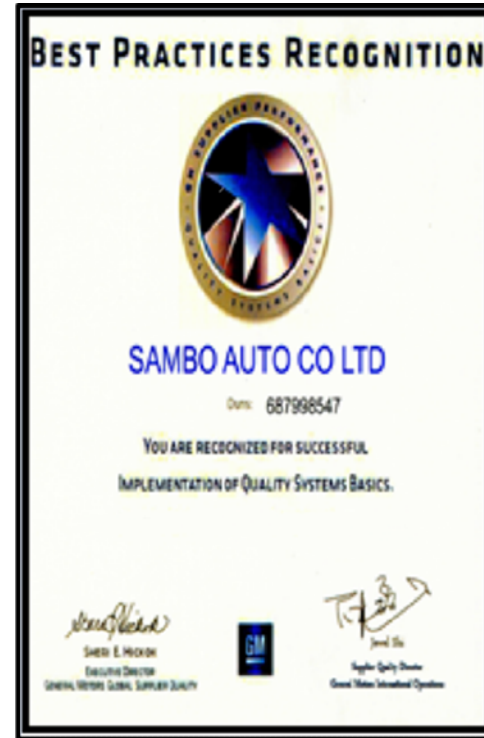
IATF 16949



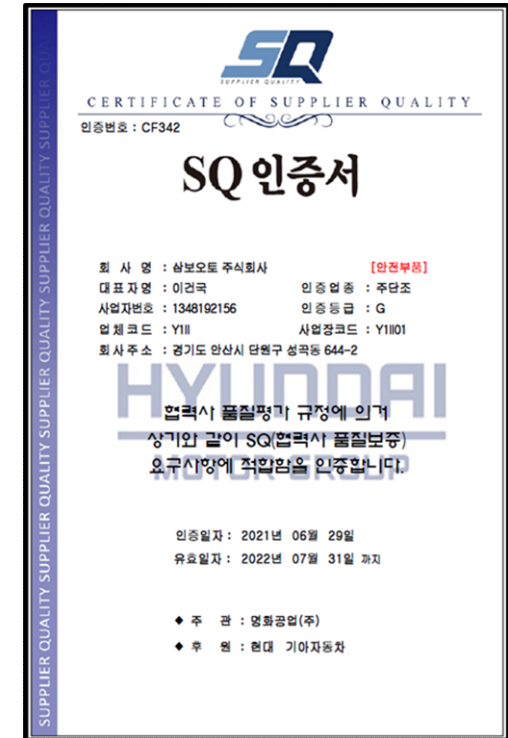
KSI ISO14001



BIQS



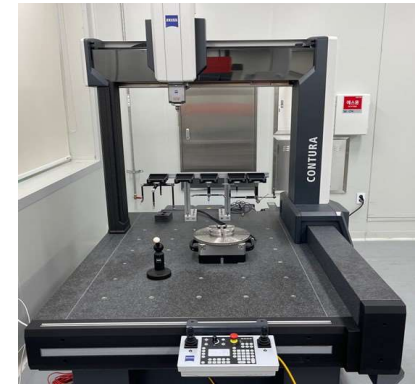
SQ MARK

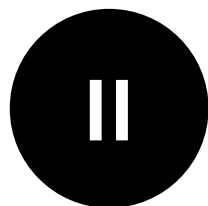


5. Quality Assurance

Quality Assurance Equipment

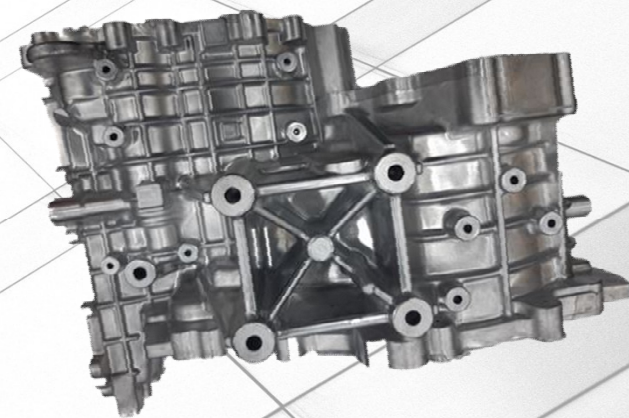
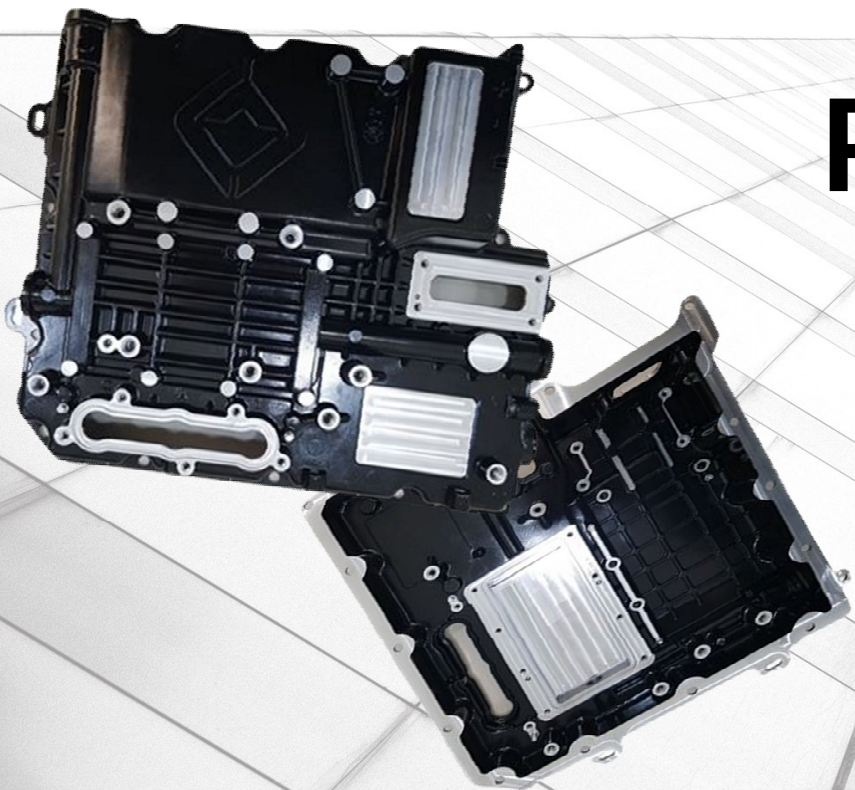
Item	Maker / Standard	Unit
3D Measuring Machine	Zeiss CONTURA / 900*1200*800	1
	DUCK IN / 700*1000*600	8
Tomography C/T	TECHVALLEY / 225kv, 0.4 μ m	1
X-ray	XABIS / 4.0kv ~ 160kv	4
Spectrometer	SHIMADZU / ALUMINUM	1
Metallurgical Microscope	OLIMPUS / GX-41	1
2D Measuring Machine	TESA / 600 PAT	2
Hardness Tester	BRINELL(ROCKWELL)/ 3000kg(105kg)	1
Shape Measuring Machine	MITUTOYO / 3.5 μ m / 100 μ m	4
Electronic Thermo-humidity Meter	SATO / -15-40 $^{\circ}$ c / 0-100%	4
Electronic Scale	ALFAMIRAGE / 0 ~ 300g	4
Surface Roughness Tester	MITUTOYO / 0.5 μ m ~ 50 μ m	4
Block Gauge	MITUTOYO / 0.5 ~ 100	2
Height Micrometer	MITUTOYO / 0-300 / 0.001	20
Step Gauge	MITUTOYO / 0-1000	2
Tensile testing machine	MET / 2Ton	1
Others	DIGITAL MICROMETER & etc.	50
Total		110





Products

1. Products Overall
2. Flagship Parts



1. Products Overall

Transmission Parts

Clutch HSG, Valve Body
Transmission Case
Oil Pump Cover & HSG

Engine Parts

Timing Chain Cover
Oil Pan, Engine Mt Bracket
Water Pump HSG



EV Parts

Motor Cover & Housing
OBC Main Case

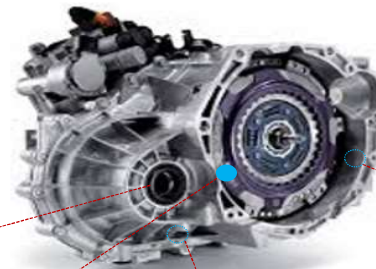
Steering Parts

Steering HSG, Rack HSG
Pinion HSG

2. Flagship Parts

ICE parts

Trans
-mission



Customer	Global GM
Classification	Transmission
Part name	Clutch Housing
Application	6-Speed & 9-Speed



Customer	HKMC
Classification	Transmission
Part name	DCT Gear Actuator
Application	7-Speed



Customer	HKMC
Classification	Transmission
Part name	Oil Pump Cover
Application	6-Speed & 8-Speed



Customer	Global GM
Classification	Transmission
Part name	Valve Body
Application	9-Speed

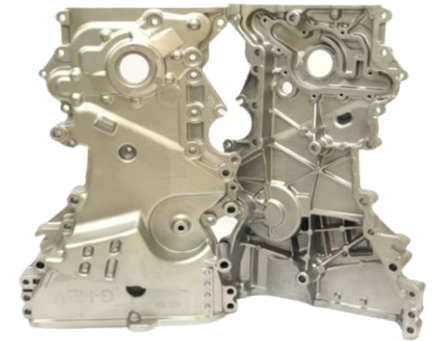
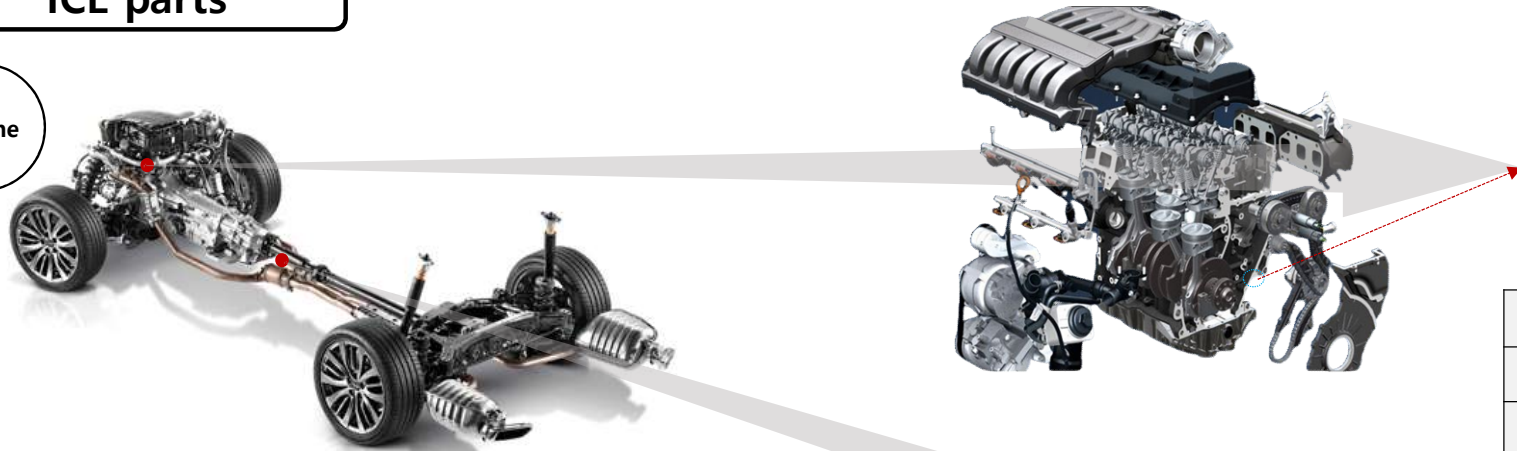


Customer	BorgWarner
Classification	Transmission
Part name	Clutch Housing
Application	10-Speed

2. Flagship Parts

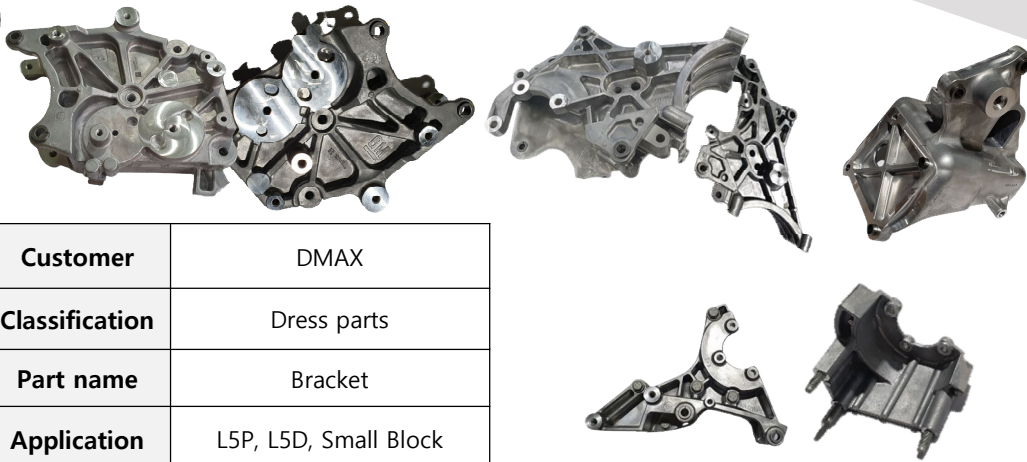
ICE parts

Engine



Customer	HKMC
Classification	Engine
Part name	Timing Chain Cover
Application	LF, YF

Dress parts



Customer	DMAX
Classification	Dress parts
Part name	Bracket
Application	L5P, L5D, Small Block

Steering

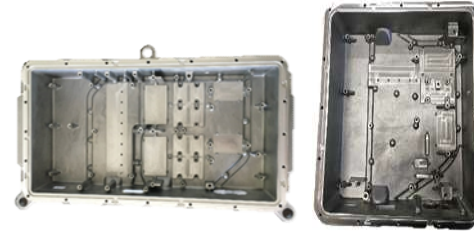


Customer	ZF
Classification	Steering
Part name	Steering Housing
Application	FD, SM5

2. Flagship Parts

EV Parts

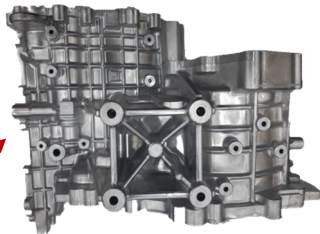
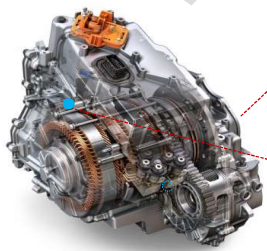
OBC Inverter



Customer	HMC
Classification	OBC
Part name	Main Case
Application	LM-FC, CS-EV

Customer	Global GM
Classification	Inverter Module
Part name	DRV MOT PWR INV MDL
Application	BET / BEV3

Drive Motor



Customer	HKMC
Classification	Drive Motor
Part name	Motor Housing
Application	NE-EV

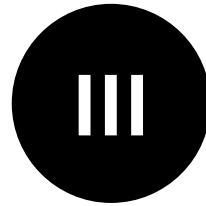


Customer	HKMC
Classification	Drive Motor
Part name	Motor Cover
Application	SUV (HEV / PHEV)



Customer	Rivian
Classification	Inverter
Part name	CHASSIS C-SPL
Application	R1T / R1S

Customer	Rivian
Classification	Inverter
Part name	BRACKET
Application	R1T / R1S



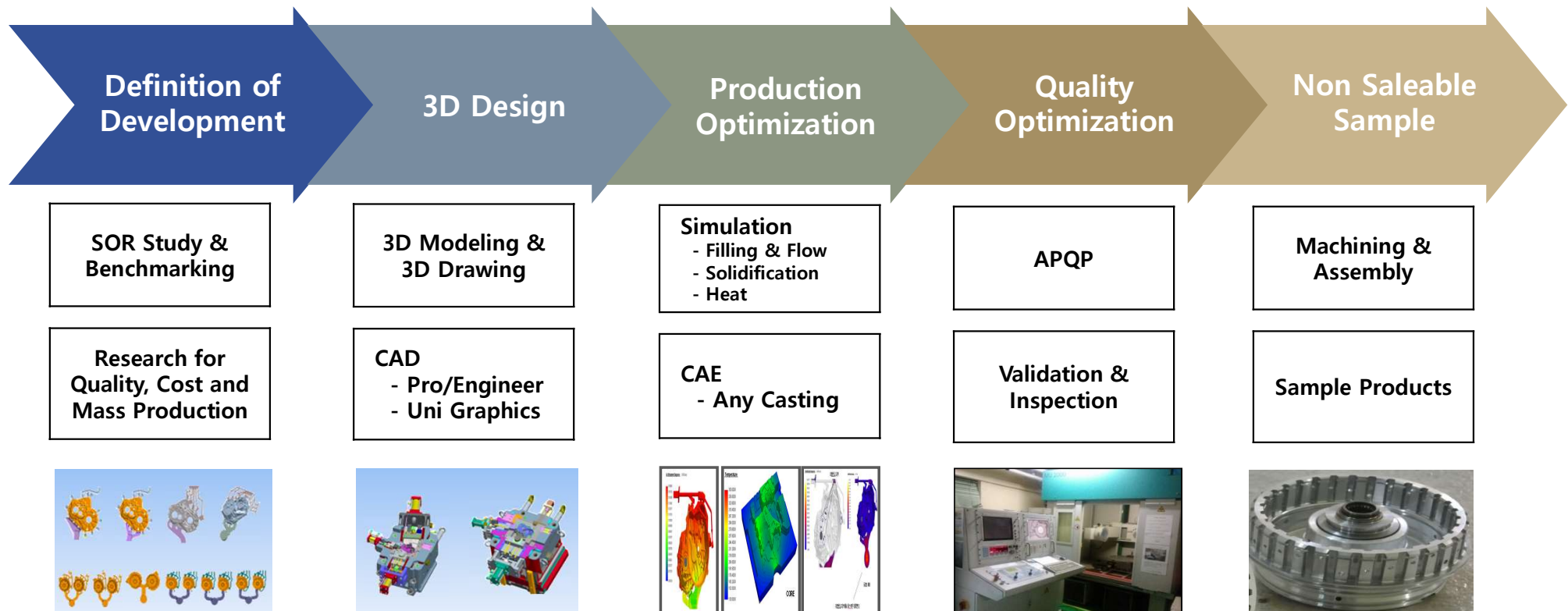
Technology

1. Developing Procedure
2. Design Tool
3. Specialized Techniques

1. Developing Procedure

Wealth of Experience for Design and Manufacturing Tools

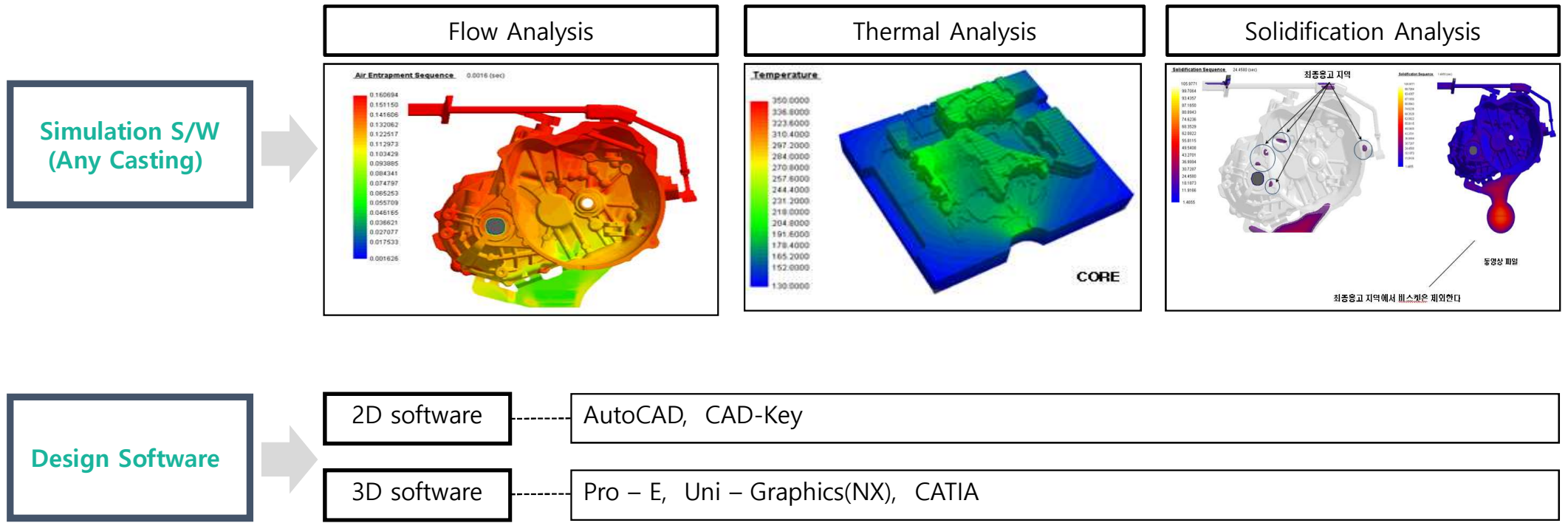
In-house mold design & manufacturing team and much experience of die casting enables us to develop optimized mold and auto parts for customers



2. Design Tool

Various simulation & design software

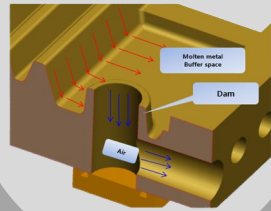
Gate design and cooling methods that have been confirmed by using flow analysis, thermal analysis, and solidification analysis enable us to determine casting mold design and secure high quality level in the initial stages.



3. Specialized Techniques

Super Cooling System

Hot spot can be efficiently managed by supplying coolant into inside of die (such as pin and etc.)



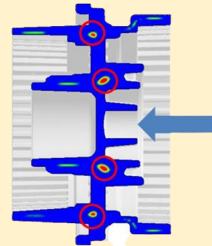
Die Temperature Control

Mold temperature can be controlled continuously through inserting thermocouple and cooling system (in : 20°C, out : 26~27°C)



Partial Squeeze System

To prevent shrinkage defects at thick region of the parts, establishing a moving core for certain zone of die and pushing the moving core into casting



Vacuum Die Casting

Preventing porosity of casting with removing air inside cavities thru deep dive and research



Multi Cavity Production

High tech for designing runner in order to minimize the difference of filling and flow among each cavities with wealth of experience





IV

Competitiveness

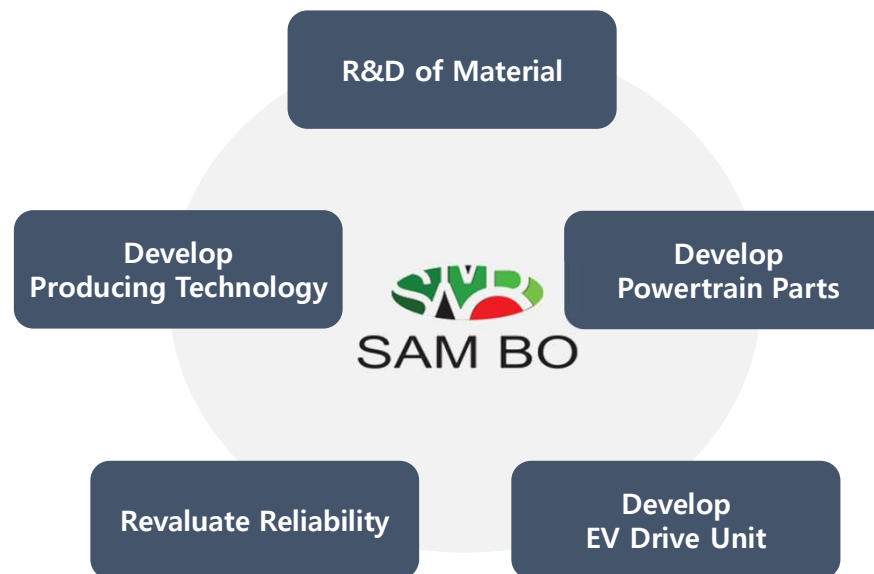
1. R&D Investment
2. Key Competency

1. R&D Investment

Manpower

Manpower	2024		2025	
	Person	Ratio	Person	Ratio
Admin Staff	59	24%	60	23%
R&D Staff	18	7%	26	10%
Line Worker	167	69%	174	67%
Total	244	100%	260	100%




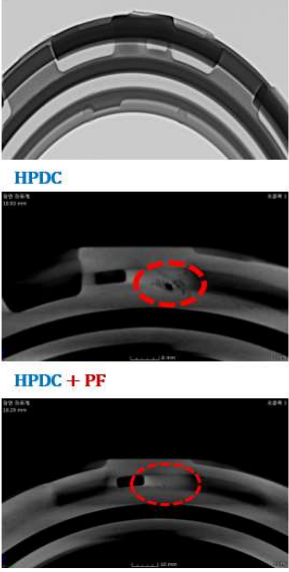

Research Area



Supplement R&D Staff continuously up to 20%

2. Key Competency

Highest quality die-casting manufacturer with 50 years of experience and technology accumulated

Raw material	Production	Quality	Techno-logy	SCM
 <p>Ability to develop materials with appropriate properties (ADC14, ADC-HC3)</p>	 <p>One-stop system including design, casting, machining and assembly</p>	 <p>- GM Supplier of Year - GM Quality Excellence</p>	 <p>Pore Free vacuum casting</p>	 <ul style="list-style-type: none"> - Impregnation - Anodizing/E-coating - Overseas local warehouse

THANKS FOR WATCHING!

