

SD Co., Ltd. Company Profile



Professional auto parts company in KOREA

E-mail : scs7028@empas.com

Company Introduction

1. Overview
2. History
3. Long Term Sales Plan
4. Organization and Manpower





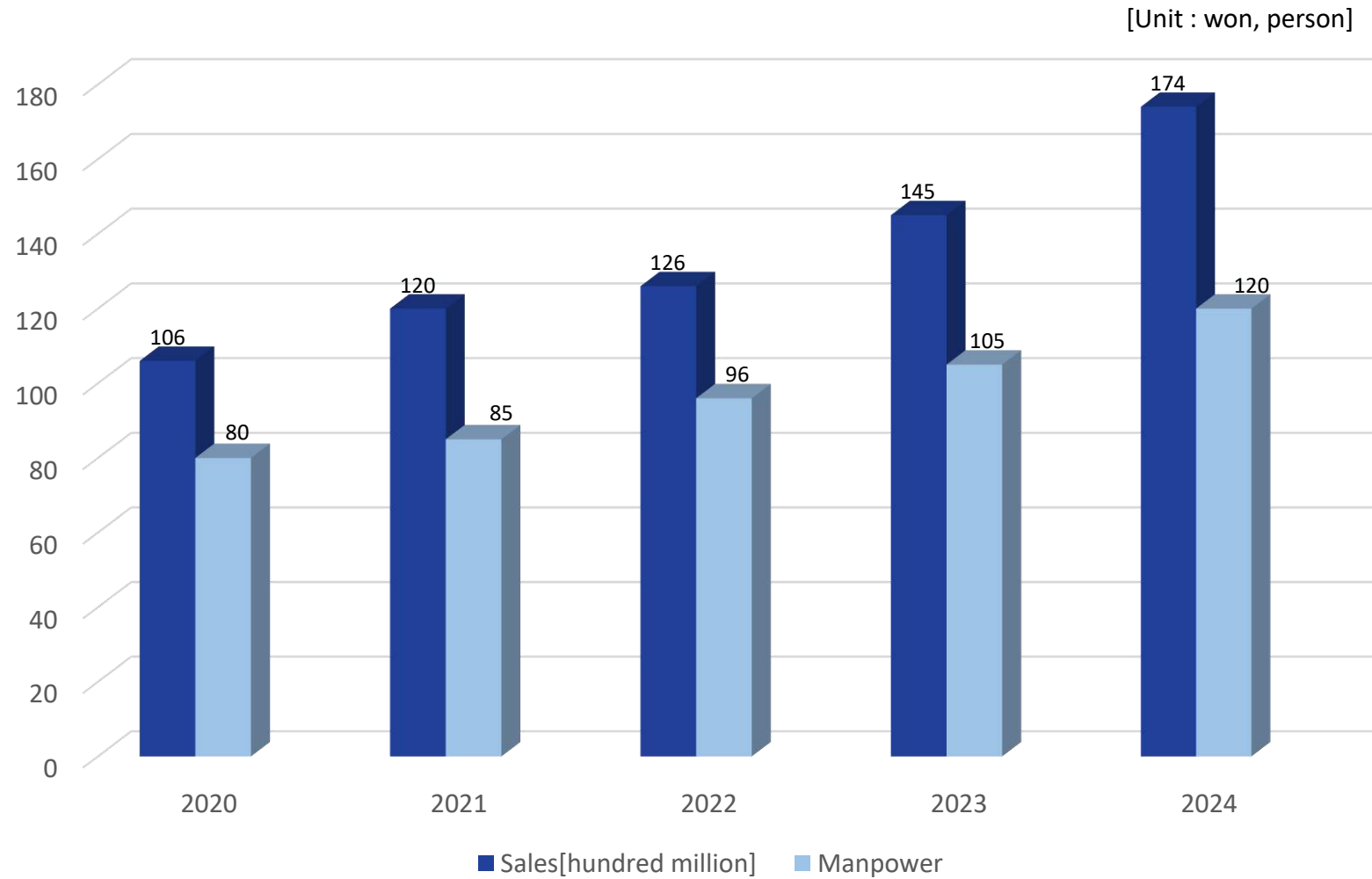
Overview

Company Name		SD Co., Ltd.			Representative Director	Shin Chansoo
Business License No.		305- 81- 84826			Established	Dec. 2003
Location	Head Office 1 st Factory	1 gil-20, Jangmok-Dong Geumseong-Myun Geumsan-Gun Chungnam			TEL / FAX	+82-41 - 752 – 6864 / 6863
	2 nd Factory	1003-1 Sinpyung-Ri Chubu-Myun Geumsan-Gun, Chungnam			Email	scs7028@empas.com
Size	Site Area	Building Area	Subsidiary Area	Ownership	Employees	
	15,898 m ²	3,809.3 m ²	885.1m ²	Own Factory	85 persons	
Sales	2019	2020		Plan in 2021	R&D Investment(2020Yr)	
	9.4 Billion Won	10.6 Billion Won		12.0 Billion Won	580 Million Won	
Industrial Property	11 Patents			Certifications	SQ Certification (Electric and electronic G, Injection G)	
Major Products	Electric and electronic parts assembly for automotive and plastic injection molding				IATF 16949/ NQA	
Major Customers	Kamtec, KFTEC, Seohan Warner Turbo, BorgWarner(Chungju), Sejong ATT, INZI Controls			R&D Center	Company Annex Research Center	
Major Facilities	Injection molding Machines	Assembly Facilities		Tooling Facilities	Test Facilities	
	29 sets	Automatic soldering M/C, Epoxy & Silicon dispenser Heat stacking M/C, Screw Fastening M/C Function tester, Winding M/C		High speed processor, Discharger, Grinder, Laser Welding machine	3D Measuring machine, Roughness/Profile Measuring machine, Tool microscope Moisture tester, Thermometer	

History

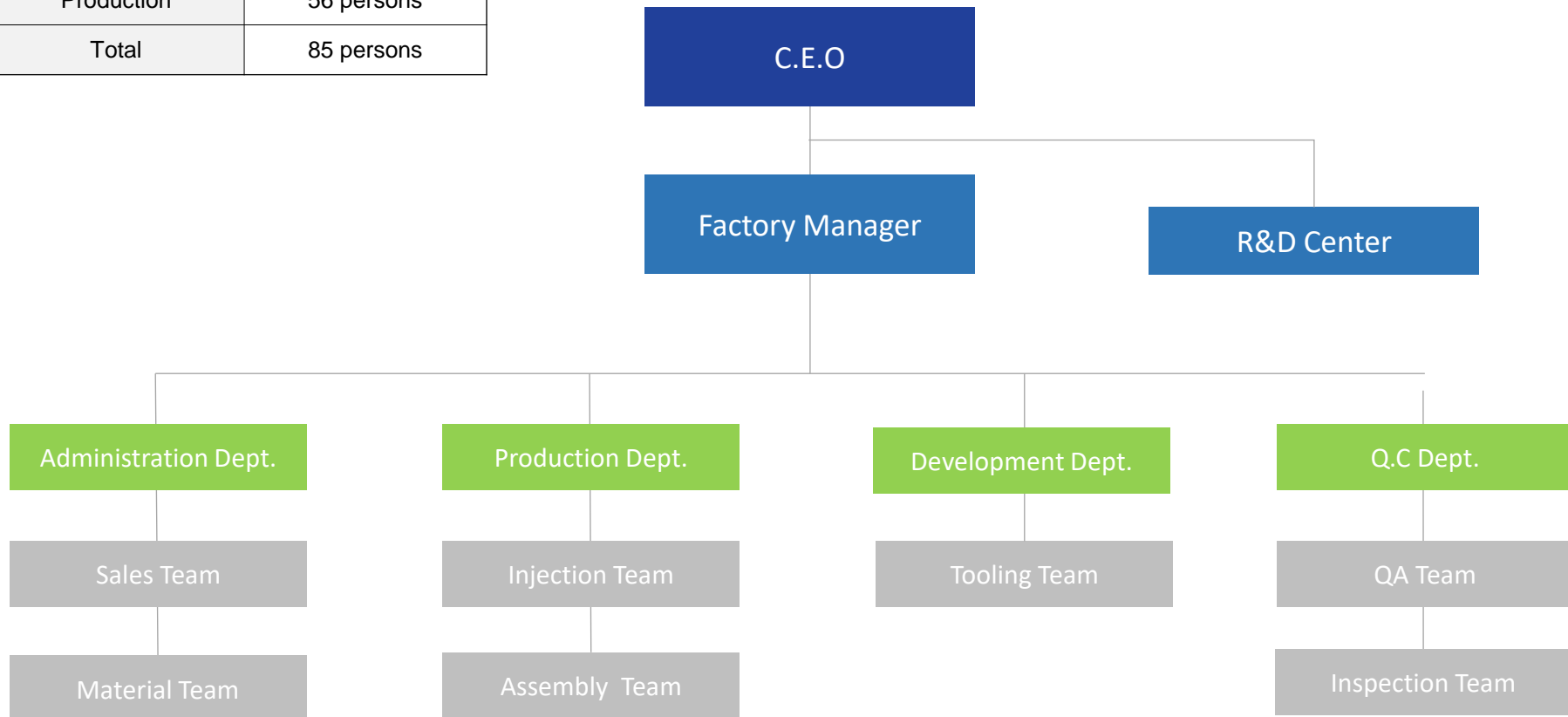
- Dec, 2003 Started business
- Sep, 2005 Acquired HMC/KMC SQ Certification (Injection, KAMTEC)
- Apr, 2006 Appointed as Clean Business
- Jul, 2006 Acquired ISO-9001 Certification
- Sep, 2006 Appointed as a Venture Business(by Gov.)
- Dec, 2006 Established R & D
- Jul, 2007 Appointed as a Promising Business in the Future(by Gov.)
- Sep, 2007 Introduced E.R.P System
- Feb, 2008 Appointed as INNOBIZ company(by Gov.)
- Feb, 2011 Acquired HMC/KMC SQ Certification (Electronic, KAMTEC)
- Jul, 2014 Acquired ISO/TS16949 Certification
- Dec, 2015 Acquired SES Tier-2 RSM Certification
- Aug, 2018 Acquired IATF16949 Certification

Long Term Sales Plan



Organization and Manpower

Management	29 persons
Production	56 persons
Total	85 persons

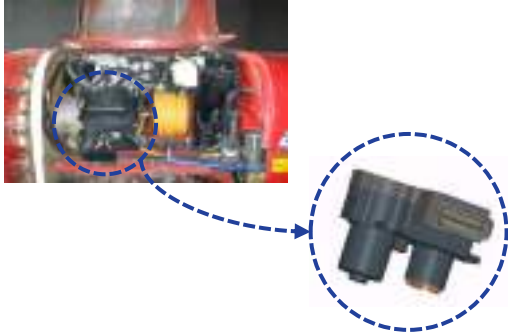




Products

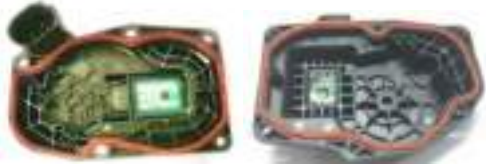

1. Major Products
2. Production Process
3. Production Facilities






Major Products(1)

	ECA (Electronic Control Actuator)		Drain Cut Valve
Application	Pesticide Applicator (2010 Year ~)	Generator (2013 Year~)	Canister Close Valve (2015 Year ~)
Engines adopted	HMC Gamma Engine	Kukje A1700-Gen Engine	Renault
Function	Engine RPM Control according to Load Change → Spray Volume Control	Engine RPM Control According to Load Change → Frequency Control	CCV is the Valve operates when OBD II test mode is started in order to check the fuel system whether for leaks
Photo			

Major Products(2)

	Cover Assembly	TPS Sensor	EGR Solenoid Valve Cover
Application	ACV, LP EGR Valve	Intake Manifold	EGR Valve
End User	HMC/KMC	HMC/KMC	HMC/KMC
Customer	KAMTEC	KAMTEC	KAMTEC
Engine/Car	All Diesel Engines	Lamda Engine	All Diesel Engines
Production Year	2008	2010	2003
Function	Extract angle from Electric Throttle Valve Flap and EGR Valve. Sensor Assembly	Detection sensor of angle for Intake manifold Flap. Sensor Assembly	Resistance compensate when temperature changed. Circuit on board Assembly
Photo			



Major Products(3)

	Solenoid Valve Coil Assembly	EVP Body Assembly	Electric Waste Gate Actuator Body Assembly
Application	On/Off, Duty Control Solenoid Valve	Electric Vacuum Pump	Turbo Actuator
End User	HMC/KMC	HMC/KMC	HMC/KMC
Customer	KAMTEC	KAMTEC	KAMTEC
Engine/Car	All Diesel Engines	Gasoline engine with Turbo	Gasoline engine with Turbo
Production Year	2008	2010	2010
Function	Solenoid Valve & Coil Assembly on insert molding base	Housing for Electric Vacuum Pump by Insert Molding	Housing Electric Waste Gate Actuator by Insert Molding
Photo			

Major Products(4)

	Swirl Control Actuator Body Assembly	Gear
Application	Intake Manifold	Actuator for Engine
End User	HMC/KMC	HMC/KMC
Customer	KAMTEC	KAMTEC
Engine/Car	All Diesel Engines	Gasoline/Diesel Engine
Production Year	2004	2008
Function	<ul style="list-style-type: none"> Housing for variable Swirl Control Actuator by Insert Molding 	<ul style="list-style-type: none"> High strength High temperature resistance
Photo		

Major Products(5)

	Plastic Slider	Plastic Vane
Application	Vacuum Pump	Vacuum Pump
End User	HMC/KMC	HMC/KMC
Customer	KAMTEC	KAMTEC
Engine/Car	Diesel Engine	/Diesel Engine
Production Year	2015	2015
Function	<ul style="list-style-type: none"> • High strength • Very high temperature resistance • High precision • Very high wear resistance 	<ul style="list-style-type: none"> • High strength • High temperature resistance • Very high precision • Polished after injection
Photo		

Major Products(6)

Engine Parts	Solenoid Valve Parts
	
<p>Insulator</p>	
	

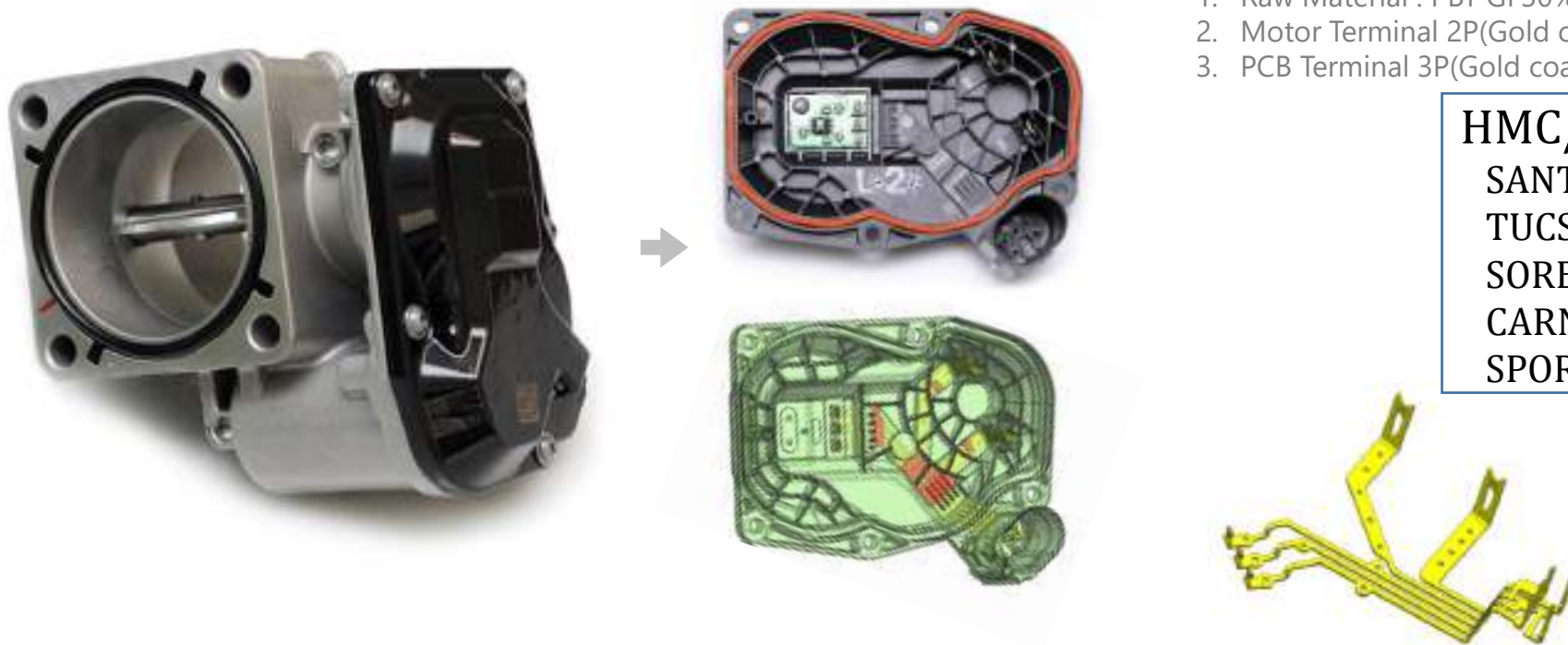
Major Products - ACV (Air Control Valve)

Mounted in the intake manifold of diesel engine to reduce the harmful exhaust increasing EGR ratio through precise throttling motion

ACV Cover Complete

1. Raw Material : PBT GF30%
2. Motor Terminal 2P(Gold coating)
3. PCB Terminal 3P(Gold coating)

HMC/KMC
SANTAFE
TUCSON
SORENTO
CARNIVAL
SPORTAGE



Major Products - VSCA (Variable Swirl Control Actuator)

Reduces generation of the harmful exhaust improving mixing ratio of fuel/air controlling generation of vortex of intake air through the linear control of Swirl Control Valve installed on the intake manifold

VSCA Housing

1. Raw Material : PBT GF30%
2. Bush 3ea (C3601)
3. Stud (SUS420F)
4. Terminal 3P(Gold Coating)
5. Motor Terminal 2P

HMC/KMC

SANTAFE
TUCSON
SORENTO
CARNIVAL
SPORTAGE



Major Products – ETA-L2 (Turbo Charger)

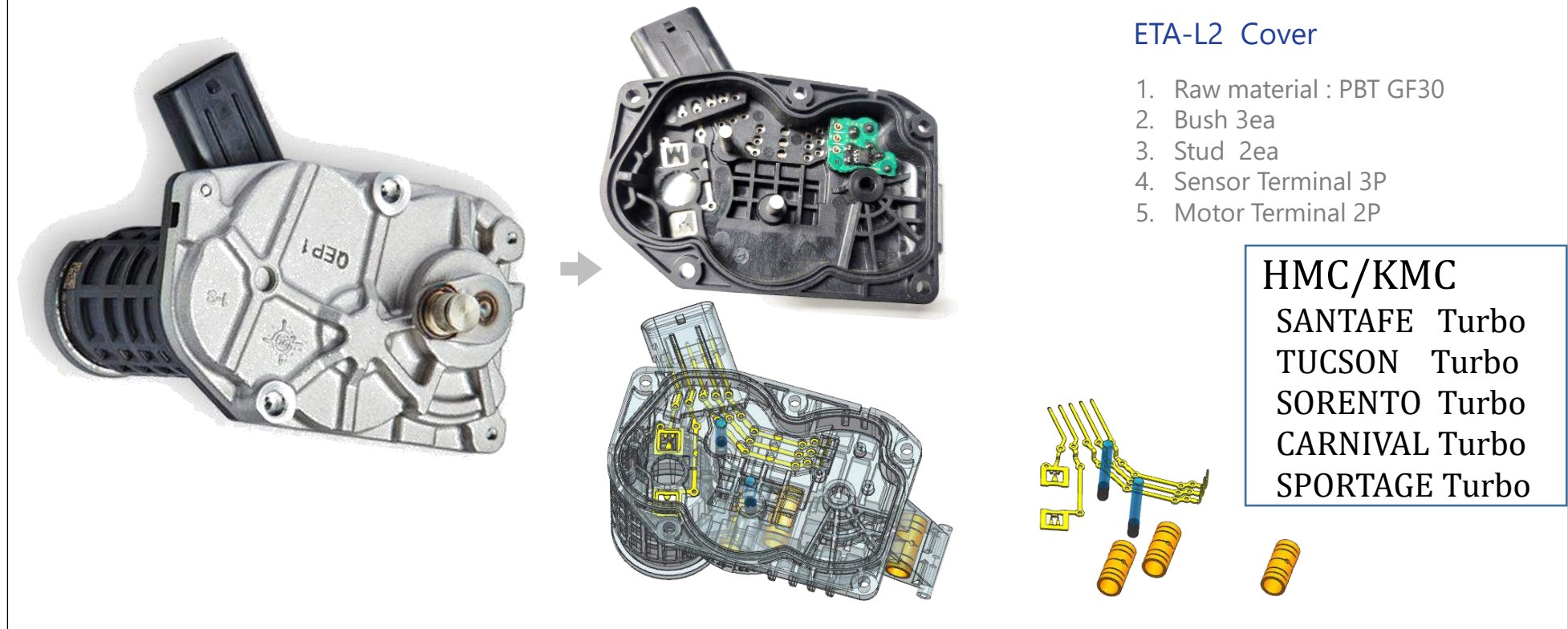
Installed on the turbocharger to drive the wastegate valve, and increases engine output by adjusting the maximum booster pressure

ETA-L2 Cover

1. Raw material : PBT GF30
2. Bush 3ea
3. Stud 2ea
4. Sensor Terminal 3P
5. Motor Terminal 2P

HMC/KMC

SANTAFE Turbo
 TUCSON Turbo
 SORENTO Turbo
 CARNIVAL Turbo
 SPORTAGE Turbo



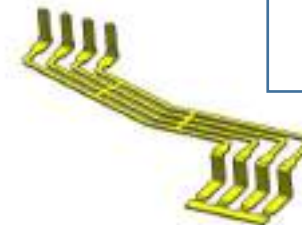
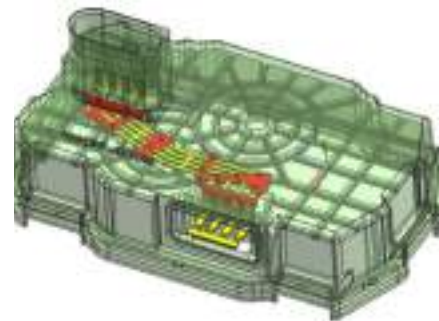
Major Products - E-Actuator (Turbo Charger)

An integral circuit system and an electric actuator which controls vanes of the turbo charger



E-Actuator Cover

1. Raw material : PPA GF+MD
2. Terminal 4P(Gold Coating)



HMC/KMC

SANTAFE Turbo
 TUCSON Turbo
 SORENTO Turbo
 CARNIVAL Turbo
 SPORTAGE Turbo

Major Products - EWGA (Electric Waste Gate Actuator)

Mounted on the turbo charger to drive West Gate Valve and adjusts the engine output by adjusting the maximum booster pressure



E-Actuator Cover

1. Raw Material : PPA GF
2. Motor Terminal 3P (Gold Coating)
3. PCB Terminal 2P (Tin Coating)

HMC/KMC
SONATA Turbo
K5 Turbo



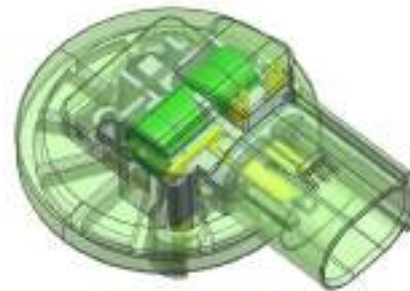
Major Products - EGR (Exhaust Gas Recirculation)

An exhaust recirculation device according to exhaust control which reduces NOx (nitrogen Oxide) produced by the low combustion temperature in the combustion chamber



EGR Connector

1. Raw Material : PBT GF
2. Terminal (Gold Coating) 3 types



HMC
STAREX

Major Products - DCV (Drain Cut Valve)

Controls the vapor gas system of canister (A device which absorbs the vapor gas produced in the fuel tank by activated carbon and return it to the engine so that it could be burned)

Canister



DC Valve

1. Raw Material : PA6 GF15
2. 11 types of Assemblies

RSM
XM3, SM6



Major Products - Vacuum Pump

A vacuum production device to operate the servo system to control the operating pressure of the break booster necessary for breaking the vehicle, engine performance and exhaust



KMC
MOHAVE
K5 CVVL
BONGO TRUCK

Plastic Vane

Raw Material : PPS



Plastic Slider

Raw Material : PA66 CF



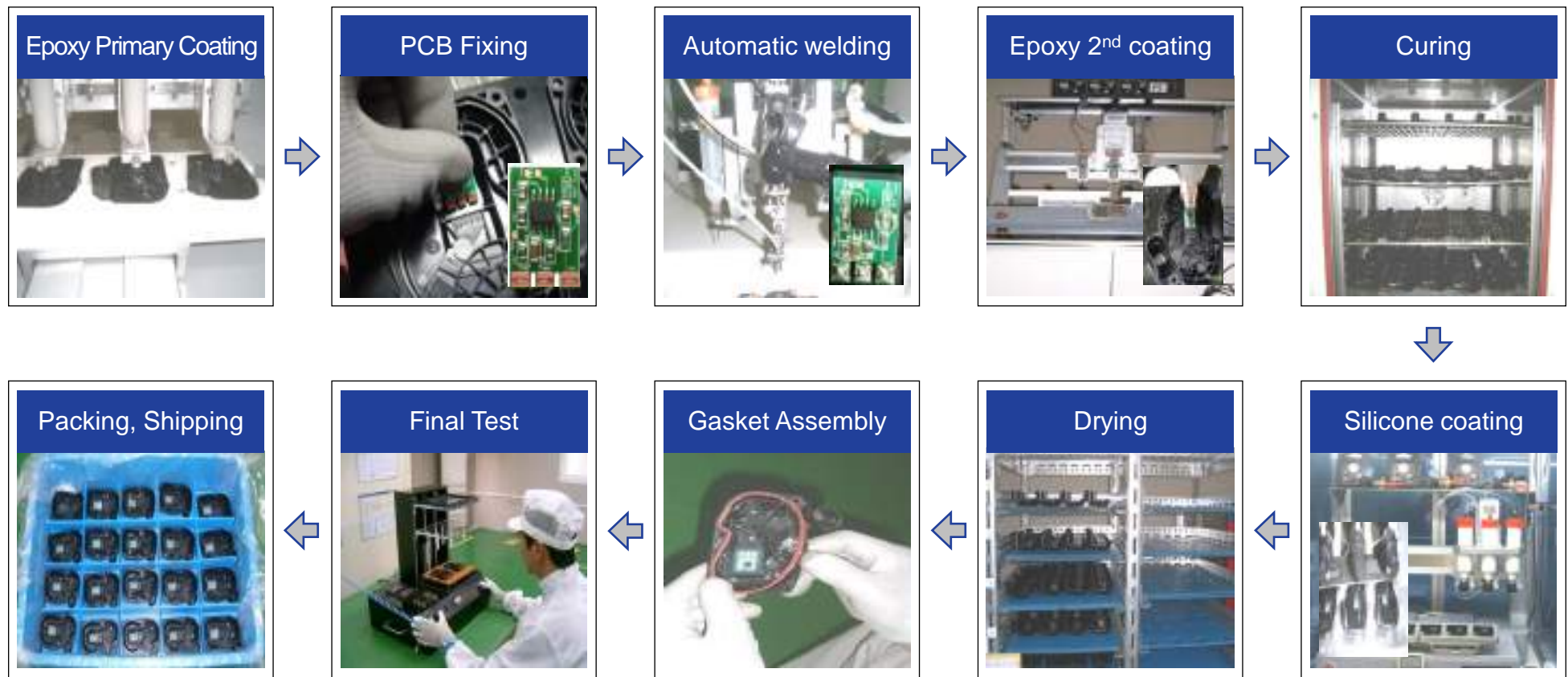
Production Process

6-1. Finished (ECA)



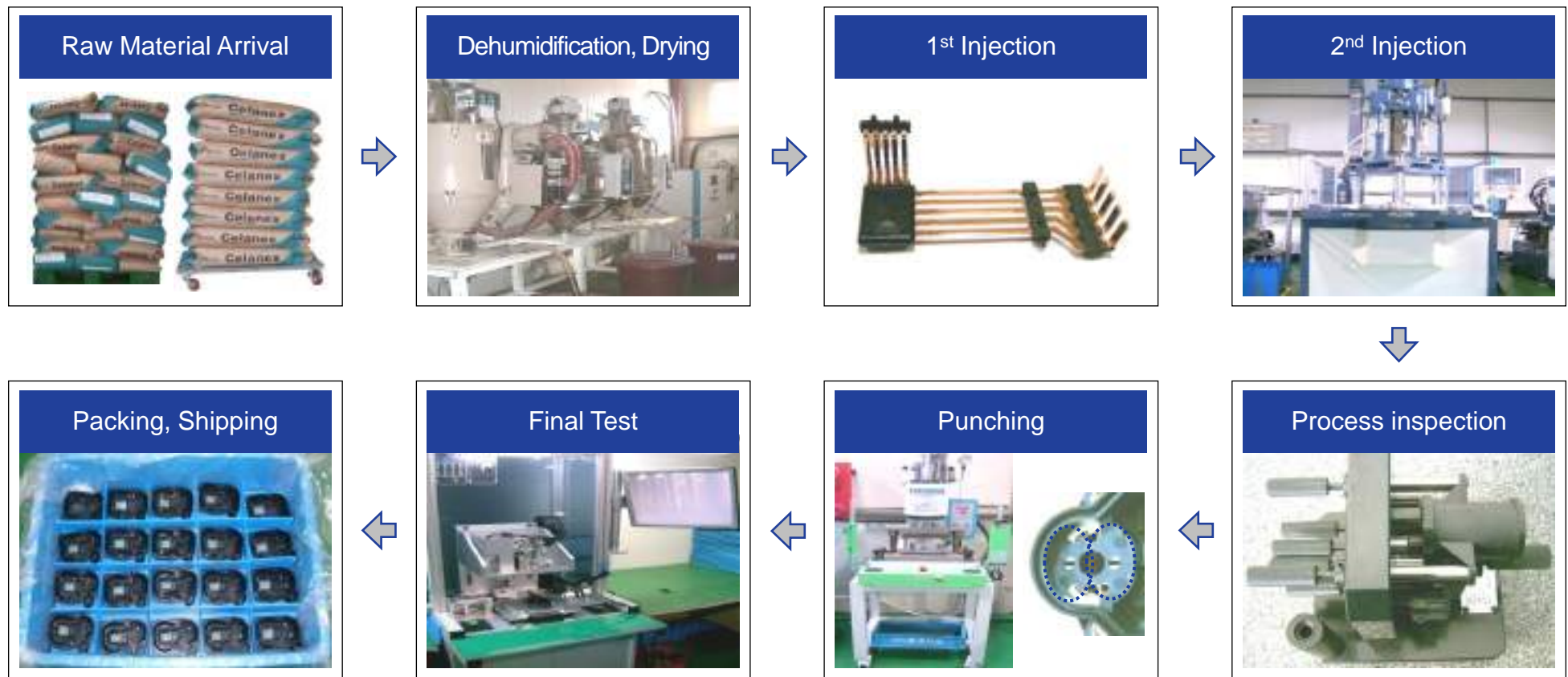
Production Process

6-2. Semi-Finished (ACV Sensor Assembly)



Production Process

6-3. Parts




Production Facilities

7-1. Assembly Line

Assembly Process	Size & Type	Quantity	Maker	
	Auto Soldering M/C	L-CAT EVO4430	3	Apollo-Seiko Found Four
	Epoxy Dispenser	I-ROBO	1	Tae Ha
	Silicone Dispenser	DX-250	2	DS Corp. Iretech.
	Chamber	OF-22	5	Jeio Tech Suk San Eng.
	Performance Tester	VDC 5V	12	Ki San, Hwa Jin
	Heat Stacking M/C	260°C/100mm	2	FEEL Eng.
	Auto Screw Drive	0.49~1.47 N.m	1	Newtop Tech.






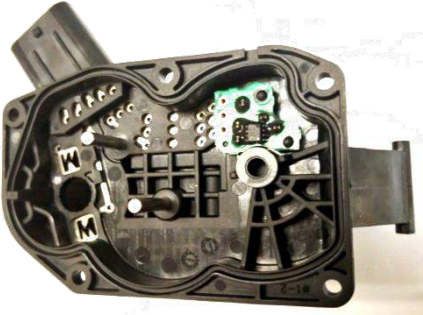
Production Facilities

7-2. Injection Molding Machine Line

Injection Process	Facility Name	Size /Type	Q'ty	Maker
	Injection Mold (Vertical)	55 ton	1	Daekyung
		85 ton	2	Daekyung
		120 ton	1	Daekyung
		150 ton	4	Daekyung, Wonil
		200 ton	3	Daekyung, HeungHwa
		250 ton	2	Daekyung, BMK
		300 ton	1	Daekyung
	Injection Mold (Horizontal)	45 ton	1	ENGEL
		60 ton	1	SODICK
		100 ton	1	SODICK
		120 ton	6	ENGEL
		200 ton	2	WooJin
		220 ton	1	LS
		280 ton	3	WooJin, HAITIAN

Production Facilities

7-3. Injection Automation Equipment

Inserted Automation	Applied Robot	Inserts	Products
	<ul style="list-style-type: none"> ■ 6-axis multi-joint (1 set) 		
	<ul style="list-style-type: none"> ■ 6-axis multi-joint (2sets) ■ 3-axis straight intersection(6sets) 		

Production Facilities

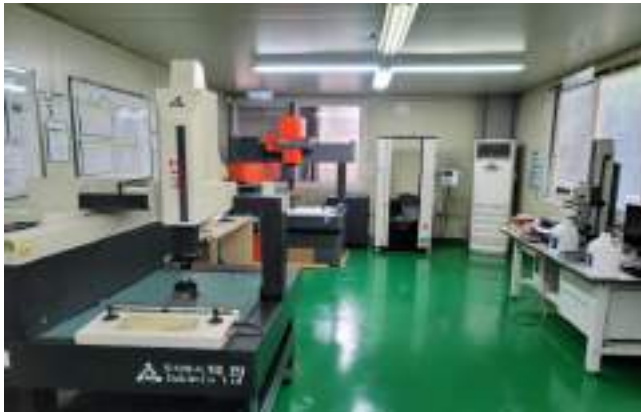
7-4. Tooling Facilities



Facility Name	Size and Type	Q'ty	Maker
Machining Center	NX5000D	1	Doosan
General Lathe	TIPL-4	1	Namseon
Milling	NSM-A	2	Namseon
Grinder	JFG520M	1	Jinyoung Precision
Discharger	450TM	2	Daehan Precision
Band Saw	JVH-450	1	Jeongmin Machine
Ultrasonic Cleaner	UIL-1800W	1	Yuil Ultrasonic Wave
Laser Welding machine	VISION	2	Poongsan Technology

Production Facilities

7-5. Testing Facilities



Facility Name	Size and Type	Maker
3D Measuring machine	HIT-V	Dukin
3D Measuring machine (Both contact and non-contact)	300 × 200 (0.0001mm)	Rational
Roughness/ Profile Measuring machine	SV-C3200S4	Mitutoyo
Tool Microscope	50 × 50 (0.001mm)	Mitutoyo
X-Ray Tester	X-eye SF-160	SEC
Moisture Tester	0.001g (0.01%)	AND
Tension and Pressure Tester	10,000 Nf(0.05%)	Dr Tech
Thermo Hygrostat Chamber	-40°C ~ 150°C	Jeio Tech
Salt Spray Tester	VT-SST200	VISION
Resistance Meter	0~10(0.001Ω)	Tech Electronic
Surface Thermometer	-200°C~1200 °C	Lufft



Thank you
For customers satisfaction.

E-mail : scs7028@empas.com



www.sdauto.co.kr