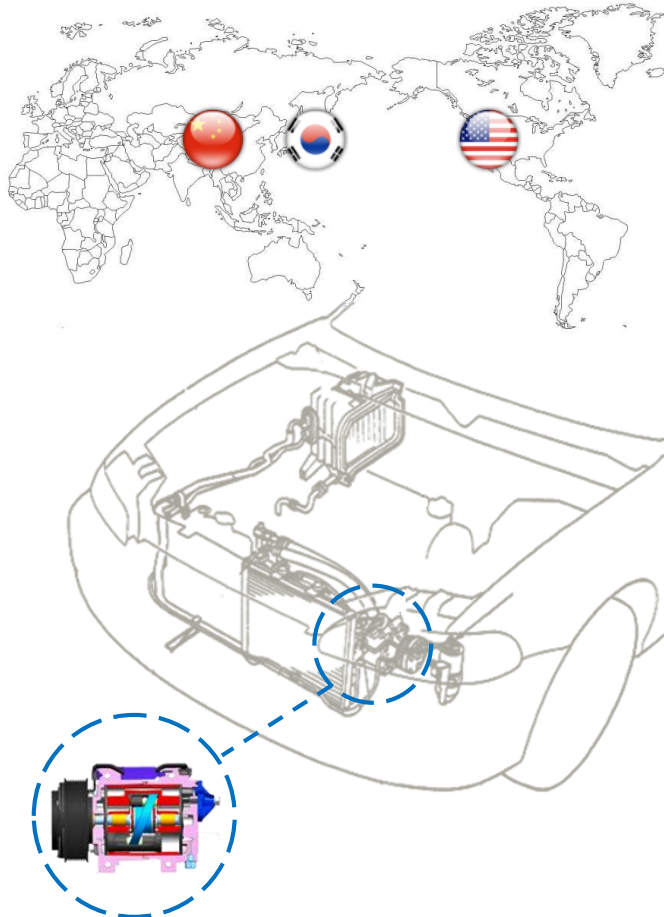


# SAM HWA

## A/C COMPRESSOR COMPONENTS



Address : #66-1, Gasan-ro, Hallim-myeon, Gimhae-si, Gyeongsangnam-do 50849, Republic of Korea  
Tel: +82-55-335-3545 / E-mail : [kccorea@gmail.com](mailto:kccorea@gmail.com)



## COMPANY INFO.

- ☐ **COMPANY** SamHwa Co., Ltd.(Regi Nr : 277-81-00424)
- ☐ **FOUNDATION** 03. 12, 2003. (2012-2018 KC CORP)
- ☐ **BUSINESS** A/C COMPRESSOR & COMPONENTS
- ☐ **ADDRESS** Gasan-ro, Hallim-myeon, Gimhae-si,  
Gyeongsangnam-do 50849, South Korea
- ☐ **CONTACT** +82-55-335-3545 / [kccore@gmail.com](mailto:kccore@gmail.com)
- ☐ **CUSTOMER**



[North America-  
A/S market]]



SYM – TIER2



Volkswagen

# COMPANY HISTORY



**2006** Won a Prize of President for export (\$5 million)

**2007** Obtained Environmental Technique Certificate

**2007** Founded Corporate R&D Center

**2007** Won a Prize of President for export (\$10 million)

**2008** Won a Prize of President for export (\$20 million)

**2013** Supplied to Delphi, Korea

**2014** Supplied to KukJe Machinery (Tractor), Korea

**2003** Founded SamHwa Tech

**2003** Obtained ISO / TS16949

**2004** Obtained TS16949

**2005** Obtained ISO 14001

**2010** Appointed 2010 Brilliant Brand of Korea

**2012** Changed the company name to KC

**2015** Supplied to DENSO, USA

**2016** Supplied to VolksWagen, China

**2019** Changed KC to SamHwa

**2003**  
~2005

**2006**  
~2009

**2010**  
~2012

**2013**  
~2015

**2016**  
~2019

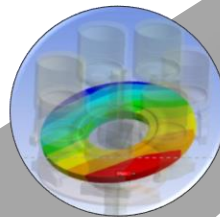


# RESEARCH & DEVELOPMENT

Our researcher of Technology Institute can design the products by ourselves using 3D and 2D programs.

For the Product Stability, cooperated with University/ Material Laboratory of Gyeongnam Technopark and conducted Structure Analysis and Fatigue/ Thermal Analysis.

Realization of Product Development with Overseas Corporation, Overseas Compressor Manufacturers and over 50 Partners.



Conducted self-assessment of product for customer satisfaction (Complex Durability, NVH, Bench Test etc.)

# QUALITY PROGRAM



## CERTIFICATE OF REGISTRATION

This is to certify that:

**SAMHWA Co., Ltd.**

66-1, Gasan-ro, Hallim-myeon, Gimhae-si, Gyeongsangnam-do, 50849, Korea

Operates a

**QUALITY MANAGEMENT SYSTEM**

Which complies with the requirements of

**IATF 16949:2016**

For the following scope of registration:

The manufacture of air conditioning compressor parts.

Exclusion - Product Design.

Certificate No.: AUTO40999  
IATF Database No.: 0354191

Issue Date: 9 May 2019  
Expiry Date: 8 May 2022

Kevin Goodwin  
General Manager Technical Services  
SAI Global Assurance

George Azedo  
Automotive Technical Manager



Registered by:  
SAI Global Certification Services Pty Ltd 20 Carlson Court, Suite 200, Toronto, Canada M8W 7G6 (SAI Global) and subject to the SAI Global  
Terms and Conditions for Certification. While all due care and skill are exercised in carrying out the assessment, SAI Global accepts no responsibility  
for the proven negligence. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. To verify that this  
certificate is current, please refer to IATF website at <http://www.iatfstandards.org> and enter the IATF certificate number. Scan QR code in  
the certificate validity check service.

**SAI GLOBAL**

***SamHwa** is doing our best to control our Quality Management System for Continuous Improvement, Prevention of Defects, Reduce of Wastes through the Acquisition of IATF 16949.*

- (1) ATF DATABASE : 0354191
- (2) Issue Date : 05. 09, 2019.
- (3) Registered by : SAI GLOBAL

**Quality  
Certification**

**Certified IATF16949  
(Quality First Policy)**

**Quality  
Program**

**Conducting Clean-up 3  
Steps (Efficiency  
Improvement, Cost  
Reduction, Waste Removal,  
Continuous Improvement)**

**Customer  
Satisfaction**

**Defective rate  
below 25 ppm /  
Goal is Zero  
Customer  
Complain.**



# MACHINING LINE

A/C COMPRESSOR



Machine center  
(Robot automation)



Machine center



Welding machine



Cnc lathe (Robot)



Centerless center



Bridge machine



Cap machine



PTFE COATING



# MACHINE EQUIPMENT

NO	FACILITIES LIST	QUANTITY	REMARK
1	CNC LATHE	21	1) PARTS OF FS10 or R4 2) HOLLOW PISTON
2	MCT (MANUAL)	9	
3	MCT (AUTOMATIC)	6	
4	WASHING MACHING	5	All PARTS
5	CENTERLESS GRINDER	3	PISTON
6	PISTON BRIDGE MACHINE	1	
7	BANDSAW	1	PARTS OF R4
8	SPOT WELDING MACHINE	1	
9	BENCH DRILL MACHINE	3	
10	SURFACE GRINDING MACHINE	3	
11	PISTON CAP MACHINE	3	HOLLOW PISTON
12	SAND BLAST MACHINE	2	
13	COATING MACHINE	2	
14	WELDING MACHINE	3	

# COMPONENTS (R4 / ROTARY TYPE)



			
SLIDER BLOCK	CASE	SHELL COVER	NOSE
			
VALVE PLATE	CRANK SHAFT	COUNTER WEIGHT	RETAINER

*We experienced to supply our compresses to North America and to Europe for several years.  
We will do our best to supply the best goods to your company.*



# COMPONENTS (FS10 / FIXED TYPE)



			
HOUSING (FRONT/REAR)	CYLINDER	SHAFT	BOLT THROUGH
			
VALVE PLATE	PIN VALVE PLATE	PISTON	SWAH PLATE

*We experienced to supply our compresses to North America and to Europe for several years.  
We will do our best to supply the best goods to your company.*

# HOLLOW PISTON (VARIABLE TYPE)



♣ *Inertia Friction weld*  
♣ *PTFE Coating*



ITEM		HOLLOW PISTON (VARIABLE DISPLACEMENT)
FUNCTION		A rotary motion of the swash plate. → Straight line motion of the Piston.
MANUFACTURER		KAYA CLIMATE CONTROL CORP (KC)
MAJOR CUSTOMER		ERAE AUTOMOTIVE (SYMC) FOTON AUTOMOTVIE (VOLKSWAGEN)
FEATURE	MATERIAL	AP2 / 4000A / A4032
		FORGING
	WELDING	INERTIA FRICTION WELDING [IFW]
	COATING	PTFE [TEFLON]



# PROCESS FLOW (HOLLOW PISTON)



# FINAL MACHINING SUPPLY RECORD

A/C COMPRESSOR



[Samhwa]



[Erae-Automotive]



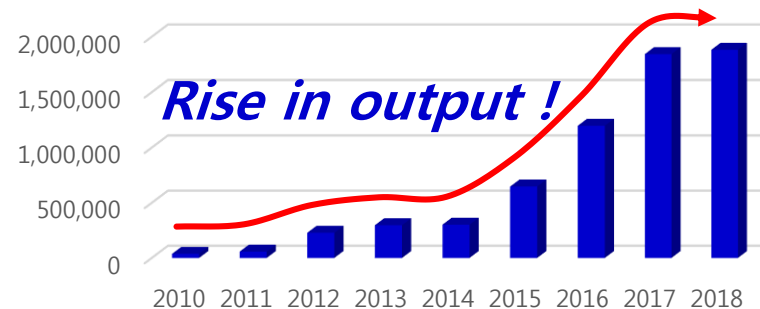
[Foton Automotive]



[SSANG YONG]



[VOLKSWAGEN]








YEAR	FOTON [CHINA]	EREA [KOREA]	OTHERS	TOTAL
2010	37,230	-	-	37,230
2011	57,538	-	-	57,538
2012	108,200	-	119,772	227,972
2013	109,060	-	187,656	296,716
2014	101,060	-	200,656	301,716
2015	113,620	534,060	-	647,680
2016	386,640	810,540	-	1,197,180
2017	929,710	913,850	-	1,843,560
2018	1,015,406	866,744		1,882,150
<b>TOTAL</b>	<b>2,858,464</b>	<b>3,125,194</b>	<b>508,084</b>	<b>6,491,742</b>

# QUALITY ASSURANCE MEASURING EQUIPMENTS

A/C COMPRESSOR



*"We will heartily reciprocate with  
the Best Quality for you."*

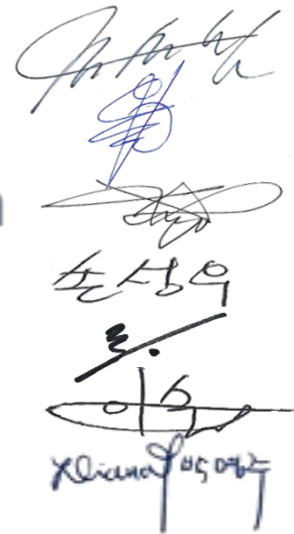
Picture	Name	Model	Test Range
	<b>3D Coordinate Measuring Machine</b>	IMS IMPECT	750*800*550
	<b>Projector</b>	MITUTOYO PH3500	254*152*300
	<b>Contour Measuring Machine</b>	Mahr CD120	300*500
	<b>Hardness Tester</b>	SR-300	HRA, HRB, HRC, HRD, HRF
	<b>Surface Roughness Tester</b>	MITUTOYO SJ-400	50 mm
Equipped over 120 measuring gauges/instruments			



We always do our best for customers.

# Thank you.

- ❑ **Management**
- ❑ **Production**
- ❑ **Administration**
- ❑ **Quality**
- ❑ **Purchasing**
- ❑ **RnD**
- ❑ **Sales**



♠ If you have any inquiries, please send us an email to [kccorea@gmail.com](mailto:kccorea@gmail.com).

