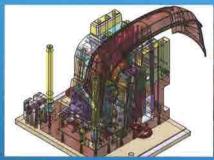


It's HANGUK MOLD's Technology Concept

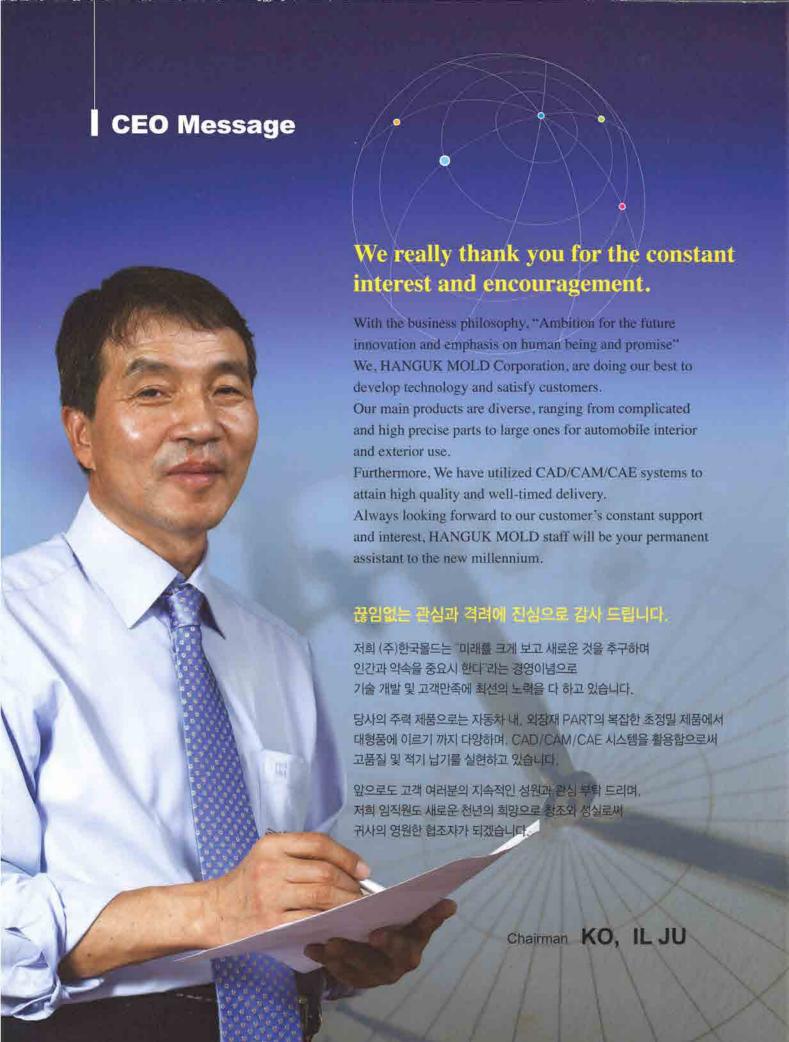






Harmony, Unity, and Creative minds are our belief.

HanGuk Mold Co., Ltd.



# History

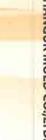
# The companies, along with our customers

언제나 고객과 함께하는 기업 (주)한국몰드 입니다

P	1987.03	Established HanGuk Model	क्रम्बा वर्ष
•	1989.01	Designated as a Tier 1 vender by Hyundai / KIA Motors	현태/기이자동차 1차 협력업체 등록
•	1996.09	Associated as a Leading mold making Co. of the Korean Mold Industry.	한국관형협동조합기업
0	1999.12	Designated as a Tier 1 vender by Hyundai Mobis	현대모비스 1차 협력업체 등록
ø	2002.03	Operated ERP system	업무전산화 ER.P 구축 운영
þ	2002.12	We exhibited 'Film Insert Mold' at German Euro Mold Exhibition	독일 유로물드 출품 전시 - 필름인서트금형
ø	2005.12	ISO 9001 certified by SMICC / ERP operate	ISO9001 품질시스템 운영 전환 / E.R.P.운영
ø	2005.12	Operated 2nd. Plant (Kim Je)	SMC 자동치부품 생산공장(김제) OPEN
•	2006.06	Operated 3rd. Plant (Ulsan city innovation center)	(주)한국ACM 설립 - 협업체계 구축
ø	2007.03	Automated MES(Manufacturing Execution System)	생산관리 e_MES 구축 운영
•	2008.03	Product for Metallic insert film	세계최초 외장필름인서트 제품 양산
φ.	2008.07	Moved the factory to Maegok Industrial area	매곡산업단지로 본사 이전
Ŷ	2011.04	Selected 'Star Company' by the chamber of commercial & industry	상공회의소 주관 STAR기업 선정
•	2012.03	Certified Supplier best Quality by Hyundai/Kia Motors	현대/기이자동차 Best Quality 공급업체 선정
	2013.12	Awarded 10 million dollars Export Tower from Korean government	1000만불수출 탑수상
•	2014.12	Awarded 20 million dollars Export Tower from Korean Government	2000만불 수출 탑 수상
	2016.02	Open 2nd Plant for Automotive part	울산 2공장 설립 – 협업체계 구축



production plant (Focusing to high efficiency part).



# Research & Development

The creative and innovative specialized manpower is realizing high efficiency in production by optimizing mold design and injection process through data research and CAE interpretation.

창의적이고 혁신적인 전문인력들이 자료연구와 CAE 해석 등을 통하여 금형 설계 및 사출 공정의 최적화를 이루어 냄으로서 생산의 고효율화를 실현하고 있습니다.

# CAD/CAM/CAE System

CAD/CAM/CAE	Solution	Quantity
CAD/CAM	Catia	9
CAD / CAM	Think	5
CAD / CAM	Unigraphics	4:
CAM	Work NC / Hipermill	4/3
CAM	Hyper Hesh	2
CAE	Mold Flow / 3D Timon	171



# Film Insert Mold & Producing

▶ Producing Finished Goods to insert film which is trimmed and making by using injection molding in the Vacuum.

#### ▶ Effect

- Substitute for painting
- Reduce the process (previous 16 steps -->5 steps)
- Luxury surface to apply variety color Film
- Cost down Eco-friendly
- \*\* Vacuum mold /Trimming mold/ Injection mold

# Tandem Mold

▶ Efficient Injection Molding System to reduce cycle time.

#### ▶ Effect

- Improving Productivity on the basis of same condition (Man/Machine/Time)
- Cost Reduction

# 2 shot injection Mold

- ▶ Possible to pruduce Many colors Parts at one mold
- ▶ Effect
- Improving Productivity on the basis of same condition (Man/Machine/Time)
- Cost Reduction - Substitute for painting
- Cost down - Eco-friendly
- \*\* Injection Molding machine 2 NOZZLE Needed

# LFT & Composite Injection Mold

- ▶ Injection Molding by using Glass fiber & carbon fiber materials
- ▶ Effect Substitute for steel panel
  - Reduce the weight
  - Could be addopped variable Design

# Heat & cooling Mold

- ▶ Effect Weldless
  - High Quality(Especially, Surface Quality)
  - Eco-friendly

## etc...

- ▶ Themo plastic mold & producing
- ▶ Hidden parting line Mold
- ▶ FEM carrier



# Patents





Manufacturing Method of







Injection molding device &

Cooling channels applying



KS O ISO 9001 : 2009









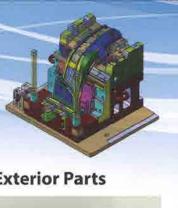
OHSAS 18001 : 2007





SQ CERTIFICATE OF SO CERTIFICATE OF SUPPLIER QUALITY (Mold





# Plastic Injection Mold for Automotive Interior & Exterior Parts







Plastic Injection Mold for instrument Ass'y







Plastic Injection Mold for Bumper Ass'y







Plastic Injection Mold for Doortrim Ass'y

# Plastic Injection Mold for Automotive Parts Etc.









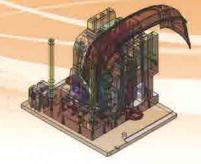




# Main Products

We pursue solid management with constant activity for quality improvement and ISO 9001 quality certification by realizing perfect quality that can move the customers and constructing synthetic and systematic quality system through technology.

완벽한 품질확보와 고객감동을 실현 할 수 있는 품질과 기술력 확보를 통한 종합적이고 체계적인 품질시스템을 구축하여 지속적인 품질개선 활동과 ISO9001 품질인증으로 내실화를 기하고 있습니다.



# | Plant Inside





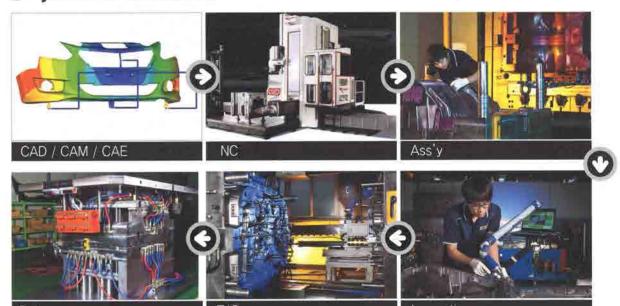


N/C Line

Ass'y Line

Injection Line

# Injection Mold Process



# Main Equipment

MACHINE DESC.	MODEL	SIZE	QTY
NC 20 M/C	HF-4-NC	4000*2800*1800	1
NC WORKING (20 M/C)	MCR-A5C	4000*2800*1800	ì
NC 15 M/C	MCV-A II	3200*2500*650	2
Doosan 12	VM1260	2500*1560*900	1
NC 12 M/C	MCV-1260	2140*1260*900	1
CNC 5 AXIS HIGH SPEED PROCESSOR	XF6300	600*600*400	Ť
CNC 5 AXIS HIGH SPEED PROCESSOR	RONIN 20 (FPT)	6000*2200*2500	î
NC 5-AXIS	DMU 60T	630*560*560	1
EDM-TWO HEAD	SB 1800 CNC	1800*800*700	ĩ
EDM	SB1000B	1000*600*400	Ĭ
EDM	EP100M	500*400*320	3.
EDM	M35	450*400*320	1.

MACHINE DESC.	MODEL	SIZE	QTY
EDM	SB 800B	1000*600*400	9
400TON HYD PRESS	DSP-3020 -400	2500mm	2
WIDE MILLING 2M/C	HMTH 1100	750*300*450	3
WIDE MILLING 11/2M/C	TM2S		ñ
Lathe	HL- 460*640	Φ460*1000	ij
Radial Drilling	NRD-2000		g.
Radial Drilling	NRD-1600	1050*1750*870	3
Injection M/C	WOOJIN	3300 ton	্র
Injection M/C	TOSHIBA / woojin	2500 / 2200 / 1800 ton	3(1/1/1)
Injection M/C	TOSHIBA/MITSUBISHIALS CABLE TOSHIBA/LS CABLE	850 / 650 ton	5(3+2)
Injection M/C	LS CABLE SUMIMOTO	450 / 350 ton	2(1+1)
VACUUM M/C	SHIN HYO	45 ton	1
TRIMING PRESS M/C	DONG SUNG	110 ton	2

and other necessary equipment for mold manufacturing

# Facilities & Process

Hanguk mold is strengthening the competitiveness with balance between every production equipment and process. Even for one production, total quality control, systematic prime cost management, and efficient production supervision should work together.

한국몰드의 모든 생산 설비와 공정은 조화를 통해 기업 경쟁력을 높여 갑니다. 하나의 제품으로 거듭나기까지 종합적인 품질관리. 체계적인 원가관리, 효율적인 생산관리와 함께 최신의 생산설비가 조화를 이루어야 합니다.

# Innovation Concept Tooling

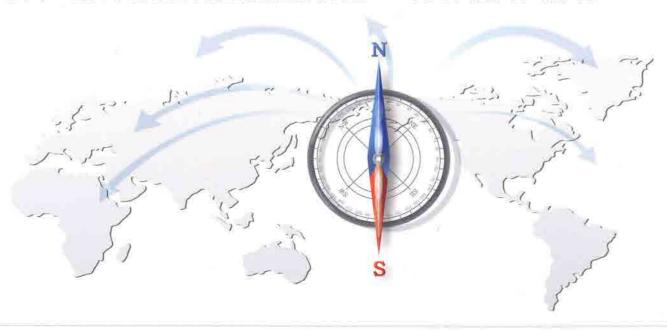
To the Wide world, For the New world

"더 넓은 세상을 향한 출발, 지금 (주)한국몰드와 함께 새로운 세상을 만납니다.



Connecting organically all processes from the early stage of development to mold for mass production by making use of accumulated experience and state-of-art technological system, we are trying our utmost for customer satisfaction by shortening development period, reducing cost and improving quality.

축적된 경험과 첨단 기술 시스템을 활용함으로서 시작 개발 단계에서 양산 금형까지 모든 공정을 유기적으로 연결하여 개발기간 단축 및 원가절감, 품질향상의 실현으로 고객 만족에 최선을 다하고 있습니다.



# HANGUK MOLD's Group















# Ulsan 1st. Plant

# Injection Mold & Parts / Die casting Mold

#21, Maegoksaneop 1-gil, Buk-gu, Ulsan, Korea Tel. +82-52-282-3737 Fax. +82-52-282-6512

# Ulsan 2nd. Plant

## AIM Manufacturing & Assemblying & **Automotive A/S Market Part**

#144, Cheoyongsaneop 3-gil, Yongam-ri, Cheongnyang-myeon, Ulju-gun, Ulsan, Korea

Tel. +82-52-282-3737 Fax. +82-52-282-6512

#### **SMC Product & Heavy Commercial Vehicle Products**

#38, Dae-dong Industry 2-gil, Mangyeong-eop, Kimie, Jeon Buk, Korea

Tel. +82-63-545-7878 Fax. +82-63-545-7875

#### HANGUK ACM CO.,LTD.

#### **SMC Material**

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Tel. +82-63-714-4300



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### **Ulsan 2nd. Plant**

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