



www.sindokorea.com

COMPANY PROFILE

Perfect Quality, Best Technology SINDO Co.Ltd.




Development ourselves, bring harmony to the organization,
moving customer's heart

CONTENTS

1. Overview
2. R&D
3. Product
4. Process
5. Quality

1. Overview

01. History



1980's ~ 2020's
Introducing the footsteps of Sindo.

- 2018. 09 Acquired IATF16949 certification
- 2017. 10 Moved to Daegu National Industrial Complex
- 06 Changed company name from SINDO High tech. to SINDO Co., Ltd.
- 2016. 10 Certificated as ATC(Advanced Technology Center) by KOITA
- 02 Certificated as a component material company
- 2014. 03 Acquired Renault Samsung Motors SES-Tier 2 certification
- 2008. 01 Acquired IMS(Information Technology Management System) certification
- 2006. 06 Certified as a company-affiliated research institute by KOITA
- 03 Acquired MOTIE NEP certification
- 02 Acquired HMC, KIA, SQ certification
- 2005. 09 Acquired ISO/TS16949 certification
- 09 Acquired ISO14001 certification
- 2004. 12 Established Sindo High Tech Co., Ltd.
- 1986. 06 Established Sindo Industry

1. Overview



02. Profile

Business Place	Location	164, Gukgasnadandaero, 39-Gil, Dalseong-Gun, Daegu, Korea (43011)
	Factory Size	Land: 56,100m ² / Building: 36,000m ²



C.E.O.	Seo, Ho-Kwon	
Industry	Automobile parts manufacturing (Precision cold forging)	
Sales Revenue	\$35mil.(2022year)	
Establishment	June, 1986	
Employees	112	Office : 47
		Factory : 65
Website	www.sindokorea.com	

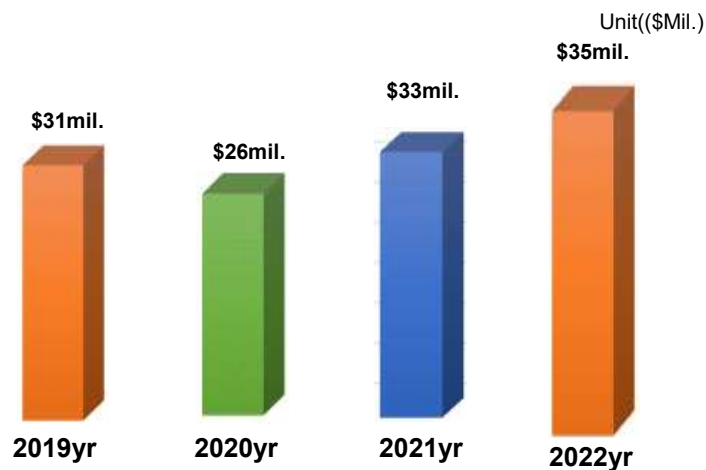


1. Overview

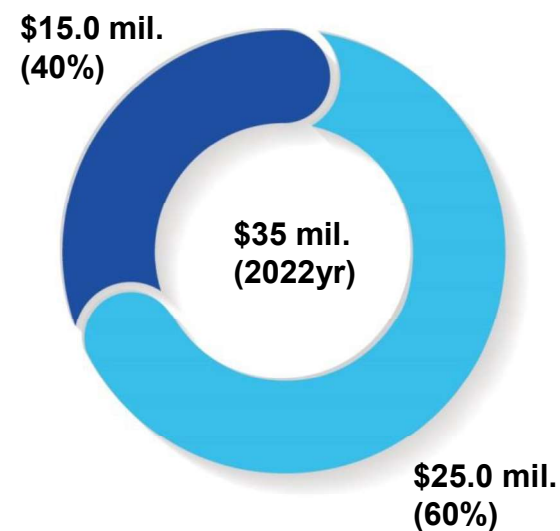


03. Sales-Revenue

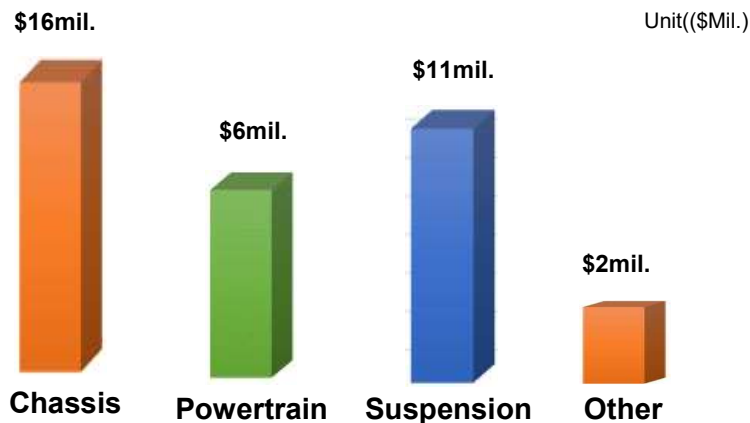
Sales by Year



Sales by Region



Sales by Application



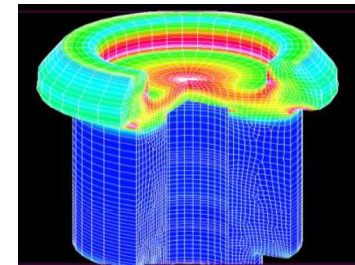
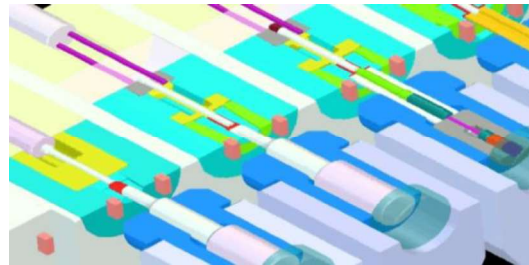
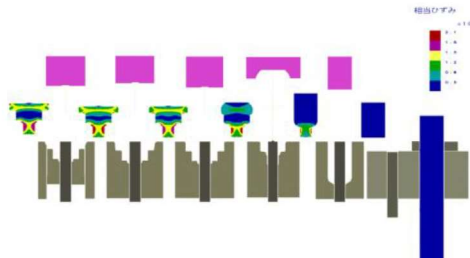
- Domestic
- Overseas

2. R&D

01. Innovative Solutions

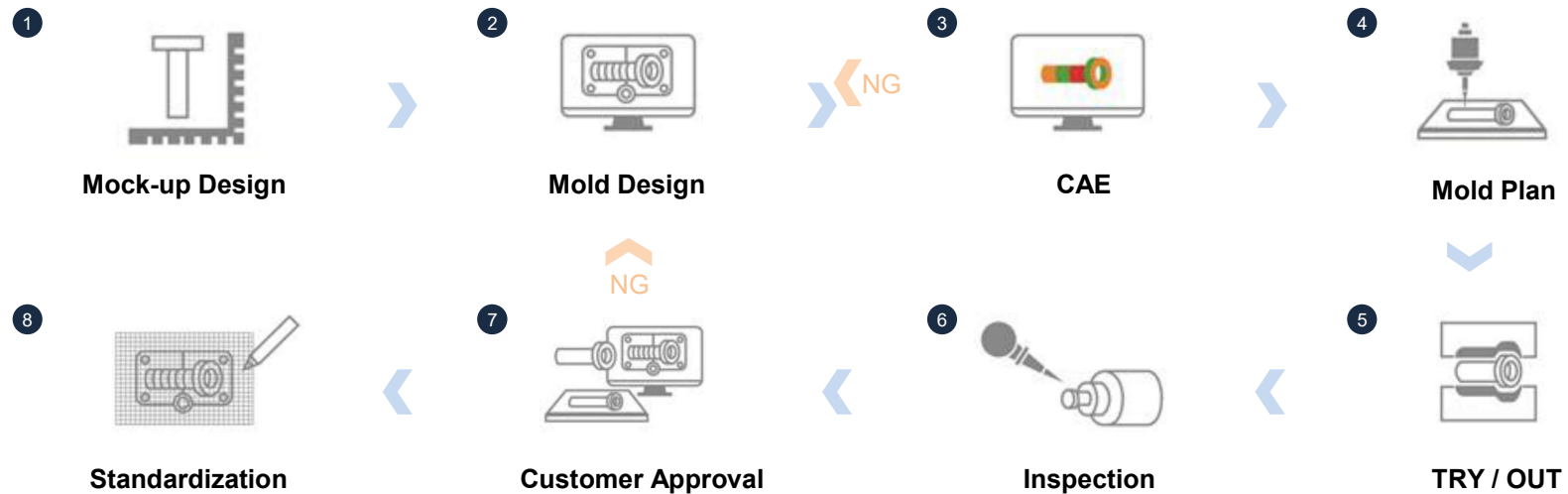
Innovative technologies and processes

- ▶ Practical use of new technology development using 3D design system



- ▶ 3D simulation of volumetric plastic working process (AFDEX 2D / 3D), structural analysis of mold

Development Management System



2. R&D Policy and Vision



02. R&D & Overseas Customers Site

R&D Policy

- Continuous technology development
- Process improvement study
- Maximize customer satisfaction
- Technical support for new products
- Technology standardization, Informationization
- Analyze the required knowledge base

Vision

- 01.** Best design technology
- 02.** Strengthening global competitiveness
- 03.** Customer Satisfaction
- 04.** Technology accumulation and craftsmanship



3. Product

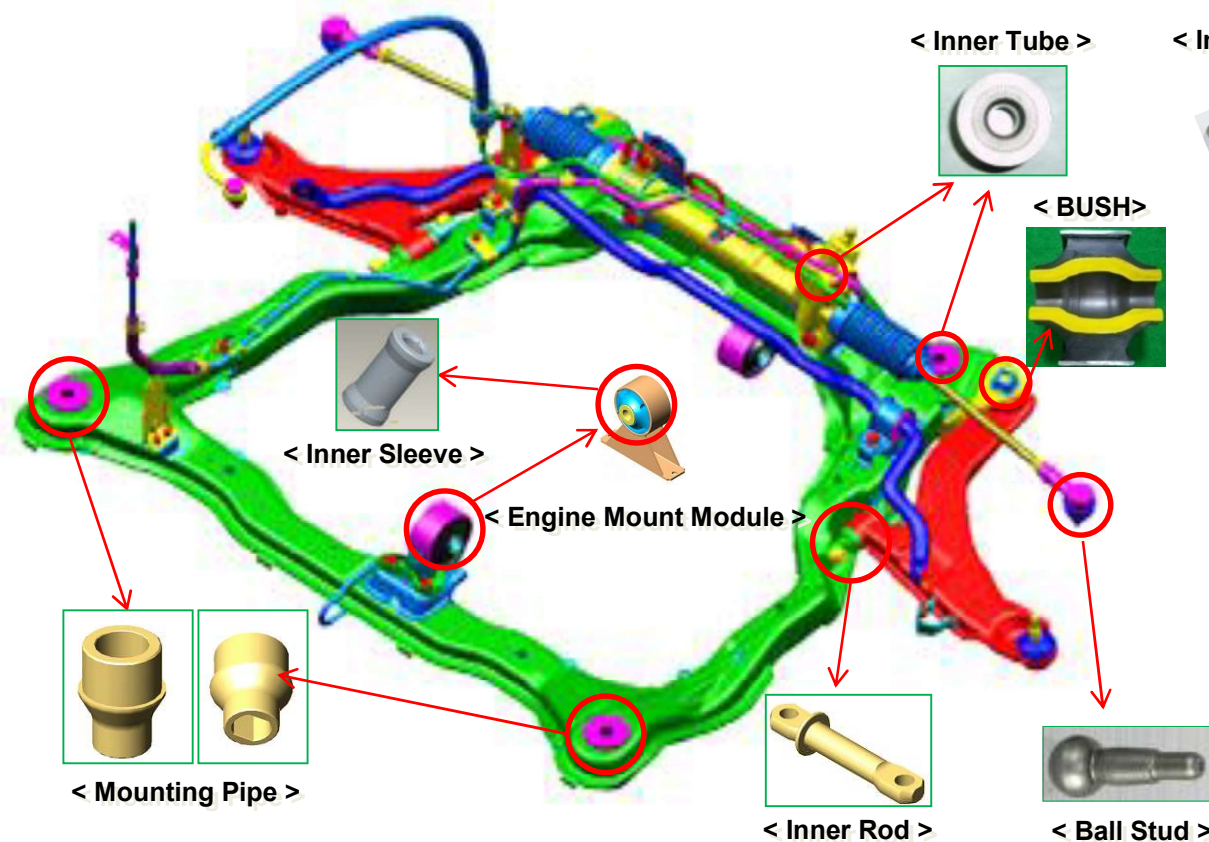
01. Product range



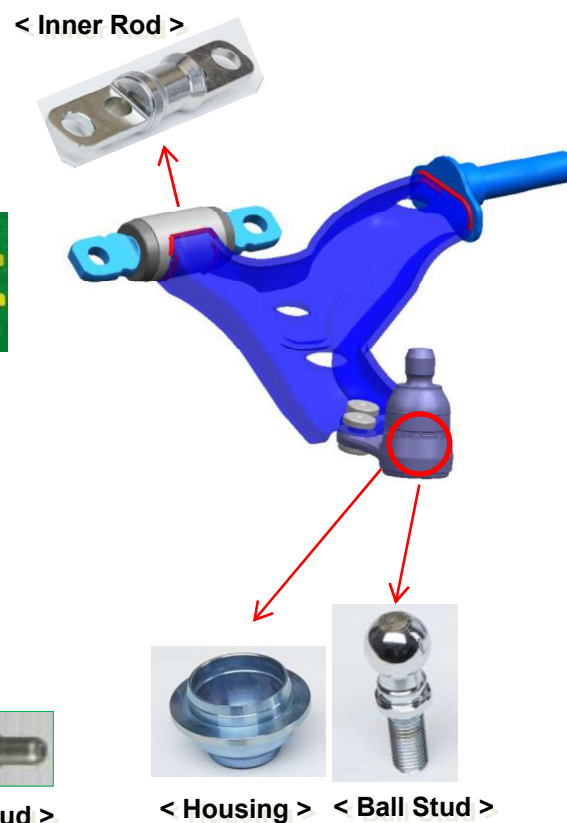
3. Product

02. Suspension Part

Front Sub-Frame Module



Sub-Frame Module



3. Product



03. Chassis / Powertrain



Inner Rod : Chassis front sub and suspension link stanchion



Inner Bush : Absorption of the vehicle's vibration by assembling inner bush and rubber



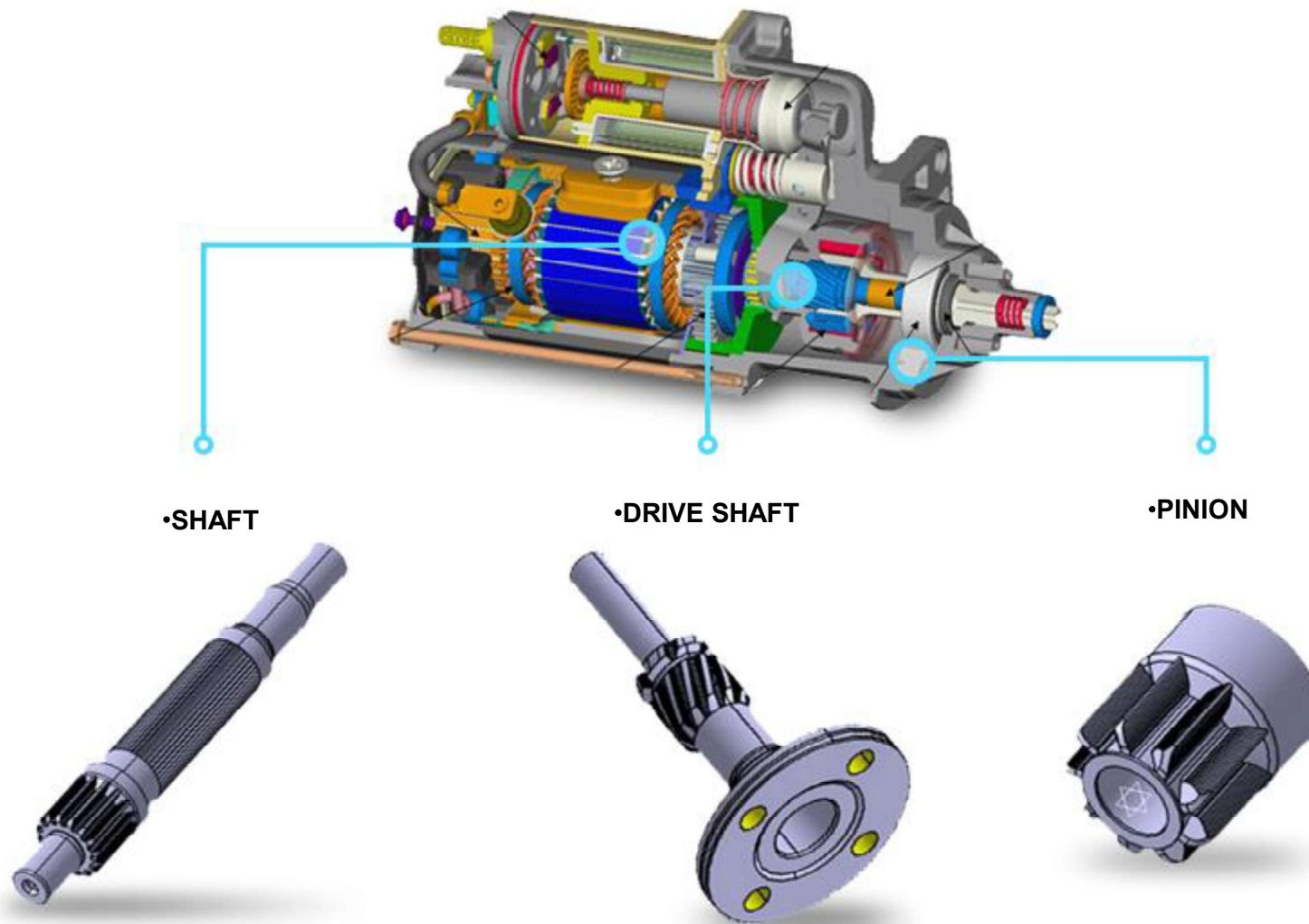
Housing, Ball Stud : Ball joint components



Shaft : Main parts for T/M

3. Product

04. Start Motor Parts

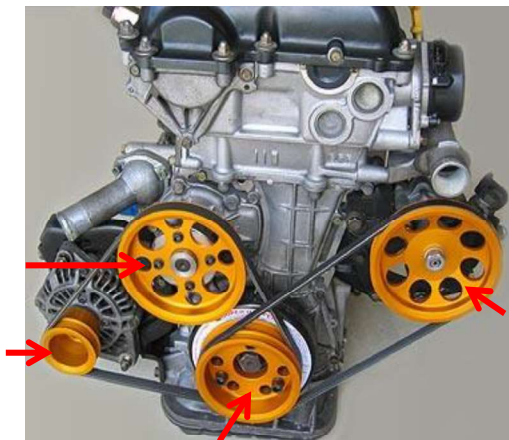


3. Product

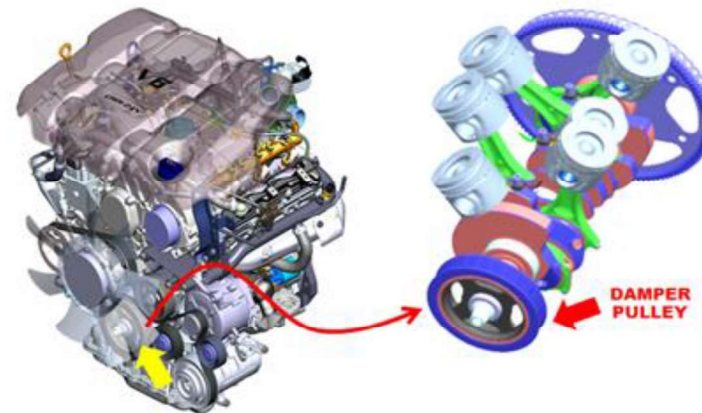


05. Lightweight (Damper pulley)

	Current damper pulley	New damper pulley
Material	FCD250(Ring) FCD450(Hub)	AL 2000 alloy
Process	Casting → Machining	Warm forging → Machining
Feature	<ul style="list-style-type: none">• High weight• Internal bubble defect issue• Easy to implement various shapes	<ul style="list-style-type: none">• Light weight• No Internal bubble defect issue• Excellent vibration damping ability

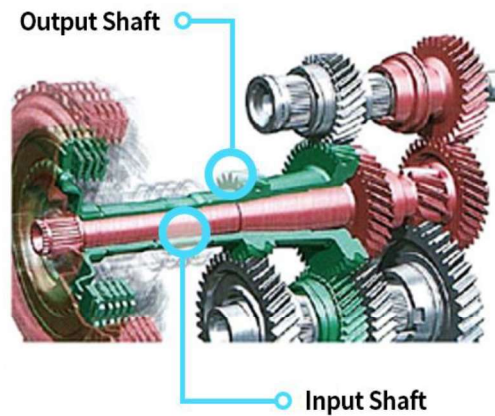
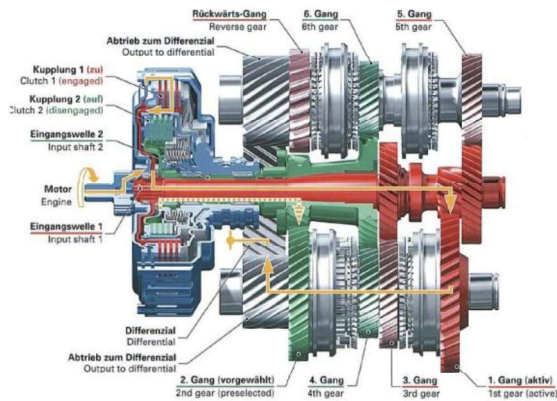


Damper pulley



3. Product

05. Transmission Part



※ Cost reduction to be achievable by only applying cold forging process.

3. Product

06. HBP-6220OUL Criteria

THE BIGGEST CHALLENGE

HBP-6220UL

Completion 12 June, 2018

6-STATION,
forging load 2200 ton
cut-off length 100~450mm
machine weight 420ton

- Forging station : 6 station
- Forging load : 2,200 ton
- Cut-off (Coil Dia) : $\Phi 55$
- Cut-off (Bar Dia) : $\Phi 65$
- Cut-length : 100~450mm



THE FIRST IN THE WORLD
SET THE WORLD RECORD
THE LARGEST PARTS
FORMER.

3. Product



07. Video



3. Product



08. Seat & Motor with Machining



Gear : Gears for seat adjuster pinion gear,
Oil Pumps gear and other gears

09. Lightweight & Military



Lightweight parts : Damper pulley, inner rod,
Door hinge, Sleeve Stud

3. Product

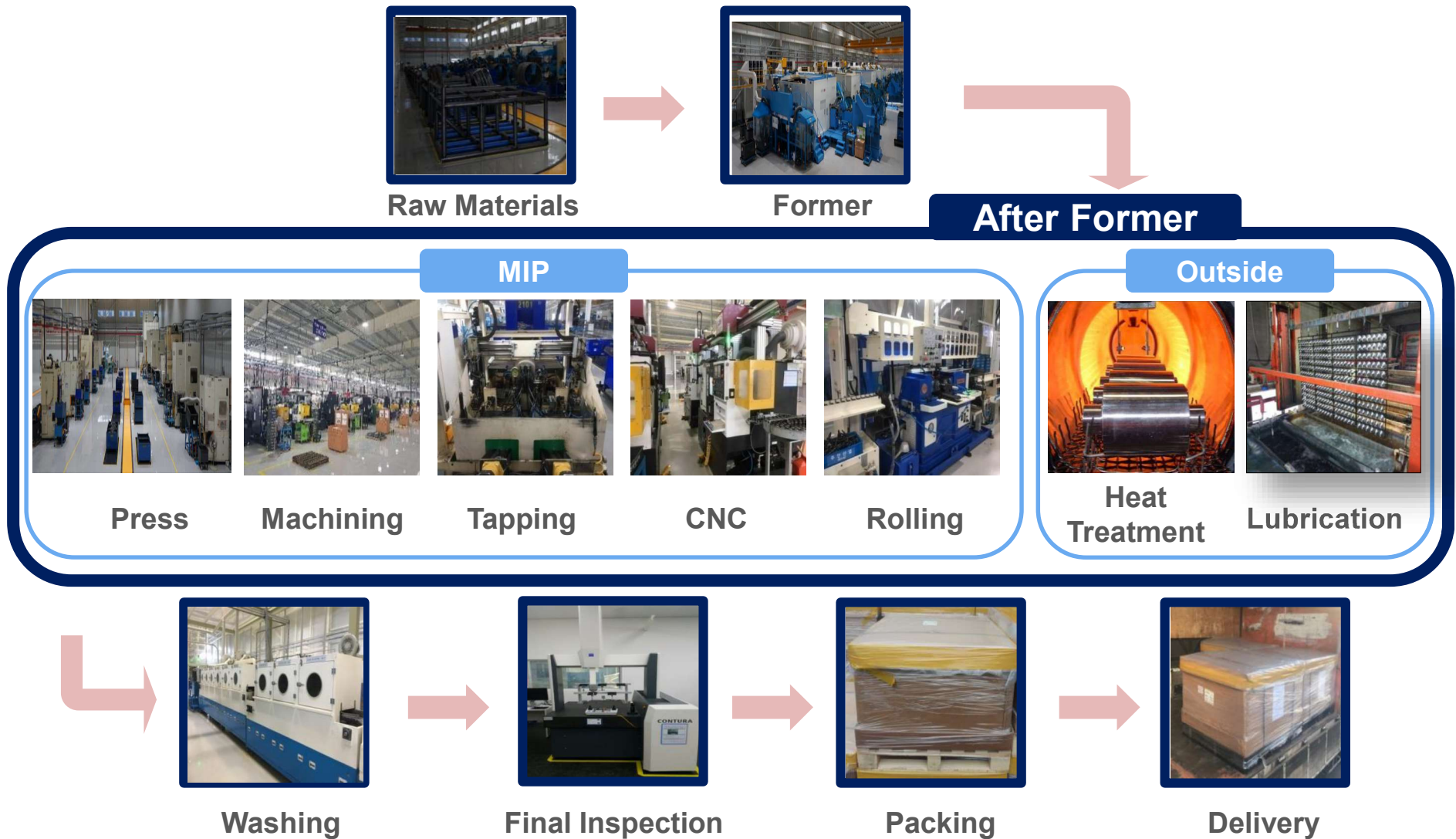
10. Others



Others : DCT Shaft, Nipple, Solenoid Valve Core, Joint Cross, Differential, Stud Sleeve, Ring, etc

4. Process

01. Manufacture Process



4. Process

02. Production Equipment



Former

Multi Step Forging M/C

Capa. : 80 ~ 2,200 Ton (Total: 20EA)



Header

Heading M/C

Capa. : 4mm ~ ½ INCH (Total 11EA)



Knuckle Press

Cold Forging Press

Capa. : 150 ~ 1,500 Ton (Total 13EA)



Machining Line

Precision Machining

- CNC Lathe : 120EA
- MCT : 10EA / Multi axle CNC : 1EA



Tooling Automation

Mold Storage

- Mold : 1,500types
- Managed by ERP System

4. Process



03. Production Equipment List

No	Name	Specification	Number
1	Former (Multi Step Forging Machine)	80Ton~2,200Ton	20 EA
2	Heading Machine	4MM/1/2inch	11 EA
3	Knuckle Press	150Ton~1500Ton	13 EA
4	Trimming Press	Special	1 EA
5	CNC Lathe	6' Gang Type CNC (KIT450, Lynx220G)	112 EA
6	CNC Lathe	8' Turret CNC (E200A, Lynx220A)	8 EA
7	MCT	F400 / F500D	1 EA / 2 EA
8	Multi axle CNC	LM1800TTST(5axle, Double Spindle & Turret)	5 EA
9	Tapping Center	i-Cut 380TD	2 EA
10	Rolling Machine	DRF15D/20D	1 EA / 2 EA
11	Bench Lathe	DS32	32 EA
12	Knurling Machine	Special	2 EA
13	Both Side Facing Machine	Special	4 EA
14	Auto Tapping Machine	Special	8 EA
15	Washing Machine	Special Drum type/ Injection type	2 EA / 2 EA

4. Process

Manufacturing Execution System



Plant Performance Management



Real Time Inventory Status



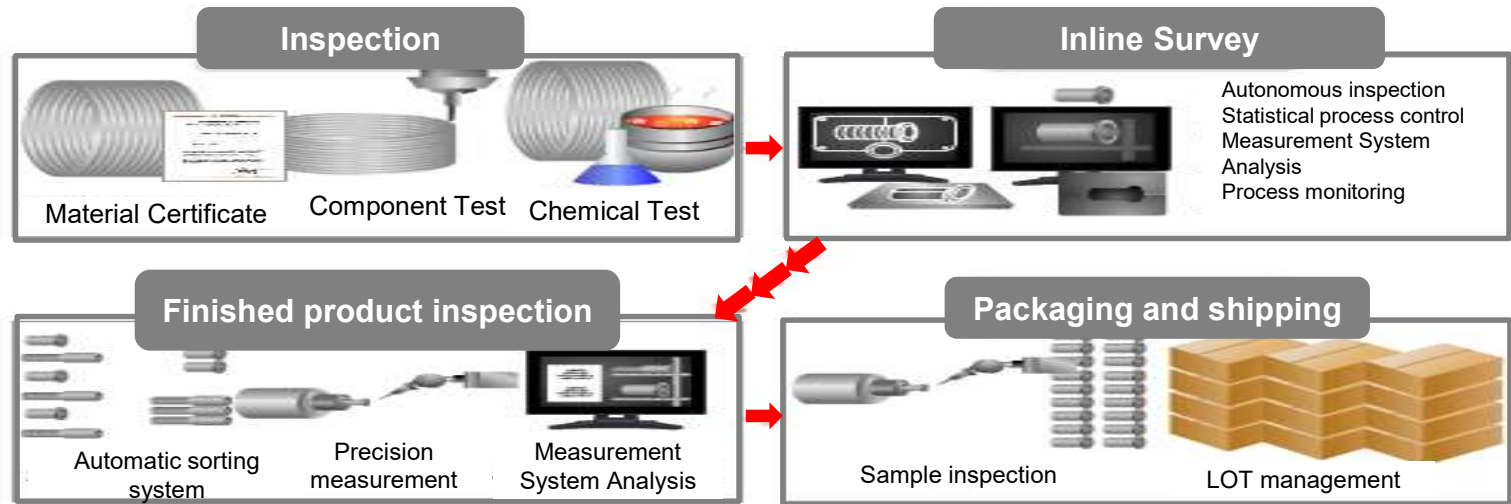
Shipping Status



Production Site Program

5. Quality

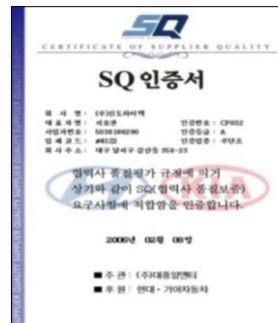
QC System



Certificates



IATF16949



HKMC/SQ



ISO14001



SYM Quality



SES-Tier2

5. Quality



01. Measuring Equipment List

No	Measuring Equipments	Specifications	Number
1	CMM	CONTURA	2EA
2	Vision system	KEYENCE	1 EA
3	Form TEST	C-300	1 EA
4	Micro Vickers Hardness TEST	HM-220C	1 EA
5	Rockwell Hardness TEST	HR-210	1 EA
6	UTM	DK3100	1 EA
7	Projector	C400 (Starrett)	2 EA
8	Optical Microscope	SJ61(Olympus)	1 EA
No	Portable Gage	Specifications	Number
1	Digital V/C	150mm (0.01mm) / 200mm (0.01mm)	13 EA / 5 EA
2	Height Gage	1~300mm (0.01mm)	2 EA
3	Digital Micrometer	0~25mm (0.01mm) / 0~150mm (0.01mm)	5 EA / 7 EA
4	Cylinder Gage	10~60mm (0.01mm)	5 EA
5	Dial Indicator	0~10mm (0.01mm)	6 EA
6	Magnetic V Block		2 EA
7	Function Gage	Special	21 EA

5. Quality



02. Measurement Tool status

Division							
	3D CMM	IMAGE DIMENSION MEASURING SYSTEM	Contour Tester	Round tester	Surface Roughness	U.T.M	Horizontal Benchtop Optical Comparator
Maker	Carl Zeiss	KEYENCE	Mitutoyo	Mitutoyo	Mitutoyo	Daekyung Tech	STARRETT
Model	CONTURA	IM-8030	C-3000	RA-116	SJ-410	DTU-900HCA	HB-400
Standard(XYZ)	700 X 1000 X 600	300 x 200 x 75	X AXIS : 100 Z AXIS : 50	X AXIS : 165 Z AXIS : 280	X AXIS : 25 Z AXIS : 8 μ m	MAX : 500KN	300 X 150
Note	All Products	All Products	All Products	All Products	All Products	All Products	All Products
Q'ty	1	1	1	1	1	1	1

5. Quality



03. Measurement Tool status

Division							
	Micro Vickers Hardness Testing Machines	Rockwell Hardness Testing Equipment	Linear Height				
Maker	Mitutoyo	Mitutoyo	Mitutoyo				
Model	HM-122	AR-10	LH-600E				
Standard(XYZ)	Advance test force : HV0.01-HV1	HRB / HRC	Z AXIS : 600				
Note	All Products	All Products	All Products				
Q'ty	1	1	1				

THANK YOU

