

COMPANY INTRODUCTION

2024.08.07



 **DAE IL
CORPORATION**

Table of Contents

1	COMPANY PROFILE & HISTORY	-----	1~2
----------	--------------------------------------	-------	-----

2	LOCATION	-----	3~6
----------	-----------------	-------	-----

1) Forging Division

3	CUSTOMERS & MAIN PRODUCT	-----	7~19
----------	-------------------------------------	-------	------

1) Electric Powertrain Parts (Reduction Gear)

2) Automotive Parts

3) Overseas Facility –DAEIL USA

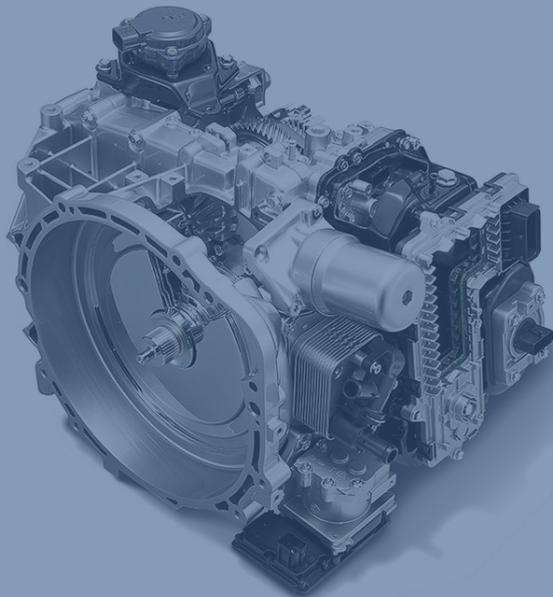
4	FUTURE TECH DEVELOPMENT	-----	20~27
----------	--------------------------------	-------	-------

1) Electric Actuator (SBW, EOP)

2) Reducer, Disconnecter, E-Axle

3) EV Personal Mobilities (Electric Scooter)

5	Revenue Status	-----	28
----------	-----------------------	-------	----



1 PROFILE

- COMPANY NAME
- CEO
- ESTABLISHMENT DATE
- ADDRESS (HQ)
- SALES
- EMPLOYEE
- MAIN PRODUCTS

DAE IL CORPORATION (DIC)

JUNG-RYEOL KIM

Aug.3rd.1976

8, Bonggyenonggong-gil, Dudong-myeon, Ulju-gun, Ulsan, Korea

\$558M ※UNIT : USD

1,545

Automotive Powertrain Parts (Transmission & Engine Parts)

Industrial Vehicle Powertrain Parts(Transmission & Drive Axle)

Electrification Parts (EV Reducer & HEV Transmission, SBW)

EV Special Equipment Vehicle production &

EV Personal Mobilities



1 HISTORY

Founding and Incorporation 1976~1989

- Development of power transmission devices for agricultural machinery
- Establishment of assembly production system



- '76. **Established Daeil Industry Co., Ltd**
- '80. 1st export of gear for PUMP Cars & Motorcycles Transmission Gear Export
- '86. Agricultural Machinery Transmission, Front Axle Ass'y Production
- '89. Hikoyo Factory Completed

Market Entry Stage 1990~1999

- Entry into the automotive parts market
- Independent development of industrial vehicle (Forklift) transmission



- '90. T/M Production for Forklift Automotive T/M production
- '91. Completion of Daiho gisung Machinery Co.,Ltd
- '96. **Completion of the Dudong plant**
Establishment of Transmission Technology R&D Center
- '97. M5EF1(light type) I/P, O/P Diff Ass'y 3 species development
- '98. ISO 9002 certification acquisition

Global Entry Stage 2000~2010

China's expansion into the region
Motorcycle Powertrain Parts Sales



- '01. QS 2000 certification acquisition
- '04. **Establishment of a local subsidiary in China(Daeil giba Co., Ltd.)**
- '06. **Renamed to DIC Co., Ltd**
- '07. **Listing on a stock exchange**
\$100 million Export Award
- '08. Development for 6-speed A/T Sun GR, O/D HUB, R/SFT
- '10. Development for North American GM 6-speed A/T Output Hub

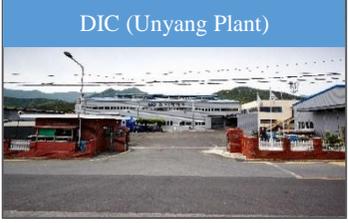
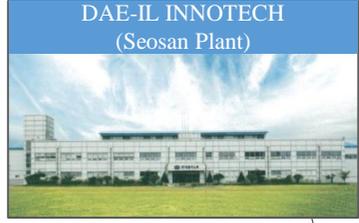
2011~Now

Development of core component such as DCT & Reduction Gear



- '11. Selection of Korean Hidden Champion (Import & Export Bank)
- '14. Development of 7DCT Gear, shaft, Sync-Sleeve
- '16. Development of 7DCT Diff Ass'y
Development of GM EV reduction gear component
Development of "A"company reduction gear Shaft & Gear
Development of LG EV reduction gear component
- '17. **ZEIN MOTORS completion**
- '20. **North American Factory Completion Kentucky**
(Forging, gearing, & Assembly schedule)
8DCT Shaft Sub Ass'y development
EV reduction Sub Ass'y 3 species development
- '21. SBW developed & mass production of motorized products
- '24. **North American plant in KY, North America begins mass production**

2 Locations (Domestic & Overseas)



2 DIC - FORGING DIVISION

Outline



LOCATION	33, Jeoneumnonggong-gil, Duseo-myeon, Ulju-gun, Ulsan
AREA	Site : 7,500m ² , Building : 4,460m ²
FOUNDATION	1990, APR
EMPLOYEE	28
SALES (USD-Million)	\$21M

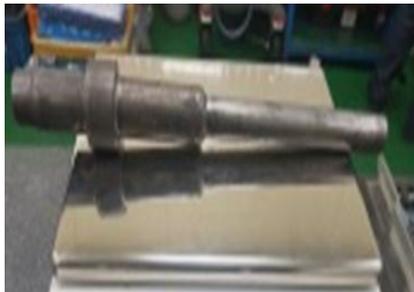
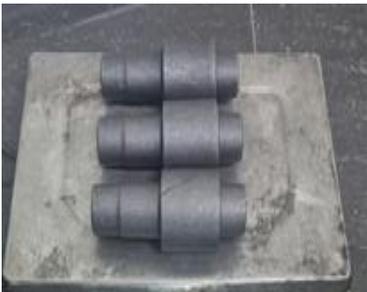
2 DIC - FORGING DIVISION

■ Facility Lists

Item	Name	Type	Q'ty	Capability (Yr)
Press	2,500 T Warm/Hot Forging Line	Auto	2 Line	3.5 M
	1,250 T Cold Forging Line	Auto	1 Line	0.9 M
	1,000 T Cold Forging Line	Auto	1 Line	4.6 M
	650 T Knuckle Press	Manual	1 Line	2.3 M
	630 T Knuckle Press	Auto	1 Line	4.0 M
	630 T Knuckle Press	Manual	1 Line	2.0 M
	450 T Knuckle Press	Auto	2 Line	2.0 M
	160 T Crank Press	Manual	1 Line	2.1 M
Heat Treatment	Sherardizing Annealing Furnace	3 TON/CH	3 Line	3,200 TON

2 DIC - FORGING DIVISION

Main Product



Item
DIFF DRIVE GEAR
OUTPUT SHAFT
INPUT SHAFT
HUB
GEAR CLUTCH
SUN GEAR
PINION/SIDE GEAR
GEAR TRANSFER DRIVEN

3 CUSTOMERS & MAIN PRODUCTS

-DIC has accumulated experience and expertise in automobile industry by manufacturing over 980 products, such as MT, AT, IVT, DCT, EV.

- Trusted automotive supplier of global automobile manufacturer

CUSTOMERS



MAIN PRODUCTS

TYPE	PRODUCT	SITE	CAPACITY	CUSTOMERS
7DCT	SHAFT, GEAR, SLEEVE, DIFF ASSY	DIC/CHINA PLANT	750,000	HMC
8DCT	SHAFT-OUTPUT SUB ASSY	DIC	220,000	HMC
EV	SHAFT & DIFF ASSY	DIC/DAE IL INNOTECH	600,000	HMC, TESLA, GMK
5M/T	SHAFT & DIFF ASSY	DIC/DAE IL INNOTECH	300,000	HMC
6M/T	SHAFT, GEAR, SLEEVE	DIC	150,000	HMC, GMK, Affiliate
6/8 AT	GEAR, DIFF ASSY	DIC/DAE IL INNOTECH	800,000	HMC, Affiliate
1Ton MT	T/M ASSY, GEAR & SHAFT ASSY	DIC/DAE IL INNOTECH	150,000	HMC

3 Key Customers (Domestic)

1. AUTOMOTIVE DIVISION

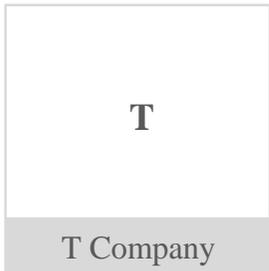
 HYUNDAI MOTOR	 KIA MOTORS	 TRANSYS	 WIA	 S&T
 GM KOREA	 GLOVIS	 MOBIS	 LG ELECTRIC	 TSUBAKI

2. HEAVY EQUIPMENT DIVISION

 DOOSAN INFRACORE	 CLARK	 HYUNDAI HEAVY INDUSTRIES
---------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------

3 Key Customers (Overseas)

1. NORTH AMERICA

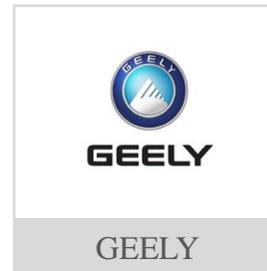


Mitsubishi Logisnext Americas Inc.

2. JAPAN



3. CHINA



3 CUSTOMERS & MAIN PRODUCTS

1. ELECTRIC VEHICLE PARTS (Reduction Gear)



IONIQ5



NEXO



EV6



NIRO EV



GENESIS



G80 EV



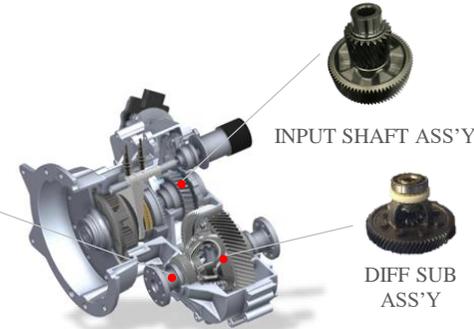
GV60



GV70 EV



OUTPUT SHAFT SUB ASS'Y



INPUT SHAFT ASS'Y



DIFF SUB ASS'Y

500K
PER YEAR

T Company



ASM INTERMEDIATE SHAFT



FINAL DRIVE GEAR

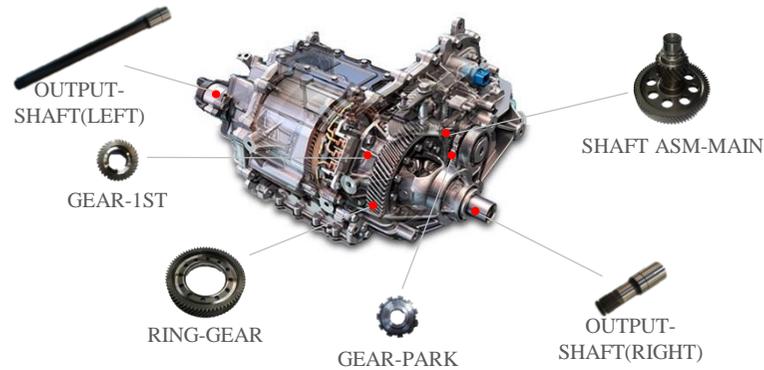
400K
PER YEAR

3 CUSTOMERS & MAIN PRODUCTS

1. ELECTRIC VEHICLE PARTS (Reduction Gear)



BOLT



100K
PER YEAR



S50 EV



X40EV



REDUCER

30K
PER YEAR

3 CUSTOMERS & MAIN PRODUCTS

2. SBW(SHIFT BY WIRE)



SONATA



PALISADE



SPORTAGE



K8



SBW(SHIFT BY WIRE)
ACTUATOR

400K
PER YEAR

3 CUSTOMERS & MAIN PRODUCTS

3. AUTOMOTIVE PARTS-MANUAL TRANSMISSION



PORTER



BONGO



MANUAL TRANSMISSION

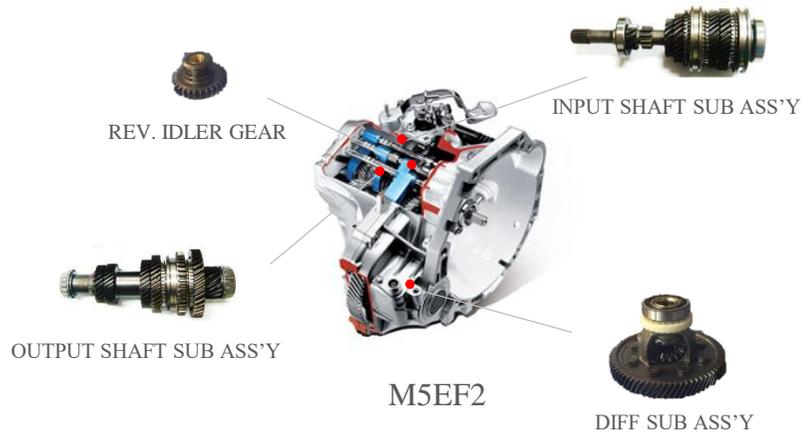
70K
PER YEAR



i10



morning



M5EF2

300K
PER YEAR

3 Plant introduction – Daeil USA

■ Main products



TAOS



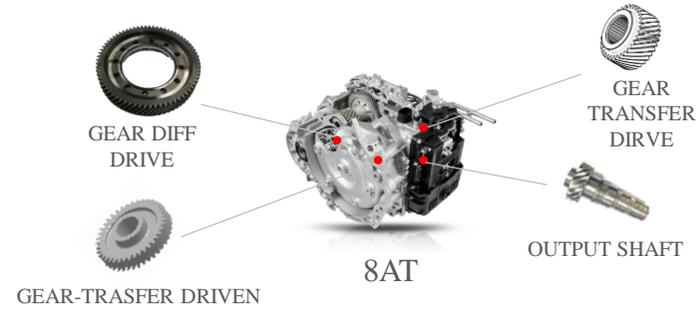
JETTA



TAYRON



TIGUAN



8AT

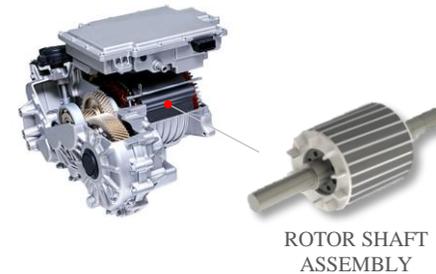
660K/ Yr.



IONIQ7



EV9



ROTOR SHAFT ASSEMBLY

400K/ Yr.



C-SEGMENT SEDAN(EV)

B-SEGMENT CUV(EV)

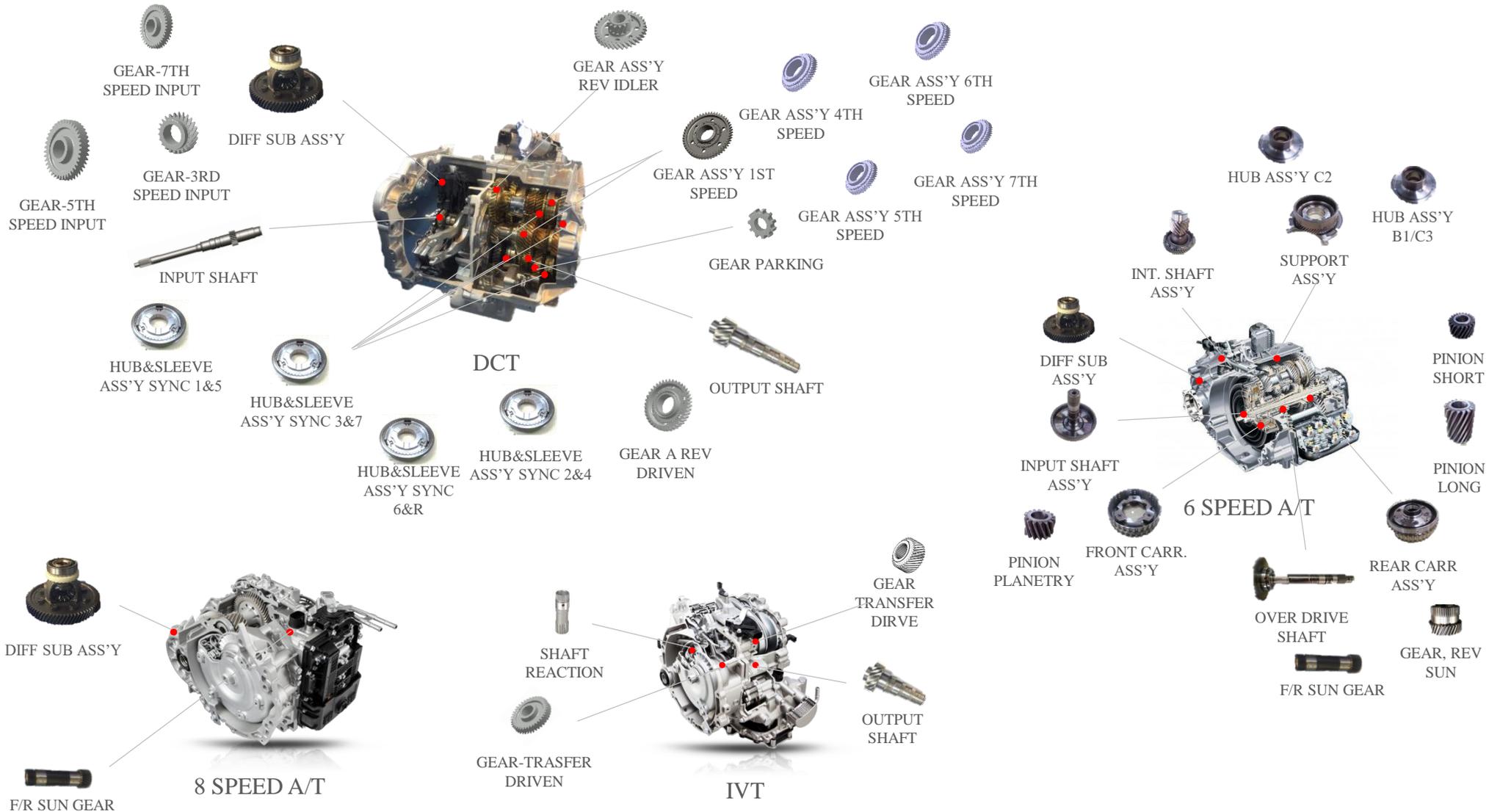


REDUCER

130K/ Yr.

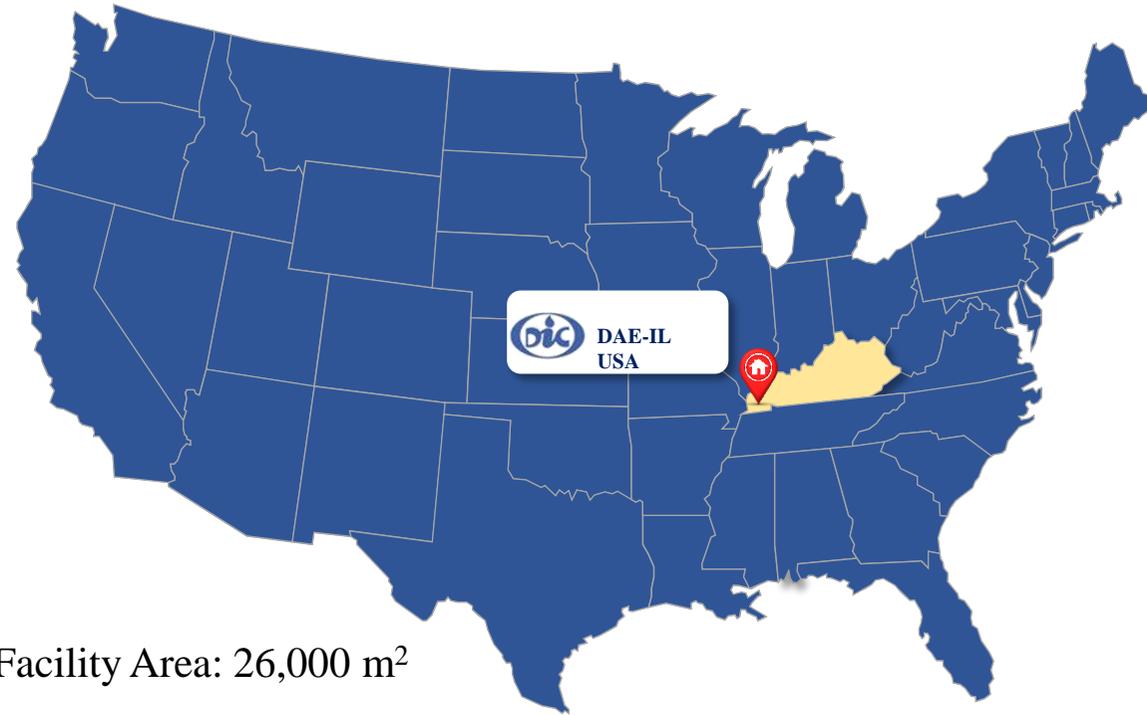
3 CUSTOMERS & MAIN PRODUCTS

3. AUTOMOTIVE PARTS-DCT, IVT, A/T



3 Overseas Facility – DAE IL USA

To be the best Powertrain maker in the world



■ LOCATION

Murray, Kentucky

■ AREA

Land Area: 165,000 m² Facility Area: 26,000 m²

■ SURROUNDINGS

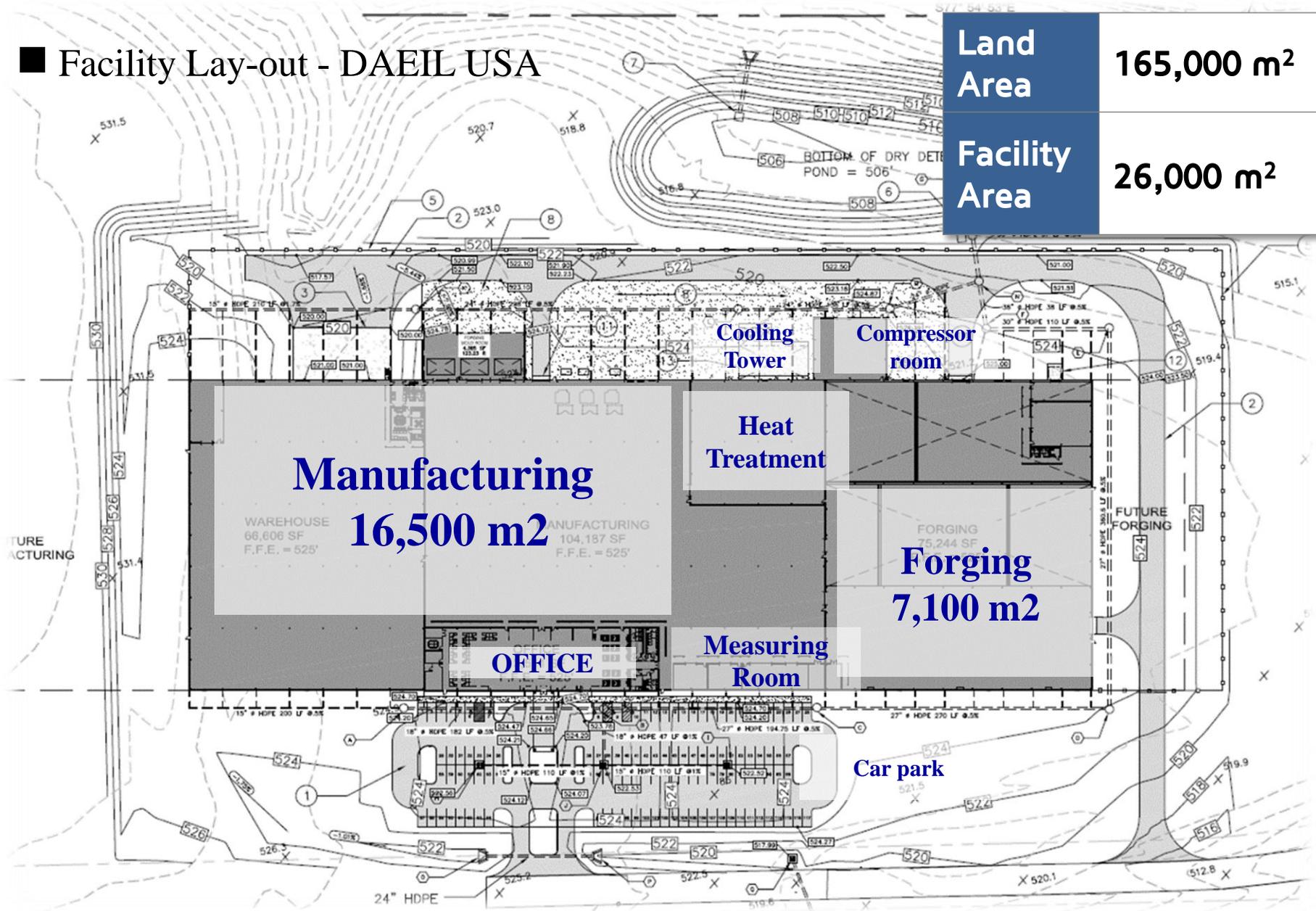
Easy access to GM, Tesla, HMC, MOBIS etc.



3 Overseas Facility – DAE IL USA

■ Facility Lay-out - DAEIL USA

Land Area	165,000 m ²
Facility Area	26,000 m ²



3 DAE IL USA – Forging Division

■ Facility Lists

Item	Name	Type	Q'ty	Capability (Yr)
Press	4,000 T Warm/Hot Forging Line	Auto	1 Line	2.5 M
	2,500 T Warm/Hot Forging Line	Auto	2 Line	4.8 M
	1,000 T Cold Forging Line	Auto	1 Line	5.5 M
Heat Treatment	ISO Continuous Furnace	1 TON/HR	1 Line	5,000 TON
	Induction Hardening	Auto	2 Line	

3 DAE IL USA – Machining Division

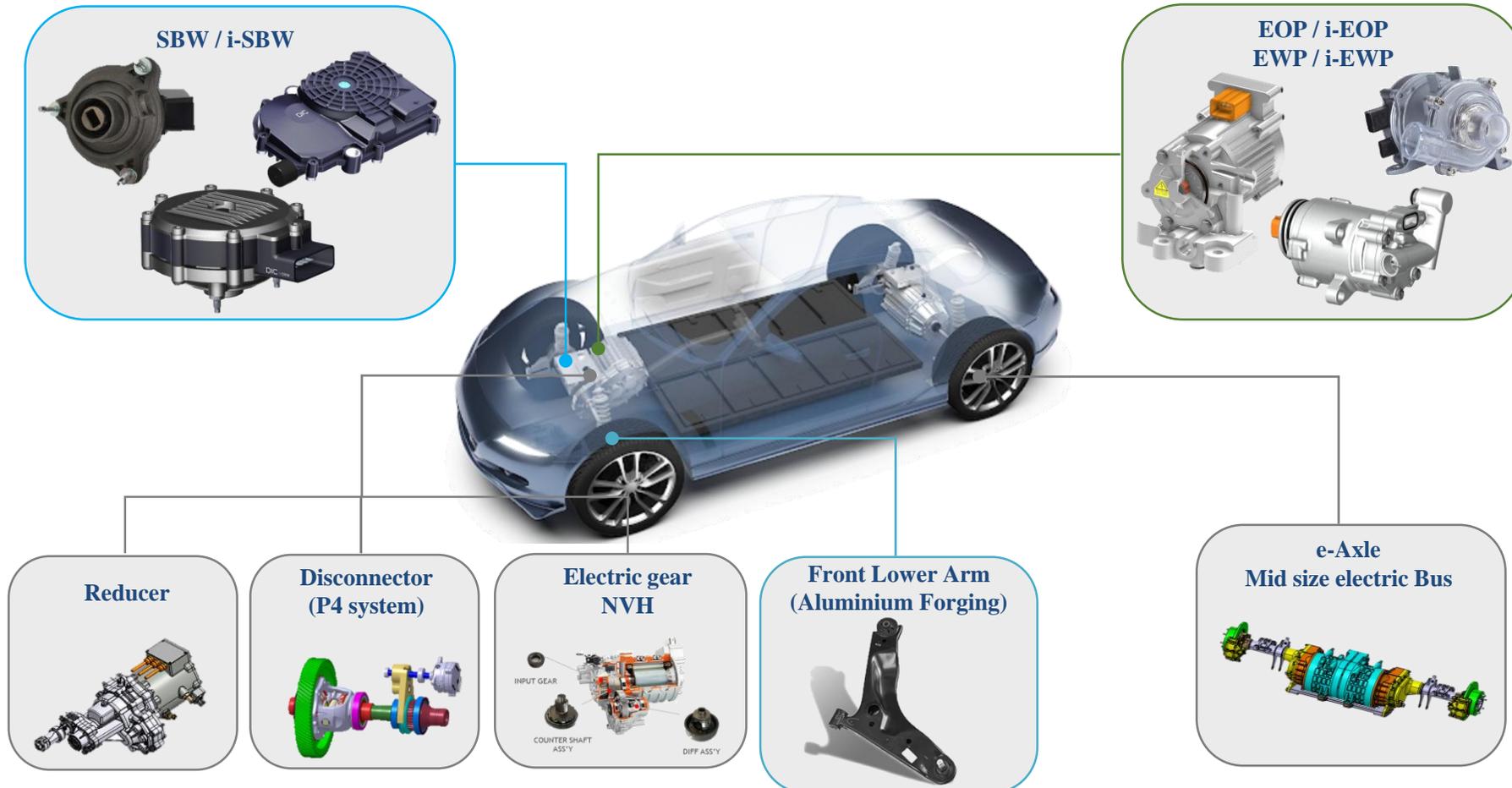
■ Facility Lists

Item	Name	Type	Q'ty	Capability (Yr)
Machining	CNC	Auto	32 EA	
	MCT	Auto	20 EA	
	Broach	Auto	1 EA	
	Hobbing	Auto	1 EA	
	Skiving	Auto	2 EA	
	Outer Grinding	Auto	4 EA	
Assembly	Rotor Shaft Assy	Auto	1 Line	400 K

4 FUTURE TECHNOLOGY

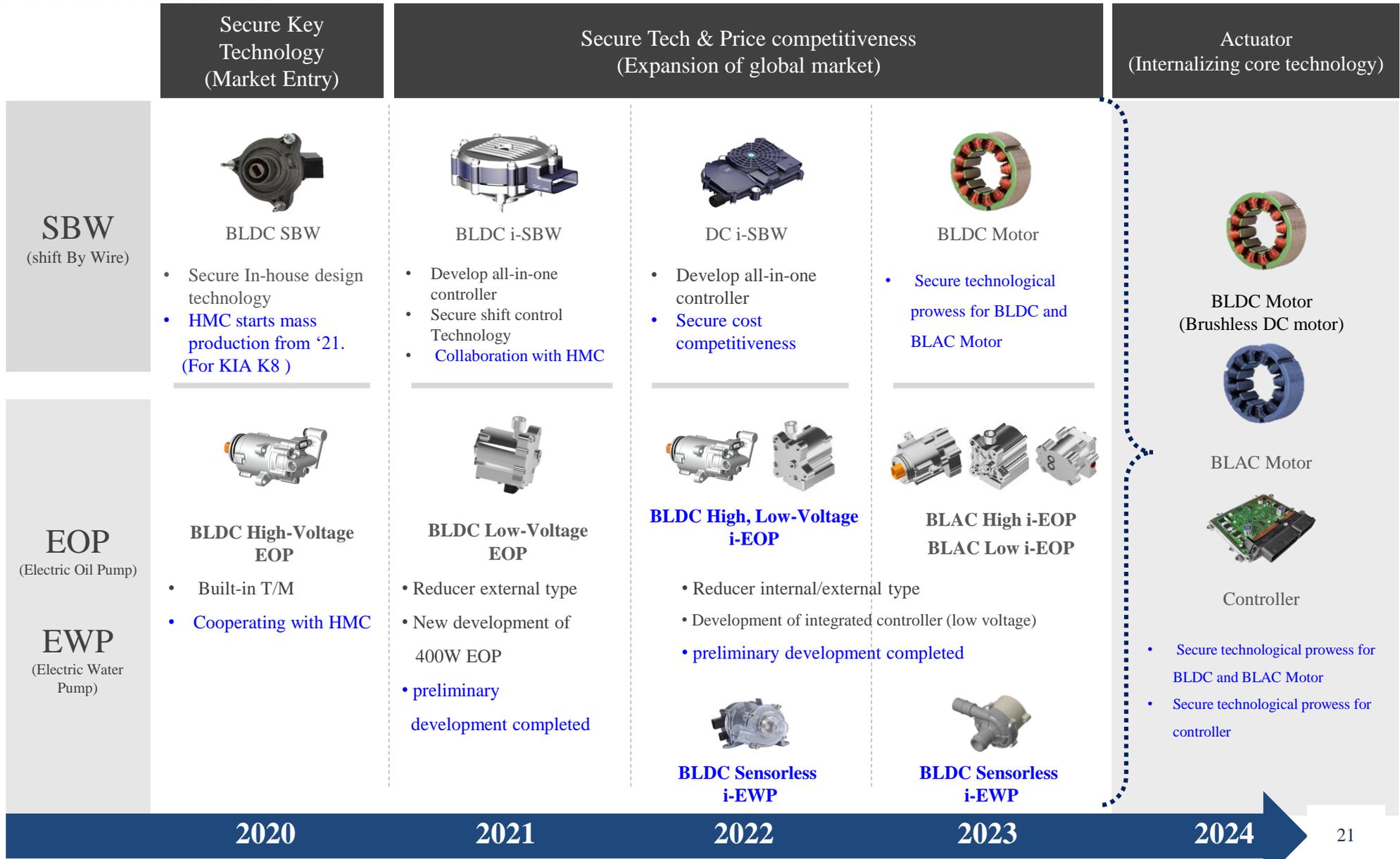
“Develop future technology based on key parts of EV capability”

- Create high added value by internalizing core technology.
- New technology development for electrified parts through industry-academic cooperation and external collaboration.



4 FUTURE TECHNOLOGY

1. Electric Actuator



Shift By Wire (SBW)

- Actuator can be configured for each motor type that meets the customer's needs

BLDC – SBW



Mass producing

BLDC – i-
SBW



Prototype development completed

DC – SBW



DC – i-SBW



Application Range
Modular / scalable
Precise & High Dynamic
Noise & Vibration
Power density
Proven Technology

Small, lightweight design considering the environmental conditions of powertrain and chassis
Scalable (torque / power) and modular design

Precise Position Control Design

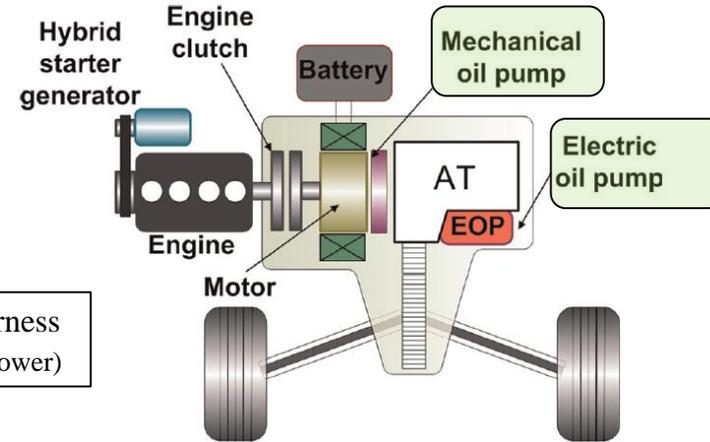
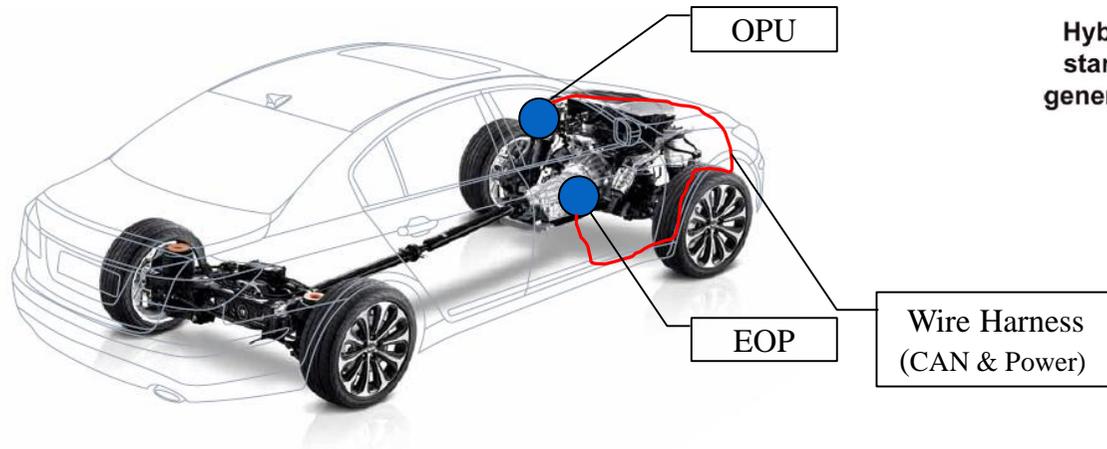
Low vibration and low noise major cause optimization design

High precision actuator with best in class power density

Proven, robust technology in series production since 2020 (HYUNDAI / KIA)

Electronic Oil Pump (EOP) Overview

■ What is EOP



Structure of 6-speed-AT-based parallel HEV

- Generates hydraulic pressure (flow, pressure) required for shifting
- Securing lubrication and cooling flow inside the transmission
- ISG operates to generate stable hydraulic pressure

* MOP(Mechanical Oil Pump)
* ISG(Idle Stop & Go)
* OPU(Oil Pump Control Unit)

4 FUTURE TECHNOLOGY

2. Reducer, Disconnecter, e-Axle

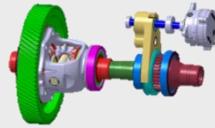
Secure Key Technology

Reducer + Disconnecter (P4 System)



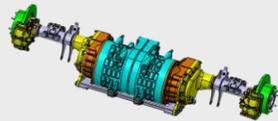
2 speed Reducer

- Performance Improvement: Improve 1st gear Hill climbing ability & 2nd gear accelerating ability
- Secure durability : Secure power transmission durability up to 250,000 km
- Modular development: Apply disconnector, parking, shift device
- Verification of Control performance : Shift control, Parking control



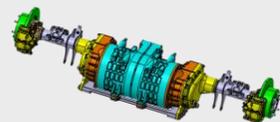
Hybrid & EV Disconnecter

e-Axle



Dual motor (Single tire)

- For mid sized EV bus 160kW
- All-in-one Dual motor : Development of e-axle system & installation method



Dual motor (Double tires)

Market access



Shift, Parking, Disconnecter applied



High strength steel applied to housing

Internalizing Core Technology



Motor



Controller

- Secure technological prowess for Motor
- Secure technological prowess for controller

2020

2021

2022

2023

2024

Thank you

