

TURVO®

Turning to Become...

TURVO INTERNATIONAL CO., LTD

2021 Q1 Investor Conference

Stock Code : 2233

Presenter : Executive Vice President Alex Tsai

Date: 2021.04.29



Agenda

- 01 | **Company Overview**
- 02 | **Operation Performance**
- 03 | **Future Prospects and Strategies**
- 04 | **Q&A**

TURVO®

01

Company Profile

- Company Overview
- Product Application

Company Overview

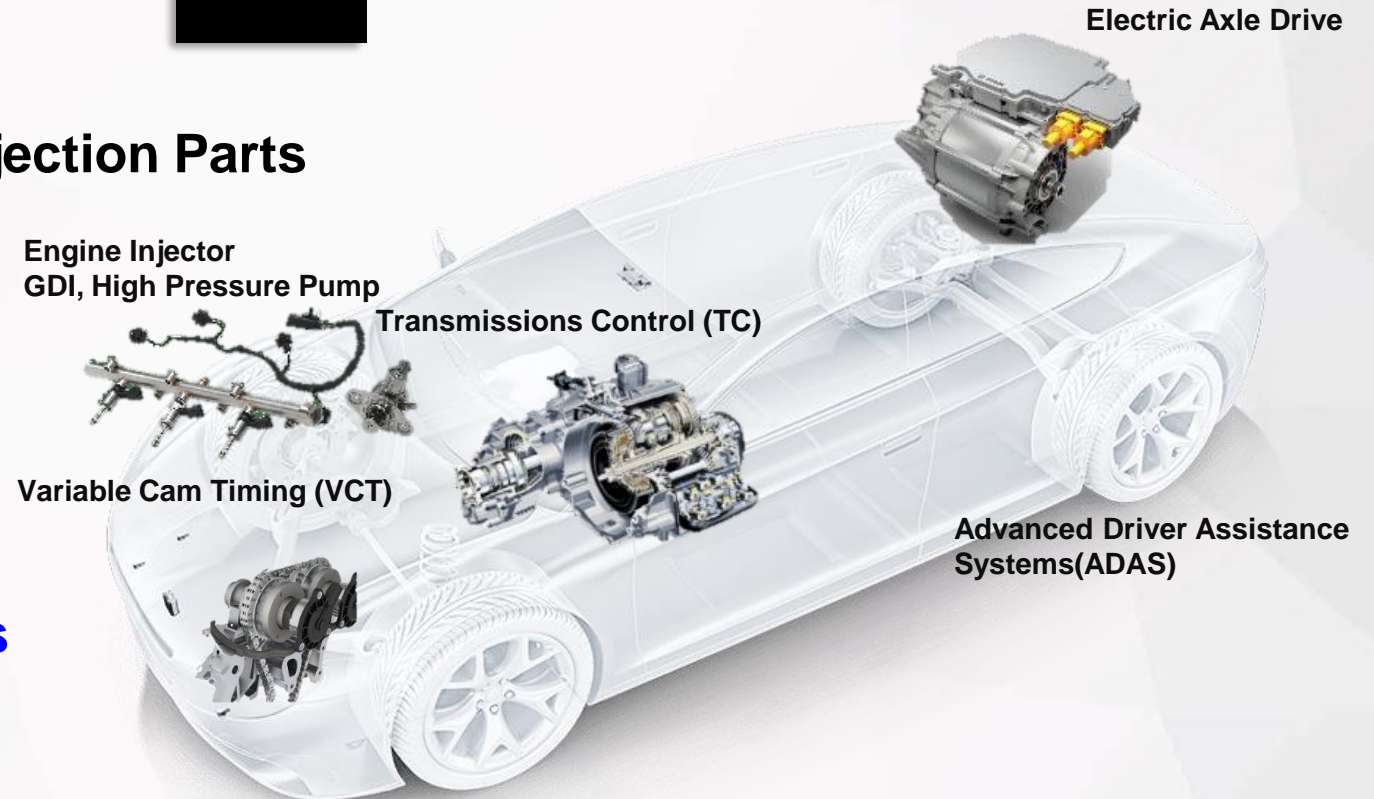
Date of Incorporation	December 29, 1987
Amount of Capital	NT\$602,881 Thousands
Location	NO.59, JING 2ND RD., WUCI DIST., TAICHUNG CITY 435, TAIWAN (R.O.C.)
Main Products	Precision metal components for Automobile, Bicycles, Medical devices 、 industrial applications, processing parts manufacture
Number of Employees	Headquarter : 315
	Construction of 2 nd Plant started on 2021.1.19
	Dongguan Plant : 769
	Jiashan Plant : 714
	MSAT : 21
	Total : 1,819



Automotive Components



- Gasoline and Diesel Engine Direct-Injection Parts
- Fuel Oil Injection Pump Parts
- Transmissions Control
- Variable Cam Timing
- Fuel Cell
- Advanced Driver Assistance Systems



Tier-1 Suppliers



Volkswagen



Mercedes-Benz



PORSCHE



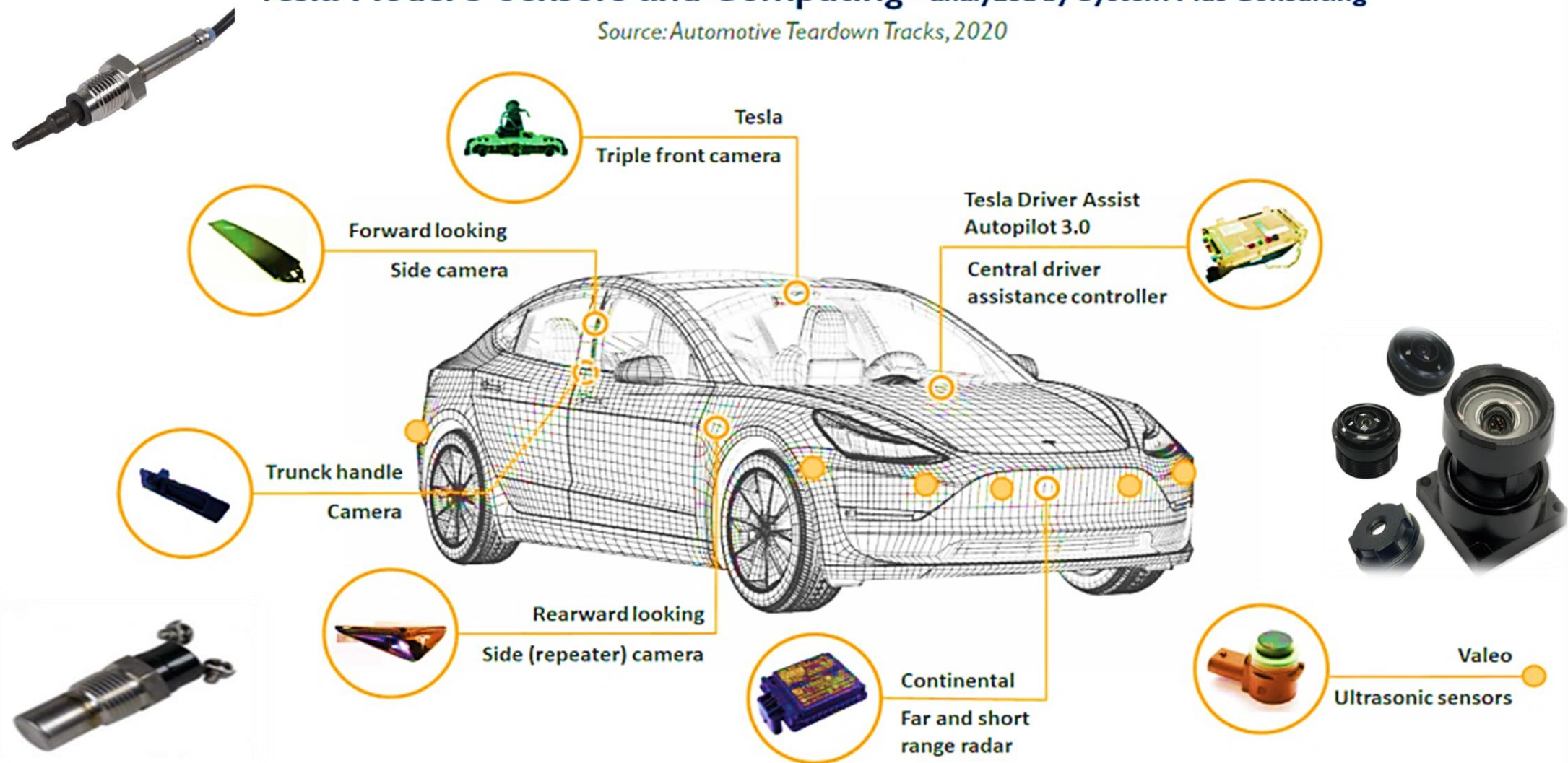
TOYOTA



Electric Vehicle Structure

Tesla Model 3 Sensors and Computing - analyzed by System Plus Consulting

Source: Automotive Teardown Tracks, 2020



Hydrogen Fuel Cell



BorgWarner



FCAS氢燃料池空壓機

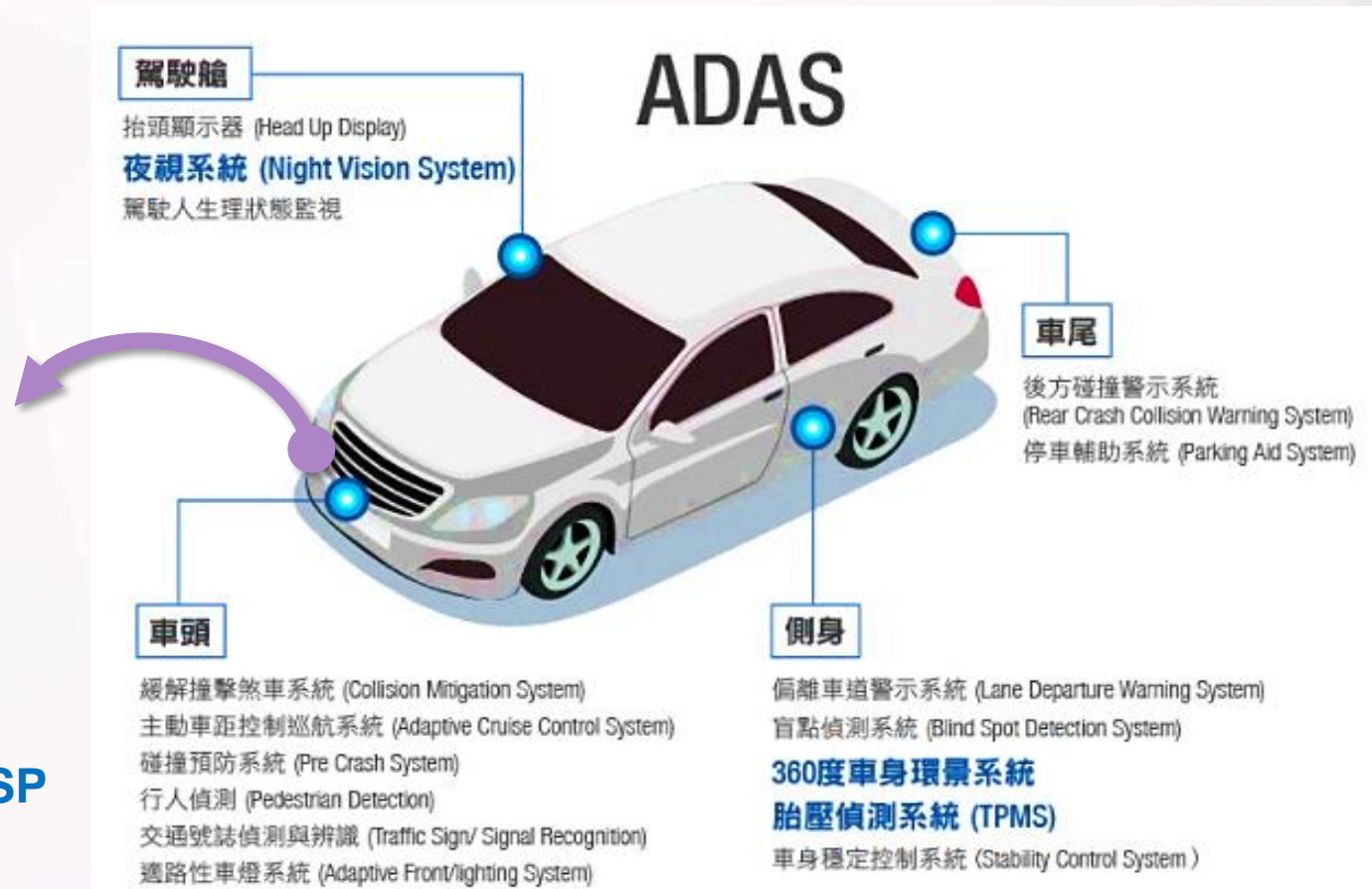


HVH 146 電機

Advanced Driver Assistance Systems (Integrated Power Brake)



Bosch officially launched in 2019
IPB Braking System: iBooster+ESP



Bike Components



- Shock Absorbers
- Front Forks
- Hubs
- Seat Pillar Posts



Medical



- Insulin Delivery System Products
- Insulin Injector Core Components
- Strategic partner in designing automation lines and equipment for NN



筆式胰島素注射器



End-customer Application

smiths medical

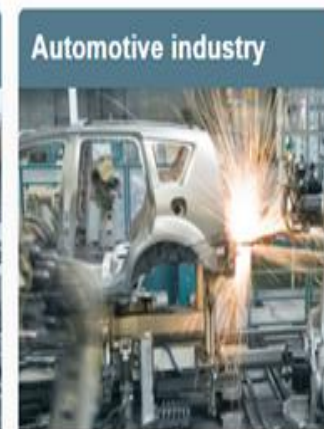


Industry



- Global Industrial Automation Sensor
- Hydraulic control systems
- Requirements to meet high-precision quality and high-reliability

(Products are tested in extreme conditions and harsh environments- Need to pass 2 million high temperature and high pressure reliability tests)



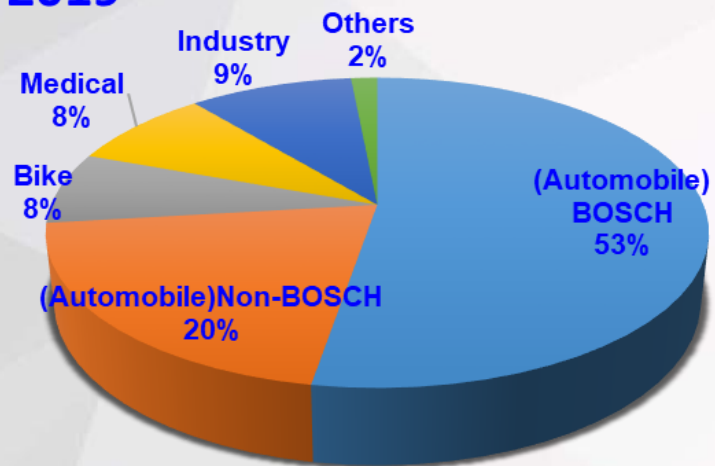
02

Operating Performance

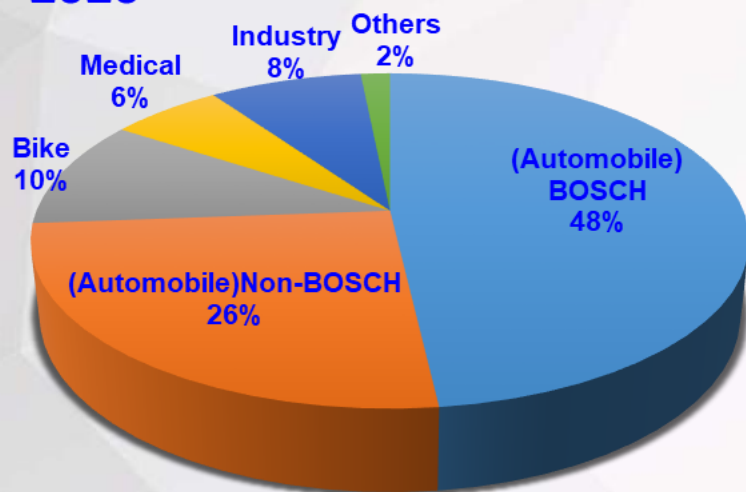
- Sales Analysis
- Operating Result

銷售分析

2019



2020



NORTH AMERICA

FY19:8.23%

FY20:7.33%

EUROPE

FY19:25.45%

FY20:27.54%

ASIA

FY19:63.89%

FY20:64.37%

SOUTH AMERICA

FY19:1.49%

FY20:0.76%

Operating Results

Unit (NTD : Million)	2019					2020				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
Revenue	629	549	553	623	2,354	561	535	694	749	2,538
Gross Margin	223	186	170	195	775	178	173	218	255	824
Gross Margin (%)	35.4%	34.0%	30.7%	31.4%	32.9%	31.7%	32.3%	31.5%	34.1%	32.5%
Operating Profit	113	80	53	73	319	84	66	112	143	405
Operating Profit (%)	17.9%	14.7%	9.6%	11.7%	13.6%	14.9%	12.3%	16.2%	19.1%	16.0%
Net Income	100	64	76	54	294	74	59	118	109	359
Basi EPS	1.71	1.1	1.3	0.96	5.07	1.29	1.06	2.01	1.87	6.23
Cash Dividend					3.3					
Cash flow from operating activities(Note)					726					339
Capital Expenditure					282					194
Free Cash Flow					443					145

Note : Decrease of Cash flow from operating activities in 2020 was due to the repatriation of US 8.35 million offshore funds, which was restricted to be engaged investments. (Amounts of financial assets reflected on financial statements should be classified as financial assets at amortized cost instead of cash and cash equivalents.)

03

Future Prospects and Strategies

- Meeting Client Needs and Decreasing Product Line Concentration
- New Product Developments (Planetary Reduction Gear)

Meeting Client Needs and Decreasing Product Line Contraction

- **Developing New Prospective Clients**

- BOSCH → BorgWarner / DENSO / AISIN/
- HITACH/UAES /SHAEFFELER etc
- **Automotive Product Diversification**
- Injection → GDI / VCT / ADAS / Fuel Cell etc.



**Diesel & Gasoline
Engine System**



Variable Cam Timing

Transmission Control

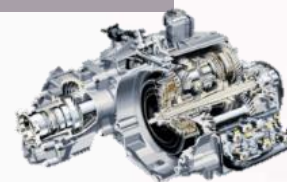


**Non-Fuel Vehicle
Products**

Fuel Cell

**Advanced Driver
Assistance Systems**

Braking System



- **Core Competencies and Application**

- Medical Devices
- Bicycle Components
- Industrial Applications

→ 101 Million

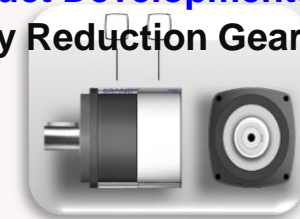
FY 15 FY 20

255 Million



- **New Product Developments**

- Planetary Reduction Gear
- Others



BOSCH BBM SUPPLIER CALL

STUTTGART MARCH 4th, 2021

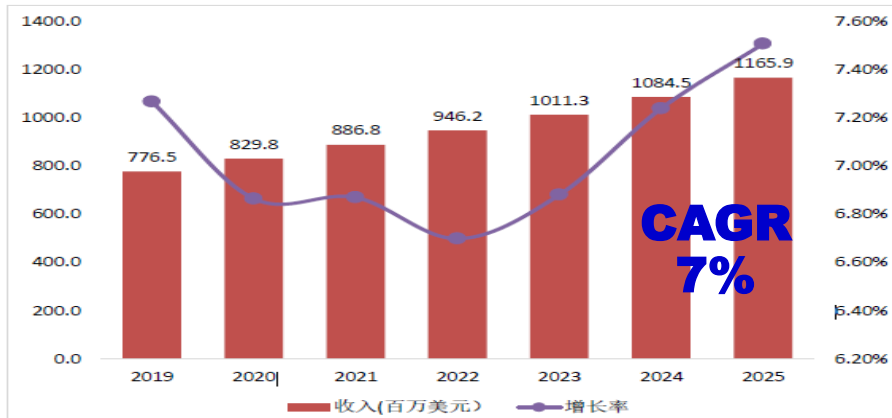


Fuel cell:
Efficient
Emission-free

Development of Planetary Reduction Gear (Market Profile))

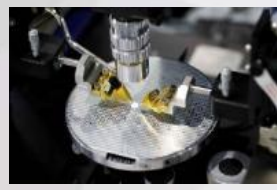
◆ Market Size

表 2019E-2025F 全球精密行星减速机产值预测



资料来源：第三方资料、新闻报道、专家采访及恒州博智(QYR)设备研究中心，2019年5月

◆ Top 10 Industrial Applications



12%

Semiconductor Equipment



25%

Food Processing Machines



17%

Robotics



13%

Textile, Printing Equipment



11%

Others

Packaging Machinery 7%

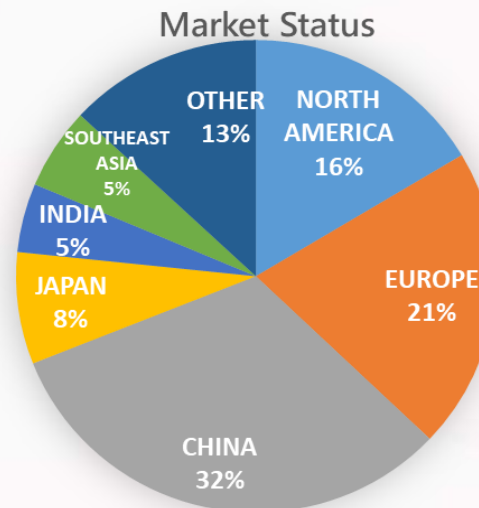
Construction Machinery 2%

Processing Equipment 6%

Medical Devices 2%

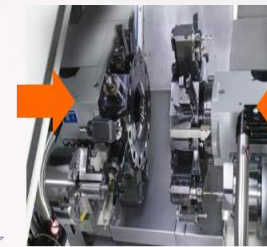
Aerospace and Aviation 5%

2019 Planetary Reduction Gear Market Status

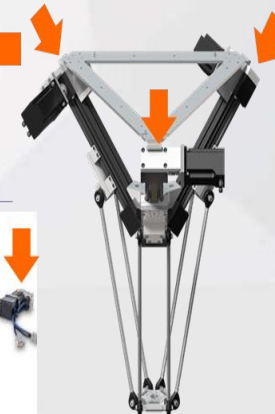


◆ Application

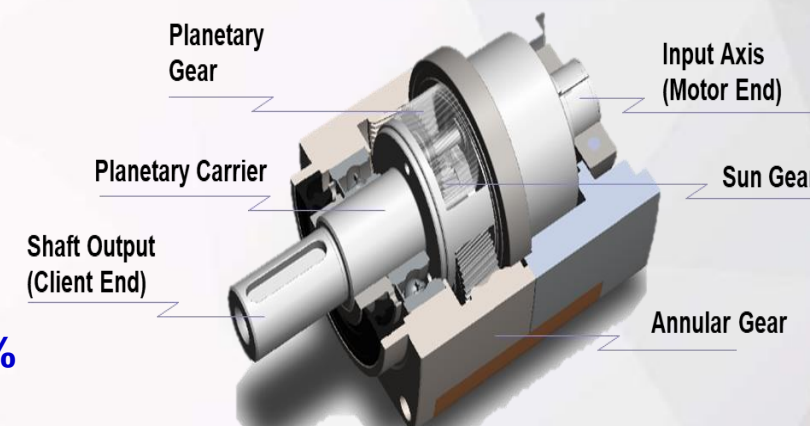
Twin-Spindle Twin-Turret



Delta Robot, XYZ Robotic Arms



◆ Gear Component



Through the gear ratio of the planetary gear and the sun gear, to reduce the rotation speed and increasing the torque

Design Strategy and Competitive Advantages

- **Patent for Lubrication:**

Insert lubricating oil into inner diameter needle roller bearing of the planetary gear to reduce abrasion and further increase the longevity of the service life.

- **Patent for Motor Gear Locking Devices:**

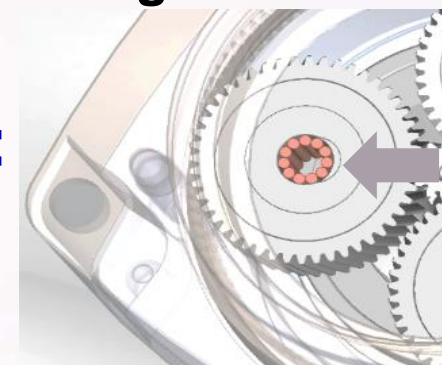
Unique design prevents the motor lock core from loosening when it is not locked, and it is easier to assemble.

- **Nitriding Process - Reduce Abrasion:**

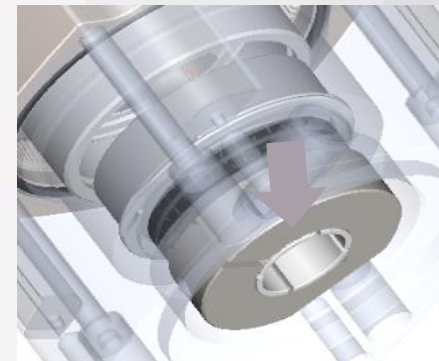
Nitride gear surface → Improving surface hardness to create high wear resistance and increase lifespan of gears.

- **Components Production Traceability Record:**

Strict quality checks and transparent tracking systems.



Patent for Lubrication



Patent for Motor Gear Locking Devices

Disclaimer

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Turning to Become...

Thanks for Your
Attention