

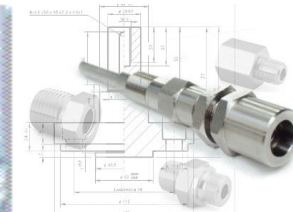
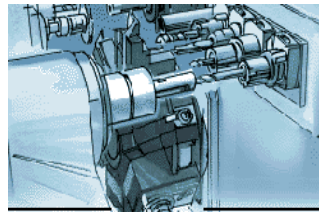
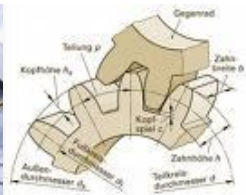
TURVO®

Turvo International Co., Ltd

www.turvo.com.tw

Visions of TURVO

To be the most competitive modular solution provider in the field of CNC turning



- Company Profile
- Current Progress
- Future Plan

- Company Profile
- Current Progress
- Future Plan

Company Profile

Established time	1987 29 th December	
President	Tony Liu	
location	No.59, Jing 2 Rd., Taichung Harbor Export Processing Zone, Wuci Dist., Taichung City 435, Taiwan	
main products	Precision metal parts for automotive, medical, industrial applications, bicycles...Etc.	
Capital	NT\$602,881,000	
Revenue	2018	NT\$ 2,549,783,000 (YOY : 6.71%)
	2019	NT\$ 2,353,988,000 (YOY : - 7.68%)
	2020 January to September	NT\$ 1,789,459,000 (YOY : 3.38%)

Milestones

1987s

- 1987 Turvo established**
- 1996 DG plant established**
- 1996 Supplier of SEAGATE**
- 1996 Supplier of J&J**
- 1998 Supplier of IBM**
- 1998 ISO 9002 Certified**

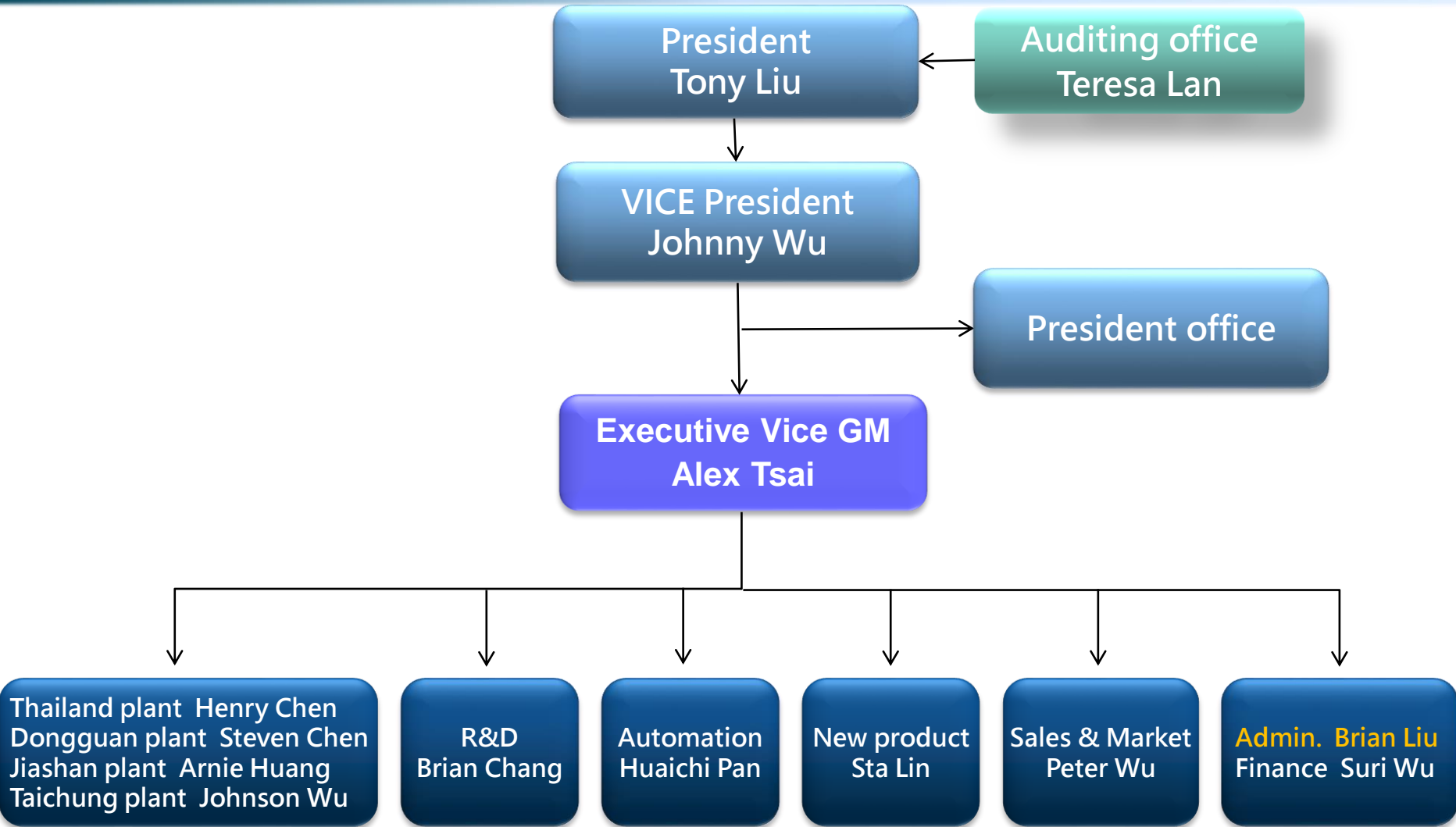
2000s

- 2001 QS 9000 Certified**
- 2004 Supplier of BOSCH**
- 2005 Supplier of NN**
- 2006 TS16949 Certified**
- 2007 ISO14001 Certified**
- 2007 OHSAS18001 Qualified**
- 2008 BOSCH Global Preferred supplier**

2010~Now

- 2010 ISO 13485 Certified**
- 2010 Automation Dep. established**
- 2011 IPO in Taiwan (2233.TW)**
- 2011 Jia-Shan plant established**
- 2013 Forging JV in Thailand**
- 2016 Heat treatment in JS plant**
- 2017 BW Preferred supplier**
- 2017 DENSO comprehensive excellent award**
- 2019 UAES Best Technology innovation award**
- 2019 Hitachi Best quality award**

Organization Chart



Locations



Production Centers



Taiwan

- 283 employees, 16,000 m²
- In Taichung harbor



Dongguan Plant

- 651 employees, 30,000 m²
- Near Shenzhen, China



Jiashan Plant

- 628 employees, 27,000 m²
- Near Shanghai, China



MSAT

- 23 employees, 5,248 m²
- Near Bangkok, Thailand

Enterprise branch status

Affiliates	Location		Capital	Mainly Working
<p>Turvo international Co,Lte.</p>	<p>Taichung- Wuqi</p>		<p>NTD 602,881K</p>	<p>R&D (New manufacturing technique) Production base for high-tech, high added value, and low quantity of flexible production. Marketing: Export-oriented</p>
<p>Dongguan Xinfen</p>	<p>Guangdong- Dongguan</p>		<p>HKD 58,385K</p>	<p>R&D (Improving and optimizing original tech) Production base for overseas customer and south China customer Marketing: Mainly – Exportation Secondary – China area</p>

Enterprise branch status

Affiliates	Location	Capital	Mainly Working
Zhejiang YuZuan	Jiashan, Zhejiang 	USD 23,000K	R&D (Improving and optimizing original tech) Production base for middle China customer and overseas customer Marketing: Mainly – China area Secondary –Exportation
MSAT	Thatoom, Srimahaphot, Prachinburi 	THB 216,278K	Forging Production base for Southeast Asia customer Marketing: South Asia automobile and scooter

Production Equipment



Multi-Spindles CNC machines



Multi-Spindles CNC machines



Degen Honing Machine



Cold Forging



Heat Treatment



Quality Certificates



ISO 9001:2015
IATF16949:2016
ISO 13485
ISO 14001
OHSAS 18001



Certified in Feb. 2018
Certified in Feb. 2018
Certified in Sep. 2019
Certified in Sep. 2019
Certified in Sep. 2019



Roadmap of Turvo's growth

Co-work with R&D Center for New Production Development



Now
Strategic Partners

Technical Authorization and Transferring  **BOSCH DENSO**

Prior for Participating New Projects /Products Development
No Incoming Inspection Activities Needed by Customers

2008~2012

Optimal Profit Margin

Top Ranking & Selected Supplier

Prior for Receiving 70% Annual Purchasing Inquiries from Customers

2004~2008

Won Majority of Purchasing Shares from Customers

Preferred Supplier

Second & Back-up Source

1996~2004

Unsteady & Uncertainty of Demands

Secondary / Back-up Supplier

Under investigation & Probation by Customers

Before 1996

Old Products
Small Volumes
Low Profit Margin

New selected and potential Supplier

Automotive

- Key components to both Gasoline and Diesel injection system
- Key components to High pressure pump
- Transmission Control Unit
- VCT control unit
- ABS brake system



End-customer Application



Medical

- The world's largest diabetes treatment products company.
- Turvo supplies core components for insulin syringe system.
- Process and quality pursue 0 PPM performing rate.

Results: 2018 delivered 9M PCS at 0PPM.



Industry

- The world' s largest industrial automation sensor and control system provider.
- High accuracy and reliability requirements due to extreme working environment.
- 2 million times of high temperature and pressure test approval is required.



End-customer Application

Bicycle and Others

- leading brands of shock absorbers/hubs in bicycle products
- Turvo has equipped quick changeover + efficient integration of outsourced process (Anode/heat treatment) to provide superior quality in response to large and frequent pull in/push out situations



End-customer Application



High-Value Customers



BOSCH *DENSO*

DELPHI

UAES 联合汽车电子有限公司



BorgWarner



Amphenol
Industrial

 CooperStandard



Mubea

HITACHI
Inspire the Next



Amphenol
Aerospace



SANDVIK



 **SANDEN**

ifm electronic

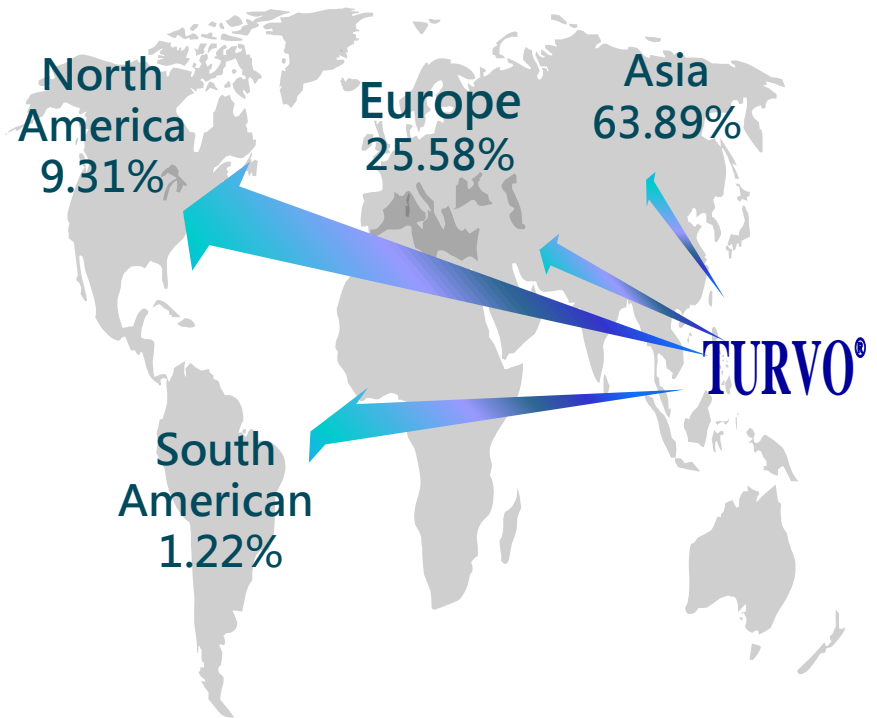
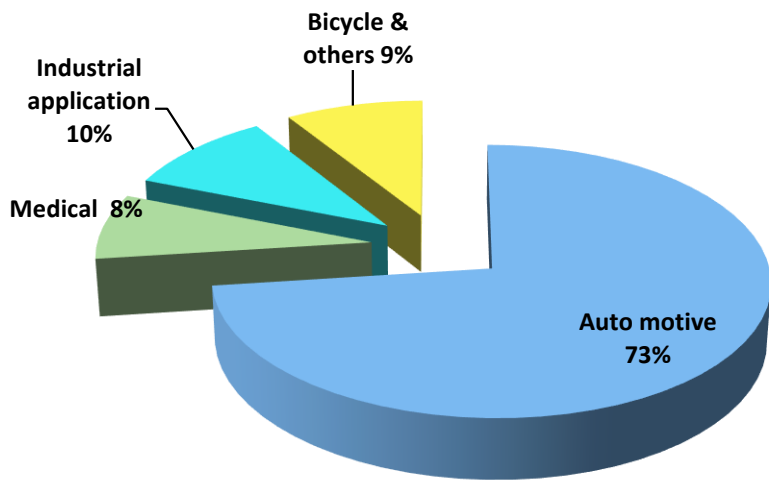
DT SWISS

smiths medical **SCHAEFFLER**

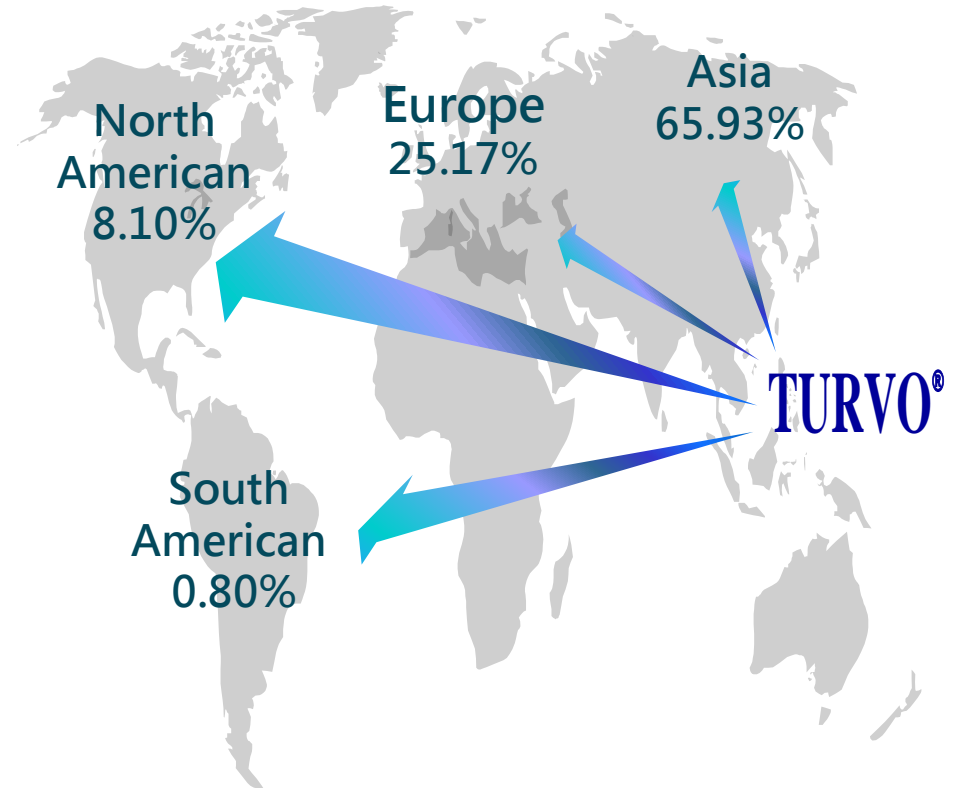
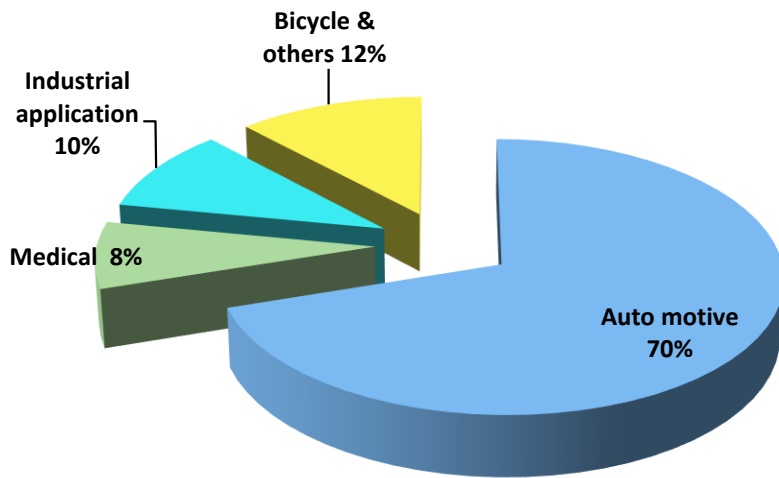


- Company Profile
- Current Progress
- Future Plan

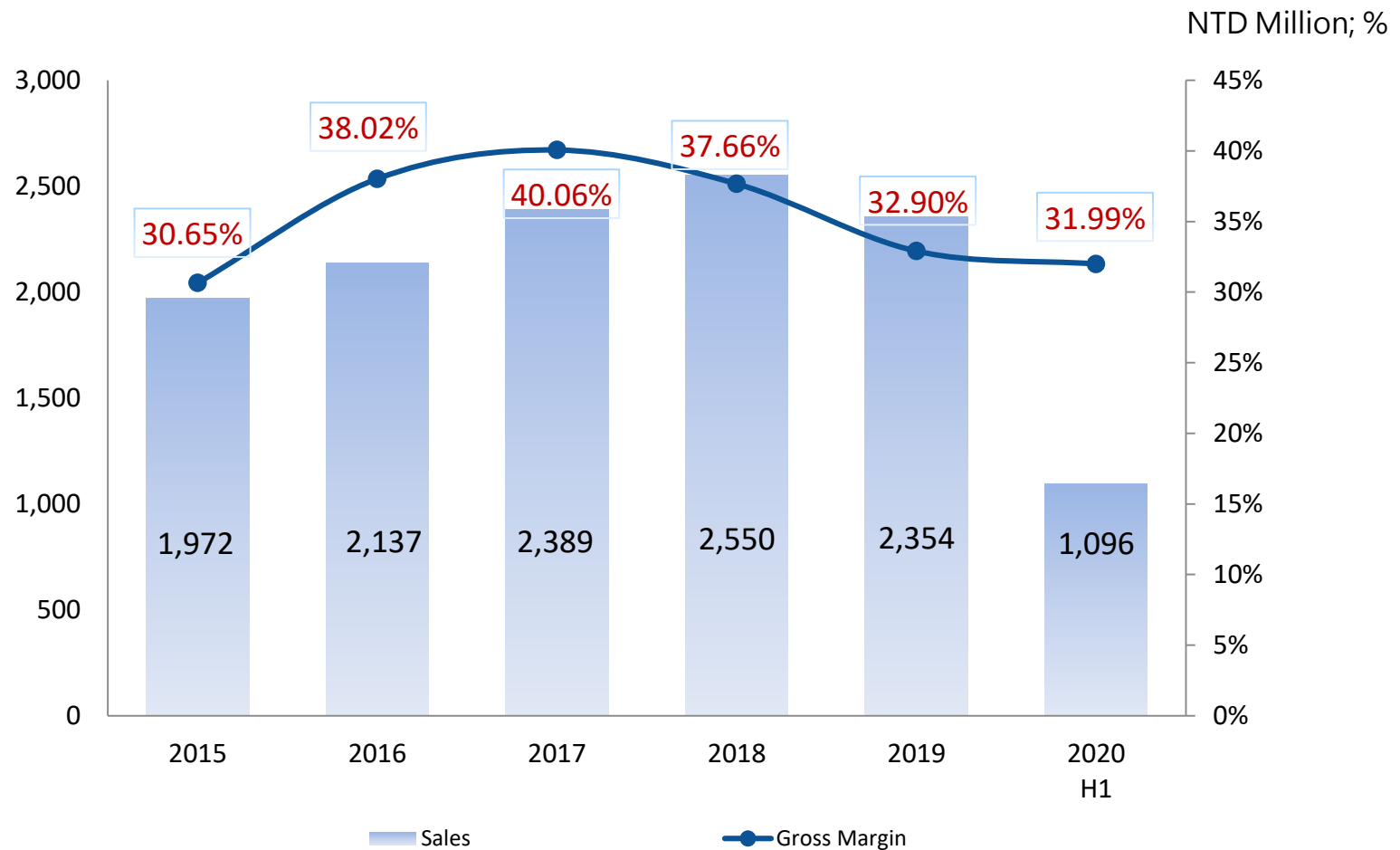
2019 Business review- region



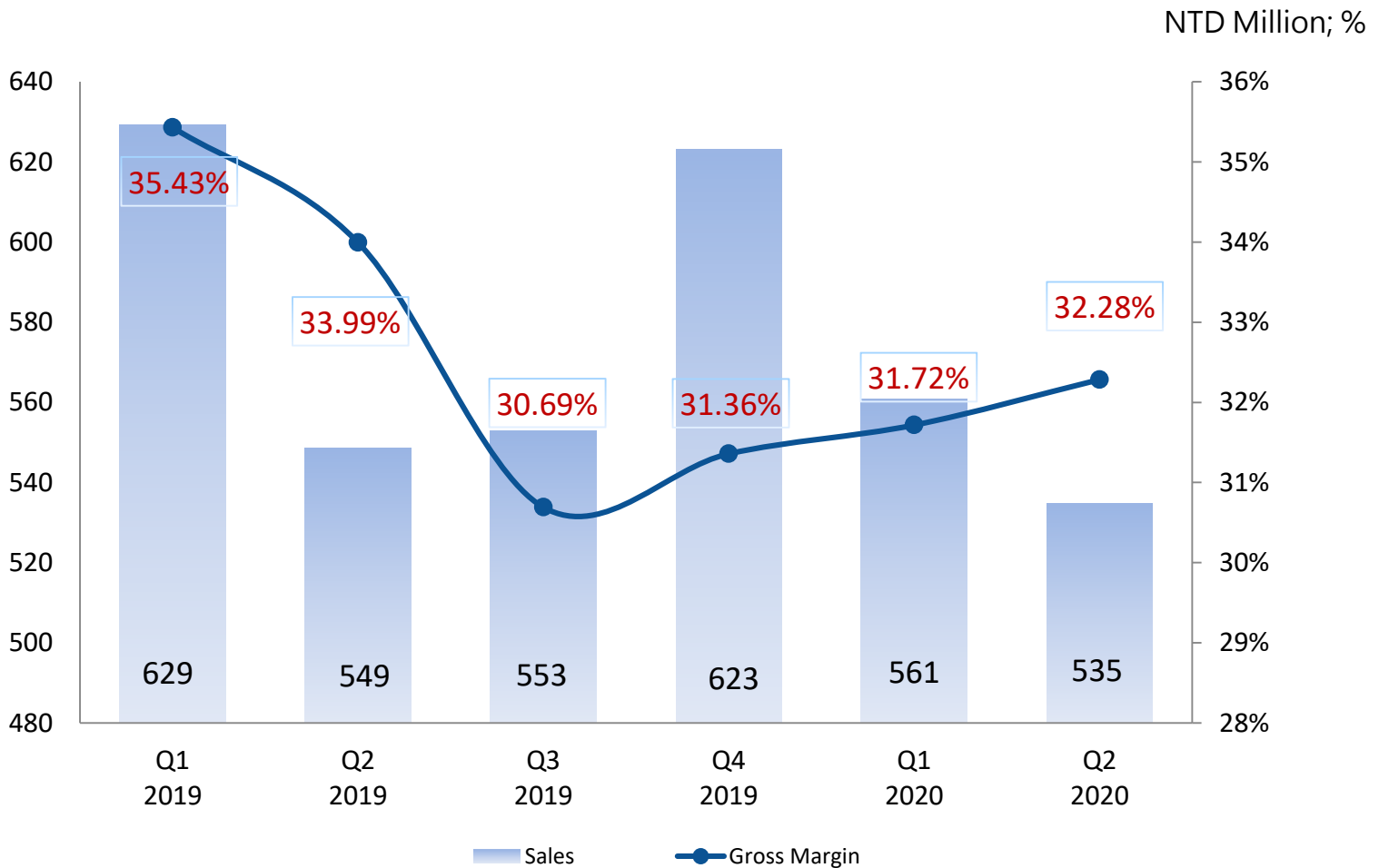
2020.H1 Business review- region



Sales Revenue and Gross Margin



Sales Revenue and Gross Margin



Enterprise Revenue and Profit

NTD Million

	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2
Revenue	629	549	553	623	561	535
Net Income	103	66	78	58	77	64
EPS	1.71	1.10	1.30	0.96	1.29	1.06

Stock dividend

NTD Million

	2015年	2016年	2017年	2018年	2019年
Net Income	250	342	396	424	305
Equities	2,192	2,278	2,411	2,675	2,671
ROE	11.39%	15.29%	16.90%	16.69%	11.42%
EPS (NTD)	5.07	6.94	8.05	7.05	5.07
Cash dividend (NTD)	3.00	5.00	3.75	4.00	3.30
Stock dividend (NTD)	-	-	2.25	-	-
Total dividend (NTD)	3.00	5.00	6.00	4.00	3.30
Dividend Pay-Out(%)	59.17%	72.05%	74.53%	56.78%	65.05%

- Company Profile
- Current Progress
- Future Plan

Technology Development

◆ Core Competitiveness

- ✓ Forging
- ✓ Turning, Milling, Drill
- ✓ Heat-treatment
- ✓ Grinding

Talent Program

◆ Recruitment

- ✓ Industry-University Cooperation
- ✓ Vocational Training Council Selection

◆ Training

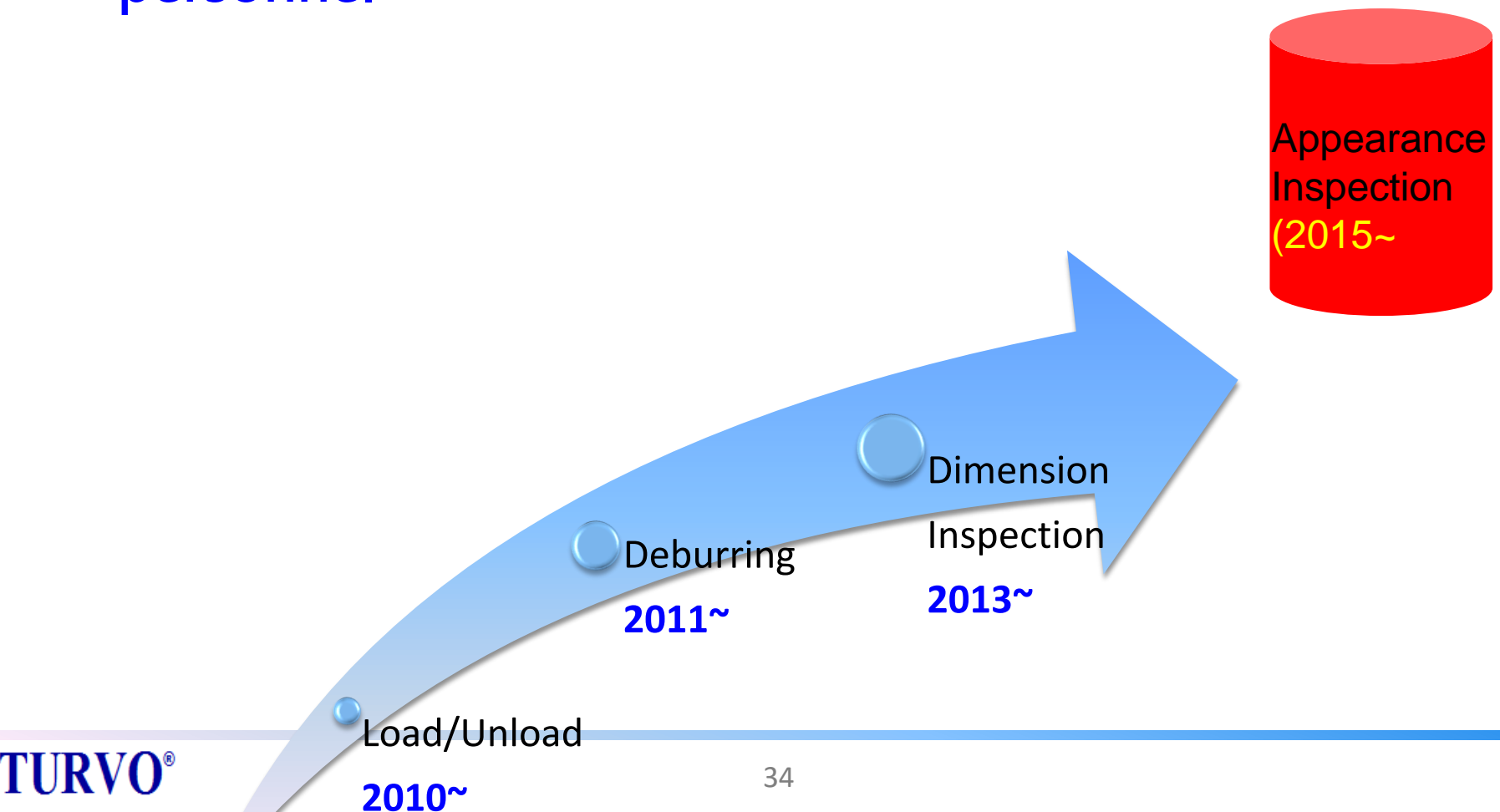
- ✓ Newcomer training, on-the-job training
- ✓ Mentorship promotion
- ✓ Overseas factory rotation

◆ Salary

- ✓ Examination promotion system
- ✓ Long-term bonus contract system

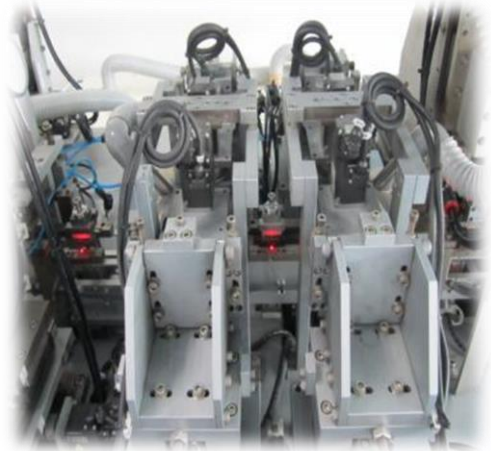
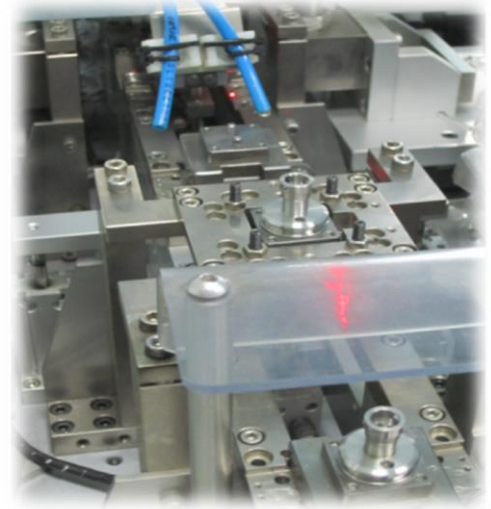
Automation

- ◆ Increase in automation: reduce dependence on personnel



Automation

Turvo designed auto de-burring machine



Automation

Turvo designed auto dimension inspection machine



Advantage: reducing operator requirement, eliminating human misjudgment, and achieve 0% defect.

Automation

**Dimension inspection + CCD
appearance inspection machine**

**Automatic Loading → Key
Dimension Inspection →
CCD Appearance
Inspection → Auto Non-
defective Unloading**



Automation

Dimension inspection + CCD appearance inspection machine



Business Development

- **Deep cultivation of automotive target customers**
 - **BOSCH continues to cultivate**
 - ◆ Gasoline system: direct injection (GDI) products
 - ◆ Diesel system: injector body
 - ◆ Brake system: mass production of ABS products
 - **American customer BorgWarner**
 - ◆ VVT system: mass production of new products continues to expand
 - **Mass production of Denso's new products**
 - ◆ Mass production of engine system products
 - **United Automotive Electronics (China's gasoline passenger car market expansion)**
 - ◆ Mass production of dual clutch (DCT) products

Business Development

- **New car customers join**

- ◆ Schaeffler customer: mass production of gearbox products
- ◆ Aisin Hongda customers: the addition of gearbox products

- **Medical expansion**

- ◆ New customer Smiths Medical: Successfully introduced medical syringe pumps and infusion system products

- **Expansion of new areas of bicycle**

- ◆ Machining products for bicycle forgings: mass production

Future Expansion



TURVO®

TURVO International Co. Ltd

www.turvo.com.tw



Thank You

Q & A