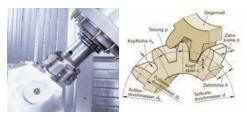
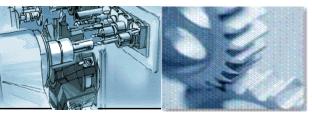
#### 宇隆科技股份有限公司

**Turvo International Co., Ltd.** 

# Company Profile







#### **Company Introduction**



The Company

**Products & Apps** 

**Core Competencies** 

**Quality Control** 



**Automation** 

**Capacity & Capability** 

#### **TURVO**®

### The Company









## **Our Vision**

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

#### **General Information**

**TURVO®** 

- Founded: 1987
- IPO: 2011 (TWSE No. 2233)
- Production Centers: 4
- Employees: 1,598 (2019/04)
- Capital: USD 20M
- Y2018 Revenue: USD 83.5M
- President : Mr. Tony Liu

#### **Our Customers**







UAES 联合汽车电子有限公司









































smiths medical SCHAEFFLER

#### **Honors for Customer Satisfaction**





- Global Supplier Award 2009/2010
- Global Supplier Award 2013/2014
- Preferred Supplier of Bosch 2010
- Preferred Supplier of Bosch 2014
- Preferred Supplier of Bosch 2015
- Preferred Supplier of Bosch 2016







#### **Honors for Customer Satisfaction**

#### **TURVO®**



- Bosch Asia Pacific Supplier Award 2010
- Bosch Asia Pacific Supplier Award 2010/2011
- The Winner of the best idea 2010
- Supplier Learning Group 2009
- Lean Supply Chain 2012/2013
- Lean Production System 2013/2014
- Continuous Improvement 2014
- TSC-AP 14Q Award 2017











#### **Honors for Customer Satisfaction**

#### **TURVO®**

#### **BorgWarner**

- Excellent Supplier of 2012
- Excellent Supplier Award 2014
- Best Collaboration Supplier 2015
- Best Quality Supplier 2016
- Excellent Supplier 2017











#### **DENSO**

Excellent Award





The Best Idea 2010



#### **TURVO**®

### Products & Apps



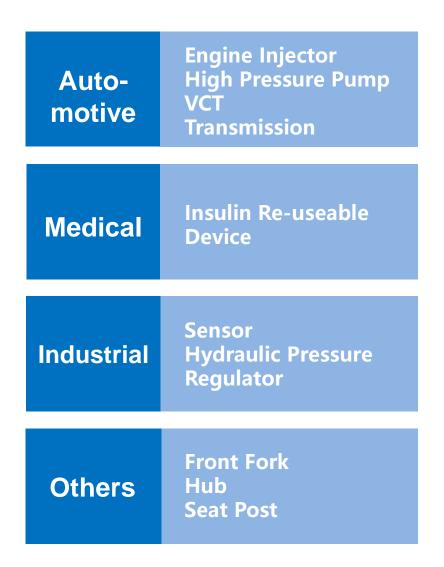


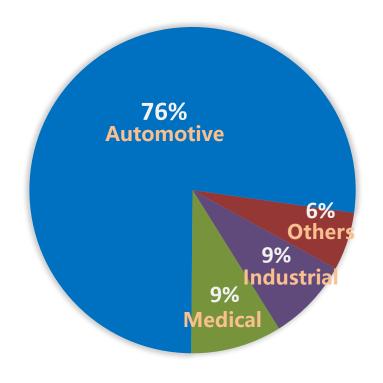




#### **Product Field**







#### **Automotive Parts**

**TURVO®** 

- Engine Injector
- High Pressure Pump
- Variable Cam Timing (VCT)
- Transmission Control Unit (TC)
- Anti-lock Braking System (ABS)





**End-customer Application** 

Medical TURVO®

- The world's largest diabetes treatment products company
- The most advanced insulin delivery system related products
- Turvo supplies core components for insulin syringe system
- Process and quality pursue 0 PPM performing rate.
   Results: 2017 delivered 9M PCS at 0PPM





Industrial TURVO®

- 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** 

Others TURVO®

- 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** 

### **Core Competencies**

#### **Capacity and Capability**



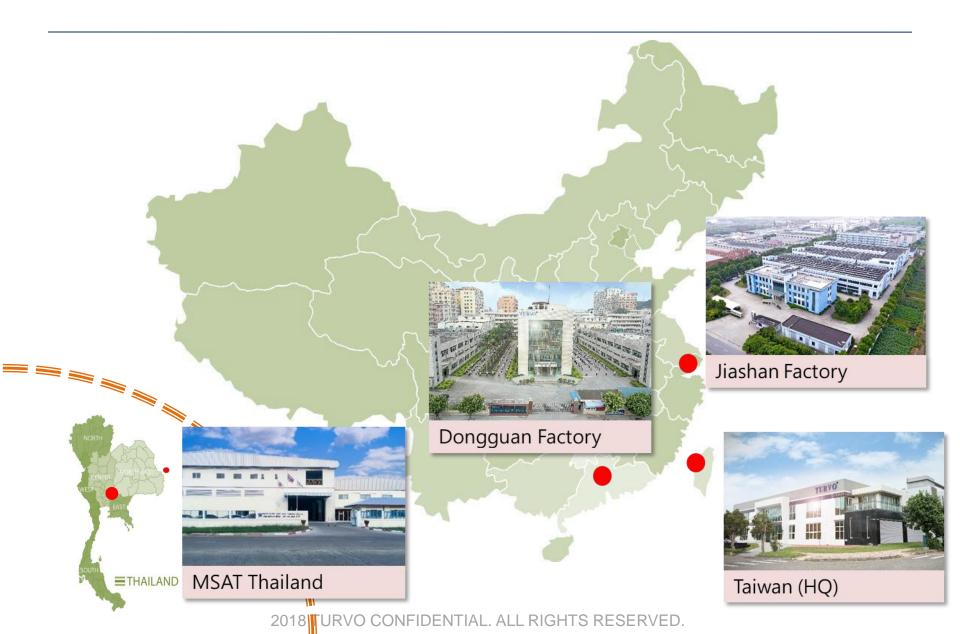






Locations





#### **Major Equipment**

**TURVO®** 

- CNC Turning/Milling Machine: 516
- CNC Grinding Machine: 29
- Multi-Spindle CNC: 9
- Mikron Multistar Workstation: 1
- Cleaning Line: 12









#### Multi-Spindles CNC (Taiwan)

#### **TURVO**®



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#### Multi-Spindles CNC (China)



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#### **Heat treatment facilities**





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#### **Tool Shop**

#### **TURVO**®









### **Core Competencies**

# Automation (Auto Inspection/Information Technology)

#### **Process Improvement**

Before One vs. one

After One vs. many



#### **Auto Inspection 1.0**





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#### **Auto Inspection 2.0**

#### **TURVO®**

- Automatic load/unload
- Dimension check
- Appearance check using CCD camera



# Real-time production monitoring system





Real status on site



Handheld Device



**Personal Computer** 

## **Core Competencies**

**Quality Control** 

#### **Quality Certificates**

#### **TURVO®**







ISO 9001:2015 ISO/IATF16949

ISO 45001:2018

ISO 13485:2016

Certificate No.FM 696707 Certificate No.696695 ISO 14001:2015 Certificate No.EMS 607965

Certificate No.MD 565462

Certificate No.OHS 522165







#### **Quality Assurance**





#### **Inspection Equipment**

#### **TURVO®**

Equipment	TW	DG	JS
Auto inspector	7	25	23
Contour tester	3	8	4
Roundness tester	2	1	4
CMM	2	2	2
Hardness tester	1	3	5
Roughness tester	2	3	3
Projector + Video Measurement system	5	12	14
Laser scan micrometer	1	2	5
Cleanliness inspector+ Metallographic microscope	1	1	2
Eddy Current Tester	1	1	3
Spectrometer	0	1	1
Magnetic tester	0	0	1



















# **Inspection equipment - CMM**

#### **TURVO**®



**Carl Zeiss CMM** 

#### **Wenzel CMM**



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# **Inspection equipment- Contour tester**

#### **TURVO**®



#### **Accretech contour tester**

#### Mahr contour tester





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#### **Materials Laboratory**





#### **Future Expansion**





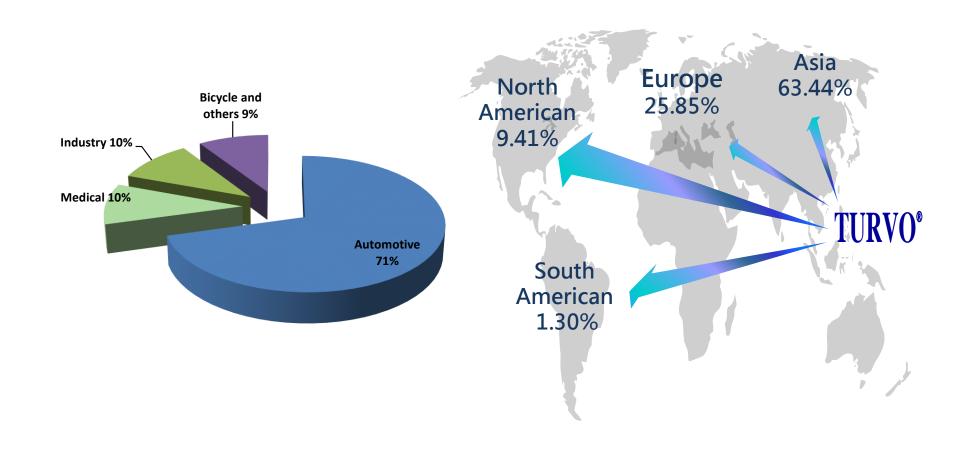
35

#### **TURVO**®

### Stock Dividend

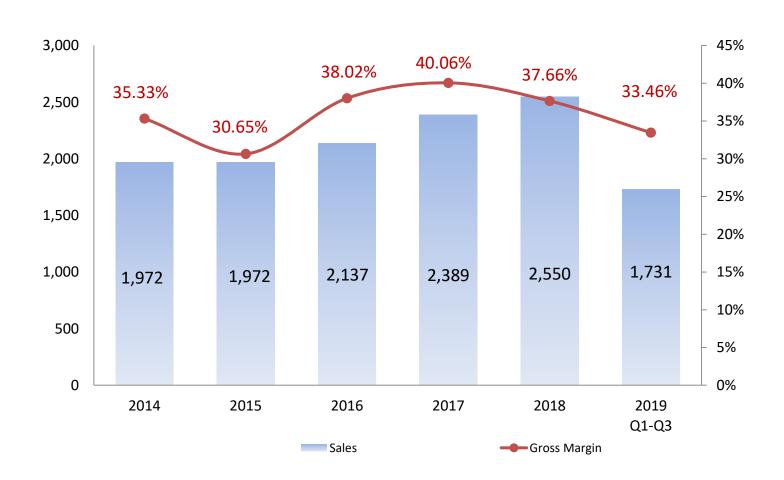
# 2019.Q1~Q3 Business review- region

#### **TURVO®**



#### **Revenue and Gross Margin**

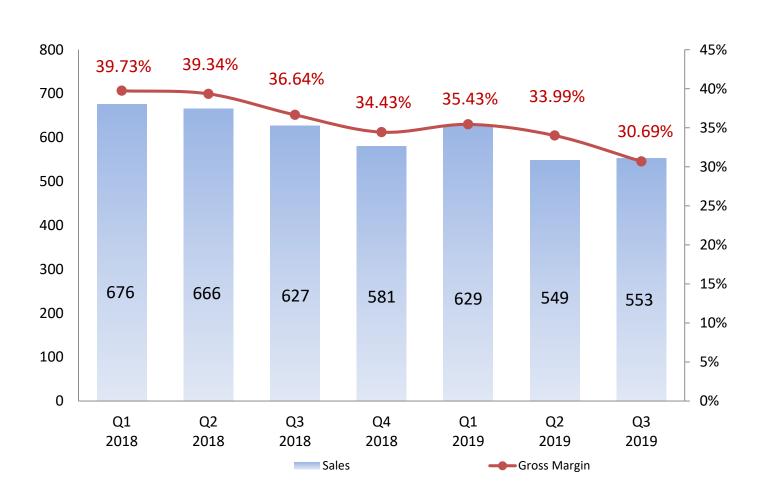
NTD Million; %



# **Enterprise Revenue and Gross Margin**



NTD Million; %



# **Enterprise Revenue and Profit**



#### NTD Million

	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3
Revenue	676	666	627	581	629	549	553
Net Income	76	155	102	91	103	66	79
EPS	1.26	2.58	1.70	1.51	1.71	1.10	1.30

#### Stock dividend



#### NTD Million

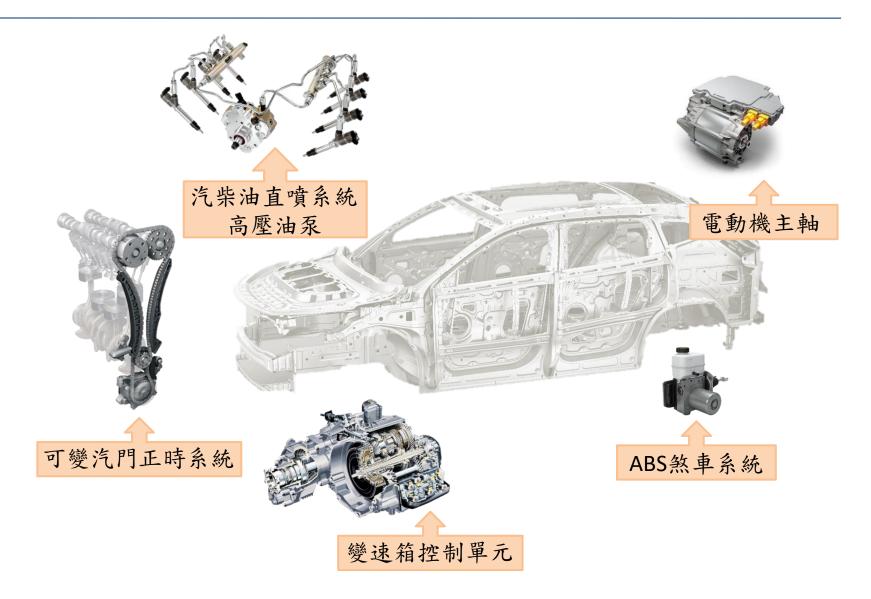
	2014年	2015年	2016年	2017年	2018年
Net Income	276	250	342	396	424
Shareholders Equity	2,193	2,192	2,278	2,411	2,675
ROE	15.80%	11.39%	15.29%	16.90%	16.69%
EPS (NTD)	6.30	5.07	6.94	8.05	7.05
Cash dividend (NTD)	4.75	3.00	5.00	3.75	4.00
Stock dividend (NTD)	-	-	-	2.25	-
Total dividend (NTD)	4.75	3.00	5.00	6.00	4.00
Dividend Payout Ratio(%)	75.40%	59.17%	72.05%	74.53%	56.78%

#### **TURVO**®

### **Business Outlook**

#### **Automotive Parts**

#### **TURVO**®



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#### **Business Development**

- Automotive produce line Europe customer
  - Gasoline/Diesel Engine: Key components / Injector Body
  - Transmission control system
  - ABS
- Increasing exposure of American / Japanese / China local customer
  - BorgWarner VTC
  - Denso Hybrid
  - UAES Transmission control system
- Continuing to pursue Southeast Asian market

#### **Business Development**



- New Medical customer Smiths Medical
- E-Axle is under development and sampling phase

#### **TURVO®**

děkuji Obrigada TERIMA KASIH tesekkurederim Aliquam Grazie Köszönöm Kiitos ありがとうでざいお さい합しい Terima kasih ~ 謝 詢~ Gracias DANKE Děkuju MERCI aitäh TAKK