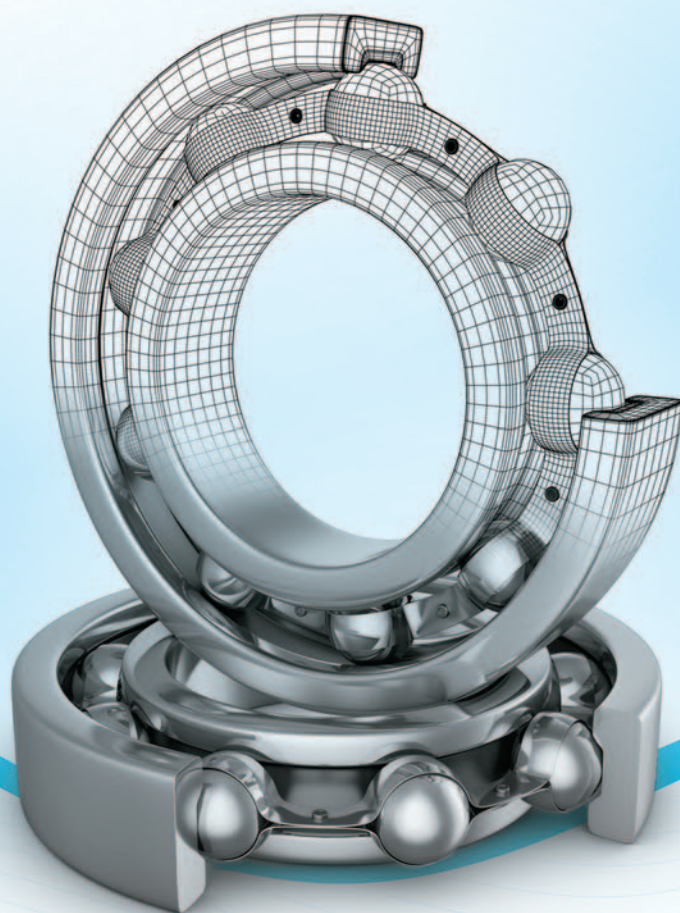


TPI[®]
BEARINGS



Technology • Precision • Innovation

www.tpi.tw



Index

	Page
Milestone	03 - 04
Sales Achievement	05 - 06
Core Competitiveness	07 - 08
Deep Groove Ball Bearing	09
Needle Roller Bearing	10
BSSB/ACBB/NN Precision Bearing	11 - 12
Fluid Dynamic Bearing	13
Strainwave Drive	14

Managing a company is a constant process of managing change, solving problems and facing up to challenges. During this process we always keep three key concepts in mind: "**Optimism, Confidence, and Innovation**". As a result of this process at TPI, we develop not just the "**Know How**" but the "**Know Why**" of our product development decisions.

We constantly build up our database of professional bearing knowledge, educating our staff in all aspects of the products so that we can advance and improve bearing design and production along with its technical applications.

This focus on both development and design has strengthened our position in the bearing industry and enabled us to build up long-term partnerships with global customers and well known

About TPI

Since 1966 TPI has been leading the industry providing a massive range of custom design ball bearings and bearings for global industry.

The policy of obtaining first-rate talent, maintaining superior quality standards, constantly updating techniques and responding to customer requirements has enabled Tung Pei Industrial Co., Ltd. to experience continual growth. The company has achieved its objectives through team work, integrity, dedication and co-operation between management and staff.

On behalf of the management and staff of Tung Pei Industrial Co., Ltd. We would like to thank our customers throughout the world for their continual confidence and support.

We are all aware of the critical part played by bearings in the efficient function of modern machinery and for this reason our whole company is dedicated to maintaining the highest possible standards at all levels of our operation. To assist us in communicating with the international market, we are pleased to make this booklet available to our existing and potential overseas customers, and we welcome any comments or queries you may have regarding our products and services.

陳成

/ Chairman

brands. The globalization of our business distribution and renewed efforts in our product innovation are keys to the future success of our company.

We focus on environmental industry technologies and we committ to saving energy wherever possible, whilst also actively engaging in a range of activities related to our materials, manufacturing processes and packaging, so that we can reduce our carbon footprint as much as possible.

Our growth relies on the success of our customers in the future, and our three core principles of "**Technology, Precision and Innovation**" are central to this. These principles motivate us to achieve our goals, which also empowers us to constantly deliver excellent products and services to all of our customers.





2010

- 2017 Hybrid Bearing won "Taiwan Excellent Award".
- 2016 Fluid Dynamic Bearing won "Taiwan Excellent Award".
- 2015 Established PT. TPI Manufacture Indonesia.
- 2015 Double Rows Roller Bearings won "Taiwan Excellence Award".
- 2013 Passed ISO 50001 Certificate.
- 2012 Precision Bearing Factory Opened.
- 2011 Won "Top 100 Taiwan Brands Award".
- 2010 Forging Factory Opened.
- 2010 Won "Outstanding Innovation Award" Issued by Taiwan Ministry of Economic Affairs.

2000

- 2009 Passed OHSAS 18001 & TOSHMS Certificate.
- 2004 Passed ISO/TS 16949 Certificate.
- 2003 Deep Groove Ball Bearing won "Taiwan Excellent Award"
- 2002 Won "Industrial Sustainable Excellence Award" Issued by Taiwan Ministry of Economic Affairs.
- 2001 Constructed Shanghai Plant.

1990

- 1999 Established "Shanghai Tungpei Enterprise Co., Ltd."
- 1993 Won "Taiwan Excellence Award".
- 1991 Signed Technical Agreement with Amatsuji Steel Ball Mfg. Co., Ltd., Japan and Opened Steel Ball Factory.

1980

- 1983 Constructed Chung-li Plant.
- 1980 Component Parts Factory Opened.

1970

- 1977 Company Name Changed to "Tung Pei Industrial Co., Ltd."
- 1975 Heat-treatment Factory Opened.
- 1974 Turning Factory Opened.

1966

- 1968 Grinding & Assembling Factory Opened.
- 1967 Constructed Taoyuan Plant.
- 1967 Started Joint-venture with NTN Corporation, Japan.
- 1966 Established Under the Name of "Tung Yang Bearing Co., Ltd."

Sales Achievement

Europe

United Kingdom, Germany, France, Italy, Spain, Netherlands, Finland, Sweden, Switzerland, Turkey, Hungary

North America

United States, Canada, Mexico

South America

Brazil, Chile, Colombia, Argentina

Africa

Egypt, Uganda, Morocco



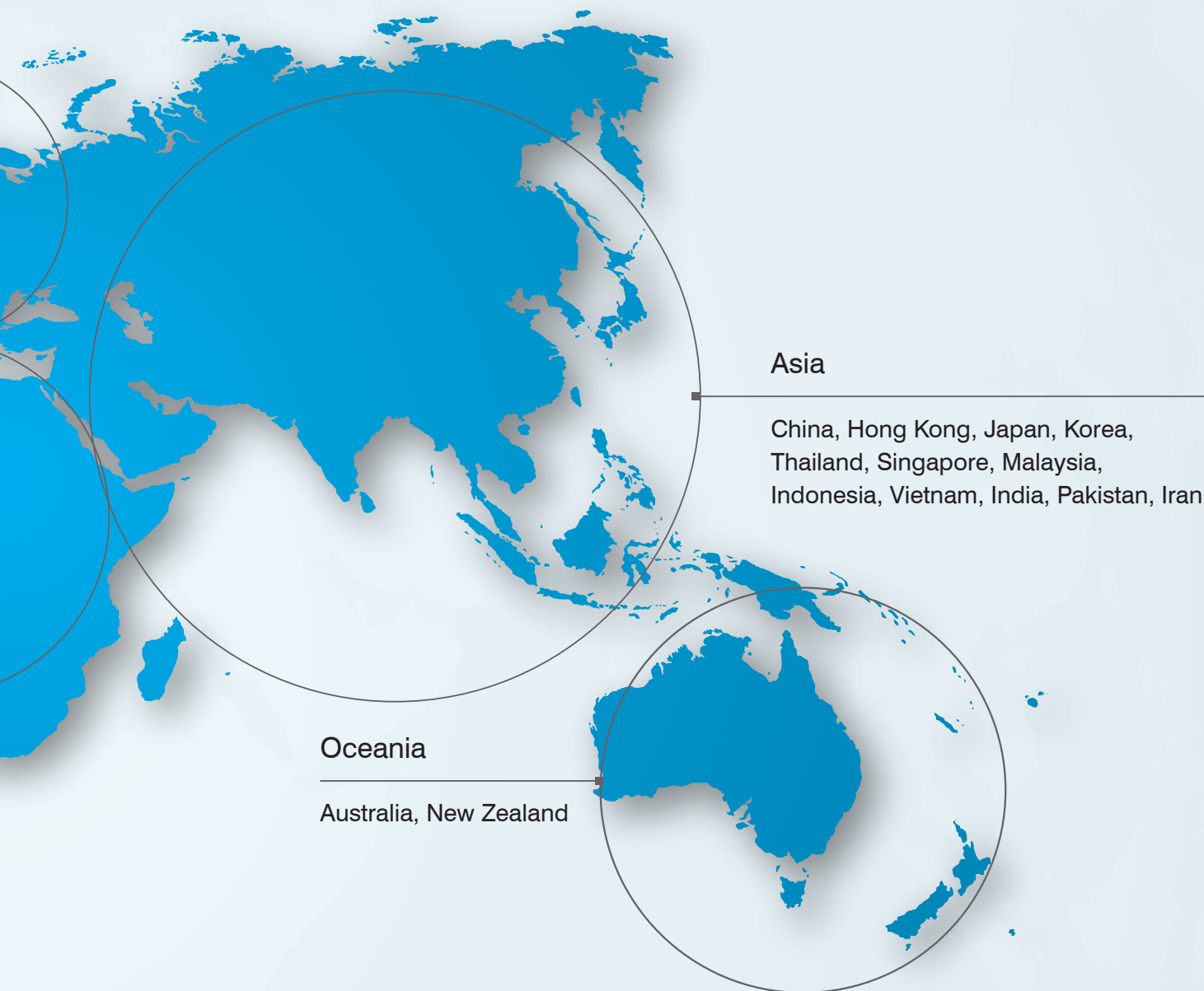
Chairman: Mr. Cheng Chen
President: Mr. Wen-Chieh Chen
Year Established: Aug 25th, 1966



Taipei Head office
Area: 843m²
Address: 10F., No. 142, Sec 4, Zhongxiao E. Rd., Taipei City 106, Taiwan



Taoyuan Plant
Area: 38,928m²
Address: No.600, Sec. 1, Jieshou Rd., Bade Dist., Taoyuan City 334, Taiwan



Asia

China, Hong Kong, Japan, Korea, Thailand, Singapore, Malaysia, Indonesia, Vietnam, India, Pakistan, Iran

Oceania

Australia, New Zealand



Chungli Plant:

Area: 56,137m²

Address: No.7, Songjiang N. Rd., Zhongli Dist., Taoyuan City 320, Taiwan



Shanghai Plant:

Area: 136,950m²

Address: No. 1555 Rongle Rd. (E) Songjiang Industrial Zone, Shanghai, China

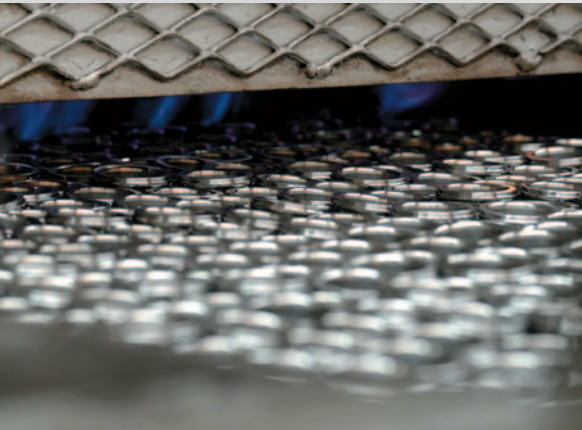


Indonesia Plant:

Area: 93,206m²

Address: Kawasan GIIC Blok AB No. 02, Kota Delta Mas, Desa Sukamahi Cikarang Pusat, Bekasi 17530, Jawa Barat, Indonesia

Core Competitiveness



Heat-Treatment

Through specific heat-treatment, followed by sub-zero treatment, the higher heat stability and longer service life is achieved with the result that the bearings can run permanently in many cases.



Ball Grinding

Precision steel balls are made in house, and all of TPI ball's precision class is G10 guaranteed, and G5 is optional on requests.

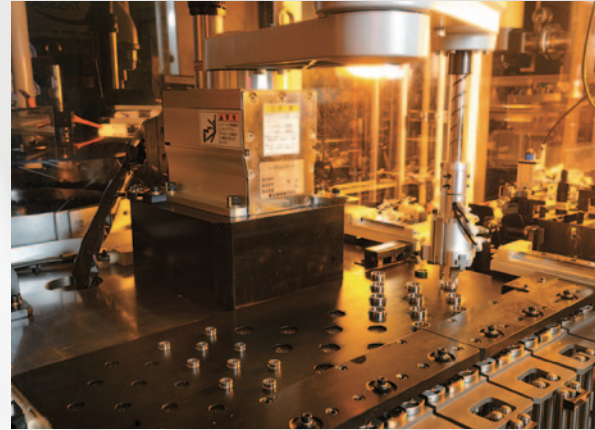


Grinding

Standard TPI super precision bearings are manufactured to P4 class according to ISO 492:2002. P2 class is optional on requests.

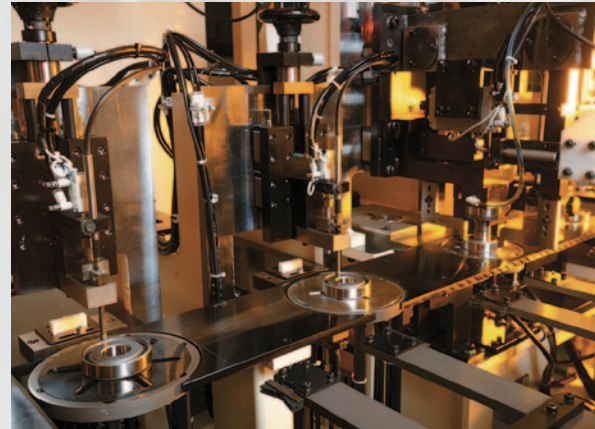
Equipment Development

To be more independent on producing, TPI is capable of develop and maintain in house. Also, customized equipment and maintenance service is also available.



On-line Monitor System

Online measuring systems are equipped on all production lines to ensure that critical characteristics, such as dimensions, clearances, and vibrations are controlled and ensured.



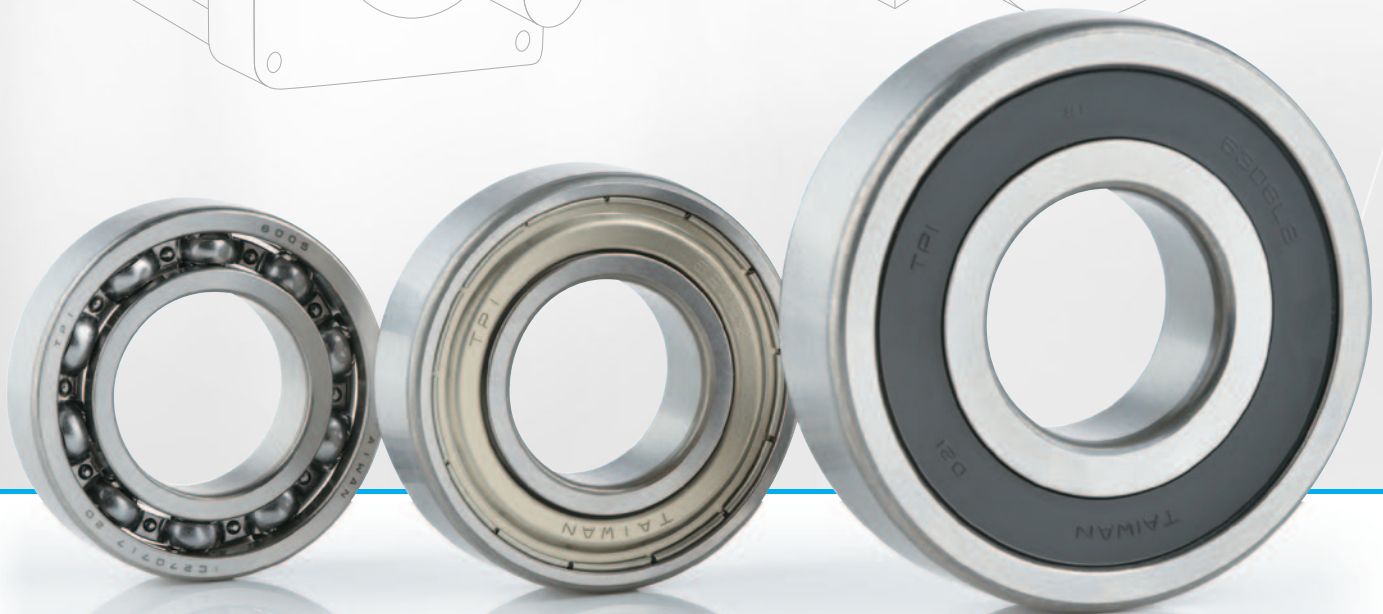
Running-In Test

Service of Running-in test is built in house to ensure that TPI precision bearings' temperature raising and performance meet different kinds of applications and conditions.



Deep Groove Ball Bearing

Deep groove ball bearings are very widely used. A deep groove is formed on each inner and outer ring of the bearing enabling them to sustain radial and axial loads in either direction as well as the combined loads which result from the combination of these forces. Also, it's suitable for high speed application.



Features

1. TPI mass production is manufactured to P5 class precision. P4 class is optional on requests.
2. Expansion bearing, long life bearing, low noise bearings and stainless steel bearing can be customized on different application.
3. Nylon Cage is optional on request to enhance higher DmN value. Also, by using different rolling elements (ceramic ball) and precision class to achieve higher limiting speeds.
4. Various seal types such as non-contact type, contact type and light contact type are available to meet different types of applications. Special design seal also can be customized.

Production Range	Outer ring diameter from 19-150mm
Main Application	Motorcycle, automotive, electric motor, DIY tool, sports equipment & bicycle, etc.

Needle Roller Bearing

Needle roller bearings have a relative small cross-sectional height with significant load-bearing capacity and rigidity relative to their volume. Also, because the inertial force action on them is limited, they are ideal choice for oscillating motion. Needle roller bearings also contribute to compact light weight machine designs and can be replacement for sliding bearings.



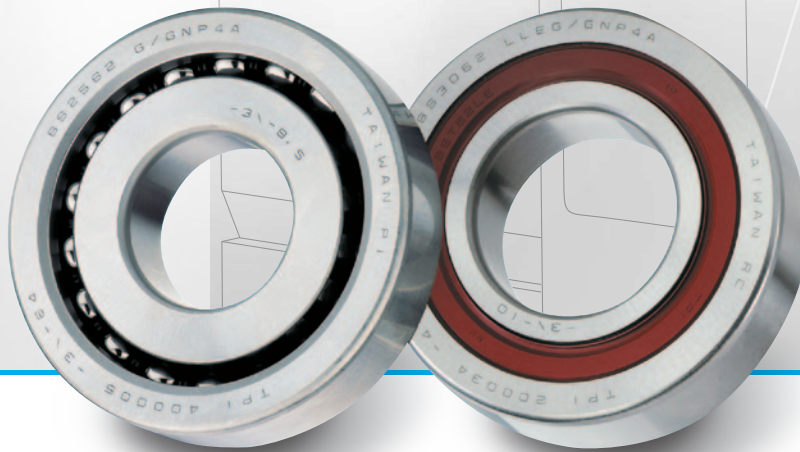
Features

1. Relative small volume and high loading capacity.
2. Light weight but high mechanical efficiency.
3. Needles are produced by ultra-clean bearing steel with Crowning design from Japan to improve life performance.

Series Type	PK series, KBK series, K series & HKS series.
Main Application	Motorcycle

Precision Bearing – Ball Screw Support Bearing

Bearing service life is three times higher than standard bearings by applying special heat-treatment process and ultra clean steel. Now TPI's BSSB spec has become industry standard.



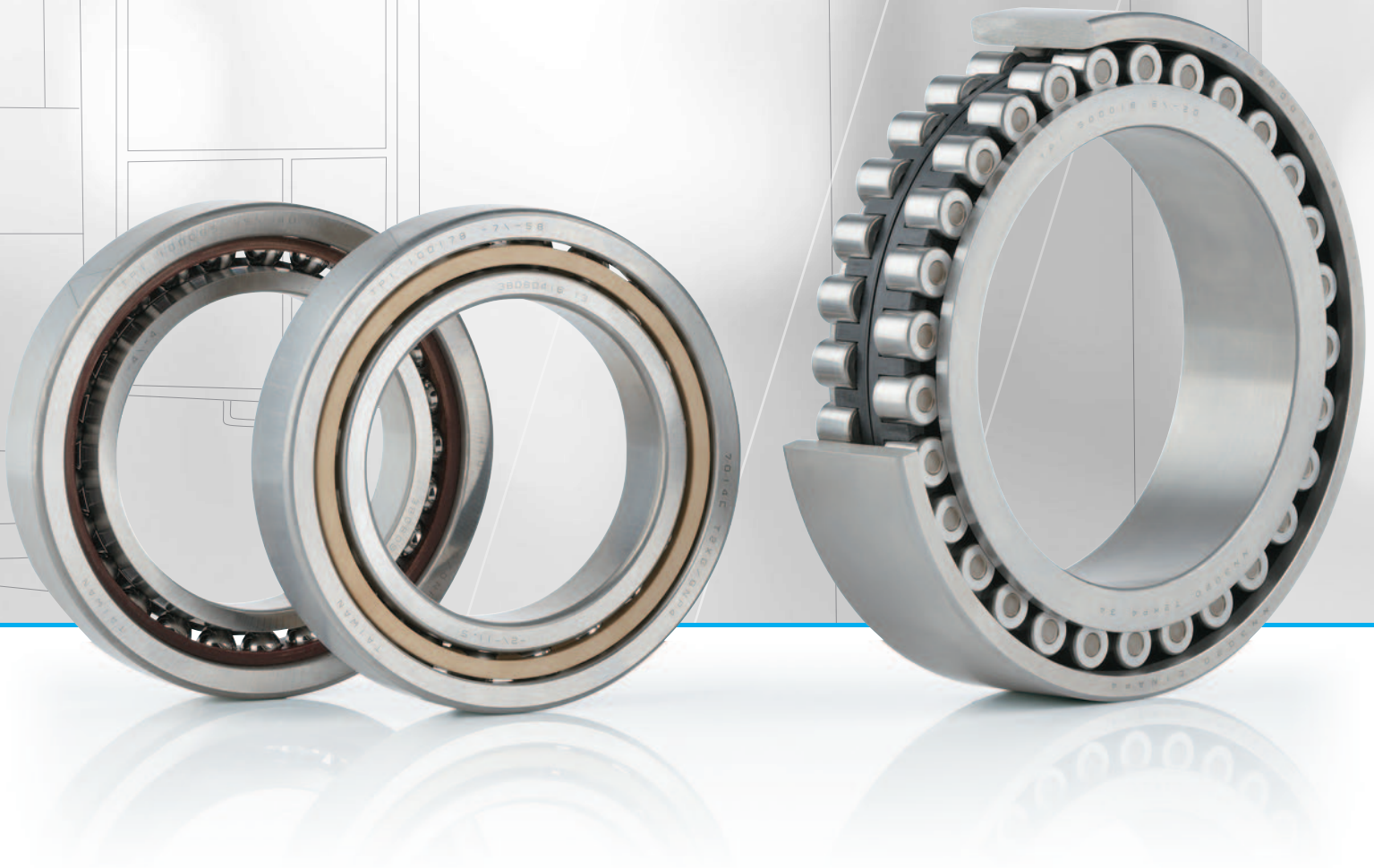
Features

1. 60° contact angle to improve bearing axial rigidity.
2. Special heat-treatment process to increase bearing service life and dimensional stabilization.
3. Standard precision P4. Special precision P4A is also available for easier matching when arrangement.
4. Light contact seal providing low torque & excellent dust-proofing effect to avoid contamination by foreign particles, and greatly improving bearings' life.

Series Type	BS series
Main Application	Ball screw support unit

Precision Bearing – Spindle and Machine Tool Use

TPI has developed angular contact ball bearings for spindle and ball screw support unit application. Through optimal preload and arrangement, angular contact ball bearings can provide significant axial rigidity.



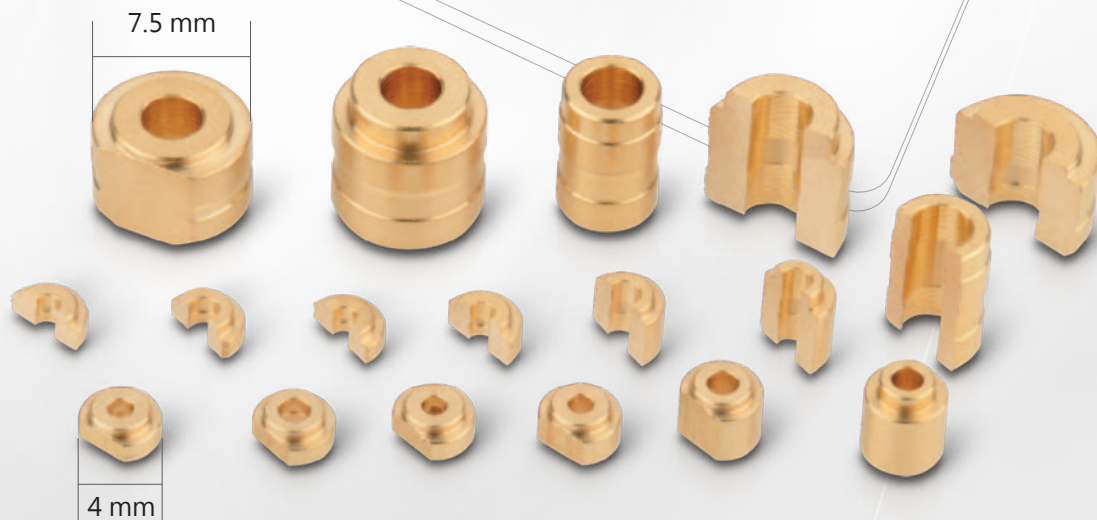
Features

1. TPI provides 15°, 18°, 25° and 30° contact angle to meet different speed and rigidity requirement.
2. High-speed, high-capacity and high-rigidity design.
3. Standard precision P4. Special precision P4X and P42 are also available for easier matching when arrangement.
4. Universally matchable arrangement for Back-to-Back, Face-to-Face and Tandem.
5. High speed version with ceramic ball to satisfy higher speed application.

Series Type	7000 series, 7200 series, 7900 series, HS series & NN series.
Main Application	BT30, BT40 and BT50 etc spindle; automation equipment.

Fluid Dynamic Bearing

Fluid dynamic bearing are with features of high speed, low noise and high reliability, speed tolerance can achieve to 20,000rpm up.



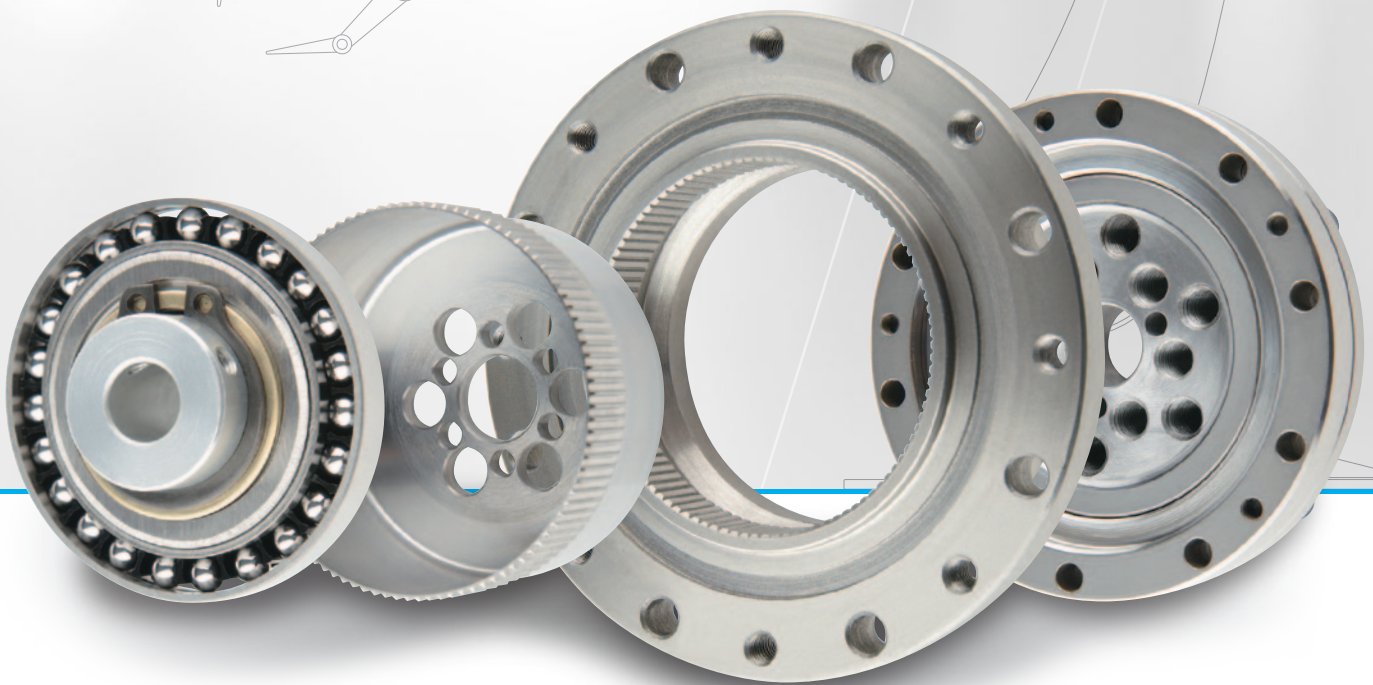
Features

1. Thin layer, high speed, low noise and high reliability to meet cooling fans' application.
2. Both standard outline and customized design are available to satisfy customer's need.
3. Special groove design generate high pressure to support shaft, enhance oil film's rigidity and prevent moving oil leakage.
4. Alternative groove direction of inner ring (CW and CCW) can be chosen.

Series Type	Inner diameter 1.2 mm, 1.5 mm, 2.0 mm & 3.0 mm
Main Application	thin fan, cooling fan, LED cooling system for automotive & scanner etc.

TPI Strainwave Drive

Strainwave drive is applying on driver and working machine to match speed and transmission torque. It's precision deceleration transfer device with function of reducing speed and increasing torque, which is also a key components of automation equipment.



Features

1. Simple mechanism with reduction ratio range from 1:30 to 1:120.
2. Low backlash, easy to control mechanism and high positioning accuracy.
3. Large amount of meshing teeth to satisfy high transmission accuracy.
4. Only four components, easy to assemble.
5. High torque, high reduction ratio, small volume and light weight.

Series Type	TCS-UT, TSH-NST, TSH-HUT, TSH-HST & TSH-SUT
Main Application	Robots, multi-axis robot arms, precision machinery & speed reduction mechanism etc.

TUNG PEI INDUSTRIAL CO., LTD.

Head Office

10F., No. 142, Sec 4, Zhongxiao E. Rd.,
Taipei City 106, Taiwan
TEL: +886-2-2741-7321 FAX: +886-2-2741-6623
E-mail: taipei@tpi.tw

www.tpi.tw

Taoyuan Plant

No. 600, Sec. 1, Jieshou Rd., Bade Dist.,
Taoyuan City 334, Taiwan
TEL: +886-3-361-3151 FAX: +886-3-362-8039

Chungli Plant

No. 7, Songjiang N. Rd., Zhongli Dist.,
Taoyuan City 320, Taiwan
TEL: +886-3-452-6801 FAX: +886-3-451-3046

Shanghai Plant

No. 1555, Rongle E. Rd., SongJiang Industrial Zone,
Shanghai, China
TEL: +86-21-5774-4698 FAX: +86-21-5774-4695

Indonesia Plant

Kawasan GIIC Blok AB No. 02, Kota Delta Mas,
Desa Sukamahi Cikarang Pusat, Bekasi 17530,
Jawa Barat, Indonesia
TEL: +62-21-8067-7410

