



ZHENGYANG BEARING

正扬轴承

HAINING ZHENGYANG BEARING CO.,LTD

ZYZ



始建于1994年

Founded in 1994



主要产品：加工范围外径30-350mm各类球轴承、  
圆柱及圆锥滚子轴承、机械零件

Main product: processing range : OD 30-350mm ball bearing,  
cylindrical roller bearing, taper roller bearing, machine part



员工：260

Employee: 260

工程技术人员：30

Engineer and Technical: 30



## 球轴承及滚子轴承厂区，25000平方米

Total 25,000 square meter of Ball Bearing and Roller Bearing plant



## 美国5000平方米的集设计、仓储及技术 服务于一体的办公中心

Total 5,000 square meter of Design, storage, technical and service center in USA

## 热处理、中大轴承、滚子厂区，实验室， 面积为30000平方米

Total 30,000 square meter of heat treatment, middle large bearing, bearing roller plant and laboratory



# 特瑞英集团 (中美合资)

HTAP Group



# 公司组织架构图

Company Organization

ZYZ/TCB

↓  
总经理  
General Manager

产品研发与实验室  
R&D Lab

管理总部  
Manager Center

球  
轴  
承  
部

Ball  
Bearing  
Dept.

滚  
子  
轴  
承  
部

Roller  
Bearing  
Dept.

大  
轴  
承  
部

Middle  
Bearing  
Dept.

热  
处  
理

Heat  
Treatment  
Dept.

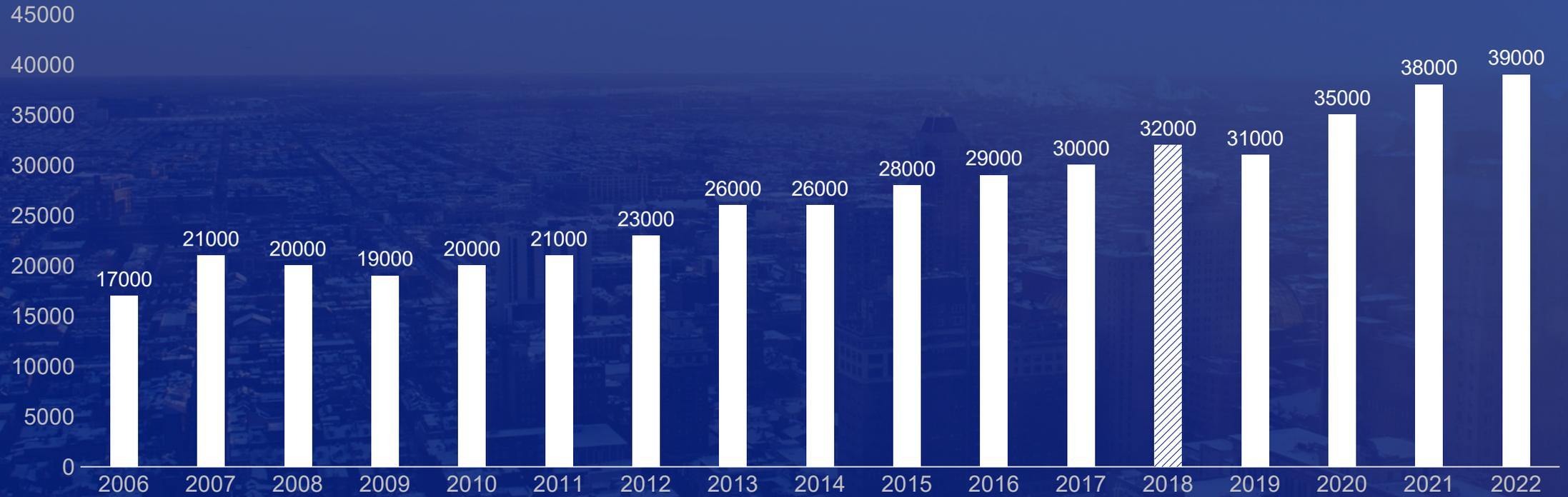
轴  
承  
滚  
子

Bearing  
Roller  
Dept.

# ZYZ销售情况

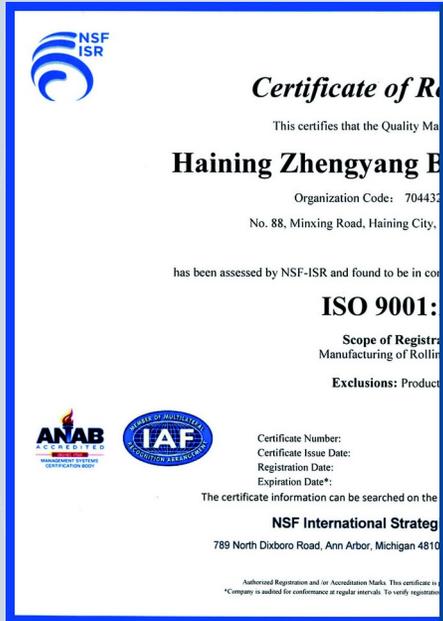
## ZYZ Sales

Thousand USD



# 证书照片

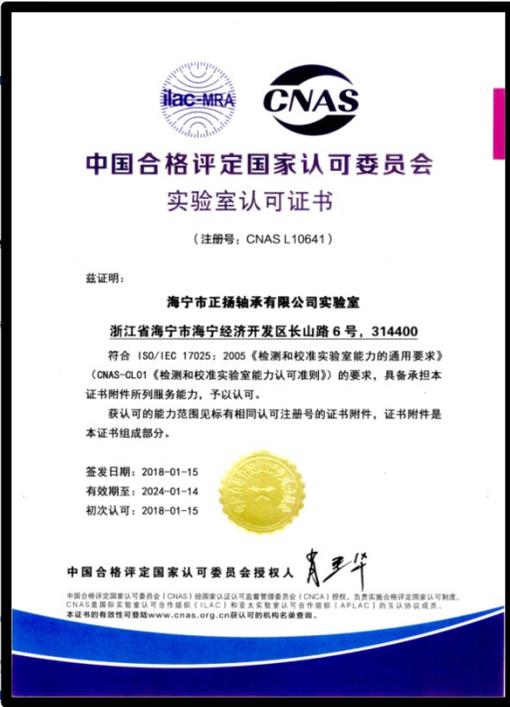
## Certificate Photo



**ISO 9001**(1999年)  
ISO 9001 (1999)



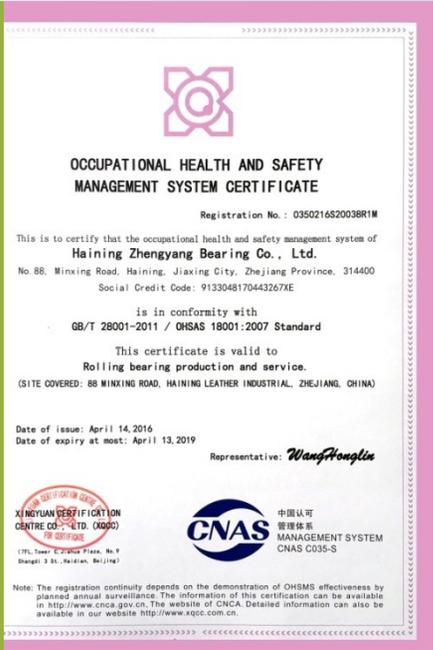
**ISO 16949**(2006年)  
ISO 16949 (2006)



**CNAS-AL01**(2017年)  
CNAS-AL01 (2017)



**TS 14001、OHSAS 18001**(2013年)  
TS14001 & OHSAS 18001 (2013)



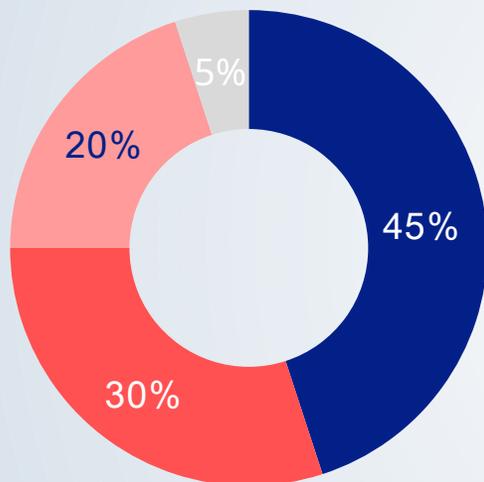
- 共创价值  
Creating shared values
- 共享过程  
Enjoy process

**成为一家专业的轴承制造商**

Be a Profession and Famous Bearing Manufacturer

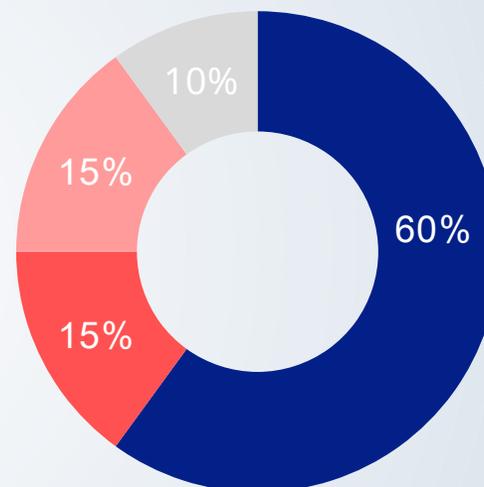


### 产品结构 Product structure



- 球轴承 Ball bearing
- 圆柱滚子轴承 Cylindrical roller bearing
- 圆锥滚子轴承 Taper roller bearing
- 其他 Others

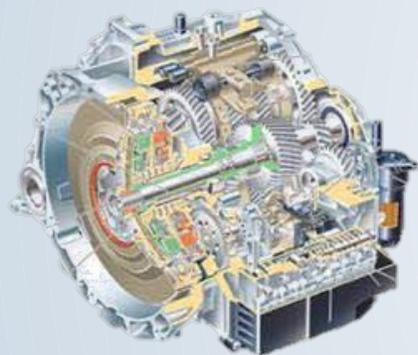
### 产品应用 Product application



- 汽车产品 Auto Parts
- 农机 Farm machinery
- 工程机械 Engineering machinery
- 电机 Electrical machine

## 应用案例

Application Cases



滚子轴承：用于伊顿富勒变速箱

Roller Bearing:Used in Eaton Fuller Engine

用量：150,000套/月

Quantity：150,000pcs/mon

## 应用案例

Application Cases



**薄壁球轴承：用于法雷奥双质量飞轮**

Thin ball Bearing:Used in Valeo DMF

**用量：150,000套/月**

Quantity：150,000pcs/mon

## 应用案例

Application Cases

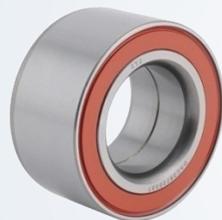


**特殊球轴承（4片密封件）：用于吉利汽车传动轴**  
Special Ball Bearing ( Four Seals ) :Used in Geely car  
transmission shaft

**用量：200,000套/月**  
Quantity : 200,000pcs/mon

## 应用案例

Application Cases



双列球轴承：用于玉柴汽车风冷系统

Double Roller Ball Bearing:Used in Yucai air cooling system

用量：5000套/月

Quantity：5000pcs/mon

## 应用案例

Application Cases



**双列球轴承(40BG39DLA)：用于汽车电磁离合器**

Double Row Ball Bearing ( 40BG39DLA ) :Used in automobile electromagnetic clutch ( Provide to Licos , final used in Volvo.300,000Km Test Passed. )

**用量：10000套小批量已出货**

Quantity : 10000pcs small lot

## 应用案例

Application Cases



**复合轴承：用于客车电磁离合器**

Composite Bearing:Used in BUS electromagnetic clutch

**用量：5000套/月**

Quantity : 5000pcs/mon

## 应用案例

Application Cases

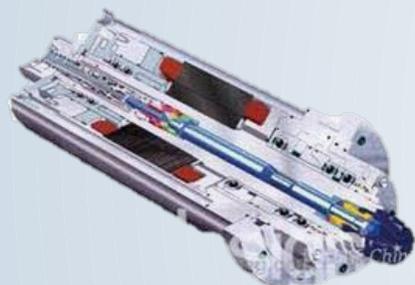


**衬套：用于菲亚特汽车发动机**  
BUSH:Used in Fiat C635 Engine

**用量：200,000套/月**  
Quantity : 200,00pcs/mon

## 应用案例

Application Cases



机床主轴

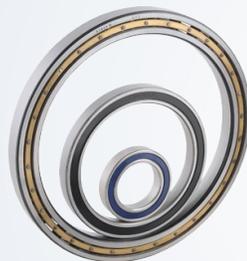
Machine tool Spindle

用量：10,000套/月

Quantity：10,000pcs/mon

## 应用案例

Application Cases

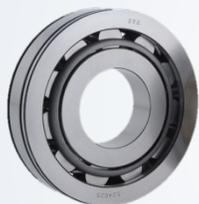


施乐复印机  
Xerox Copiers

用量：5000套/月  
Quantity：5000pcs/mon

## 应用案例

Application Cases



风力发电机  
Wind turbine

用量：5000套/月  
Quantity：5000pcs/mon

## 应用案例

Application Cases



机器人手

Robot Hand

用量：20,000套/月

Quantity：20,000pcs/mon

## 应用案例

Application Cases



工程机械

Engineering Machinery

用量：2000套/月

Quantity：2000pcs/mon



## 产品设计与开发

Product Design and Development

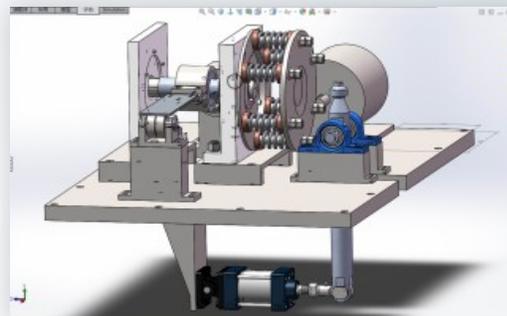
### 01 产品设计软件 / Product Design Software

产品设计软件采用与河南科技大学联合开发的优化设计软件V3.0



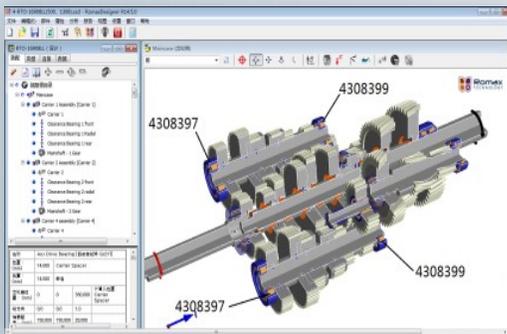
### 02 工艺、工装、设备等设计 / Process, Tooling, Facility Design

采用CAXA一级SOLID WORKS软件



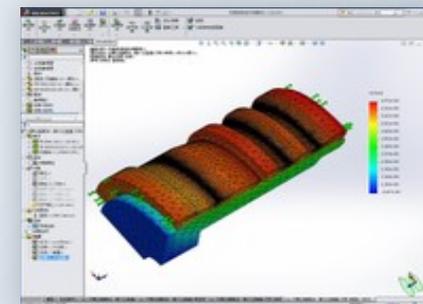
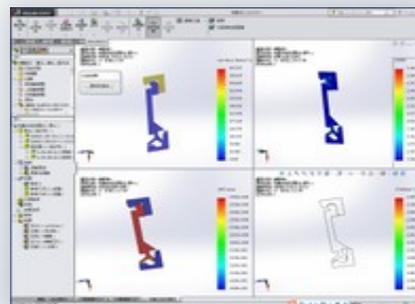
### 03 轴承动态建模分析 / Bearing Dynamic Modeling Analysis

与美国NOVA/TCB合作采用ROMAX软件为产品应用进行模拟动态设计与分析



### 04 有限元分析 / Process, Tooling, Facility Design

应用SIMULATION有限元分析软件，辅助产品设计与分析





## 研发团队

Development Team

### 01 ZYZ团队 / ZYZ Team



### 02 ZYZ/TCB美国团队 / ZYZ/TCB USA Team



### 03 外聘专家顾问 / Outside Expert Consultant

材料工程师 Material engineer

轴承摩擦学博士 Bearing tribology doctor

轴承设计专家 Bearing design expert

金相分析专家 Metallographical analysis expert



## 产品设计与开发

Product Design and Development

- 设计验证：按照客户要求对产品进行各种寿命，温升漏脂试验，确保产品满足可靠要求
- Design Validation : To conduct endurance testing or Temperature rising & grease leakage testing as per customer requirements, so as to ensure the products reliability



温升漏脂试验机

Temperature Rising & Grease  
Leakage Testing



轴承寿命试验机

Bearing Endurance Testing Machine





检测与试验

Testing and Experiment



径向游隙检测  
Radial Clearance Tester



波纹仪显示  
Waveness Analyzer



3D成像  
3D imaging



三坐标测量仪  
CMM



英国进口泰勒仪  
British Taylor Profilometer



圆度仪  
Roundness instrument



万能测长仪  
Universal length measuring instrument



## 检测与试验

Testing and Experiment



精密测量

Precision measurement



金相理化

Metallurgical physical  
chemical



实验室测量

Laboratory  
measurement



清洁度

Cleanliness Tester



## 热处理

Heat Treatment

- 热处理：热处理利用带气氛保护的连续网带炉，现场控制遵照CQI-9标准体制，使过程更可靠
- Heat Treatment：In-house Heat Treatment process utilize the continuous belt furnace with protection atmosphere, the whole process is in compliance with CQI-9 system strictly, which make process control more reliable.
- 回火：5小时，更可靠，被SNR接受
- Temper：5 hours， more reliable .Approval by SNR.



CQI-9  
CQI-9



热处理  
Heat Treatment



 **连续磨加工线**  
Continuous Grinding Lines

- 磨加工：具有意大利马尔波斯主动测量，日本法纳克，三菱控制系统、THK滚珠丝杠等配套的自动化连线生产，保证了产品的精度与一致性和稳定性
- Grinding : We introduce continuous lines for grinding with system of Italy Marposs Active Measuring Instrument, Japan FANUC, Mitsubishi control system, THK ball screw shaft, this ensure product accuracy and consistency & stability.



磨加工连线  
Continuous Grinding Lines



内滚道主动测量装置  
Measuring While  
Raceway Grinding



轮廓检测仪  
Profile Projector



 **总成装配**  
Finished Goods Assembly

- 装配：装配的每个过程均有一些过程严格检查
- Finished goods Assembly : Conduct strict inspections in each operation all through the whole process



球轴承装配连线  
Ball bearing Assembly



圆柱滚子轴承装配连线  
Cylindrical roller bearing Assembly



振动检验  
Vibration test



## 可靠性防错系统-球轴承装配线

Reliable Error-Proofing System - Ball Bearing Assembly Line

- 100%漏球检测
- 100% Ball Missing Detection
- 100%漏铆钉检测
- 100% Rivet Missing Detection
- 100%加脂量检测
- 100% Rivet Height Detection





## 可靠性防错系统-圆柱/圆锥滚子轴承装配线

Reliable Error-Proofing System - Cylindrical & Taper Roller Bearing Assembly Line

- 100%滚子反装检测
- 100% Roller Reversing Detection
- 100%滚子丢失检测
- 100% Roller Missing Detection
- 100%轴承宽度检测
- 100% Cone Width Detection





主要客户  
Major customers



海宁市正扬轴承有限公司 HAINING ZHENGYANG BEARING CO.,LTD



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<http://www.zyzbearing.com/>



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