

# Finework(Hunan) New Energy Technology Co., Ltd.















WIND ENERGY









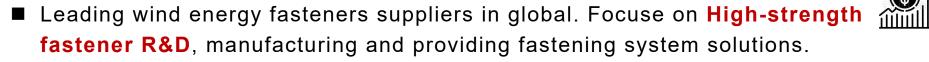


### Introduction

■ Finework Tech. was founded in 2012, located in Changde, Hunan Province, China. A listed company on Shenzhen Stock Exchange's GEM since June 2023.



No. of Employees: 2000+





Output Value: 1.8 billion CNY /Year

■ Expaned to high-end equipment manufacturing users in industrials of aerospace, oil&gas, nuclear power, construction machinery, etc to be the Second Growth Curve.



Factory Area: 200,000 m<sup>2</sup>+

# Our History

### FINEWORK

#### 2007

Our first factory was built in Shanghai.



#### 2016

The company's output value exceeded to 100 million yuan, and was listed on the New OTC Market (Beijing)



#### 2019

The company launched new products for wind power like turbine bolts, anchor components, etc..



#### 2021

The company expanded its business from wind power to aviation, aerospace and petroleum.



#### 2024

The company establishes three new subsidiaries: Yingji, Zhilingyun, and BoTe Aviation.



#### 2012

The factory was relocated to Hunan. Finework (Hunan) was founded.



#### 2018

Finework's factory expanded and modernized and standardized facilities were introduced.



#### 2020

Awarded as the single champion of PRC Ministry of Industry and Information Technology (MIIT), Hunan Top 100 Manufacturing Industry.



#### 2023

Shenzhen Stock Exchange's Growth Enterprise Market rings the bell for listing.



#### 2025

Wind Energy: Vietnam plant settle down; Wind towers & farms projects launched. Aerospace: Acquires Chengdu Guanhang subsidiary.





# **Organization Structure**

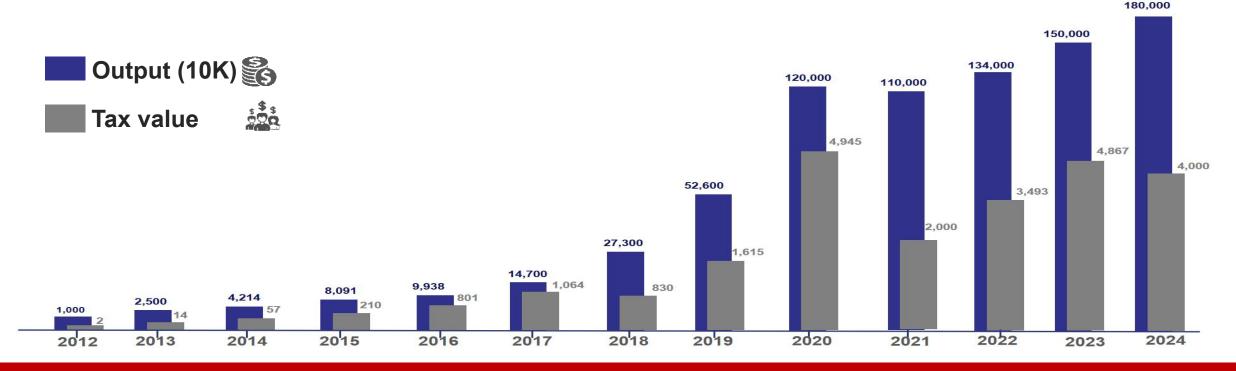


### Finework (Hunan) New Energy Technology Co., Ltd. (Headquarter)

Wind power components	Aerospace components	New energy	Overseas investment
Finework(Hunan)New Energy Technology Co.,Ltd. (Blades and Nacelle Fasteners)	Finework Bolt(Hunan)Aviation Technology Co., Ltd. (Aviation engine fasteners)	Finework Lingwo(Changde)New Energy Co., Ltd.	Finework International(Hong Kong)Investment Co., Ltd.
Finework New Energy Technology (Huangshi) Co., Ltd. (Anchor boltS)	Engine(Hunan)Aviation Technology Co., Ltd. (Precision machining parts)	Finework(Xidongting) Wind Farm Project	Finework International(Singapore)Technology Pte.,Ltd.
Finework New Energy Technology (Jilin) co., Ltd. (Anchor bolts)	Zhilingyun(Hunan) Aviation Technology Co., Ltd. (Metal seal devices)	Finework (Ningxia) Wind Farm Project	
Finework Union(Hunan) Industry Technology Co.,Ltd. (Flanges 、anchor plates and large structural components)	Suzhou Finework Aviation Technology Co., Ltd. (Sheet metal welding component)		
Finework Nut(Hunan)Fastener Manufacturng Co., Ltd. (Nuts)	Chengdu Guanhang Technology Co., Ltd. (Precision parts for oil and aviation Industries)	### T. P. M.	REAL PLAN BEARING THE PROPERTY OF THE PROPERTY
Vietnam Precision Craft Component Techology Co.,Ltd. (Full range of fasteners for Wind Energy)	Finework-Heggemann Aerospace Technology Co., Ltd. (Sino-German JV, In Prep) (Specializing in wing structures, landing gear	SERIT RESISTANCE SINCE YOUR Finewark Not World furbine outs	factories, by components, mortal and device mort
Finework New Energy Equipment (Liuzhou) Co., Ltd.	components, and wing assemblies)	Tribute still	and are it is a disperse and a service of the servi
(Wind turbine towers)	Finework Saudi Arabia(under construction) (Fasteners&Precision parts for oil and aviation	第4 Ta F. R. A. Mark Turkhise Finework Jillin Wood turkhise Finework Jillin Wood turkhise Finework Jillin Wood turkhise Finework Ausagabi-Winditurubise Finework Ausagabi-Winditurubise	WILCOO WILCOO
Finework(Changde) Equipment Manufacturing Co., Ltd. (Wind turbine towers)	Industries)	account poil	等等。从近日以 加州 如 如 新 新 新 新 新 新 新 新 新 新 新 新 新
Finework(Huaihua) wind turbine tower barrel project		tantonous man ana, retorem  alle Nati-April, En Bellet  alle Nati-April, En Bellet  and September (1985)  and proposed to the second of the se	9 th Standard 100 Famous Chapte, World farm project
Finework (Ningxia) wind turbine anchor bolt project		#6 V 3-2 R d d fill Pleases Righthy: Wind furthine teach barried  **The Company of the Company	B W Tall State 20 To Company C

# **Development Data**





A 12-Year Leap: Scaling from RMB 1 Million Startup Capital to RMB 1.8 Billion in Output Value.



36 items Patent for Invention

**37**items Utility Model Patent

24 items
Software Authorships

8items Leading Participation Indeveloping



Global market share of embedded screw sleeve of wind turbine blade No.1

National Intelligent Manufacturing Pilot Demonstration Enterprise by MIIT

### Wind Energy—Overview and Product Portfolio





 Qualified by LM and stepped into wind energy industry in 2012 as a global blade bushing supplier

 Expanded product portfolio from blade connections to full range of wind turbine fasteners

 The biggest wind energy fasteners supplier with a global market coverage (#1 since Year 2020)

 Customer portfolio enlarged from wind turbine manufacturers, OEM players, EPC contractors to utility operators

Wind tower manufactruing and wind farm project set up in 2025

Annual output: 150,000 Metric Tons

Factory Area: 180,000m²

Full in-house manufacturing



### Wind Energy—Customer Portfolio



### Global















### China































中国电建 POWERCHINA



中下核(P)CGN











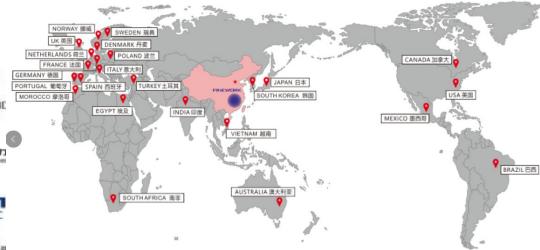




中国长江三峡集团有限公司









### FINEWORK

### **Automatic manufacturing lines for bushing**

#### Material loading system

Automatically loading material, adjust the supply speed of loading materials, voice and light warning for workpieces shortage

#### • Forging automatic sysetm

Composed of robot, medium frequency machines and punching machines. One robot controls 6 medium frequency heating stations

#### • Drilling flexible manufacturing system

Composed of drilling machines, robots and loading system. Loading and unloading worpieces by robots. Pecise drilling holes, pre-warning during manufacturing process

#### • Machining flexible manufacturing system

One robot and 4 NC lathes collaborative turning operation, clamping and loading workpieces automatically

#### Automatic cleaning system

Automatically grasp workpiece with truss-type manipulator. Soak and dry the cleaning grooves automatively

#### • MT automatic system

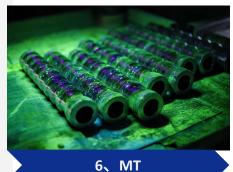
Automatically loading workpieces, control the feeding speed according to the operation of the magnetic particle detection lines. warning for material shortage automatically

#### Automatic zinc spraying system

Automatic loading the workpieces, controll spray gun by advanced sensors and servo motors. Workpieces are driven by the frequency conversion motor to rotate at a constant speed to ensure the spraying quality

















2. Forging



5. Automatic Cleaning



8、AGV Trasit



### FINEWORK

#### **Automatic manufacturing lines for stud bolts**

- Automatic production lines for cutting and chamferring Two sawing machines with a double-head chamfering machine are closely connected to cutting machine as a automatic line
- Automatic production lines for boring and extruding Six boring machines are connected with one extrduing machine. Save transit time and manpower cost
- Automatic production lines for turning
  Different processes are connected through the product
  conveyor chains continuously with the self-developed
  integrated control system
- Marking Threading automatic lines
   Marking, threading and visual checking are closely connected to realize the automatically operation
- Threadling- cleaning- MT automatic system
  Threading proccess is connected to the cleaning machines and automatically transit to the MT process. After the MT is qualified, move the material rack with robot. By remote monitoring











4、Turning



5. Marking



6. Threading



7、Cleaning



8, NDT



9. Coating



10、Packing



### FINEWORK

### **Automatic manufacturing lines for Hex-bolts**

- Turning and testing automatic sysetm+Hot forging automatic Aumatic production for cutting, rough turning and forging process with online testing
- · In-house design and development of integrated automatic control system to get online switch of process parameters and pre-warning of manufacturing process done

#### • Threadling- cleaning- MT automatic system

Self- designed and developed an integrated control system to achieve automated online production of hex bolt threading, cleaning, and NDT. Reduce the transit time and man power cost.

#### Automatic coating line

- Realize the cooperative operation mode of shelf, drive system, palletizing tooling and palletizing cars
- Online process parameters switch and automaticpre-warning in manufacturing process

#### Automatic packing line

Robots equipped with specialized fixtures to replace manual handling, the workload on personnel has been significantly reduced. Work efficiency improved by 160%. The integration of vision systems, counting systems, weight-bearing systems, and automatic label printing and affixing devices has effectively mitigated issues such as material mixing and inaccurate quantities that are often associated with manual operations.

















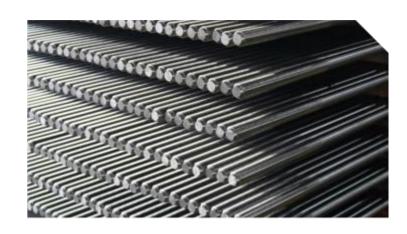


5. Cleaning



5. Packing







### **Anchor Bolt**

- Annual capacity: 50,000 metric tons
- Max. in size: M72
- Max. in length: 12meters
- Surface treatment: HDG & others





### Flanges (Anchor Plates)

Annual capacity: 20,000 tons

Maximum Diameter: 8 meters

Surface treatment: Zinc Thermal Spraying and others









### FINEWORK

### **New setup in 2025-Wind Towers**

- Manufacruting base: Changde City, Huaihua City, Liuzhou City
- Capcity:
- a) Steel tower: 250 sets
- b) Concrete tower: 100sets
- Highlights:
- a. Welded steel construction
- b. Leading manufacturing process
- c. Experienced engineering





**Steel Tower** 





**Concrete Tower** 





### **New setup in 2025-Wind Farms**

Location:

a) Hunan Changdeb) Ning Xia Wuzhong

Capacity: 1.4GW

Investment: 10 Billion CNY

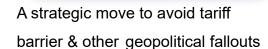


### Wind Eenrgy—New Production in Vietnam



### Why build a factory in Vietnam?

### Tariff Barrier





### Free trade

Free trade agreement with USA & EU

Normally 5% tariff

### COST



Competitive labor & utility costs as an emerging manufacturing hub in Asia

### Globalization 💬

Better Serve customer globally

### Wind Eenrgy—New Production in Vietnam







- Location: Nam Dinh Vu Industrial Park, Haiphong City, Vietnam.
- Temperature: Monthly average temperature is 20~23 °C.

Location	Distance
Hai Phong Train Station	15 km
Deepwater Port	15 km
Highway	7 km
Airport	12 km
Hanoi city center	105 km



# Wind Eenrgy—New Production in Vietnam



Category	Construction	Trial Manufacturing
Insert/ Stud	Sep./2023- Jul./2024	In trail manufacturing
Nacelle & Tower Bolt	Sep./2023- Sep./2024	In trail manufacturing
Anchor cage	Sep./2023- Oct./2024	TBD
Flange(TBD)	Sep./2023- Mar./2025	TBD

### **Full In-house Manufacturing Process**

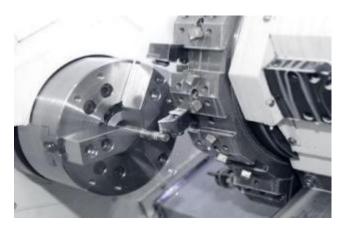




**Heat Treatment** 

Production lines: 10+

Capacity: 100,000 metric tons/Year



**Machining** 

CNC #: 500 units+ Capacity: 10 Million pieces



**HT—Magnetic Induction** 

Production lines: 5

Capacity: 50,000 metric tons/Year



**Thread Rolling** 

Production lines: 10+

Capacity: 100,000 metric tons/Year Max. in Size: M72



**Hot Forging** 

Production lines- 10+

Capacity: 100,000 metric tons/Year



Coating

Production lines: 8+

Capacity: 100,000 metric tons/Year

Coatings available: GEOMET ,MAGNI , DELTA-MKS ,ZINTEK , HDG, Zinc THERMAL SPRAYING

# Non-destructive Testing



- PT, UT, MT and other non-destructive testing capabilities
- PT & MT level 3 qualification certificates.







### **UT Level III certificate**







### PT Level III certificate



### **Laboratory Testing - CNAS Accredited Lab**















### Laboratory Testing - CNAS Accredited Lab







**Torque** 



**Durability Testing** 



Room Temperature Stretching



**Fatigue Testing** 



High Temperature Stretching





### **Dimension Measurement**





Coordinate **Measuring Machine** 

#### Model

CromaClassic8106/ 800\*1000\*600

#### **Monitoring Project**

**Precision Size** Measurement

### **Accuracy**

0.0001mm



**Digital Altimeter** 

#### Model

Mitutoyo (Japan) LH-60

### **Monitoring Project**

**Precision Height** Measurement

### Accuracy

0.0001m

m



**CNC Projector** 

#### Model

RPI VMS-4030G

### **Monitoring Project**

**Precision Projection** Measurement

#### Accuracy 0.001mm

0.005mm



**Profilometer** 

#### Model

Wilson Precision MMD-HPG150TSL

### **Monitoring Project**

**Precision Contour** Measurement

### Accuracy

# **Roundness Tester**

#### Model

Mahr Group. MMQ44

#### **Monitoring Project**

**Precision Roundness** Measurement

### Accuracy

0.0001m

m



**Gear Testing Center** 

### Model

PREC30

#### **Monitoring Project**

**Precision Gear** Measurement

### Top to bottom distance

15-500

### **Qualification and Certificates**





ISO 14001



**ISO 16949** 



**ISO 9001** 



IATF 16949



GL



**CNAS(ISO/IEC 17025)** 







NADCAP(MT&PT)



**AS9100D** 





API-20F

**TPG-Heat Treating** 

**TPG-NDT** 

API-20E

### Outlook



Strive for 30 years to build tens of billions of fastening-tech industry

--dedicated to become the Global Leading High-strength Fastening System Provider

### 1.5 billion

No.1 in Global Wind-power Rank Top 10 in Global Aerospace Fastener Manufacturing and Engines High-strength Fastener Manufacturing

### 10 billion

Rank No.5 in Global Highstrength Fastener Manufacturing

2023

2030

3 billion

2040



Wind Power 4 billion



Aerospace 3 billion



Petroleum 1 billion



Gas Turbine

1 billion



Ship or Vessel 500 million



Engineering Machinery 500 million

(in RMB)



# Thank you!









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