

Products and Services

Reewind

Special foundation solution and Anchor bolt production

Foundation health inspection and reinforcement solution

Special wind tower solution

waterproof and smart tensioning equipment distributor



CONTENT









About Reewind

A subsidiary of WindMagics, Reewind provides various engineering and technological services and products for the Wind energy industry. With an International Quality Certification of ISO9001, Reewind has become one of the prominent service providers of turbine foundation management in Asia.

Through innovation and introduction of technology, reewind has filled many gaps in China's domestic wind power engineering technology. It developed the first hollow replaceable anchor bolt foundation, the first large-diameter steel segmented tower, and the first pre-mixed tower. It also became the first company to provide the solutions covering the entire lifecycle of wind turbine foundation.

Reewind helped draft five industry guidelines and reviewed two others. The company has obtained five invention patents and 20 utility model patents. It has so far delivered more than 1500 special anchor foundations solutions. It has also delivered health management solutions for more than 500wind turbines.

1500+

Special anchor bolt foundation

500+

Foundation Health monitoring

COMPANY PROFILE



Our Qualification





国家电投集团江西电力有限公司文件

国家电报江西大电 [2019] 24号

关于表彰江西公司 2019 年度科技奖励 获奖项目的决定

/所属各单位:

表本单位控制任何公司各种帮助业是事业、任意保护保险等

along at the lateral and an artist the lateral strains of the party. As he wires below to

亚克式人员。各族实现在奖金分配表数征数公司入资路

"3551 Optics Valley" Certification

> Quality Management System Certification

High-tech enterprise certification

Construction Enterprise Qualification Certification Technology Progress Award





Service 1 Special foundation solution and Anchor bolt production



Technical patent on replaceable anchor bolt

- 1st patented protection design in the world. (Cooperation with SPIC)
- Replaceable, maintainable that reduces overall cost

Design optimization for general or anchor foundation

- Provide secured and economic solution solution
- Save engineering costs

Anchor equipment production and supply

- Provide a full range of anchor assembly products
- Annual production capacity of over 10,000 tons

Foundation construction instruction

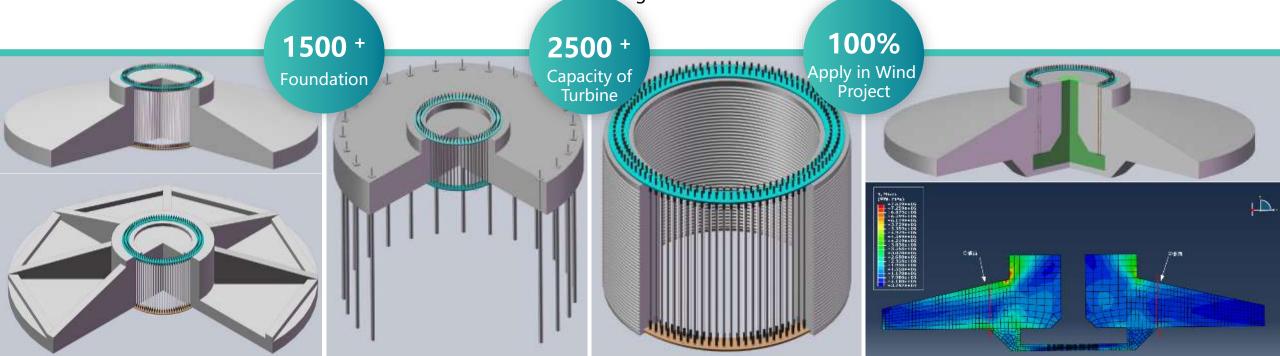
On-site monitoring and quality control

Industries standard guideline

Guideline- "Anchor bolt production and installation guideline"

Software

Hollow foundation and anchor assembly calculation software



Service 2 Foundation health inspection and reinforcement solution



Regular inspection service

 Scada data analysis, structure review, structure monitoring and feature inspection

Special damage detection service

 Core drilling, test, visit, radar, demolition, theory and HMS analysis.

Foundation repair and reinforcement

• Surface repairing, waterproofing, grouting reinforcement and other customized technical solutions

Foundation and tower operation performance monitoring

• Foundation tilt, foundation and tower relative displacement - horizontal and vertical, tower vibration and frequency.

Industry standard guideline

 Foundation inspection, monitoring and reinforcement process (compiling)



Service 3 Special wind tower solution



Concrete tower design

- Internal and external prestress design proposal, preconstructed and grouting design
- Mold design, equipment production, transportation and installation

Thin-wall concrete tower design

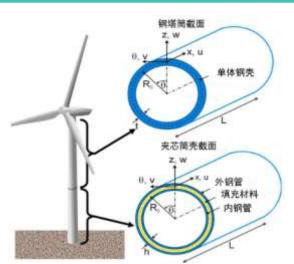
- Complex thin-wall cylinder structure, optimized molds and reinforcement
- Standard complex structure production
- Patented technology

Steel structure segmented tower design

- The first scaled steel structure segmented tower design
- Construction, transportation and installation service

Industry standard guidelines

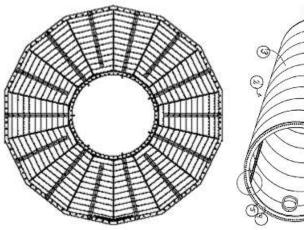
- Standard "Wind Tower design guideline"
- Standard " Wind tower construction guideline"











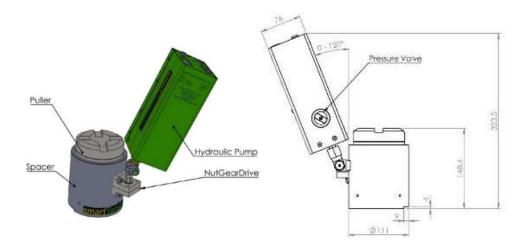
Service 4 Special waterproof and smart tensioning equipment distributor



Tensioning Inspection and Smart Tensioning equipment distributor

We conduct tensioning inspection and distribute Smart Tensioning equipment – a leading product in the industry.

The device is portable and produce tensioning reports.



Waterproof construction and high performance of waterproof materials distributor

Triflex Towersafe is a waterproofing system specially developed for wind turbine and has been successfully applied in the wind power industry. Over 15 years, it is the basic waterproof product designated by European host manufacturers such as Enercon and Vestas. The material is superior to the traditional polyurethane waterproof material, and ensures the permanent elasticity and resistance of the waterproof system. With dynamic and long-term blister resistance and UV-resistant radiation, the standard operating conditions are expected to last for 25 years.



瑞风能源致力于Triflex Towersafe 在中国风电应用的推广

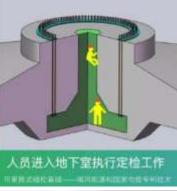
为新能源行业提供一流的工程技术服务

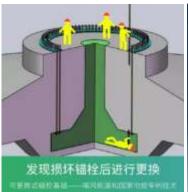
Core Product

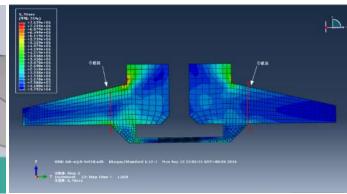


Replaceable hollow anchor bolt foundation

Easy to replace, repair and recycle









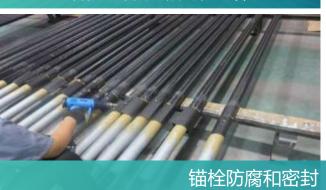




Anchor bolts for tower foundation

Various anchor bolt components and related products









Core Product



Foundation Health Monitoring System HMS

Combining the basic data model, theory and test data model of a wind turbine with the actual detection and monitoring results of the turbine foundation, we provide a basic quality analysis.

HMS solutions: Data-based basic quality analysis, damage validation based on inspection and monitoring data, and repair reinforcement solutions to ensure continuous operation of the foundation.

02 Foundation basic data assessment

-The size and reinforcement performance of foundation, the record of waterproofing, strength and reinforcement of foundation

01 Foundation database model

To estimate the damage level of foundation through the theory analysis, experiment and the case study

03 Non-destructive and specialized testing

General inspection, feature inspection and specific structure inspection for foundation structure

04 Data Monitoring

The vibration performance of turbine, Foundation inclination, turbine displacement

᠍ 风机基础定期质量监督报告

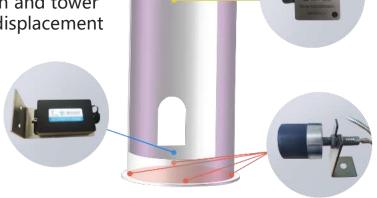
♥ 风机基础健康度评级

Foundation and tower monitoring equipment

A device that comprehensively monitor foundation and tower vibration, tilt and displacement

Inclinometer

A device that detect basic ring level and tower verticality



Vibration Inspection

We analyze damage level of the tower based on the standard data and the testing data

Displacement Inspection

We analyze real-time dynamic displacement between the tower and the foundation.



RW HMS



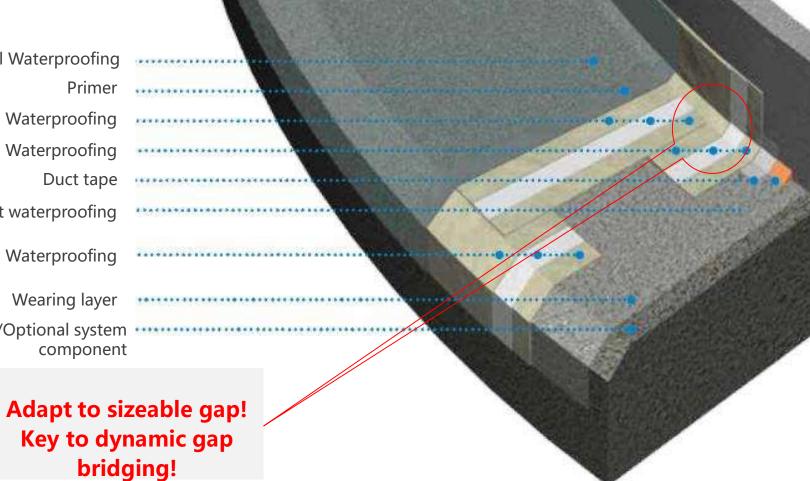


Qualified Waterproofing Comparison

总述	Triflex Towersafe (PMMA)	聚氨酯类产品 (UR)
Root penetration resistant	Yes	No
Displacement in joint property in atmosphere temperature	At lease 10mm-50mm	No mention
Painting Effectiveness	30 min intervals for each layer, it takes 5 hours to finish one turbine	24hour intervals for each layer , it takes 2-3 days to finish one turbine
Sediment resistant and anti-hydrolysis feature	Yes	No
UV or inferred relisten in long-term	Yes	No
Warranty period	6 years in general	No mention
General situation: -30-+90°C、no external damage、no corrosive liquid、normal performance of		

displacement in joint area

Detail Waterproofing Primer Waterproofing Waterproofing Duct tape Joint waterproofing Waterproofing Wearing layer Other/Optional system component



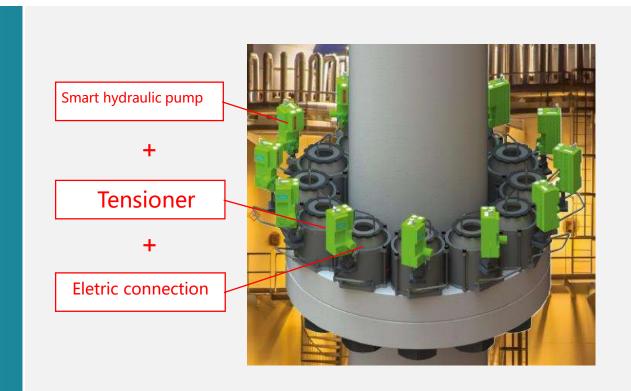
Core Produce





Smart Tensioning device

- CE recognition, import from Germany, small scale, light weight, only 1/5 of traditional hydraulic;
- Multi control, automatic rotation of nut, high degree of automation
- Tension reach level 8.8 10.9 12.9,
 M8-M150 anchor bolt;
- The residual preload of the bolt can be predicted, and the tension report is highly traceable;
- Meter capacity 36V,appropriate to connect the external source or energy storage









Research and development



Our R& D team focuses on wind power infrastructure and tower research for more than 10 years. We work with Hohai University and Wuhan University of Technology Equipment and conduct product trial and prototype testing in laboratory

Research



Study on reinforced concrete tower with prestressed thin-walled shell

Development of high-strength grout for wind turbine foundation

damage reinforcement

Study on Durability of Fan Foundation Damage

Development of closed structure grouting density testing equipment



Research result

- 5 industry standard guidelines
- -Hollow replaceable anchor bolt research project (second prize)
- -5 invention patents and several utility model patents
- -Research on Force and Damage of Fan Foundation Ring Foundation
- -Structural calculation software





Our Profile

- -Anchor foundation design and component supply for over 1500 turbines
- -Hollow replaceable foundation design for over 100 turbines
- -Foundation health monitoring and data analysis for over 500 turbines
- -Inspection and analysis for over 300 turbines
- -Foundation reinforcement and reparation for over 150 Turbines
- -Foundation waterproof treatment for over 200 turbines
- -20 sets of special tensioning equipment
- -Segmented steel structure tower design
- -Cable-stayed steel structure tower design
- -Thin-walled shell concrete structure tower design (Both in development)









Our Partners













Our Clients























Thanks!

Reewind is looking forward to becoming your long-term trusted partner in realizing your commitment to customers!

Reewind — Engineering and technology service provider for wind turbines



联系 张艳江 15811013285



邮箱 yanjiang_zhang@reewind.com.cn



网址 www.reewind.com.cn