



COMPANY BROCHURE

企业宣传手册

威力传动

WEILI 威力传动

股票代码：300904

章节概览



—
威力传动
视一切挑战为机遇
致力于打造成为
全球最具竞争力的精密传动解决方案提供商

CONTENTS

目录

01

企业简介

Company Profile

01 / 02

02

发展历程

Development History

03 / 04

03

产品概览

Product Overview

05 / 12

04

全球市场&全球服务

Global Markets & Global Services

13 / 16

05

企业实力

Company Strength

17 / 20

06

厂区介绍

Factory Introduction

21 / 26

07

智慧园区

Smart park

27 / 28

08

绿色工厂

Smart Park

29 / 32

01 企业简介

Company Profile

成立于

2003 年

在职员工

2000+

研发、质量技术人员占比

20%

威力集团创立于2003年，总部位于中国宁夏银川，拥有员工超2000名，是全球精密传动技术领域领先的解决方案提供商，产品与服务覆盖风力发电机主齿轮箱与偏航变桨驱动、新能源汽车永磁电机与动力总成、工程机械减速器等业务领域。集团下属银川威力传动技术有限公司、银川威马电机有限责任公司、上海威郢新能源有限责任公司等子公司，持续践行“推动全球精密传动技术变革”的企业使命。威力传动2023年登陆深交所创业板，股票代码：300904。

威力集团秉持“生存靠质量、发展靠管理、腾飞靠创新”的发展理念，在银川和上海两地搭建200余人的跨学科研发系统，累计获得200余项核心技术专利，主导及参与制定近20项国家标准。

威力集团在德国汉堡、印度金奈等地设立海外技术服务中心，业务辐射亚洲、欧洲、中东等核心市场。

威力集团始终将社会责任深植企业基因，在脱贫攻坚、乡村振兴、抗灾救险、捐资助学、校企合作等领域倾力投入，以实际行动践行社会责任。获评“全国文明单位”，实现商业价值与社会责任的深度融合。

面向新时代发展机遇，威力集团将加速推进数字化转型与全球化市场拓展，致力于成为全球最具竞争力的精密传动解决方案领导者，为新能源产业变革与高端装备升级贡献中国智慧。

Founded in 2003 and headquartered in Yinchuan, Ningxia, China, Weili Group boasts over 2,000 employees and stands as a leading solution provider in the global precision transmission technology sector. Its products and services span various business areas, including wind turbine main gearboxes and yaw/pitch drives, permanent magnet motors and powertrains for new energy vehicles, and construction machinery reducers. The Group comprises subsidiaries such as Yinchuan Weili Transmission Technology Co., Ltd., Yinchuan Weima Motor Co., Ltd., and Shanghai Weiying New Energy Co., Ltd., all of which continuously fulfill the corporate mission of "driving global precision transmission technology transformation." In 2023, Weili Transmission made its debut on the ChiNext board of the Shenzhen Stock Exchange, with the stock code 300904.

Upholding the philosophy that "quality ensures survival, management drives development, and innovation fuels growth," Weili Group has established an interdisciplinary R&D system featuring over 200 experts across Yinchuan and Shanghai. The Group holds more than 200 core technology patents and has led or participated in the formulation of nearly 20 national standards.

With overseas technical service centers in Hamburg, Germany, and Chennai, India, Weili's business footprint now extends across core markets in Asia, Europe, and the Middle East.

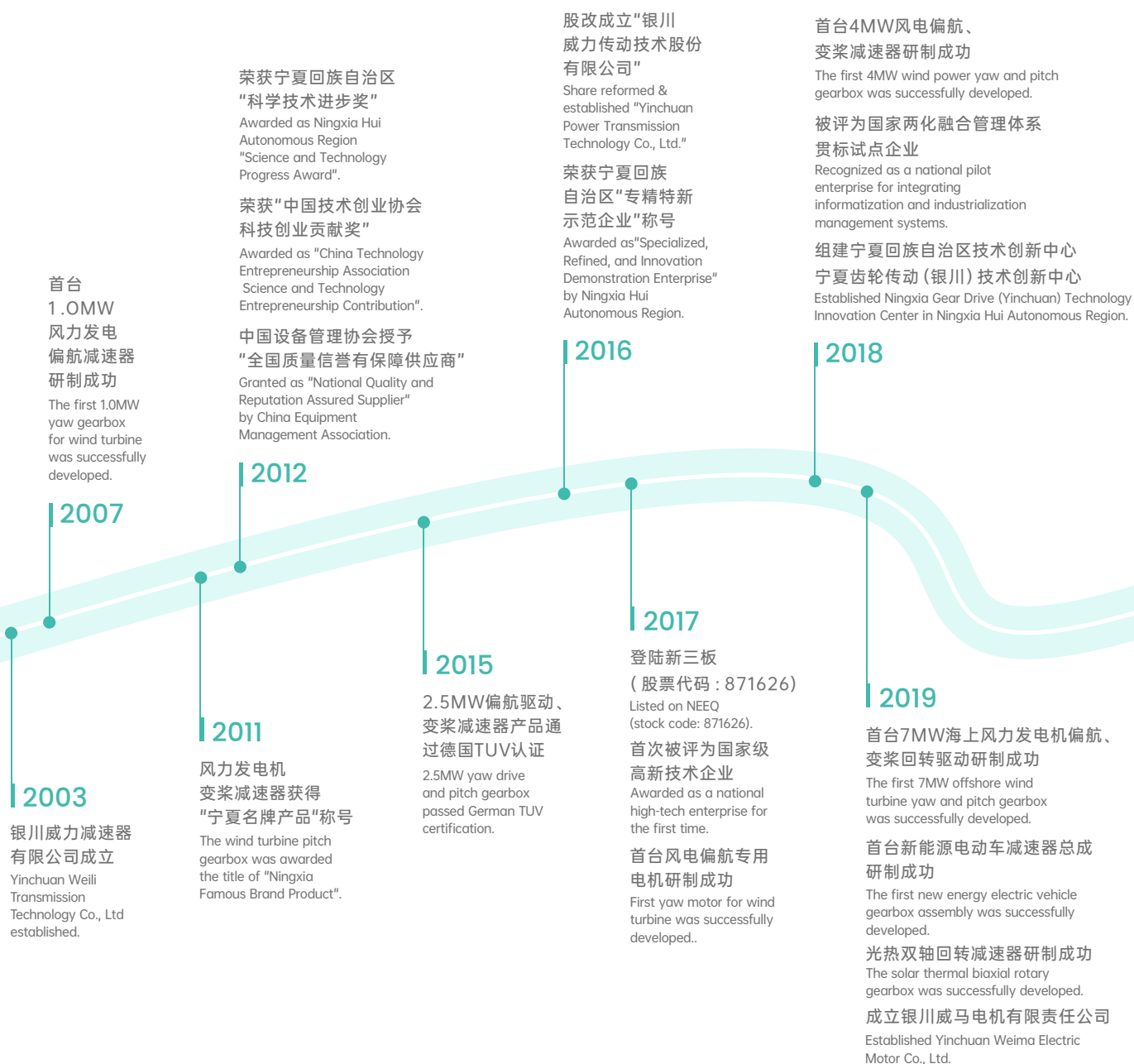
Integrating social responsibility into its corporate DNA, Weili Group has made significant contributions to poverty alleviation, rural revitalization, disaster relief, educational philanthropy, and industry-academia collaboration. Recognized as a "National Model Company," Weili achieves a deep synergy between commercial value and social responsibility.

Facing the opportunities of the new era, Weili Group is accelerating its digital transformation and global expansion. We are committed to becoming the world's most competitive leader in precision transmission solutions, contributing Chinese expertise to the transformation of the new energy industry and the upgrading of high-end equipment.



02 发展历程

Development History



首台12.5MW风电偏航、变桨减速器研制成功

The first 12.5MW wind power yaw and pitch gearbox was successfully developed.

锥蜗杆回转减速器研制成功

The conical worm rotary gearbox was successfully developed.

荣获“宁夏回族自治区行业领先示范企业”

“宁夏回族自治区首批创新型示范企业”等荣誉称号

Awarded the titles of "Ningxia Hui Autonomous Region Industry Leading Demonstration Enterprise" and "Ningxia Hui Autonomous Region First Batch of Innovative Demonstration Enterprises".

“精密减速器研发生产项目”开工奠基

The "Precision Gearbox R&D and Production Project" commenced.

新能源汽车150kW电驱动总成研制成功

The new energy vehicle 150KW electric drive assembly was successfully developed.

自主研发MES一期全面上线

The independently developed MES phase I was fully implemented.

获批宁夏回族自治区科技厅：宁夏回族自治区精密减速器工程技术研究中心

Approved by the Ningxia Hui Autonomous Region Science and Technology Department:

Ningxia Precision as Gearbox Engineering Technology Research Center.

2021

2020

首台8MW变桨减速器研制成功

The first 8MW pitch gearbox was successfully developed.

批准宁夏回族自治区“企业技术中心”

Approved the construction of a "Provincial Level Enterprise Technology Center" in Ningxia Hui Autonomous Region.

在上海成立飞地研发中心

Established an offsite R&D center in Shanghai.

荣获“宁夏回族自治区技术创新示范企业”称号

Awarded the title of "Ningxia Hui Autonomous Region Technology Innovation Demonstration Enterprise".

再次被评为国家级高新技术企业

Once again rated as a national high-tech enterprise

“精密减速器研发生产项目”正式投入使用

The "Precision Gearbox R & D and Production Project" officially came into operation.

首台风电增速器产品一次性装配成功、一次性加载试验成功，获得北京鉴衡认证中心风力发电机组部件认证并交付客户使用。

The first wind turbine main gearbox was assembled successfully at one time, passed the loading test at one time, and smoothly rolled off the production line.

银川市政府授予“优秀民营企业”

Awarded as "Excellent Private Enterprise by Yinchuan Municipal Government.

新能源汽车三合一电驱动总成的设计和制造顺利通过

IATF 16949:2016汽车行业质量管理体系认证

The design and manufacturing of the new energy vehicle three-in-one electric assembly successfully got IATF16949:2016 certificate.

首次公开发行A股并在深圳证交所创业板上市（股票代码300904）

Initial issuance of A-shares and listed on the Shenzhen Stock Exchange GEM (stock code 300904).

第三次被评为国家级高新技术企业

Re-rated as a national high-tech enterprise.

2023

2022

威马电机被认定为“国家科技型中小企业”

“宁夏回族自治区科技型中小企业”

Weima Motor was recognized as "national science and technology SMEs" and "science and technology SMEs in Ningxia Hui Autonomous Region".

首款自主研发的新能源汽车电驱动系统

150KW三合一（电机、控制器、减速器）

产品在银川试制成功下线

The first self-developed new energy vehicle electric drive system 150KW three-in-one (motor, controller, gearbox) product was successfully trial-produced and launched in Yinchuan.

SAP ERP、PLM成功实施，

自研集成中台、MES二期全面上线

The independently developed SPM was successfully implemented, and SAP, ERP, and the phase II of self-developed MES were fully online.

首款工程机械回转减速器、卷扬减

速器研制成功

The first slewing gearbox and hoisting gearbox for construction machinery were successfully developed.

荣获第七届“全国文明单位”称号

Awarded the title of "National Civilized Unit" (7th Session).

入选全国数字化绿色化协同转型发展典型案例

Selected as a Typical Case for National Digital and Green Collaborative Transformation Development.

荣获自治区“先进级智能工厂”称号

Honored with the Ningxia "Advanced Smart Factory" Title.

取得职业健康安全管理体系认证证书

Obtained the Occupational Health and Safety Management System Certification.

威力传动检测中心顺利通过SGS实验室能力比对

Weili Transmission's Testing Center successfully passed the SGS Laboratory Proficiency Testing.

2025

2024

“风电增速器智慧工厂项目”

正式开工奠基

"Wind Turbine Main Gearbox Smart Factory Project" officially started construction.

喜获CNAS实验室认可证书

Awarded the CNAS laboratory accreditation certificate.

获批宁夏回族自治区科技厅

第一批自治区企业飞地

研发中心

Approved by Ningxia Hui Autonomous Region Science & Technology Department: the first batch of autonomous region enterprise offsite R&D centers.

银川市政府授予“银川市

优秀民营企业综合实力“20强”

Awarded as "Yinchuan Outstanding Private Enterprise Comprehensive Strength 'Top 20'" by Yinchuan Municipal Government.

产品概览

Product Overview

03

风力发电增速器 Wind Turbine Main Gearbox

风力发电增速器是风力发电机组科技含量最高的核心部件，其作用是增速降扭，将风轮在风力作用下产生的扭矩传递给发电机并使其得到发电所需求转速。

The wind turbine main gearbox is the most technologically advanced core component of wind turbine generator. Its function is to increase speed and reduce torque, transmitting torque generated by the rotor under wind force to the generator and enabling it to reach the rotational speed required for power generation.

双馈增速器 Doubly-Fed Main Gearbox



10MW 主轴集成式双馈增速器
10MW Main Shaft Integrated & Doubly-Fed Main Gearbox

- 双馈发电机通过风轮驱动齿轮箱转动，内外转子高效转换机械能为电能，并由控制器优化功率输出和风力利用。

The doubly-fed generator utilizes the wind wheel to drive the gearbox, with its inner and outer rotors efficiently converting mechanical energy into electrical energy, and optimizes power output and wind utilization by controller.

- 双馈技术起步较早，技术成熟可靠，成本相对较低，适用于陆上风电项目。

Doubly-fed technology started early, the technology is mature and reliable, and the cost is relatively low, which is suitable for onshore wind power projects.

特性

功率范围：4~12MW（全面覆盖市场需求）
速比范围：170~220（适配所有双馈机组）
使用寿命：满功率运行20年/175000小时
运行温度：-45℃至50℃极端环境下可以稳定运行

优势

面向成本的设计(DFC)，应用6项专利技术，减重约4%，扭矩密度高约5%
精密的构造设计，支撑箱体法兰止口对接，确保支撑刚度的同时大幅减重
NVH分析及应对措施，采取壳体共振与减振措施以及隔振设计，振动降低45%
内置74条油路，采用独有的多层迷宫密封结构设计，解决高速级漏油的行业顽疾
严格的型式试验，通过负载、扫频、LDM、漏油等型式试验内容，验证了产品的可靠性和耐久性

半直驱集成式增速器 Semi-Direct & Integrated Main Gearbox



5.6MW 半直驱集成式增速器
5.6MW Semi-Direct & Integrated Main Gearbox

- 半直驱集成式增速器通过中速齿轮箱连接叶轮和永磁发电机，高效转化风能为电能，同时减轻体积和重量，提高风电转换效率。

The semi-direct & integrated main gearbox connects the wheel and permanent magnet generator through a medium-speed gearbox, efficiently converting wind energy into electrical energy while reducing volume and weight, and enhancing wind-to-electricity conversion efficiency.

- 半直驱技术结合了直驱和双馈的优势，具有体积小、重量轻、发电效率高等特点，适用于陆上及海上大型风电项目。

Combining the advantages of both direct drive and doubly-fed systems, the semi-direct drive technology has features such as small size, light weight, and high power generation efficiency, suitable for large-scale wind power projects both onshore and offshore.

特性

功率范围：4~18MW（全面覆盖市场需求）
速比范围：53~75（适配所有半直驱机组）
使用寿命：满功率运行20年/175000小时
运行温度：-45℃至50℃极端环境下可以稳定运行

优势

面向成本的设计(DFC)，应用6项专利技术，减重约4%~7%，扭矩密度高约5%~9%；
紧凑结构与集成设计，与发电机集成设计，轴向尺寸小，发电机组可缩短15%
专利行星级设计和安装方式，独特的行星轮设计和安装工艺使得行星架的刚度相较于传统设计提高了33%
NVH分析及应对措施，采取壳体共振与减振措施以及隔振设计，振动降低40%
内置95条油路，采用独有的多层迷宫密封结构设计，解决花键轴漏油的行业顽疾
严格的型式试验，通过负载、扫频、LDM、漏油等型式试验内容，验证了产品的可靠性和耐久性

风力发电减速器 Wind Power Gearbox

风力发电减速器在风电机组中扮演着至关重要的角色，通过提高发电效率、调节转速和扭矩、优化变桨偏航系统、提升风电机组寿命以及有效润滑冷却等多方面作用，确保了风电机组的高效、稳定和长期运行。

The wind power gearbox plays a crucial role in wind turbine, ensuring efficient, stable, and long-term operation through enhancing power generation efficiency, regulating rotational speed and torque, optimizing pitch and yaw systems, prolonging turbine lifespan and effectively lubricating & cooling.

特点

- 高精度：采用多级行星齿轮传动，外齿轮精度达到6级，内齿轮精度达到7级。
- 高标准：符合APQP4Wind、GL 2016、IEC 61400-1标准，达到国际领先设计水准。
- 高可靠性：根据全生命周期时序载荷谱计算各零件疲劳强度，满足20 ~ 25年寿命。
- 低噪音：工作噪音 $\leq 75\text{dB}$ ，低于行业要求 $\leq 85\text{dB}$ 。
- 低振动：振动速度 $\leq 0.5\text{mm/s}$ ，低于行业要求 $\leq 8\text{mm/s}$ 。

Features

- High Precision: Utilizes multi-stage planetary gear transmission with external gear accuracy reaching Grade 6 and internal gear accuracy reaching Grade 7.
- High Standards: Complies with APQP4Wind, GL2016, and IEC61400-1 standards, achieving internationally leading design standards.
- High Reliability: Fatigue strength of each component is calculated based on full-life cycle time-series load harmonics, ensuring a lifespan of 20 to 25 years.
- Low Noise: Operating noise is less than 75dB, lower than the industry requirement of $\leq 85\text{dB}$.
- Low Vibration: Vibration speed is $\leq 0.5\text{mm/s}$, lower than the industry requirement of $< 8\text{mm/s}$.

优势

- 竞争力强：同等价格下与国内产品相比，尺寸小、重量轻、扭矩密度高。
- 适应性强：在各种复杂的气候条件下都能保持良好的工作性能。
- 虚拟样机技术：进行整机动力学仿真，在数字环境中快速迭代优化产品。
- 自主知识产权：拥有47项授权专利，包括输入轴制动、输出轴密封、齿轮传动系统、圆螺母防松、工艺装备、试验台等。

Advantages

- Strong Competitiveness: Compared to domestic products at the same price, it boasts smaller size, lighter weight, and higher torque density.
- Versatile Adaptability: Maintains good working performance under various complex climatic conditions.
- Virtual Prototyping Technology: Conducts dynamic simulations of the entire machine, enabling rapid iterative optimization of products in a digital environment.
- Proprietary Intellectual Property Rights: Holds 47 authorized patents, covering input shaft braking, output shaft sealing, gear transmission systems, round nut locking, process equipment, test benches, and more.

风电变桨减速器 Wind Power Pitch Gearbox



12MW 变桨减速器
12MW Pitch Gearbox

- 变桨减速器主要用于控制风力发电机叶片的角度，通过调整叶片对风的使用效果来优化风能转化为机械能的效率。当风力发电机转子转速达到额定值时，变桨减速器通过改变叶片角度，使叶片始终保持在最佳工作状态，从而提高风能捕捉效率并控制风机的输出功率。

The pitch gearbox mainly control the angle of the wind turbine blades, optimizing the conversion of wind energy into mechanical energy by adjusting the blades angle. When the turbine rotor reaches its rated speed, the pitch gearbox adjust the blade angle to maintain the blades in optimal operating condition, enhancing wind energy capture efficiency and controlling the turbine's output power.

- 目前，产品主要覆盖3MW到20MW陆上和海上风力发电机组。工作时，结合自身高效调节、稳定输出、转矩控制的特点，可以适应不同风速和负荷造成的状况。

Currently, pitch gearbox mainly cater to onshore and offshore wind turbine systems ranging from 3MW to 20MW. With features of efficient adjustment, stable output and torque control, pitch gearbox can adapt to varying wind speeds and loads.

特性

减速比：100 ~ 300

极限输出扭矩：20KNm ~ 220KNm

应用场景：用于风力发电机，实时调整桨叶的迎风角度。

风电偏航减速器 Wind Power Yaw Gearbox



10MW 偏航减速器
10MW Yaw Gearbox

- 偏航减速器的主要功能是控制风力发电机的转向，确保风机叶轮始终面对风向，通过电机、减速器和转向系统组成，电控系统自动监测风向的变化，并根据这些变化驱动转向装置调整角度，实现风机的转向。

The primary function of the yaw gearbox is to control the orientation of the wind turbine generator, ensuring that the blades are always aligned with the wind direction. Composed by electric motor, gearbox, and steering system, the electronic control system automatically monitors changes in wind direction and drives the steering mechanism to adjust the angle, realizing the turbine orientation.

- 目前，产品主要覆盖3MW到20MW陆上和海上风力发电机组；工作时，结合自身承载能力强、结构紧凑、高效传动的特点，可以及时调整风力发电机的角度，将叶轮转向风向，以最大限度地利用风能。

Currently, The yaw gearbox mainly cater to onshore and offshore wind turbine ranging from 3MW to 20MW. With large load-bearing capacity, compact structure, and efficient transmission, the yaw gearbox can promptly adjust the turbine's angle to align the blades with the wind direction and maximizing wind energy utilization.

特性

减速比：900 ~ 3000

极限输出扭矩：60KNm ~ 220KNm

应用场景：用于风力发电机，精确调整风机的对风方向。

工程机械减速器

特点

- 高精度：采用多级行星齿轮传动，外齿轮精度达到6级，内齿轮精度达到7级。
- 高标准：符合APQP4Wind、GL 2016、IEC 61400-1标准，达到国际领先设计水准。
- 高可靠性：根据实际工况制定载荷谱并计算各零件疲劳强度，产品寿命长。
- 低噪音：工作噪音 $\leq 75\text{dB}$ ，低于行业要求 $\leq 85\text{dB}$ 。
- 低振动：振动速度 $\leq 0.5\text{mm/s}$ ，低于行业要求 $\leq 8\text{mm/s}$ 。

Features

- High precision: multi-stage planetary gear transmission, the accuracy of the outer gear reaches 6 levels, the accuracy of the inner gear reaches 7 levels.
- High standard: In line with APQP4Wind, GL 2016, IEC 61400-1 standards, to reach the international leading design standards.
- High reliability: According to the actual working conditions to develop the load spectrum and calculate the fatigue strength of each part, long product life.
- Low noise: working noise $\leq 75\text{dB}$, lower than the industry requirements $\leq 85\text{dB}$.
- Low vibration: vibration speed $\leq 0.5\text{mm/s}$, lower than the industry requirements $\leq 8\text{mm/s}$.

优势

- 竞争力强：同等性能下与国外产品相比，价格优势大。
- 定制化程度高：可根据客户特殊要求进行产品定制开发。
- 虚拟样机技术：进行整机动力学仿真，在数字环境中快速迭代优化产品。
- 自主知识产权：拥有25项授权专利，包括输入轴脱离、输出轴密封、齿轮传动系统、工艺装备、试验台等。

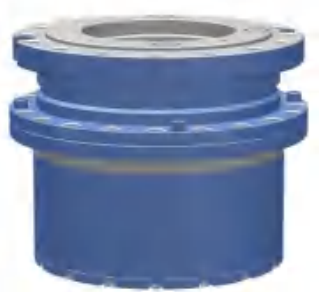
Advantages

- Strong competitiveness: compared with foreign products under the same performance, the price advantage is large.
- High degree of customization: products can be customized according to the special requirements of customers.
- Virtual prototyping technology: complete machine dynamics simulation and rapid iterative optimization of products in a digital environment.
- Independent intellectual property rights: It has 25 authorized patents, including input shaft disengagement, output shaft sealing, gear transmission system, process equipment, test bench, etc.

卷扬减速器 Winch Gearbox

- › 卷扬减速器经过减速增扭后带动卷筒旋转，卷筒卷绕钢丝绳并通过滑轮组，使起重机吊钩提升或下落重物。

Rotating the coiling drum after reducing speed and increasing torque, winding the steel rope by pulley block to raise or lower heavy objects with crane hook.



WLW17T2B54 卷扬减速器
WLW17T2B54 Winch Gearbox

- 采用多级行星齿轮传动，结构紧凑，节省空间
- 内置驻车制动器
- 可安装不同系列的变量马达和定量马达
- 承载能力大、效率高、传动平稳、噪音低
- Multi-stage planetary gear transmission, compact structure and space saving.
- Equipped with internal stopping brake.
- Capable of installing different series of variable and fixed displacement motors.
- Large load capacity, high efficiency, smooth transmission, low noise.

- › 主要用于旋挖钻机、起重机、提升机等设备。

Rotary drilling rigs, cranes, elevators, etc.

特性

减速比：26 ~ 420

最大输出扭矩：7.5 ~ 325KNm

回转减速器 Slew Gearbox

- › 减速器输出齿轮与设备上的齿圈啮合，驱动机械设备平台的旋转。

Working Principle: gearbox output gear meshing with the gear ring of the equipment, driving the rotation of the machinery platform.



WLR17T3B104 回转减速器
WLR17T3B104 Slewing Drive

- 采用多级行星齿轮传动，结构紧凑，节省空间
- 内置驻车制动器
- 可安装不同系列的变量马达和定量马达
- 承载能力大、效率高、传动平稳、噪音低
- Multi-stage planetary gear transmission, compact structure and space saving.
- Equipped with internal stopping brake.
- Capable of installing different series of variable and fixed displacement motors.
- Large load capacity, high efficiency, smooth transmission, low noise.

- › 主要用于旋挖钻机、混凝土泵车、高空作业车、挖掘机、起重机等设备。

Rotary drilling rigs, concrete pump trucks, aerial work platform, excavators, cranes, etc.

特性

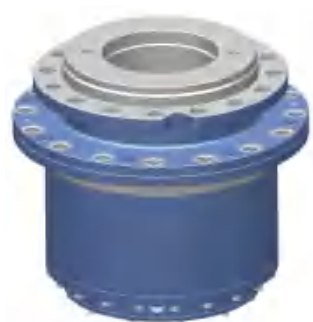
减速比:27 ~ 304

最大输出扭矩:7.7 ~ 290KNm

行走减速器 Travel Gearbox

- › 行走减速器输出端与链轮或轮辋安装，驱动履带式或轮式车辆行走。

Gearbox output end mounted with the sprocket or rim to drive the tracked or wheeled vehicle.



WLT26T3B69 行走减速器
WLT26T3B69 Travelling Retarder

- 采用多级行星齿轮传动，结构紧凑，节省空间
- 内置驻车制动器
- 脱开装置（选配）
- 可安装不同系列的变量马达、定量马达及电机
- 承载能力大、效率高、传动平稳、噪音低
- Multi-stage planetary gear transmission, compact structure and space saving.
- Equipped with internal stopping brake.
- Decoupling device (optional).
- Capable of installing different series of variable & fixed displacement motors and electric motors.
- Large load capacity, high efficiency, smooth transmission, low noise.

- › 主要用于模块车、平板车、掘进机、压路机、挖掘机、履带式起重机等设备。

modular vehicles, flatbed trucks, tunneling machines, road rollers, excavators, crawler cranes, etc.

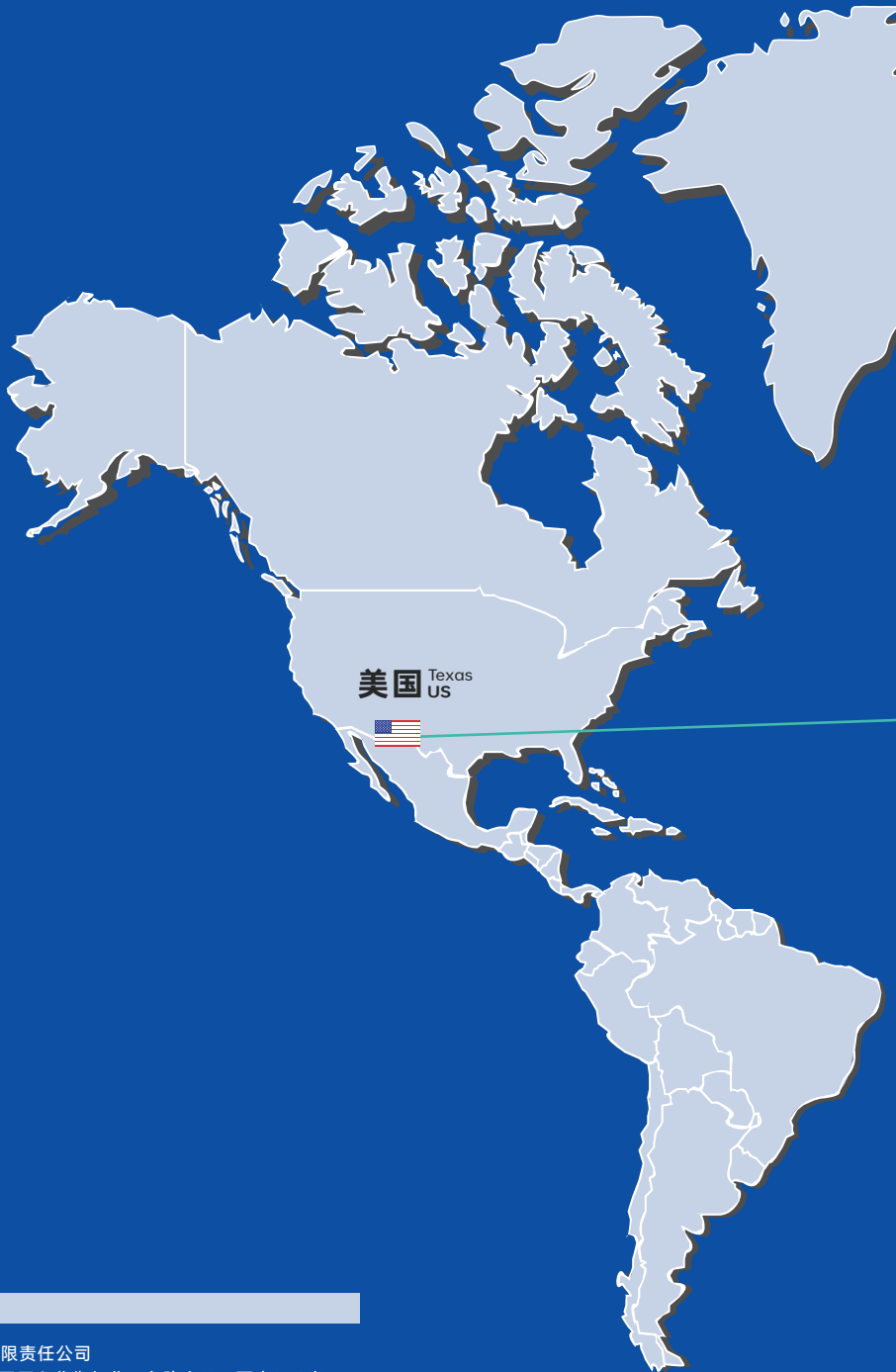
特性

减速比:16 ~ 760

最大输出扭矩:7 ~ 620KNm

04 全球市场&全球服务

Global Markets & Global Services



中国 ★

生产基地

银川威力传动技术股份有限公司（总部）
地址：银川市文萃南街600号



鸡西威润传动有限责任公司
地址：鸡西市鸡冠区兴北街与北环东路交叉口西南260米



服务中心

一区
辐射区域：
新疆、青海、西藏
甘肃西部



二区
辐射区域：
宁夏、陕西、山西、河北
甘肃东部、蒙西



三区
辐射区域：
黑龙江、吉林、辽宁、蒙东



四区
辐射区域：
山东、河南、江苏、安徽、
湖北、河北、江西、浙江、福建



五区
辐射区域：
四川、重庆、湖南、贵州、
云南、广西、广东



**美国** **销售/服务中心**

地址: 2920 Telecom Pkwy Suite 400,
Richardson

**印度** **销售/服务中心**

地址: Workafella Business Center-51,Level 4,
Tower A Rattha Tek Meadows Old
Mahabalipuram Road,Rajiv Gandhi Salai,
Sholinganallur Chennai, Tamil Nadu, India

**德国** **销售/服务中心**

地址: Hein-Saß-Weg 21,
Germany;

**日本** **销售/服务中心**

地址: 13-106, 17-4-chome,
Minamiaoyama,
Minato City, Tokyo



合作共赢 Mutually Beneficial Cooperation

创新引领 共筑梦想

国外伙伴 Foreign Partner

SIEMENS Gamesa
RENEWABLE ENERGY

NORDEX **Acciona**

adani

SUZLON
WIND TURBINE

W2E
WIND TO ENERGY

DOOSAN Enerbility

合作成就梦想

创新引领未来

威力传动期待与您携手前行

Cooperation makes dreams come true

Innovation leads the future

Weinig Drive looks forward to working with you

DISPLAY

国内伙伴 Domestic Partners



05 企业实力

Corporate Strength

研发实力 Research and development strength

创新驱动的品质承诺

研发团队

Research and development group

专职研发团队拥有超 **200** 人

涵盖机械、电气、软件等领域

具备风电齿轮箱、工程机械齿轮箱、光热回转驱动、电机、新能源汽车电驱动总成、电控系统、液压系统的研发能力，能够为客户提供系统高度集成的产品及全面的技术服务。

具备整机、子系统和零部件的CAE仿真分析能力，可完成静力学、疲劳损伤、多体动力学、CFD、NVH等分析工作。

通过CAE计算、结果分析、设计优化工作，可为产品设计提供最优方案，确保研发项目一次性成功。

国际认可

International recognition

威力传动是APQP4Wind成员企业，产品研发体系获得国际认可。我们将APQP4Wind体系完全植入PLM系统运行，并利用PLM的项目管理功能对每一个研发项目进行全过程管控，确保研发项目的质量与进度得到有效管理；公司增减速器产品已先后取得鉴衡认证（CGC）、TUV认证、GL认证、SGS认证等多项权威证书，进一步彰显了产品在国际市场的可靠性与技术实力。



理化实验室

physics and chemistry laboratory

威力传动理化实验室，可完成原材料化学成分、金相组织、力学性能的检验测试，保证产品的原材料性能满足要求。三个产品试验室，建设有10余台专用试验台，可完成风电偏航和变桨减速器、风电增速器、工程机械减速器、光热回转驱动、新能源汽车电驱动总成等产品的试验，包括齿轮接触斑点试验、空载试验、加速疲劳试验、静载试验、破坏性试验、润滑系统试验等，可以充分验证产品的承载能力、可靠性和稳定性，为产品的质量保驾护航。

研发流程

Research and development process



研发质量管理体系

Develop quality management system



PLM

产品开发
质量管理

Product Development
quality management

SAP

产供销协同
质量管理

Coordination between production
supply and marketing
Quality management

中台

流程与数据
端到端集成

Process and data
End-to-end integration

MES/WMS

生产管控
智能物流

Production Controller
intelligent logistics

OA/文件管理

质量管理
落地实行

Quality management
Implementation on the ground



集成中台 Integrated center



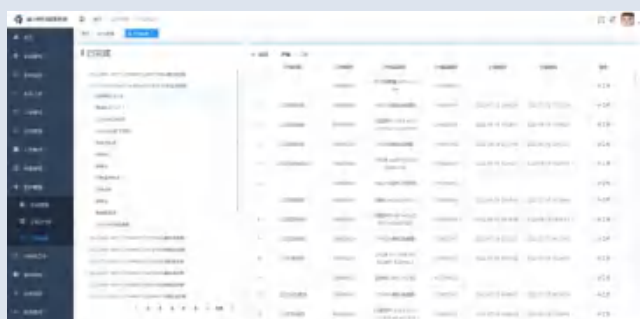
质量过程监督 Quality process supervision



MES过程质量控制 MES process quality control



质量数据分析 Qualitative data analysis



产品信息追溯 Product information traceability



物料唯一编码 Material unique code

专利权 Patent property right



科技成果 Scientific and technological achievements



软著 Service guarantee



标准 Standard



06 厂区介绍

Factory Introduction

减速器工厂 Intelligent Manufacturing

行业领先的智慧工厂，是产品可靠性的坚实保障

Industry-Leading Smart Factory is a Solid Guarantee for Product Reliability



加工车间 Machining shop



装配流水线 Assembling Line



可靠性试验车间 Testing Shop



智能立体库房 Intelligent Stereo Warehouse



到货分拣线 Incoming Material Sorting Line



油漆后处理线 Painting and Post-Treatment

增速器智慧工厂 Intelligent factory of speed increaser

世界一流的智能化生产设备，搭建高起点、前瞻性的5G智慧工厂

World-class intelligent production equipment, building a high-starting point and forward-looking 5G smart factory



滚铣齿车间 Gear Hobbing Workshop



热处理车间 Heat Treatment Workshop



磨齿车间 Gear Grinding Workshop



智能分拣车间 Intelligent sorting workshop



装配车间 Assembly Workshop



增速器工厂试验台 Test Bench for Main Gearbox Factory

试验台具备当前风电市场所有齿轮箱机型的测试能力，满足年产2000台齿轮箱的试验需求
Meet test requirements for an annual production of 2,000 sets of main gearboxes

品质至上 Quality First

严格质量保障体系

质量保证中心总面积4200m²，现有人员200余人，配备专业检测设备170余套，检测器具2400余件投入8200余万元。中心下设五个职能部门——体系保证、产品保证、供方管理、质量管理及检测中心，覆盖产品全流程。

The Quality Assurance Center covers an area of 4,200 square meters with over 200 staff members. An investment of over 82 million yuan has been made in more than 170 sets of testing equipment and 2,400 measuring tools. The Center comprises five functional departments: System Assurance, Product Assurance, Supplier Management, Quality Management, and the Testing Center—ensuring comprehensive coverage of the entire product lifecycle.





体系可靠性保证

System reliability assurance



为顺应自身国际化发展战略及行业高质量要求，通过了包括 GB/T19001:2016 在内的多套质量管理相关认证，建立一套高质量、高可靠性的质量管理体系。

In order to comply with its own international development strategy and high quality requirements of the industry, we have passed a number of sets of quality management certifications including GB/T19001:2016, and established a set of high-quality and highly reliable quality management system.

产品可靠性保证

Product reliability assurance



APQP 4Wind体系结合项目管理，深度参与设计方案、DFMEA、特殊特性等关键阶段评审，最终通过样机型式试验来确认产品可靠性，验证方法获得CNAS认可，专业性和能力行业领先。

APQP4Wind system combined with project management, deeply involved in the design scheme, DFMEA, special characteristics and other key stage review, and finally through the prototype type test to confirm the reliability of the product, the verification method was recognized by CNAS, professional and ability of the industry leading.

供应链质量控制

Supply chain quality control



通过供应商关键节点监造、绩效管控、全流程MES系统管控、高频率次的检验节点，打造全面而高效的供应链质量保障体系，年供应商交付合格率99.07%，远高于行业水平。

Through the supplier key node supervision, performance control, the whole process MES system control, high frequency of inspection nodes, to create a comprehensive and efficient supply chain quality assurance system, the annual supplier delivery pass rate of 99.07%, far higher than the industry level.

过程质量控制

Process quality control



建立产品全流程质量MES系统管理，唯一物料码的二维码使用，实现产品及零部件质量数据的快速记录和溯源。年总检超过200万次，特性覆盖率100%，工序合格率达99.7%以上，位于行业领先水平。

Establish MES system management of the whole process of product quality, use two-dimensional code of unique material code, and achieve rapid recording and traceability of product and component quality data. The annual total inspection exceeds 2 million times, the feature coverage rate is 100%, and the process qualification rate is more than 99.7%, which is located in the industry leading level.

检验检测保证

Inspection assurance



中心以“公正、科学、准确、高效”为使命，践行CNAS-CL01、ISO/IEC17025:2017准则要求，可开展105项检测、计量工作，其中33项获CNAS认可，服务范围不仅满足本公司需求，可覆盖宁夏区域，关键检测设备、能力均为行业领先。

With the mission of "fairness, science, accuracy and efficiency", the center implements the requirements of CNAS-CL01 and ISO/IEC17025:2017 standards, and can carry out 105 testing and measurement work, 33 of which are recognized by CNAS. The service scope not only meets the needs of the company, but also covers Ningxia region, and the key testing equipment and capabilities are leading in the industry.

质量优化改善

Quality optimization
and improvement



全员参与质量提升，定期开展质量活动分析（CIP、QCC、8D）等，年度开展CIP改善项目500多项，QCC活动改善项目60多项，年均创造质量改善价值超过200万元。

All staff participate in quality improvement, regularly carry out quality activity analysis (CIP, QCC, 8D), etc., carry out more than 500 CIP improvement projects and more than 60 QCC activity improvement projects annually, and create an annual quality improvement value of more than 2 million yuan.

QUALITY FIRST



07 智慧园区 Smart Park

威力传动智慧园区，作为北方最大的风电增速器减速器研发基地，占地447.54亩，建筑面积超23万平方米，是数字化转型的杰出代表。园区内，智慧工厂与5G全覆盖的成功应用，引领威力传动步入智能制造新时代。通过数字化与制造业的深度融合，我们构建了高效、智能、绿色的生产运营管理体系，为风电技术创新与业绩增长提供强大动力。

在数字化转型中，威力传动坚持自主研发与引进技术并重。自研MES、中台等系统，实现生产精细化管理；引进SAP ERP、PLM、WMS等先进系统，全面赋能研产供销各环节。同时，构建数字化底座、物联网平台及IT基础设施，为全面转型奠定坚实基础。通过大数据分析，我们精准把握市场需求，优化生产计划，降低成本，提升效率。

Weili Transmission's Smart Park, as the largest research and development base for wind turbine main gearbox and pitch & yaw gearbox in northern China, covers an area of 30 hectares, with building area exceeding 230,000 square meters. It stands as an exemplary representation of digital transformation. In the Smart Park, the successful application of smart factories and full 5G coverage has ushered Weili Transmission into a new era of intelligent manufacturing. With deep integration of digitalization and manufacturing, Weili transmission has established an efficient, intelligent, and green production and operation management system, providing powerful impetus for wind power technology innovation and business growth.

In the process of digital transformation, Weili Transmission emphasizes both independent research and development and the introduction of technology. We have developed proprietary systems such as MES and middleware to achieve refined production management, and introduced advanced systems like SAP ERP, PLM, and WMS to comprehensively empower every aspect of research, production, supply, and sales. Additionally, we have built a digital foundation, an IoT platform, and IT infrastructure, laying a solid foundation for comprehensive transformation. Through big data analysis, we accurately grasp market demands, optimize production plans, reduce costs, and enhance efficiency.



特别是在质量管理方面，威力传动充分利用大数据技术，对生产全过程进行实时监控与预警，显著提高了产品控制的精确度和效率，确保产品达到行业顶尖水平。这一数字化质量管理手段，是我们保障产品质量、提升客户满意度的重要基石。

此外，威力传动还认识到数字化转型对企业管理的深远影响。我们构建组织级业务运营管理体系，通过数字化手段优化内部流程，提升决策效率与执行力，促进企业资源高效整合与利用，增强应变与创新能力。

展望未来，威力传动将继续发扬创新、务实、高效精神，依托智慧园区的数字化成果，推动风电技术创新。我们将以更优质的产品与服务，助力国家“双碳”目标实现，为构建清洁能源体系贡献力量。在数字化转型的浪潮中，威力传动正迈向更加辉煌的未来，持续引领风电行业的发展。

Especially in quality management, Weili Transmission leverages big data technology to conduct real-time monitoring and early warning throughout the production process, significantly improving the accuracy and efficiency of product control, ensuring that our products reach the top level in the industry. This digital quality management approach is a crucial cornerstone for us to guarantee product quality and enhance customer satisfaction.

Furthermore, Weili Transmission recognizes the profound impact of digital transformation on enterprise management. We have built an organizational-level business operation management system, optimizing internal processes through digital means, enhancing decision-making efficiency and execution capabilities, promoting efficient integration and utilization of enterprise resources, and strengthening adaptability and innovation capabilities.

Looking ahead, Weili Transmission will continue to uphold the spirit of innovation, pragmatism, and efficiency, relying on the digital achievements of the Smart Park to drive wind power technology innovation. We will provide higher-quality products and services to contribute to the realization of the national "dual carbon" goals and the construction of a clean energy system. In the wave of digital transformation, Weili Transmission is moving towards a more glorious future, continuously leading the development of the wind power industry.



08 绿色工厂 Green Factory

银川威力传动以数字化与绿色化深度融合为核心，聚力打造自治区级和国家级绿色工厂与风电装备绿色制造标杆。企业建成20MW屋顶光伏电站，年发电量可达2600万度，年减排二氧化碳2.4万吨，综合能耗下降约20%。同步打造高水平智能工厂，配套建设自动仓储、无人物流及数字孪生系统，实现生产全流程高效低碳运行。大力推行绿色设计与清洁生产，材料利用率及工艺能效均处于行业领先水平。积极构建绿色供应链体系，威力传动减速器生产工厂与增速器生产工厂均已获得LEED国际绿色建筑认证，获评金风科技五级绿色供应商，并成功入选国家级数字化绿色化转型典型案例。公司以“绿电+智造”双轮驱动，为新能源装备产业节能降碳、绿色高质量发展树立了可复制、可推广的示范样板。



Yinchuan Weili Transmission, with the deep integration of digitalization and greenification as its core, is committed to building autonomous region-level and national-level green factories and benchmarks for green manufacturing of wind power equipment. The company has built a 20MW rooftop photovoltaic power station, with an annual power generation capacity of 26 million kWh, reducing carbon dioxide emissions by 24,000 tons annually and lowering the comprehensive energy consumption by about 20%. Simultaneously, it is building a high-level smart factory, equipped with automatic warehousing, unmanned logistics, and digital twin systems, to achieve efficient and low-carbon operation throughout the entire production process. The company vigorously promotes green design and clean production, with material utilization rates and process energy efficiency both at the leading level in the industry. It actively builds a green supply chain system, with both the Weili Transmission reducer production factory and the speed increaser production factory having obtained LEED international green building certification, been rated as a Level 5 green supplier by Goldwind Science and Technology, and successfully selected as a national-level typical case of digital and green transformation. Driven by the dual engines of "green electricity + smart manufacturing", the company has set a replicable and promotable demonstration model for energy conservation, carbon reduction, and green and high-quality development in the new energy equipment industry.





减速器厂区 Reducer factory area



减速器厂区一角 A corner of the reducer factory area



综合楼 Comprehensive Building



综合楼大厅 Comprehensive Building Lobby

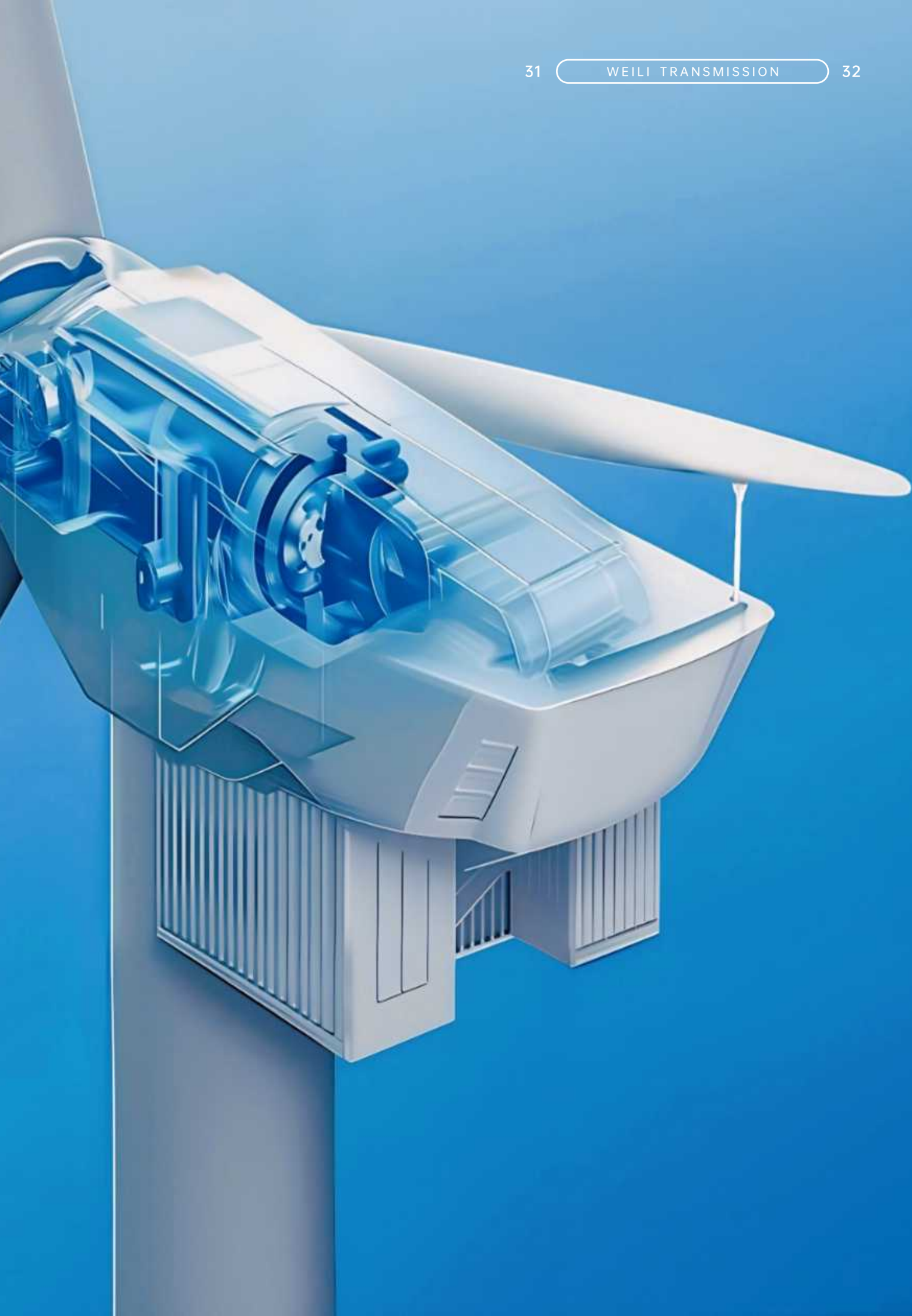




推动全球精密传动技术变革

Promote the transformation of global precision transmission technology







扫码了解最新资讯

Scan the code for the latest news

银川威力传动技术股份有限公司

Yinchuan Weili Transmission Technology Co.,Ltd

银川威马电机有限责任公司

Yinchuan Weima motor Co., Ltd

银川威力传动技术股份有限公司上海分公司

Yinchuan Weili Transmission Technology Co.,Ltd
Shanghai Branch

公司网址 Company Website: www.weili.com

销售电话：0951-7601777 服务电话：17809404506

公司地址 Company Address:

宁夏银川市西夏区文萃南街600号 No.600,South Wencui St.,Yinchuan,Ningxia

宁夏银川市西夏区黄河西路332号 No.332,West Huanghe Rd.,Yinchuan,Ningxia

上海市长宁区淞虹路207号C幢6楼B单元 6F,Building C,No.207 Songhong Rd.,Shanghai
