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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 33154-2025

Replacing GB/T 33154-2016

**Rubber seals for yaw and pitch bearings of wind turbine
generator**

风力发电机偏航轴承及变桨轴承橡胶密封圈

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 33154-2016 "Rubber sealing ring for wind turbine slewing bearing".

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2016 edition);
- b) Added a chapter on "Terms and Definitions" (see Chapter 3);
- c) Added a schematic diagram of the multi-lip seal structure (see 4.1);
- d) Added requirements for seal ring size, length and tolerance, as well as multi-lip seal ring cross-section size and tolerance (see 4.3, 2016 edition) 3.5.2, 3.5.3);
- e) Changed the test conditions for UV aging resistance and compression set in the material performance requirements (see 4.4.2, 2016 edition) 3.2.2);
- f) The elongation at break and hot air aging indicators in the material performance requirements have been changed (see 4.4.2, 3.2.2 of the 2016 edition);
- g) Added finished product performance requirements (see 4.5, 3.3 of the 2016 edition);
- h) Added a chapter on "Test methods" (see Chapter 5);
- i) Added the sealing ring length inspection method (see 5.2.1);
- j) The provisions on batching and sampling in the inspection rules have been modified (see 6.2, 4.1 of the 2016 edition);
- k) Added sampling rules for product length inspection (see 6.2.2.3);

l) Added sealing ring performance test method (see Appendix A).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Rubber and Rubber Products of Standardization (SAC/TC35).

This document was drafted by: Tieling Five Star Sealing Research Institute Co., Ltd., Chengdu Tianma Precision Machinery Co., Ltd., Nanjing Leader Oriental Rubber and Plastics Technology Co., Ltd., Wafangdian Bearing Group Wind Power Bearing Co., Ltd., Mingyang Smart Energy Group Co., Ltd., Anhui Zhongding Seals Co., Ltd., Jiangyin Haida Rubber & Plastic Co., Ltd., Chengdu Shengbang Sealing Co., Ltd., Ma'anshan Hongli Rubber Products Co., Ltd.

Company, Sichuan Daohong New Materials Co., Ltd., Ma'anshan Jingwei Slewing Bearing Co., Ltd., CRRC Shandong Wind Power Co., Ltd., Liaoning Tieling Rubber Industry Research and Design Institute, Hunan Rubber and Plastic Sealing Components Factory Co., Ltd., Sichuan Jiashite Rubber Co., Ltd., Hebei Huageng Technology Co., Ltd.

Co., Ltd., Hebei Huami New Materials Technology Co., Ltd., Yancheng Quality and Technical Supervision Comprehensive Inspection and Testing Center, Shanghai Jieying Sealing Technology Ltd.

The main drafters of this document are: Hu Qingzhi, Yao Yuchen, Wu Weiming, Wang Liangyan, Zhang Lina, Zeng Junlin, Ke Yuchao, Ningxia, Wang Lin, Huang Lianggen, Zhou Wugang, Fan Zhaofang, Wang Jingli, Qian Aidong, Chang Shengchang, Yan Lin, Li Yang, Wang Weiding, Yao Chenyang, Ni Liwei, Wen Fengchun, Li Xueguang, Zhao Ming, Cao Qi, Tian Youfeng, Cheng Kai, Cheng Shizhi, Chang Qinhui, Xie Aidi, Yin Jilei, Zhao Hang, Zheng Jun, Rao Wen, Yue Qing, Zhang Fang, Li Wei, Chen Liyun, Yang Liguoguo.

This document was first published in 2016 and this is the first revision.

Wind turbine yaw bearings and pitch bearings rubber seals

1 Scope

This document specifies the technical requirements, inspection rules, and labeling, packaging, and Transportation, storage and installation, and describes the corresponding test methods.

This document applies to the production, inspection and acceptance of rubber seals for yaw bearings and pitch bearings of wind turbines (hereinafter referred to as seals).

2 Normative references

GB/T 528

GB/T 529

GB/T 531.1

GB/T 1682

GB/T 1689

GB/T 1690

GB/T 2828.1

GB/T 2941

GB/T 3512

GB/T 4199

GB/T 6930

GB/T 7759.1

GB/T 7762

GB/T 10125

GB/T 13279

GB/T 16585

GB/T 29717

3 Terms and Definitions

The terms and definitions defined in GB/T 4199, GB/T 6930 and the following apply to this document.

3.1 Yaw bearing

A bearing used to connect the nacelle and the tower, tracking wind direction and adjusting the windward side.