P3413

Type of Project: New IEEE Standard
Project Request Type: Initiation / New
PAR Request Date: 31 Aug 2023
PAR Approval Date: 06 Dec 2023
PAR Expiration Date: 31 Dec 2027
PAR Status: Active

1.1 Project Number: P3413
1.2 Type of Document: Guide
1.3 Life Cycle: Full Use

2.1 Project Title: Guide for Technical Requirements and Acceptance Methods of Double Horizontal Jibs Gin Pole on Ground for Transmission Tower Erection

3.1 Working Group: Double Horizontal Jibs Gin Pole on Ground(PE/T&D/OVR/DHJGPG)
3.1.1 Contact Information for Working Group Chair:
Name: Jianyun Ye
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3.1.2 Contact Information for Working Group Vice Chair:
None
3.2 Society and Committee: IEEE Power and Energy Society/Transmission and Distribution(PE/T&D)
3.2.1 Contact Information for Standards Committee Chair:
Name: Eriks Surmanis
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3.2.2 Contact Information for Standards Committee Vice Chair:
None
3.2.3 Contact Information for Standards Representative:
Name: Daniel Sabin
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4.1 Type of Ballot: Entity
4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot: Jul 2025
4.3 Projected Completion Date for Submittal to RevCom: Feb 2026

5.1 Approximate number of entities expected to be actively involved in the development of this project: 9
5.2 Scope of proposed standard: This guide describes technical requirements, on-site acceptance methods, marks, packaging, transportation, storage and application requirements of the double horizontal jibs gin pole on ground. This guide applies to double horizontal jibs gin pole on ground with rated lifting torque not exceeding 15 000 kN·m, overall tower's height not exceeding 460 m and lifting height not exceeding 430 m. This type of gin pole is fully applicable to the transmission towers with an overall height up to 385 m.

5.3 Is the completion of this standard contingent upon the completion of another standard? No
5.4 Purpose: This guide provides the technical requirements and acceptance methods of double horizontal jibs gin pole on ground for transmission tower erection to improve the safety and reliability of the erection process of ultra-high power transmission towers.
5.5 Need for the Project: When power lines cross rivers, lakes, straits or valleys, we usually use long-span crossing towers to support overhead conductors. Due to their extensive root span, great height and heavy weight of long-span crossing tower, the technical requirements for assembling are relatively higher. The application of double horizontal jibs gin pole on ground provides a new and effective technical scheme for erecting high tower in transmission line. Currently, there are 60% of the world's top 10 highest long-span crossing towers are erected with double horizontal jibs gin pole on ground.
However, as the key equipment for tower erection, there are no unified technical requirements, on-site acceptance methods, and application requirements for the double horizontal jibs gin pole on ground in previous application. It is not conducive to the international promotion and application of double horizontal jibs gin pole on ground nor to the effective control of the safety risk during erection.
Therefore, it is urgent to formulate this guide to regulate the technical requirements and acceptance methods

of the double horizontal jibs gin pole on ground for transmission tower erection. In addition to improving the safety, reliability and environmental protection during tower erection, it has important guiding significance for improving the overall technical level of the erection equipment for high tower of transmission line.
5.6 Stakeholders for the Standard: The stakeholders for the standard consist of technical service companies, manufacturers, utilities, energy service companies and other interested entities.

6.1 Intellectual Property

6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project? No

6.1.2 Is the Standards Committee aware of possible registration activity related to this project? No

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7.1 Are there other standards or projects with a similar scope? Yes

Explanation: At present, there are five standards in relevant fields, including ISO 4301-3-2021, ISO 9927-3-2019, ASME B30.3-2019, ISO 11660-3-2008 and ISO 7752-3-2013.This proposal relates to double horizontal jibs gin pole on ground for transmission tower erection. It does not belong to the classification defined by the above standards. The scope and method of this product are different from the usage of cranes specified in these standards. Partial structure and mechanism of this product differ from the corresponding ones on the cranes in these standards. Therefore, these standards are not applicable to this product.

7.1.1 Standards Committee Organization: ISO
Project/Standard Number: ISO 4301-3-2021
Project/Standard Date: 12 May 2021
Project/Standard Title: Cranes - Classification - Part 3: Tower cranes

7.1.2 Standards Committee Organization: ISO
Project/Standard Number: ISO 9927-3-2019
Project/Standard Date: 01 Mar 2019
Project/Standard Title: Cranes - Inspections - Part 3: Tower cranes

7.1.3 Standards Committee Organization: ASME
Project/Standard Number: ASME B30.3-2019
Project/Standard Date: 19 Aug 2020
Project/Standard Title: Tower Cranes, Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings

7.1.4 Standards Committee Organization: ISO
Project/Standard Number: ISO 11660-3-2008
Project/Standard Date: 14 Feb 2008
Project/Standard Title: Cranes - Access, guards and restraints - Part 3: Tower cranes

7.1.5 Standards Committee Organization: ISO
Project/Standard Number: ISO 7752-3-2013
Project/Standard Date: 02 Dec 2013
Project/Standard Title: Cranes - Control layout and characteristics - Part 3: Tower cranes

7.2 Is it the intent to develop this document jointly with another organization? No

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8.1 Additional Explanatory Notes: