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**Hydraulic machines, radial and axial - Methodology for
performance transposition from model to prototype**

径流和轴流式水力机械 模型到原型水力性能换算方法

(English Translation)

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B.1.1 Scale effect of friction loss coefficient

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document adopts IEC 62097:2019 "Methods for converting model to prototype hydraulic performance of runoff and axial flow hydraulic machinery".

The following minimal editorial changes have been made to this document.

---Corrected an editing error in the table numbering in section 6.3.1;

---Added notes about Excel workbooks.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Electrical Equipment Industry Association.

This document is under the jurisdiction of the National Technical Committee on Standardization of Hydropower Turbines (SAC/TC175).

1 Scope

This document presents a method for determining prototype efficiency based on model test results. The conversion process takes into account the influence of surface roughness.

The scale effect within.

This document applies to contract evaluation based on the results of hydraulic machinery model tests.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

IEC 60193 Acceptance tests on models of hydraulic turbines, storage pumps and pumps (Hydraulic turbines, storage pumps) Note. GB/T 15613-2023 Acceptance tests of water turbines, storage pumps and pump-turbine models (IEC 60193:2019, IDT)