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Methods of noise measurement for pumps

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Turbomachinery Society of Japan (TSJ)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS B 8310** : 1985), which has been technically revised.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

Methods of noise measurement for pumps

Introduction

This Japanese Industrial Standard has been prepared based on ISO 20361 : 2019, Edition 3, with some modifications of the technical contents to ensure the consistency with relevant JISs.

Annex JA is unique to JIS and not given in the corresponding International Standard. The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard specifies all the information necessary to carry out efficiently and under standardized conditions the determination, declaration, and verification of the airborne noise emission of pumps or pump units. It specifies the noise measurement methods and the operating and mounting conditions that shall be used for the test.

Noise emission characteristics include emission sound pressure levels at specified positions and/or the sound power level. The determination of these quantities is necessary for declaring the noise emission values, and purpose of noise control at source at the design stage. The determination of these quantities is also necessary for comparing the noise emitted by pumps on the market.

The use of this Standard ensures the reproducibility of the determination of the airborne noise emission characteristics within specified limits determined by the grade of accuracy of the basic airborne noise measurement method used. Noise measurement methods according to this Standard are engineering methods (Grade 2 of accuracy) and survey methods (Grade 3 of accuracy).

This Standard does not deal with the characterization of the structure-borne sound and liquid-borne noise generated by pumps.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 20361 : 2019 *Liquid pumps and pumps units — Noise test code — Grades 2 and 3 of accuracy* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and JIS are IDT (identical), MOD (modified), and NEQ (not equivalent) according to ISO/IEC Guide 21-1.

2 Normative references

Part or all of the provisions of the following standards, through reference in this text,