ICS 91.120.25
CCS J04

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 13437-2009

Replacing GB/T 13437-1992

Description of torsional vibration absorber characteristics

扭转振动减振器特性描述

Issued on: April 24, 2009 **Implemented on: December 1, 2009**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China;
Standardization Administration of China

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Foreword

This standard is GB/T 13437-1992 "torsional vibration damper characterization" amendments. This standard and GB/T 13437-1992 compare main technical changes are as follows:

--- Adjust torsional vibration damper according to the principles of product classification;

--- Deletion of the current hanging pendulum and spring-type silicone oil is no longer used for torsional vibration damper. This standard replaces GB/T 13437-1992. Appendix A of this standard and Appendix B is an informative annex. This standard by the national mechanical vibration, shock and condition monitoring Standardization Technical Committee (SAC/TC53) and focal points. This standard was drafted. China Shipbuilding Industry Corporation seventh eleven Institute. The main drafters of this standard. Zhou Jian, Zhou Yan, Jiang Ying small, stone phenanthrene, Mabing Jie. This standard replaces the standards previously issued as follows:

--- GB/T 13437-1992. Torsional vibration damper characterization

1 Scope

GB/T 13437-2009 is the Chinese national standard on description of torsional vibration absorber characteristics, in the field of construction materials and building. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 24 April 2009 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 December 2009. Classification: ICS 91.120.25, CCS J04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the torsional vibration damper (hereinafter referred to as the shock absorber) terminology, classification, characteristics and parameters of expression mention the manufacturer to the user For technical information. This standard applies to internal combustion reciprocating shaft (hereinafter referred to as shaft) commonly used in structural forms of shock absorber. Other forms of shock absorber also Reference may be used.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard. However, according to research encourages the parties to the agreement Study whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 2298 Mechanical vibration and shock term

GB/T 15371 crank shaft torsional vibration measurement and evaluation methods CB/T 3853 marine diesel engine shafting torsional vibration measurement method

3 Terms and Definitions

GB/T 2298, and given the following terms and definitions apply to this standard.

3.1 It has a moment of inertia, torsional stiffness and damping of torsional vibrations generated (or no damping) system. Synonyms. torsional vibration system.

3.2 Acting on the torsional vibration system, provoke some kind of system in response to periodic external torque.

3.3 The number of cycles per revolution of the crankshaft torque generated by the excitation of sinusoidal vibration.

3.4 In the moment slowly increase or decrease in the process of incremental damper suffered external torque and it generates incremental angular displacement ratio. NOTE. Static torsional stiffness and torque change rate. When the elastic member is a rubber shock absorber parts, also temperature dependent.

3.5 Under dynamic conditions, suffered outside the incremental torque damper and they generate incremental angular displacement ratio.

3.6 Shock absorber damping torque generated by its relative angular velocity ratio.

3.7 Loss factor (also called relative damping) Psid by equation (1) is defined.