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Mechanical seals— General requirements

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Foreword

This translation has been made based on the original Japanese Industrial Standard 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 The Japan Society of Industrial Machinery Manufacturers (JSIM)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently **JIS B 2405**: 1993 is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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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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Mechanical seals—General requirements

JIS B 2405: 2003

1 Scope This Japanese Industrial Standard specifies the items relating to the performance, construction, dimensions, accuracy of machines to be fitted, performance tests and marking of mechanical seals for general use.

Remarks: Designation of products is given in Annex 1 (informative). Auxiliary apparatuses are given in Annex 2 (informative).

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0651 Geometrical Product Specification (GPS)—Surface texture: Profile method—Nominal characteristics of contact (stylus) instruments

JIS B 7430 Optical flats

JIS K 2213 Turbine oils

3 Definitions For the purposes of this Standard, the terms given in Table 1 apply (see Figs. 1 to 4).

Further, idiomatic expressions and English equivalent are given for information.

Table 1 Definitions of terms

Term	Definition
sealing	To restrict leakage of fluid
sealing face; rubbing face	A surface of the mating ring or the seal ring (or parts of similar function) to rub against each other in close contact.
mating ring	A ring having a sealing face which does not move in the axial direction despite abrasion on the sealing face.
seal ring	A ring having a sealing face capable of moving in the axial direction by a spring or the like in proportion to abrasion of the sealing face.
stationary ring	A ring having a sealing face which does not rotate together with the shaft.
rotating ring	A ring having a sealing face which rotates together with the shaft.
secondary seal	The seal being interposed between the stationary ring and the casing or a mechanical seal cover (seal cover, cover plate), or that between the rotating ring and the shaft or the shaft sleeve. It is classified into the stationary side secondary seal and the rotating side secondary seal.
sealed fluid	Fluid used in machines, and with which leakage is expected to be restricted. Usually, it indicates the fluid at high pressure side.