

# JAPANESE INDUSTRIAL STANDARD

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(JSMA/JSA)

Disc springs — Part 1: Calculation

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## **Foreword**

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Spring Manufacturers Association (JSMA)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act. This Standard partially replaces JIS B 2706: 2013, which has been withdrawn.

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**JIS B 2706** series consists of the following 2 parts under the general title *Disc springs* —:

Part 1 : Calculation

Part 2: Product specifications and method of testing

# Disc springs — Part 1: Calculation

JIS B 2706-1: 2023

#### Introduction

This Japanese Industrial Standard has been prepared based on **ISO 19690-1**: 2017, Edition 1, with some modifications of the technical contents and structure.

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 JA.

## 1 Scope

This Standard specifies the design criteria of disc springs made of steel, whether as single disc springs or as stacks of disc springs (hereafter referred to as springs).

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

ISO 19690-1: 2017 Disc springs — Part 1: Calculation (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, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 0103 Springs — Vocabulary

NOTE Normative reference in the corresponding International Standard : ISO 26909 Springs — Vocabulary

JIS B 0156 Springs — Symbols

NOTE Normative reference in the corresponding International Standard : ISO 16249 Springs — Symbols

### 3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS B 0103** apply.

# 4 Symbols and units

For the purpose of this Standard, the meanings of symbols and units given in Table 1, and those given in **JIS B 0156** apply.