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**Fasteners — Non-electrolytically applied
zinc flake coatings**

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal establishing a Japanese Industrial Standard from The Japan Research Institute for Screw Threads and Fasteners (JFRI)/Japanese Standards Association (JSA), with the draft of Industrial Standard based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

This Standard has been made based on ISO 10683:2000 *Fasteners – Non-electrolytically applied zinc flake coatings* for the purposes of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial 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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the original JIS is to be the final authority.

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Contents

	Page
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
3.1 non-electrolytically applied zinc flake coating (with or without integral lubricant)	2
4 General characteristics	3
5 Dimension requirements and testing	3
6 Testing of corrosion protection	6
7 Mechanical and physical properties and testing	7
7.1 General	7
7.2 Appearance	7
7.3 Temperature resistance	7
7.4 Ductility	7
7.5 Adhesion/cohesion	7
7.6 Cathodic protection	7
7.7 Torque/tension relationship for coatings with integral lubricant or subsequently (externally) added lubricant	7
8 Applicability of tests	7
8.1 General	7
8.2 Tests mandatory for each lot	7
8.3 Tests to be conducted for in-process control	8
8.4 Tests which are only to be conducted when specified by the customer	8
9 Designation	8
10 Ordering requirements	9
Annex (Informative) Example for the choice of the coating thickness relating to corrosion protection requirement	10

Fasteners—Non-electrolytically applied zinc flake coatings

Introduction This Japanese Industrial Standard has been prepared based on the first edition of ISO 10683 *Fasteners—Non-electrolytically applied zinc flake coatings* published in 2000 without modifying the technical contents.

1 Scope This Standard specifies requirements for thickness, corrosion resistance and mechanical and physical properties of non-electrolytically applied zinc flake coatings on steel fasteners with metric threads.

It applies to both coatings with or without chromate.

Coatings according to this Standard may also be applied to steel screws which form their own mating threads such as wood screws, self tapping screws, self drilling screws, thread cutting screws and thread rolling screws as well as to non-threaded steel parts such as washers and pins.

They may be similarly applied to steel fasteners with other types of thread.

Coatings according to this Standard can be supplied with integral lubricant and/or with a subsequently added lubricant.

Note : The International Standard corresponding to this Standard is as follows.

In additions, 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.

ISO 10683: 2000 *Fasteners—Non-electrolytically applied zinc flake coatings* (IDT)

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. If the indication of the year of publication is given to these referred standards, only the edition of the indicated year constitutes the provision of this Standard but the revision and amendment made thereafter do not apply. The normative references without the indication of the year of coming into effect apply only to the most recent edition (including amendments).

JIS B 0209-1 *ISO general purpose metric screw threads—Tolerances—Part 1: Principles and basic data*

NOTE : ISO 965-1:1998 *ISO general purpose metric screw threads—Tolerances—Part 1 : Principles and basic data* is identical with the said standard.

JIS B 0209-2 *ISO general purpose metric screw threads—Tolerances—Part 2: Limits of sizes for general purpose external and internal screw threads—Medium quality*

NOTE : ISO 965-2:1998 *ISO general purpose metric screw threads—Tolerances—Part 2 : Limits of sizes for general purpose external and internal screw threads—Medium quality* is identical with the said standard.

JIS B 0209-3 *ISO general purpose metric screw threads—Tolerances—Part 3: Deviations for constructional screw threads*

NOTE : ISO 965-3:1998 *ISO general purpose metric screw threads—Tolerances—Part 3 : Deviations for constructional screw threads* is identical with the said standard.

JIS B 0251 *Limit gauges for metric screw threads*

NOTE : ISO 1502:1996 *ISO general-purpose metric screw threads—Gauges and gauging* is equivalent to the said standard.

JIS B 1010 *Designation system for fasteners*

NOTE : ISO 8991:1986 *Designation system for fasteners* is identical with the said standard is identical with the said standard.

JIS B 1045 *Fasteners—Preloading test for the detection of hydrogen embrittlement—Parallel bearing surface method*

NOTE : ISO 15330:1999 *Fasteners—Preloading test for the detection of hydrogen embrittlement—Parallel bearing surface method* is identical with the said standard.

JIS B 1051 *Mechanical properties of fasteners made of carbon steel and alloy steel—Part 1: Bolts, screws and studs*

NOTE : ISO 898-1:1999 *Mechanical properties of fasteners made of carbon steel and alloy steel—Part 1: Bolts, screws and studs* is identical with the said standard.

JIS B 1091 *Fasteners—Acceptance inspection*

NOTE : ISO 3269:2000 *Fasteners—Acceptance inspection* is identical with the said standard.

ISO 1463:1982 *Metallic and oxide coatings—Measurement of coating thickness—Microscopical method*

ISO 2064:1996 *Metallic and other inorganic coatings—Definitions and conventions concerning the measurement of thickness*

ISO 9227:1990 *Corrosion tests in artificial atmospheres—Salt spray tests*

3 Terms and definitions For the purpose of this Standard, the definitions given in ISO 2064 together with the following apply.

3.1 non-electrolytically applied zinc flake coating (with or without integral lubricant)