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**Protective clothing for users of
hand-held chain-saws—
Part 3: Test methods for footwear**

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In the event of any doubts arising as to the contents,
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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Health, Labour and Welfare and the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal of establishing a Japanese Industrial Standard from Japan Safety Appliances Association (JSAA)/Japanese Standards Association (JSA), with a draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law.

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JIS T 8125 consists of the following 3 parts under the general title “*Protective clothing for users of hand-held chain-saws*”:

Part 1 : Test rig driven by a flywheel for testing resistance to cutting by a chain-saw

Part 2 : Test methods and performance requirements for leg protectors

Part 3 : Test methods for footwear

Protective clothing for users of hand-held chain-saws—

Part 3: Test methods for footwear

Introduction

This Japanese Industrial Standard has been prepared based on the first edition of ISO 11393-3 published in 1999 with some modifications of the technical contents, such as addition of chain speed.

The portions given sidelines or dotted underlines in this Standard are the matters in which the contents of the corresponding International Standard have been modified. A list of modifications with explanations is given in Annex JB.

This Standard forms part of a series concerned with personal protective equipment designed to protect against the risks arising from the use of hand-held chain-saws.

No personal protective equipment can ensure a 100 % protection against cutting from a hand-held chain-saw. Nevertheless, experience has shown that it is possible to design personal protective equipment which offers a certain degree of protection.

These functional principles are as follows. Often more than one principle is applied.

- a) chain slipping: on contact the chain does not cut the material
- b) clogging: fibres are drawn by the chain into the drive sprocket and block chain movement
- c) chain braking: fibres have a high resistance to cutting and absorb rotational energy, thereby reducing the chain speed.

1 Scope

This Standard specifies test methods to be used to assess the resistance of footwear for protection of the user against cutting from a hand-held chain-saw of personal protective clothing (hereafter referred to as “footwear”).

NOTE 1 Methods for testing other forms of foot and leg protection (e.g. gaiters) against hand-held chain-saws will be covered in JIS T 8125-2 or other parts of ISO 11393.

NOTE 2 The International Standard corresponding to this Standard is as follows.

ISO 11393-3:1999 *Protective clothing for users of hand-held chain-saws—
Part 3: Test methods for footwear* (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.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. For standards with the year indication, only the edition of indicated year shall apply but the revision (including amendments) made thereafter shall not apply. The normative references without the indication of the year shall apply only to the most recent editions (including amendments).

JIS K 6400-2 *Flexible cellular polymeric materials—Determination of the physical properties—Part 2: Hardness (indentation technique) and stress-strain characteristics in compression*

NOTE : Corresponding International Standard : ISO 3386-1, *Polymeric materials, cellular flexible—Determination of stress-strain characteristics in compression—Part 1: Low-density materials* (MOD)

JIS T 8125-1 *Protective clothing for users of hand-held chain-saws—Part 1: Test rig driven by a flywheel for testing resistance to cutting by a chain-saw*

NOTE : Corresponding International Standard : ISO 11393-1: 1998, *Protective clothing for users of hand-held chain-saws—Part 1: Test rig driven by a flywheel for testing resistance to cutting by a chain-saw* (MOD)

ISO 17249: 2004 *Safety footwear with resistance to chain saw cutting*

NOTE : This standard (ISO 17249: 2004) is applicable only to the protective coverage and the safety level specified therein does not apply.

3 Terms and definitions

For the purposes of this Standard, the following terms and definitions apply.

3.1 footwear with integral protection

footwear in which the chain-saw protective material either comprises the material of the footwear or is permanently attached to the footwear

3.2 cut through

that the cutting length exceeds 10 mm in the protection material surface that is nearest to the body side under the cutting test of protective material

NOTE : Suppose that a sample consists of monolayer or two or more layers, and that it constitutes the end products, such as protection trousers, apply a moving saw chain against the sample surface that is outside a wearer's body. When a saw chain cuts the layer of a sample, slowing down and stops, it means that the cutting longer than 10 mm occurs between the surface on which the saw chain has been applied and the opposite surface (see JIS T 8125-1).

4 Test specimens

For footwear with metallic toecaps, three pairs, size 26.5 cm shall be tested. For footwear with non-metallic toecaps, four pairs, size 26.5 cm shall be tested.