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(JKPSA/JSA)

**Kraft paper sacks—
Method of specification**

ICS 55.080

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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 Japan Kraft Paper Sacks Industrial Association (JKPSA)/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 Z 0239 : 1996** is replaced with this Standard.

This revision has been made based on **ISO 8351-1 : 1994 *Packaging—Method of specification of sacks—Part 1 : Paper sacks*** 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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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Kraft paper sacks—Method of specification

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 8351-1 : 1994** *Packaging—Method of specification for sacks—Part 1 : Paper sacks* published in 1994 with some modifications of the technical contents.

Portions given sidelines or dotted underlines are the matters modified from the original International Standard. The list of modification with the explanation is given in annex 2 (informative)

1 Scope This Standard provides a checklist for the characteristics of kraft paper sacks (hereafter referred to as “paper sacks”) to be specified by the parties concerned when ordering.

This Standard is primarily intended for application to the types of paper sacks specified in **JIS Z 0102**.

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

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**.

ISO 8351-1 : 1994 *Packaging—Method of specification for sacks—Part 1 : Paper sacks* (MOD)

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 Z 0102 *Vocabulary for kraft paper sacks*

NOTE : **ISO 6590-1 : 1983** *Packaging—Sacks—Vocabulary and types—Part 1 : Paper sacks* is equivalent to the said standard.

JIS Z 1531-1 *Kraft paper sacks—Description and method of measurement*

NOTE : **ISO 6591-1 : 1984** *Packaging—Sacks—Description and method of measurement—Part 1 : Empty paper sacks* is equivalent to the said standard.

3 Method of specification

3.1 General When drawing up the specifications of a paper sack for ordering purposes, customer and manufacturer shall consider each item in the following lists and, where relevant, mutually agree to include them in the ordering specifications at an appropriate level.

The format of the ordering specification shall be agreed upon between the customer and the manufacturer.

3.2 Description

3.2.1 Sack type The types of paper sacks are classified into open-mouth type and valved type, and the symbols of them corresponding to **JIS Z 0102** are given below in parentheses.

3.2.1.1 Types of open-mouth sacks and symbol for them as given in the following:

- sewn flat (C-1);
- sewn gusseted (C-2);
- pasted flat hexagonal-bottom (A-1);
- pasted gusseted rectangular-bottom (A-2);
- pasted flat turn-over-bottom (A-3);
- pasted gusseted turn-over-bottom (A-4);
- pasted gusseted double-turn-over-bottom (A-5);
- pasted gusseted turn-over-bottom with reinforcing paper (A-5').

3.2.1.2 Types of valved sacks and symbol for them as given in the following:

- sewn flat (D-1);
- sewn gusseted (D-2);
- pasted flat hexagonal-ends (B-1);
- pasted gusseted rectangular-ends (B-1');
- pasted gusseted turn-over-ends with reinforcing paper (B-2);
- longitudinal seam valved pasted gusseted turn-over-ends (B-3);
- longitudinal seam valved pasted gusseted double-turn-over-ends (B-4).

3.2.2 Tube type

- flush-cut;
- stepped-end;
- notched-end.

3.2.3 Dimensions The following dimensions, in millimetres, shall be specified in accordance with **JIS Z 1531-1**.

- length of sack, a
- width of sack (width of body), b
- width of gusset, e
- width of end (width of bottom), c

- width of valve, g
- length of valve, f
- width of valve sleeve, v
- length of valve sleeve, i
- length of turn-over, p
- sewing line distance, n , from adjacent sack transverse edge;
- valve sleeve position, l : distance between outermost edge of sack and outermost edge of valve sleeve, measured parallel to the bottom.

3.2.4 Type of material Each ply shall be specified by type, grammage (in grams per square metre) or thickness (in micrometres), surface treatment [e.g. coating type and grammage, antislip type and application method, direction of the treatment faces (face in or face out)].

Thermoplastic film plies, normally an inner ply, shall be either type A or type B specified as follows:

a) Type A

- loose or integral (degree of combination of film plies and the paper plies);
- film type, e.g. PE-LD, PE-LLD, PE-HD, PVDC or E/VAC;
- film state (flat or tubular);
- film thickness, in micrometres;
- film melt flow index, in grams per 10 min
- length, in millimetres, where different from other plies (usually when loose or integral tubular);
- gusset, in millimetres, where different from other plies (usually when loose or integral tubular);
- width, in millimetres, where different from other plies (usually when loose or integral tubular);
- heat seal distance, in millimetres, from adjacent sack or thermoplastic ply transverse edge;
- skirt length, in millimetres, only for loose type;
- Z-fold (type having Z-fold in the middle);
- cuffed or uncuffed (with or without turn-over of film opening).

b) Type B

- film type, e.g. PE-LD, PE-LLD, PE-HD, PVDC or E/VAC;
- film state (flat, tubular or bursiform);
- film thickness, in micrometres;
- film dimensions, in millimetres: winding width in the case of flat and tube width in the case of tube;

- dimensions of film sack: length and width, in millimetres, of sack;
- specification of combination of film sacks: inserted, sewn, turned up on four sides or without turning up;
- heat sealing position of bursiform film: distance, in millimetres, from the end part of sack bottom.

3.2.5 Perforations

- beneath valve: number, size and pattern;
- ply: number, spacing, size and location of holes.

3.2.6 Valve/sleeve

- valve type: simple, reinforced, internal sleeve, external sleeve, longitudinal seam and heat sealable;
- valve position: i.e. in which corner of sack or at which longitudinal seam;
- sleeve materials: e.g. kraft, polyethylene-coated kraft, tubular polyethylene.

3.2.7 Longitudinal seam

- type: continuous, interrupted or unbonded;
- overlap width, in millimetres.

3.2.8 Pasted closure type

- flush-cut bottom: with/without bottom patch and/or bottom cap;
- stepped-end bottom: with/without bottom patch and/or bottom cap;
- stepped-end bottom: turn-over bottom;
- flush cut or stepped-end turn-over or double turn-over bottom: with/without reinforcing tape.

3.2.9 Bottom patch

- position: valved end, non-valved end;
- material: type and grammage;
- dimensions, in millimetres: length, width.

3.2.10 Bottom cap

- position: valved end, non-valved end;
- material: type and grammage;
- dimensions, in millimetres: length, width;
- wrap around: yes/no.

3.2.11 Bottom orientation

- folded towards sack face side;
- folded towards sack back side.

3.2.12 Sewn closures/sewing

3.2.12.1 Type of sewn closure

- simple;
- taped and sewn (tape under sewing);
- sewn and taped (tape over sewing);
- taped and sewn and taped (reinforced);
- heat-sealed and sewn and taped.

3.2.12.2 Type of stitch

- single chain stitch: with/without filter cord;
- double locked stitch: with/without filter cord.

3.2.12.3 Type of thread

- natural;
- synthetic;
- blend.

3.2.12.4 Type of filter cord

- jute (filler cord);
- paper (filler cord);
- other.

3.2.12.5 Stitch count per 250 mm or 100 mm.

3.2.12.6 Tape protrusion from sack edges, in millimetres.

3.2.12.7 Number of stitches in protruding tape.

3.2.12.8 Tape

- type of tape: crepe tape, reinforcing tape and over tape;
- material;
- colour.

3.2.12.9 Sewing position: top or bottom of sack in relation to print.

3.2.13 Filling aperture (open-mouth sacks only)