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(JKPSA/JSA)

**Kraft paper sacks—
Vocabulary and types**

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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 0102 : 1996** is replaced with this Standard.

In order to conform to the International Standard, this revision has been prepared based on **ISO 6590-1 : 1983** *Packing—Sacks—Vocabulary and types—Part 1 : Paper sacks*.

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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—Vocabulary and types

Introduction This Japanese Industrial Standard has been prepared based on the first edition of **ISO 6590-1** *Packaging—Sacks—Vocabulary and types—Part 1 : Paper sacks* published in 1983 with some modifications of the editorial presentation and/or the technical contents.

In addition, clause 7 gives the definitions not included in the corresponding International Standard to form a part of Japanese Industrial Standard.

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 (informative).

1 Scope This Standard defines terms, classification and packaging terms commonly used in kraft paper sack manufacture. It refers to single- and multi-ply sacks made from kraft paper; it does not refer to bags for the retail trade.

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

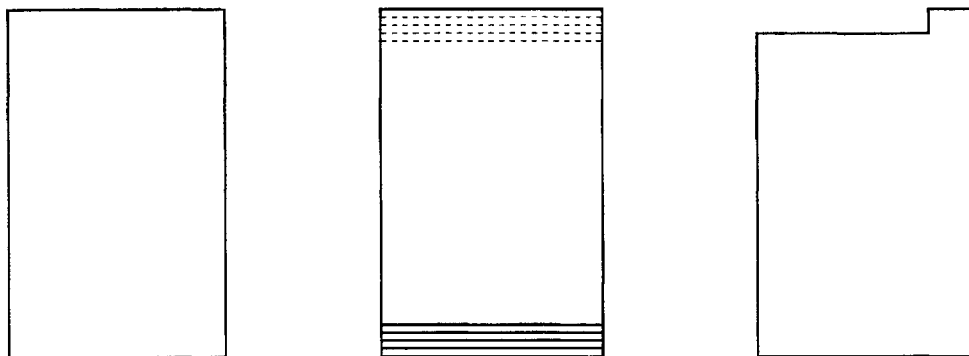
In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21**.

ISO 6590-1 : 1983 *Packaging—Sacks—Vocabulary and types—Part 1 : Paper sacks* (MOD)

2 General Certain definitions relating to paper sacks and their manufacture are indicated.

- a) **paper sack** A container made essentially from one or more flattened tubular plies of paper closed at least at one end, possibly in combination with other flexible materials to provide the properties required for filling and the goods distribution chain (hereafter referred to as “sack”).
- b) **ply** A sheet of paper or other flexible material, or combination of such materials, forming the walls of a sack.
- c) **gusset** A fold inserted in the longitudinal edge of a tube or sack.
- d) **tube** One or more plies in the form of a flattened cylinder cut into prescribed lengths.
 - 1) **flat tube** A tube comprised solely of flattened cylindrical plies with no inserted folds.
 - 2) **gusseted tube** A tube with folds inserted in the longitudinal edges.
 - 3) **flush cut tube** (flat or gusseted) A tube with plies cut collectively to a prescribed length [see figure 1 a)].
 - 4) **stepped end tube** (flat or gusseted) A tube with plies severed in echelon to a prescribed length [see figure 1 b)].

- 5) **notched end tube** (flat or gusseted) A tube with plies cut collectively to a prescribed length, in a manner which provides a notch at one end [see figure 1 c)].



a) **Flush cut tube** b) **Stepped end tube** c) **Notched end tube**

Figure 1 Tube

- e) **sewing** (stitching) Joining together by means of thread.

NOTE : In sack manufacture, usually bottom sewing by which the tube is closed at one or both ends with or without a capping tape.

- 1) **stitch** Part joined together by means of machine sewing thread.

Information : Distance between pinholes is called “stitch interval” (stitch pitch), the number of pinholes on the tube is “the number of stitches” and a state in which upper thread and lower thread are not bound is “skipped stitch”.

- 2) **tape protrusion from sack edges** Edges of a tape protruding from the machine-sewn ends.

- f) **pasting** (adhesive bonding) Joining together by means of an adhesive.

- 1) **longitudinal seam** Pasting by which the longitudinal overlap [see 2 h) 1)] of a ply is jointed together with an adhesive.

Information : The seam may be continuous or interrupted.

- 2) **transverse pasting** Application of adhesive between the plies at one or both ends of a tube.

Information : Transverse pasting facilitates separation of the front and back sides of the tube during manufacture or use and can increase the strength of certain types of sack.

- 3) **bottom pasting** Pasting by which the tube is closed at one or both ends by means of an adhesive.

NOTE : Before closure of the tube the ends are folded and/or formed into a suitable shape.

- 4) **gusset spot pasting** Pasting applied to the end part of gusset in order to prevent the gusset from unfolding.

- g) **heat sealing** (welding) Joining together by the application of heat.
- h) **overlap** Areas of a tube or ply which are superposed.
- 1) **longitudinal overlap** Areas of the longitudinal edge of a ply which are superposed.
 - 2) **bottom overlap** Areas of the transverse edges of a tube which are superposed when formed into a bottom.
- i) **valve** An aperture, normally situated in one corner of a sack or at end part of longitudinal overlap, through which the sack is filled, and which, after filling, does not readily allow reverse flow of the contents.

3 Types and symbols of sacks shall be as specified in table 1.

Table 1 Classification of types and symbols of sacks

Type of sack	Open mouth	Symbol of type	Valved	Symbol of type
Sewn sack ⁽¹⁾	Open mouth-sewn-flat sack	C-1	Valved-sewn-flat sack	D-1
	Open mouth-sewn-gusseted sack	C-2	Valved-sewn-gusseted sack	D-2
Pasted sack ⁽¹⁾	Open mouth-pasted-flat hexagonal bottom sack	A-1	Valved-pasted-flat hexagonal ends sack	B-1
	Open mouth-pasted-gusseted rectangular bottom sack	A-2	Valved-pasted-gusseted rectangular ends sack	B-1'
	Open mouth-pasted-flat turn over bottom sack	A-3	Valved-pasted-gusseted turn over ends sack with reinforcing paper	B-2
	Open mouth-pasted-gusseted turn over bottom sack	A-4	Longitudinal seam valved-pasted-gusseted turn over ends sack	B-3
	Open mouth-pasted-gusseted double (turn over) bottom sack	A-5	Longitudinal seam valved-pasted-gusseted double turn over ends sack	B-4
	Open mouth-pasted-gusseted (turn over) bottom sack with reinforcing paper	A-5'		

Note ⁽¹⁾ Various designs of sack containing a combination of pasted and sewn ends are possible but these are not listed in the table. For an example see the note to 3.6.3.

3.1 flat sack A sack manufactured from a flat tube.

3.2 gusseted sack A sack manufactured from a gusseted tube.

3.3 sewn sack A sack closed at one or both ends by means of a continuous transverse line of stitches.

3.4 pasted sack A sack closed at one or both ends by pasting.

3.5 open mouth sack Tube closed at one end only during manufacture.

3.5.1 open mouth-sewn-flat sack Flat tube closed at one end by means of a continuous transverse line of stitches [see figure 2 a)].

3.5.2 open mouth-sewn-gusseted sack Gusseted tube closed at one end by means of a continuous transverse line of stitches [see figure 2 b)].

3.5.3 open mouth-pasted-flat hexagonal bottom sack Flat tube closed at one end by folding, forming and pasting the bottom in a hexagonal shape [see figure 2 c)].

3.5.4 open mouth-pasted-flat turn over bottom sack Flat tube closed at one end by turning over the end and pasting (commonly known as pinch type [see figure 2 d)].

3.5.5 open mouth-pasted-gusseted rectangular bottom sack Gusseted tube closed at one end by folding, forming and pasting the bottom in a rectangular shape (commonly known as self-opening satchel) [see figure 2 e)].

3.5.6 open mouth-pasted-gusseted turn over bottom sack Gusseted tube closed at one end by turning over the end and pasting (commonly known as pinch type) [see figure 2 f)].

3.5.7 open mouth-pasted-gusseted double turn over bottom sack Gusseted tube closed at one end by turning over the end twice and pasting [see figure 2 g)].

3.5.8 open mouth-pasted-gusseted turn over bottom sack with reinforcing paper Gusseted tube closed at one end by turning over the end and pasting, provided with reinforcing paper with tear tape to the outer side [see figure 2 h)].

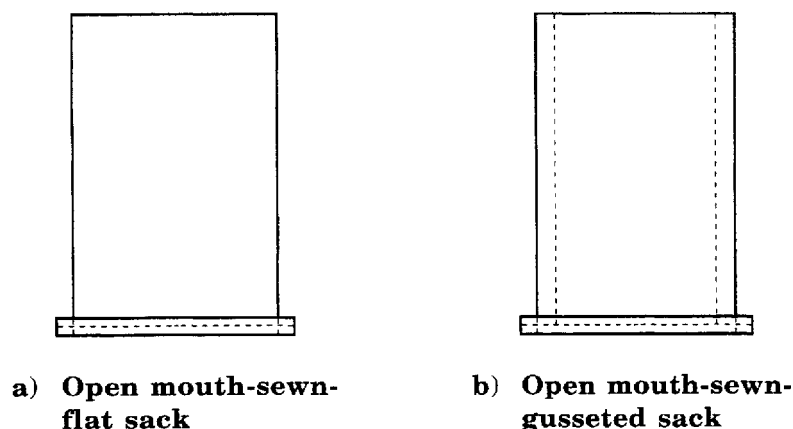
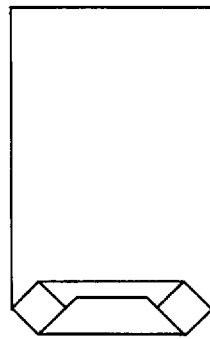
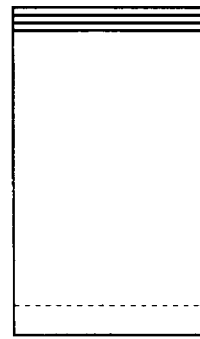


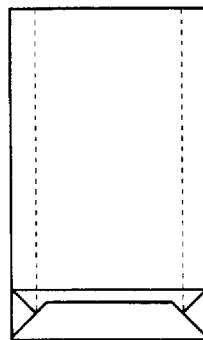
Figure 2 Classification of open mouth sacks



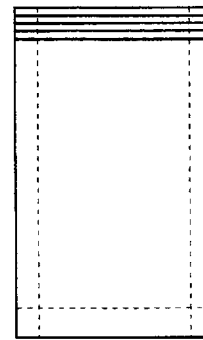
c) **Open mouth-pasted-flat hexagonal bottom sack**



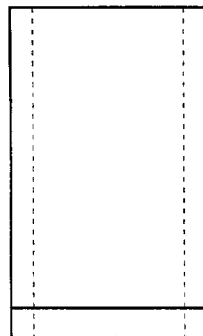
d) **Open mouth-pasted-flat turn over bottom sack**



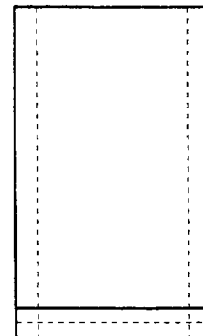
e) **Open mouth-pasted-gusseted rectangular bottom sack**



f) **Open mouth-pasted-gusseted turn over bottom sack**



g) **Open mouth-pasted-gusseted double turn over bottom sack**



h) **Open mouth-pasted-gusseted turn over bottom sack with reinforcing paper**

Figure 2 (concluded)

3.6 valved sack Tube closed at both ends but provided with a valve.

3.6.1 valved-sewn-flat sack Flat tube closed at both ends by means of a continuous transverse line of stitches [see figure 3 a)].