



JAPANESE
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STANDARD

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JIS Z 8801-2 : 2000

Test sieves—
Part 2 : Test sieves of perforated
metal plate

ICS 19.120; 73.120

Descriptors : screening equipment, wire netting

Reference number : JIS Z 8801-2 : 2000 (E)

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS Z 8801 : 1994** is withdrawn and replaced with this Standard.

JIS Z 8801 series with title of “*Test sieves*” consist of the following three parts.

Part 1 : Test sieves of metal wire cloth

Part 2 : Test sieves of perforated metal plate

Part 3 : Test sieves of electroformed sheets

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## Test sieves— Part 2 : Test sieves of perforated metal plate

**Introduction** This part of JIS Z 8801 has been made on the basis of ISO/DIS 3310-2 *Test sieves—Technical requirements and testing—Part 2 : Test sieves of perforated metal plate* published in 1999 as the 4th edition without changing the technical contents, but adding the item not specified in the corresponding International Standard (material) and the necessary item (concrete methods for inspection).

The parts given the sidelines or the dotted underlines in this Standard are the matters not included in the corresponding International Standard.

**1 Scope** This part of JIS Z 8801 specifies the technical requirements and inspection methods of the test sieves of perforated metal plate used for the sieve analysis test of the material in a state of powder and particle to be turned into raw material, partially fabricated item or end product in the engineering and mining fields (hereafter referred to as “sieve”).

**Remarks :** The following standard is the corresponding International Standard to this Standard:

ISO/DIS 3310-2 : 1999 *Test sieves—Technical requirements and testing—Part 2 : Test sieves of perforated metal plate*

**2 Normative references** The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards indicated below shall be applied.

JIS B 7184 *Profile projectors*

JIS B 7507 *Vernier, dial and digital callipers*

JIS G 3101 *Rolled steels for general structure*

JIS G 4305 *Cold rolled stainless steel plates, sheets and strip*

JIS H 3100 *Copper and copper alloy sheets, plates and strips*

### 3 Sieve plate

#### 3.1 Shape and arrangement of holes

- a) The sieve plate shall be of round holes (round aperture) or square holes (square aperture) perforated perpendicularly to metal plate.
- b) The sieve holes shall be arranged as follows:
  - 1) In the case of round holes, the arrangement is that the angle made by the straight lines connecting the hole centers as shown in Attached Fig. 1 is of 60°.
  - 2) In the case of square holes, the holes are arranged in straight rows or in staggered rows as shown in Attached Fig. 2.

- 3) In any cases, the intervals between sieve holes (hereafter referred to as “pitch”) are equal.

### 3.2 Aperture size and pitch of sieve

- a) The aperture size of sieve, pitch and thickness of sieve plate shall be as given in Attached Table 1.
- b) The corners of square holes may be rounded. However, the radius of these corner rounds shall be the value smaller than the value  $r_{\max}$  (mm) calculated by the following formula:

$$r_{\max} = 0.15 w$$

where,  $w$  (mm) is the nominal aperture size.

### 3.3 Thickness of sieve plate as given in Attached Table 2.

## 4 Sieve frame

- a) The shape of the frame shall be round or square.
- b) The dimensions of the round frame shall be as given in Attached Table 3. For the square frame, dimensions are not specifically given.
- c) In the case of round frame, the sieves of the same dimensions shall be able to be used in a piled up state.

## 5 Appearance

- a) **Flaw in punching, burrs and deformation of hole** The sieve plate shall be free from the defects which affect the sieve analysis test results such as flaw resulted from punching, burrs, deformation of holes, etc.
- b) **Distortion and deflection** The sieve plate shall be mounted on the frame in such a way that no distortion and deflection are generated and so manufactured that no test portion is lodged in the part where the sieve plate is attached to the sieve frame.

**6 Material** The material for the sieves shall be as given in Attached Table 4 or those equivalent or superior thereto in quality.

However, the material for the frame of square sieve is not specified.

## 7 Inspection

**7.1 Appearance** Inspect visually the appearance by lightening the entire sieve with the uniform light. In this case, there shall be no defects specified in 5.

**7.2 Aperture size and pitch of sieve** The aperture size of the sieve and pitch shall be measured using an appropriate measuring apparatus in accordance with the following methods in a) and b), and the measured values shall conform to the specification in Attached Table 1.