

Dredger's Anchors

1. Scope

This Japanese Industrial Standard specifies anchors used mainly for non self-propulsion dredger for operation and emergency.

Remark: In this standard units and numerical values in [] are in accordance with the International System of Units (SI), and given for reference only.

2. Classification

The anchors shall be classified into two types A and B according to the shape of shanks.

3. Construction, Shape and Dimensions

The construction, shape and dimensions shall be as shown in Fig. 2 and Tables 1 to 5 and conform to the following requirements:

- (1) Nominal weight is given by the calculated total mass.
- (2) The weight of stock shall be approx. 1/5 of the calculated total mass.

4. Tolerance on Dimensions

- (1) The tolerance of each part of the anchor shall be $\pm 4\%$ except those specified, and its maximum value ± 20 mm.
- (2) The actual weight of the anchor may be increased as compared with the nominal weight within the limits of tolerance, but no decrease shall be allowed.

5. Materials

The materials shall be as shown in Fig. 2.

6. Tests and Inspection

6.1 The anchor shall be subjected to the following tests and inspection:

- (1) Weight, dimensions and visual inspection
- (2) Hammering test
- (3) Proof test

6.2 Weight, Dimensions and Visual Inspection The construction, shape, dimensions and weight shall be inspected and shall conform to the requirements of 3 and 4, and shall be free from any detrimental defects for use.

6.3 Hammering Test The anchor shall be hammered with a hammer weighing 3 kg or more and shall be free from any defects.

6.4 Proof Test The proof test load shown in Table 6 corresponding to the actual weights of the anchor except those of the stock shall be applied to the fluke as shown in the Fig. 1 and there shall be no abnormal deformation or other defects.

When the anchor is pulled from approximately 10% of the proof load to full load and then released to the initial load, the permissible change of the gauge length shall not exceed 20 mm.

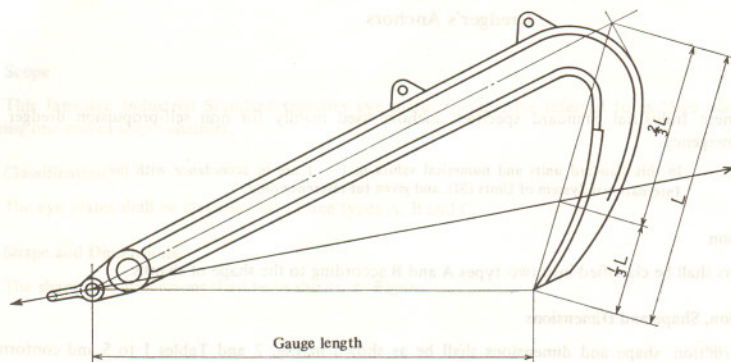


Fig. 1.

7. Designation

The anchor shall be designated by the title, type and nominal weight. JIS number may be used in place of the title.

Example: Dredger's Anchor Type A 0.5 or JIS F 3991 Type A 0.5

8. Marking

The actual weight of body and stock shall be stamped on the body and stock respectively and also the manufacturer's name or abbreviation for it to be marked on the body.

References Standards:

- JIS G 3101 — Rolled Steel for General Structure
- JIS G 3201 — Carbon Steel Forgings
- JIS G 4051 — Carbon Steel for Machine Structural Use
- JIS G 5101 — Carbon Steel Castings

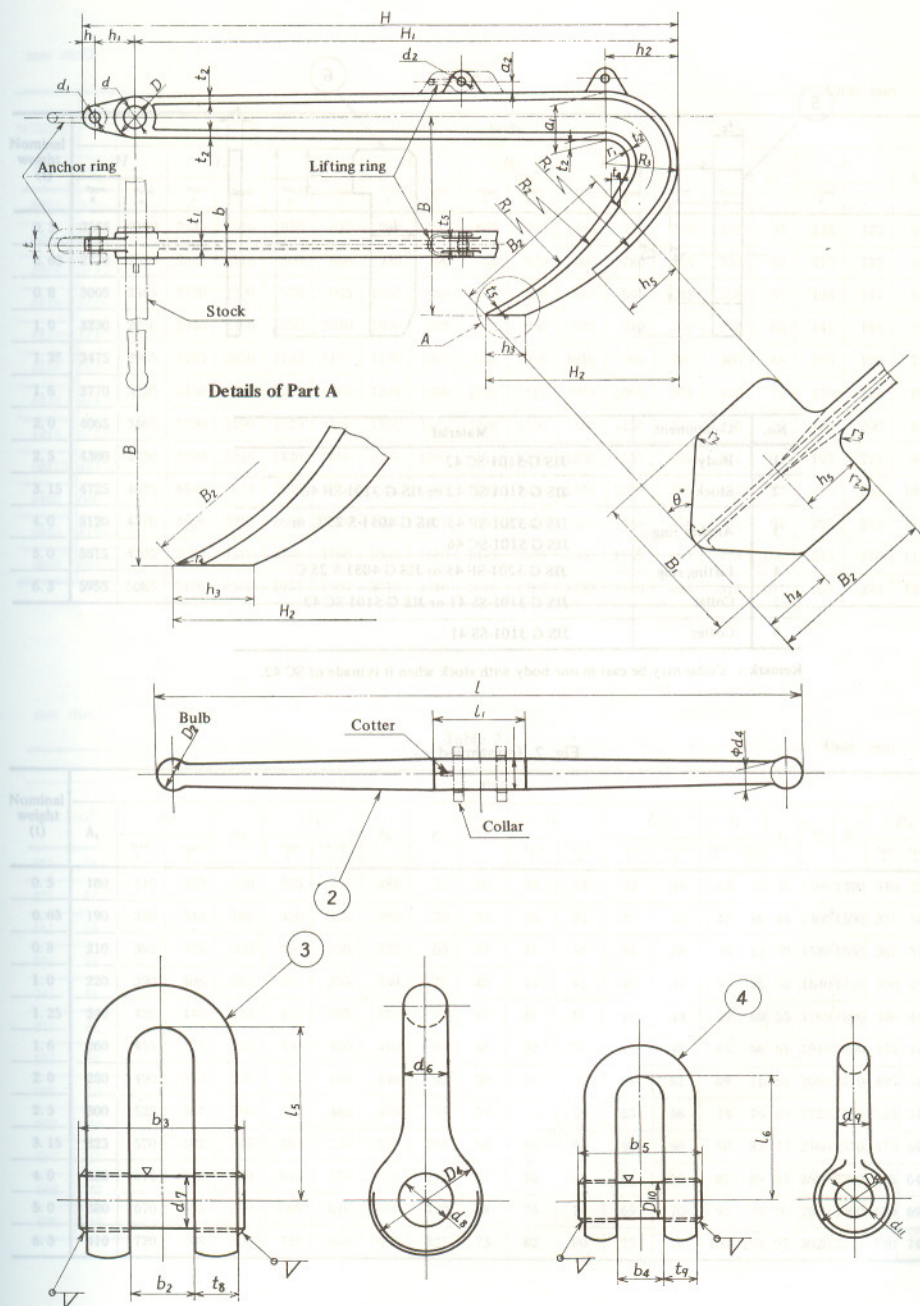


Fig. 2.