Ships' steel guy blocks with swivels for fibre rope

1. Scope This Japanese Industrial Standard specifies ships' steel blocks with swivels (hereinafter referred to as "block") for fibre rope guy.

Remarks: This standard makes reference to the following standards:

JIS B 0205 – Metric coarse screw threads
JIS B 1351 – Split pins
JIS B 2801 – Shackles
JIS F 3418 – Ships' sheaves
JIS G 3101 – Rolled steel for general structure
JIS G 4051 – Carbon steel for machine structural use
JIS G 5501 – Grey iron castings
JIS H 3100 – Copper and copper alloy sheets, plates and strips
JIS H 3250 – Copper and copper alloy rods and bars

2. Classification The block shall be classified as given in **Table 1**.

Table 1

Type	Nominal dia.
MS 1A	160
MS 1B	160
MS 2A	160
MS 2B	160

Remarks: 1. First letter M in the type symbol denotes the block for hemp or synthetic fibre rope.
2. The second letter S in the type symbol denotes the block with swivel.
3. The third letters 1, and 2 in the type symbol denotes the number of sheaves.
4. The fourth letter A in the type symbol denotes the block without becket, and B with becket.

3. Construction, shape and dimensions The construction, shape and dimensions of the block shall comply with **Figs. 1** to **4** and the following requirements:

(1) The sheaves shall conform to **JIS F 3418**.
(2) The sheaves shall conform to **JIS B 2801**.
(3) The sheaves shall conform to **JIS B 1351**.

4. Materials The materials for the block shall be as given in **Table 2**.

AVA Documents Document Sharing Hub

Full document details: JIS F 3419-1995

Table 2

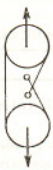
No.	Component	Material
1	Fork	JIS G 4051-S 25 C
2	Side plate	Steel plate
3	Axle pin and hexagon nut	JIS G 4051-S 25 C
4	Split pin	Brass wire
5	Check piece	Steel plate
6	Distance piece	JIS G 3101-SS 400
7	Swivel	JIS G 4051-S 25 C
8	Nut for swivel	JIS G 4051-S 25 C
9	Washer	JIS H 3100-C 2801 P or JIS H 3250-C 3604 BD or C 3604 BE
10	Pin and nut	JIS G 3101-SS 400
11	Split pin	Brass wire
12	Partition plate	Steel plate
13	Sheave	JIS G 5501-FC 200
14	Shackle	Conform to JIS B 2801
15	Grease nipple	Brass

5. Surface treatment The fork, side plates and distance pieces of the block shall be galvanized.

6. Tests and inspection

6.1 Loading test The block with sheave(s) coupled with shackle shall be tested by applying the proof load in such a manner as given in **Table 3**.

Table 3

Item \ Type	MS 1 A	MS 1 B	MS 2 A	MS 2 B
Testing method				
Safe working load kN	4.9	4.6	17.7	21.6
Proof load kN	19.6	27.6	35.4	43.2

Remark: The safe working load for a single-sheave block means the maximum load that can be withstood at one end of the rope passing the block. The safe working load for a multiple sheave block means the maximum load that can be withstood at the shackle of the block.

6.2 Overhaul inspection After the loading test is finished, each part of the block shall be overhauled and inspected and be free from any defect.

7. Designation The block shall be designated by the title, **JIS** number and type.

Example: Ships' steel guy block with swivel for fibre rope, MS 1A or **JIS F 3419** MS 1A

AVA Documents
Document Sharing Hub

Full document details: JIS F 3419-1995

8. Marking The following particulars shall be marked on a readily visible part of the block by stamping or by attaching an identification plate.

(1) Nominal diameter or identification symbol
(2) Safe working load
(3) Year and month of manufacture
(4) Manufacturer's name or abbreviation for it.

AVA Documents
Document Sharing Hub

Full document details: JIS F 3419-1995