



Ships' snatch blocks

1. Scope This Japanese Industrial Standard specifies ships' snatch blocks (hereinafter referred to as "block").

Remarks: This standard makes reference to the following standards:

- JIS B 0205 – Metric coarse screw threads
- JIS B 0207 – Metric fine screw threads
- JIS B 1101 – Slotted head screws
- JIS B 1111 – Cross recessed head screws
- JIS B 1112 – Cross recessed head wood screws
- JIS B 1135 – Slotted head wood screws
- JIS B 1256 – Plain washers
- 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
- JIS H 5111 – Bronze castings

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

Table 1

Type		Nominal size				
SM	H	—	200	—	—	—
	E	—	200	—	—	—
SW		160	200	240	—	—
WM	H	—	—	—	260	330
	E	—	—	—	260	330

Remarks: 1. The first letter S in the type symbol denotes steel block, and W wooden block.

2. The second letter M in the type symbol denotes the block for hemp or synthetic fibre rope, and W for wire rope.

3. The third letter H in the type symbol denotes the block with hook, and E with eye.

4. The nominal sizes of Types SMH, SME and SW are derived from the diameter of sheave, and those of Types WMH and WME from the height of shell.

3. Construction, shape and dimensions The construction, shape and dimensions of blocks shall be as shown in Figs. 1 to 3 and the following requirements:

- (1) The swivel of Types SMH, SME and SW shall be provided with grease lubrication. The swivel of Types WMH and WME may be provided with oiling holes.
- (2) The shackle used for Type SME, SW and WME shall conform to JIS B 2801.
- (3) The bindings and side plates of Types SMH and SME may be fixed by riveting or welding.
- (4) The bindings and side plates of the type SW may be fixed by welding.

The split pin used in the types SMH, SME and SW shall conform to **JIS B 1351**.

The sheave used in the type WMH or WME shall conform to **JIS F 3418**.

The pan head screw used in the type WMH or WME shall conform to **JIS B 1101** or **JIS B 1111**.

The countersunk head wood screw used in the type WMH or WME shall conform to **JIS B 1112** or **JIS B 1135**.

The washer used in the type WMH or WME shall conform to **JIS B 1256**.

Screw threads on the swivel shall conform to **JIS B 0207**.

Screw threads on the axle pin and nut shall conform to **JIS B 0205** or **JIS B 0207**.

Materials The materials for the blocks shall be as given in **Table 2**, for Type MS, as given in **Table 3**, W and as given in **Table 4**, for Type WM.

Table 2

Component	Material	Type	No.	Component	Material
Binding	JIS G 3101-SS 400	SMH or SME	14	Nut	JIS G 4051-S 25 C
Binding	JIS G 4051-S 25 C		15	Set screw	Steel wire
Binding	JIS G 4051-S 25 C		16	Sheave	JIS G 5501-FC 200
Binding	JIS G 3101-SS 400		17	Bush	JIS H 5111-BC 6
Hook holder	JIS G 4051-S 25 C		18	Split pin	Brass wire
Side plate	Steel plate		19	Locking plate	Steel plate
Side plate	Steel plate		20	Washer	JIS H 3100-C 2801 P or JIS H 3250-C 3604 BD or C 3604 BE
Side plate	Steel plate		21	Grease nipple	Brass
Axle pin and hexagon nut	JIS G 4051-S 25 C		22	Bolt and hexagon nut	Steel bar
Hinge pin	JIS G 4051-S 25 C		23	Swivel eye	JIS G 4051-S 25 C
Safety hook	Steel bar		24	Shackle	To be as specified in JIS B 2801
Rivet	Steel bar				
Hook	JIS G 4051-S 25 C				

Table 3

Component	Material	Type	No.	Component	Material
Binding	JIS G 3101-SS 400	SW	12	Swivel nut	JIS G 4051-S 25 C
Binding	JIS G 4051-S 25 C		13	Grease nipple	Brass
Binding	JIS G 4051-S 25 C		14	Sheave	JIS G 5501-FC 200
Binding	JIS G 3101-SS 400		15	Bush	JIS H 5111-BC 6
Side plate	Steel plate		16	Set screw	Steel wire
Side plate			17	Split pin	Brass wire
Side plate			18	Hinge pin	JIS G 4051-S 25 C
Axle pin and hexagon nut	JIS G 4051-S 25 C		19	Swivel holder	JIS G 4051-S 25 C
Check piece	Steel plate		20	Washer	JIS H 3100-C 2801 P or JIS H 3250-C 3604 BD or C 3604 BE
Swivel eye	JIS G 4051-S 25 C		21	Split pin	Brass wire
Rivet	Steel bar		22	Shackle	Conform to JIS B 2801

- (5) The split pin used in the types SMH, SME and SW shall conform to **JIS B 1351**.
- (6) The sheave used in the type WMH or WME shall conform to **JIS F 3418**.
- (7) The pan head screw used in the type WMH or WME shall conform to **JIS B 1101** or **JIS B 1111**.
- (8) The countersunk head wood screw used in the type WMH or WME shall conform to **JIS B 1112** or **JIS B 1135**.
- (9) The washer used in the type WMH or WME shall conform to **JIS B 1256**.
- (10) Screw threads on the swivel shall conform to **JIS B 0207**.
- (11) Screw threads on the axle pin and nut shall conform to **JIS B 0205** or **JIS B 0207**.

4. Materials The materials for the blocks shall be as given in **Table 2**, for Type MS, as given in **Table 3**, for Type SW and as given in **Table 4**, for Type WM.

Table 2

Type	No.	Component	Material	Type	No.	Component	Material
SMH or SME	1	Binding	JIS G 3101-SS 400	SMH or SME	14	Nut	JIS G 4051-S 25 C
	2	Binding	JIS G 4051-S 25 C		15	Set screw	Steel wire
	3	Binding	JIS G 4051-S 25 C		16	Sheave	JIS G 5501-FC 200
	4	Binding	JIS G 3101-SS 400		17	Bush	JIS H 5111-BC 6
	5	Hook holder	JIS G 4051-S 25 C		18	Split pin	Brass wire
	6	Side plate	Steel plate		19	Locking plate	Steel plate
	7	Side plate	Steel plate		20	Washer	JIS H 3100-C 2801 P or JIS H 3250-C 3604 BD or C 3604 BE
	8	Side plate	Steel plate		21	Grease nipple	Brass
	9	Axle pin and hexagon nut	JIS G 4051-S 25 C		22	Bolt and hexagon nut	Steel bar
	10	Hinge pin	JIS G 4051-S 25 C		23	Swivel eye	JIS G 4051-S 25 C
	11	Safety hook	Steel bar		24	Shackle	To be as specified in JIS B 2801
	12	Rivet	Steel bar				
	13	Hook	JIS G 4051-S 25 C				

Table 3

Type	No.	Component	Material	Type	No.	Component	Material
SW	1	Binding	JIS G 3101-SS 400	SW	12	Swivel nut	JIS G 4051-S 25 C
	2	Binding	JIS G 4051-S 25 C		13	Grease nipple	Brass
	3	Binding	JIS G 4051-S 25 C		14	Sheave	JIS G 5501-FC 200
	4	Binding	JIS G 3101-SS 400		15	Bush	JIS H 5111-BC 6
	5	Side plate			16	Set screw	Steel wire
	6	Side plate	Steel plate		17	Split pin	Brass wire
	7	Side plate			18	Hinge pin	JIS G 4051-S 25 C
	8	Axle pin and hexagon nut	JIS G 4051-S 25 C		19	Swivel holder	JIS G 4051-S 25 C
	9	Check piece	Steel plate		20	Washer	JIS H 3100-C 2801 P or JIS H 3250-C 3604 BD or C 3604 BE
	10	Swivel eye	JIS G 4051-S 25 C		21	Split pin	Brass wire
	11	Rivet	Steel bar		22	Shackle	Conform to JIS B 2801