# Mechanical Strength Testing for Side Scuttles

**Object of Amendment**

Rules for the Survey and Construction of Steel Ships Part L

**Reason for Amendment**

Chapter 7 of Part L of the Rules for the Survey and Construction of Steel Ships stipulates requirements for side scuttles based on ISO 1751 which specifies requirements for ship's side scuttles.

ISO 1751 stipulates the loading procedure for mechanical strength tests for deadlights in reference to ISO 614, which stipulates procedures for the punch method of the non-destructive strength testing of glass plates. However, ISO 1751 was amended, and the loading procedure for the deadlight according to ISO 614 was deleted, with a separate loading procedure being specified instead.

Accordingly, relevant requirements are amended based on ISO 1751.

**Outline of the Amendment**

Amends the reference to ISO 614 related to the loading procedure for mechanical strength tests for deadlights and specifies the loading procedure.

**Effective Date and application**

This amendment applies to tests for which the application is submitted to the Society on or after 1 January 2026.

ID:DH25-05

Amended-Original Requirements Comparison Table (Mechanical Strength Testing for Side Scuttles)

| Amended | Original | Remarks |
|---|---|---|
| **RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS**<br><br>**Part L EQUIPMENT**<br><br>**Chapter 7 SIDE SCUTTLES**<br><br>**7.1 Side Scuttles**<br><br>**7.1.5 Testing**<br>**2** Mechanical strength testing<br>(1) A prototype side scuttle without glass pane and with closed deadlight is to be subjected to a mechanical strength test by the punch method specified in **Fig. L7.1** according to the test pressures given in **Table L7.8**.<br>(2) The punch is to be placed on that side of the deadlight which could be subjected to direct contact with the sea. Where the construction of the deadlight makes it necessary, a plate of 100 *mm* diameter and 10 *mm* thickness may be placed between the punch and the deadlight.<br>(3) When subjected to the pressure given in **Table L7.8**, the permanent deformation of the deadlight is not to exceed 1 % of the nominal size of the side scuttle. | **RULES FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS**<br><br>**Part L EQUIPMENT**<br><br>**Chapter 7 SIDE SCUTTLES**<br><br>**7.1 Side Scuttles**<br><br>**7.1.5 Testing**<br>**2** Mechanical strength test<br>(1) A prototype side scuttle without glass pane and with closed deadlight is to be subjected to a mechanical strength test by a punch method according to the test pressures given in **Table L7.8**. For this test, *ISO* 614 is to be used as a guide.<br>(2) The punch is to be placed on that side of the deadlight which could be subjected to direct contact with the sea. Where the construction of the deadlight makes it necessary, a plate of 100*mm* diameter and 10*mm* thickness may be placed between the punch and the deadlight.<br>(3) When subjected to the pressure given in **Table L7.8**, the permanent deformation of the deadlight is not to exceed 1% of the nominal size of the side scuttle. | |

# Amended-Original Requirements Comparison Table (Mechanical Strength Testing for Side Scuttles)

<table>
<tr><th>Amended</th><th>Original</th><th>Remarks</th></tr>
<tr>
<td>
Table L7.8 Test Pressure for Mechanical Strength
<table>
<tr><th>Type of side scuttle</th><th>Test pressure (kPa)</th></tr>
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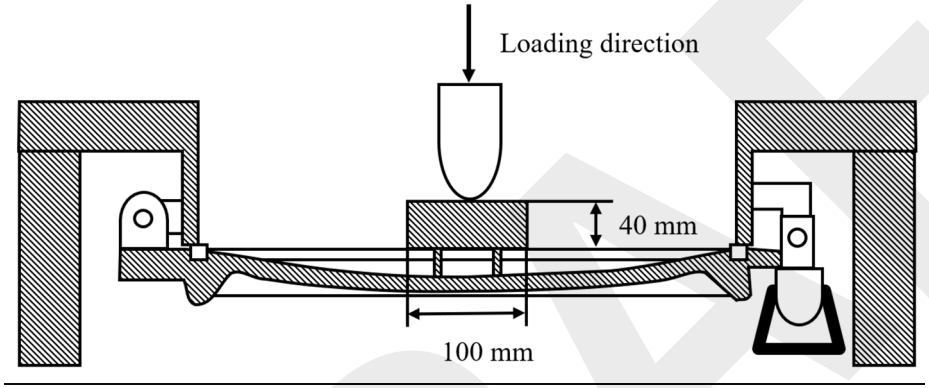
Fig. L7.1 Mechanical Strength Test<br>


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<td>Specify the loading direction with reference to ISO 1751:2012.</td>
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EFFECTIVE DATE AND APPLICATION<br><br>
1. The effective date of the amendments is 1 January 2026.<br>
2. Notwithstanding the amendments, the current requirements apply to tests for which the application is submitted to the Society before the effective date.
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