SPECIFIC SAFETY INSTRUCTION SSI-M-1-6

LIFTING TABLES, VEHICLE LIFTS AND TAIL LIFTS
1 INTRODUCTION

For the convenience of the reader, this Specific Safety Instruction uses the masculine gender only. However, its use shall be understood as referring to both genders unless the context clearly indicates a reference to one gender only.

1.1 Legal basis

In accordance with its intergovernmental status, the Organization establishes and updates Safety Rules to implement its Safety Policy.

This Specific Safety Instruction forms part of the CERN Safety Rules and is issued pursuant to the Staff Rules and Regulations and the CERN Safety Policy.

1.2 Purpose and scope

The purpose of this Specific Safety Instruction is to define the additional Safety requirements relating to lifting tables, vehicle lifts and tail lifts, and their components, compared to General Safety Instruction GSI-M-1 “Lifting equipment and accessories”.

This equipment includes: elevating work platforms installed temporarily or permanently, powered manually or electrically, used to raise/lower equipment, materials and/or personnel and which also allow equipment and materials to be raised to perform work at a height more conveniently and safely.

1.3 Definitions

For the purposes of this Specific Safety Instruction, the following definitions shall apply:

- **Assembly and installation test of lifting equipment**: test to make sure that the lifting equipment is safely and securely assembled and installed, in compliance with the manufacturer's instructions.

- **Examination of the condition of lifting equipment**: examination whose purpose is to check that the lifting equipment and its supports are in good condition and to identify any wear and tear that could represent a hazard and which must include the following essential components:
  - chocking, anchoring and braking devices designed to immobilise mobile lifting equipment when not in operation;
  - brakes or equivalent devices designed to stop and then maintain the load or equipment in all positions;
  - devices designed to control the lowering of loads;
  - lifting blocks and pulley rims;
  - load and tipping/moment limiters;
  - devices limiting the movements of the lifting equipment and the load, such as motion limiters, derricking limiters, slewing limiters, anti-collision devices and fall protection devices;
  - hooks and mechanical, electromagnetic or pneumatic gripping devices;
  - load-bearing cables and chains.

- **Operating test of lifting equipment**: test consisting in:
  - using the lifting equipment, with or without its accessories, to move a test load into the most unfavourable positions, applying a force to the mechanical components corresponding to the maximum values of the capacity stated by the manufacturer;
  - verifying the operating efficiency:
    - of the brakes or equivalent devices designed to stop and then maintain the load or equipment in all positions;
    - of the systems designed to control the lowering of the loads;
    - of the systems limiting the movements of the lifting equipment and the load, such as motion limiters, derricking limiters, slewing limiters, anti-collision devices and fall protection devices;
  - triggering the load-moment limiters and overturning-moment limiters, where they exist, in order to check that they operate correctly at the values defined in the manufacturer’s instructions or, where no instructions exist, at values beyond the maximum operating load and at least 1.1 times the load or maximum moment.

- **User entity**: organic unit or contractor authorised to use an item of mechanical equipment belonging to or hired by CERN or a collaborating institution.
For other definitions please refer to section 1.3 of Safety Regulation SR-M “Mechanical equipment” and to General Safety Instruction GSI-M-1 “Lifting equipment and accessories”.

1.4 CERN Safety Rules and Laws

This Specific Safety Instruction is supplemented by the documents listed below, where they exist:

- Safety Regulations (SR);
- General Safety Instructions (GSI);
- Specific Safety Instructions (SSI);

and by the relevant provisions of the following Laws:

- Arrêté du 1er mars 2004 relatif aux vérifications des appareils et accessoires de levage (France).
- EN 1570 – Safety requirements for lifting tables (Europe).
- EN 1493 – Vehicle lifts (Europe).
- EN 1756 – Tail lifts – Platform lifts for mounting on wheeled vehicles – Safety requirements (Europe).
- EN ISO 13857 – Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs (Europe).

In the event of any ambiguity or contradiction between the above-mentioned documents, they shall apply in decreasing order of priority, starting from the top.

2 ADDITIONAL SAFETY REQUIREMENTS COMPARED TO GSI-M-1

The following additional Safety requirements compared to General Safety Instruction GSI-M-1 shall apply to lifting tables, vehicle and tail lifts:

<table>
<thead>
<tr>
<th>Relevant section of GSI-M-1</th>
<th>Phase of life cycle</th>
<th>Additional Safety requirements compared to GSI-M-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Design</td>
<td><img src="image" alt="Illustrative examples" /></td>
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<tr>
<td></td>
<td></td>
<td>Equipment designed for raising or lowering goods, and the operator when authorised.</td>
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<tr>
<td></td>
<td></td>
<td>Lifting tables shall be designed to meet standard EN 1570.</td>
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<td>Vehicle lifts shall be designed to meet standard EN 1493.</td>
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<td></td>
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<td>Tail lifts shall be designed to meet standard EN 1756.</td>
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<tr>
<td>2.2</td>
<td>Manufacture</td>
<td>Manufacturing of vehicle lifts at CERN is prohibited. Adjustments are authorised, provided that they are made in accordance with the manufacturer’s instructions and with the approval of the HSE Unit.</td>
</tr>
<tr>
<td>2.3</td>
<td>Procurement or arrival/presence on the CERN site</td>
<td>No additional Safety requirement compared to GSI-M-1.</td>
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<tr>
<td>2.4</td>
<td>Installation</td>
<td>No additional Safety requirement compared to GSI-M-1.</td>
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<td>2.5</td>
<td>Acceptance and commissioning</td>
<td>No additional Safety requirement compared to GSI-M-1.</td>
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</tbody>
</table>
2.6 Use

Each part of the elevating work platform on which persons must not stand shall be clearly indicated. This information shall also be provided on safety labels. Instructions for operators shall emphasise the specific safety measures to be taken.

To avoid crushing and shearing, the minimum distance between moving parts and the mobile and fixed parts which can be reached by people on the platform or near to its area of movement must meet standard EN ISO 13857.

The user entity shall ensure that persons under its responsibility using elevating work platforms have been provided with the relevant training for their workplace or workstation.

2.7 Periodic inspections

In the case of lifting tables and vehicle lifts the following examination and test are required:

- examination of the condition and operating test: annually or at intervals specified by the manufacturer if required more than once per year.

In the case of tail lifts the following examination and test are required:

- examination of the condition and operating test: twice-yearly or at intervals specified by the manufacturer if required more than every six months.

2.8 Maintenance

No additional Safety requirement compare to GSI-M-1.

2.9 Recommissioning

Following dismantling/reassembly, recommissioning shall be carried out in accordance with section 2.5 of GSI-M-1.

2.10 Decommissioning/ dismantling

No additional Safety requirement compared to GSI-M-1.

3 FINAL PROVISIONS

3.1 Entry into force

This Specific Safety Instruction (version 1) enters into force upon its publication on the CERN website dedicated to the CERN Safety Rules: [https://www.cern.ch/safety-rules](https://www.cern.ch/safety-rules).