ACCREDITATION SCHEME FOR INSPECTION BODIES

TECHNICAL NOTE: HL 01

SPECIFIC REQUIREMENTS FOR THE ACCREDITATION OF INSPECTION BODIES FOR HOOK-LIFT & CONTAINER INSPECTION

Technical Note HL 01, 09 July 2018
The SAC Accreditation Programme is managed by Enterprise Singapore

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1. INTRODUCTION

1.1 The purpose of the inspection is to determine the condition of the hook-lifts and containers for conformance with standards or other normative documents and/or general requirements.

1.2 The field of hook-lift inspection covers the inspection of various types of hook-lifts and their accessories. This includes the inspection of repair works.

1.3 The field of container inspection covers the inspection of various types of containers on waste collection vehicles, their accessories and the inspection of repair works. This includes:

- Open/Closed Top Containers
- Portable Compactors

1.4 This technical note (HL 01) should be read in conjunction with documents listed in the Reference Section and government regulations where applicable.

1.5 The inspection report produced by an accredited inspection body for the scope of accredited inspection activities shall be an endorsed report.

1.6 This Technical Note applies to inspections done within the inspection bodies' premises and inspections done on site. [Example: Bin Centres etc]

2. EQUIPMENT

2.1 Equipment which affect results that are critical to the conclusion of the inspection shall be appropriate for the particular inspection to be performed.

2.2 Inspectors shall ensure that all equipment, including equipment not under the charge of the inspection body, used during inspection work is calibrated and traceable to the SI unit. Calibration shall be performed by recognized accredited laboratories [1] or the National Measurement Institute who is a member of the BIPM [2] MRA where possible. The inspectors shall ensure that the acceptance of calibration reports be based on the measurement traceability as specified in SAC-SINGLAS 006: Traceability of Measurement.

2.3 Where calibration facilities are not available, in house calibration shall be validated using well recognized methods.

2.4 Refer to Table 1 for the recommended frequencies of calibrations and checks of critical equipment used.

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[1] *Recognised accredited laboratories refer to those accredited by SAC-SINGLAS or its MRA partners*

[2] *BIPM MRA refers to listing of signatories maintained by International Bureau of Weights and Measures (BIPM) and publicly available on the BIPM website: http://www.bipm.fr*

3. TESTING

3.1 Analytical testing is a laboratory activity and therefore does not come within the scope of ISO/IEC 17020. Examples of analytical testing are chemical or metallurgical analysis.

3.2 Where analytical testing is required to support the evaluation, the inspection body shall ensure that the testing is performed by an accredited laboratory. The inspection body shall ensure that it receives endorsed test reports from accredited laboratories where available.

3.3 When an organisation is providing analytical testing and inspection for the same project, the organisation has to ensure that there is sufficient independence between the two activities (e.g. results of inspection activities and testing activities should not be approved by the same person).

3.4 Functional testing forms a normal part of the activities of an inspection body and is therefore within the scope of ISO/IEC 17020. Example of functional testing includes load testing of lifting equipment and accessories.

4. INSPECTION PERSONNEL

4.1 INSPECTORS

4.1.1 Inspectors, including approved signatories, shall be suitably qualified and have sufficient relevant experience in their scope of inspection. Example: in welding technology, welding inspection, manufacturing and inspection, material technology, corrosion, knowledge in NDT, functionality of equipment and other related technologies. (See Appendix 2 for the qualification criteria)

4.1.2 Inspectors, including approved signatories, must be familiar with the relevant standards or codes used in the inspection activities.

4.1.3 Inspection bodies shall note that qualification requirements of inspectors may be superseded or limited by the regulatory requirements of the countries where the equipment eventually resides.

4.1.4 Inspection bodies shall maintain records of inspectors' qualifications, training and experience. The records shall include how and when each inspector is authorized by the inspection bodies to perform specific inspection or functional testing.

4.1.5 Only a Professional Engineer is permitted to carry out certification on any repair or modification to load bearing structural components; or to review change to any operating parameter or calculation for hook-lift.

5. INSPECTION METHODS AND PROCEDURES

5.1 The inspection body shall have detailed procedures and instructions for the application of the appropriate regulations, codes of practice, standards, specifications, guidance documents and customer requirements.

5.2 The inspection body shall document the inspection in the checklist provided by the relevant authorities and support it with objective evidence. This includes photographs of the items inspected.

5.3 Codes, Standards, Manufacturer Specifications and other technical references applicable to the design, construction, operation, inspection and repair of hook-lift, container and their components within the accredited scope shall be maintained up to date and be readily available to the staff.

6. FORMAT OF ACCREDITATION SCOPE

6.1 The scope of accreditation is granted only for specific items, materials or systems being inspected. An example of the accreditation scope is attached in Appendix 1.

7. Reference

a) ISO/IEC 17020:2012 – Conformity Assessment-Requirements for the operation of various types of bodies performing inspection
b) ILAC P15:06/2012 – Application of ISO/IEC 17020:2012 for the Accreditation of Inspection Bodies
c) SAC-SINGLAS 006 – Traceability of Measurement
d) Environmental Public Health Act (Chapter 95, Section 113) Environment Public Health (General Waste Collection) Regulation: 2000
e) NEA’s Code of Practice for Licensed General Waste Collection

Appendix 1

Inspection Body: Type A or B or C

Type of Product	Type and Range of Inspection	Inspection Method, Codes or Standards used
1) Hook-Lift	a) In-service inspection b) License renewal inspection	
2) Container (Open-Top)	a) In-service inspection b) License renewal inspection	
3) Container (Compactor)	a) In-service inspection b) License renewal inspection	

Approved Signatories

Mr [Signatory A]	- For Hook-Lift & Container (Open-Top)
Mr [Signatory B]	- For Hook-Lift & Container (Compactor)
Mr [Signatory C]	- For Hook-Lift Only
Mr [Signatory D]	- For Container (Open-Top) Only
Mr [Signatory E]	- For Container (Compactor) Only

NOTE :

Type A inspection body
The inspection body providing “third party” services.

Type B inspection body
The inspection body which forms a separate and identifiable part of an organisation involved in the design, manufacture, supply, installation, use or maintenance of the item it inspects and has been established to supply inspection services to its parent organisation.

Type C inspection body
The inspection body which is involved in the design, manufacture, supply, installation, use or maintenance of the items it inspects or of similar competitive items and may supply inspection services to other parties not being its parent organisation.

Appendix 2

Qualification Criteria for Inspectors and Approved Signatories

The general criteria for an inspector shall include
1. 3 years of relevant working experience
2. Trained by Original Equipment Manufacturer (OEM)
3. Evaluated and appraised by the inspection body to be competent

The general criteria for an approved signatory shall include
1. 7 years of relevant working experience
2. Relevant Diploma/NITEC and trained by OEM
3. Evaluated and appraised by the inspection body to be competent

TABLE 1 RECOMMENDED EQUIPMENT CALIBRATION AND CHECK INTERVALS

S/N	Equipment	Frequency of calibration or check	Equipment / Parameters to be checked
1.	Pressure Gauge	a) Functional check before each & every inspection b) To be calibrated once every 2 years	Pressure
2.	Meter Rule	a) Functional check before each & every inspection b) To be calibrated once every 2 years	Dimensional
3.	Torque Wrench	a) Functional check before each & every inspection b) To be calibrated once every 2 years	Torque