

Standard Category **1**

S1170

Train arrestors – Inspection and maintenance

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1 Purpose

The purpose of this standard is to define the requirements for the inspection and maintenance of train arrestors.

2 Scope

- 2.1 This standard applies to the inspection and maintenance of all forms of train arrestor on running lines and in depots and sidings.

Note: For the purposes of this suite of standards, the term "fixed train arrestor" includes rail-built, concrete block, hydraulic, drag and sand-drag types. See definition in clause 7.

- 2.2 It covers both scheduled and post-engagement inspections and maintenance.

3 Requirements

3.1 General

- 3.1.1 LU shall be informed if a train arrestor is unavailable or likely to become unavailable for use, or is subject to restricted use (e.g. limited approach speed), during Traffic Hours. Repairs shall be carried out within 36 hours.

3.2 Inspection

3.2.1 General

Routine and post-engagement inspections of train arrestors shall follow the manufacturer's recommendations where these are available.

3.2.2 Routine inspections

- 3.2.2.1 Inspection of train arrestors, including the supporting track, as part of general patrolling inspections shall conform with the requirements of S1158.
- 3.2.2.2 During both general patrolling and detailed inspections particular attention shall be paid to any signs of unreported engagement.
- 3.2.2.3 Friction train arrestors shall be subject to a specific and detailed inspection at intervals of not more than 12 months. This inspection shall check both the configuration of the friction train arrestor and the condition and state of adjustment of its individual components, including the slide path and the positioning of the train arrestor between the registration marks (as described in S1169), and protective paintwork.
- 3.2.2.4 Fixed train arrestors shall be subject to a specific and detailed inspection at intervals of not more than two years. This inspection is additional to the basic visual (PM1) and track quality (PM3) inspections described in standard S1158, and shall check both the configuration of the train arrestor and the condition of each of its individual components and any protective paintwork. Notwithstanding the two-yearly frequency, a detailed inspection shall be carried out if the PM1 or PM3 inspections identify any defect which in the inspector's assessment compromises the performance of the arrestor.

- 3.2.2.5 In addition to the routine inspection requirements above, hydraulic fixed train arrestors shall be inspected at intervals of not more than 2 months to check for signs of leakage and the correct retraction of buffer rams into housings.
- 3.2.2.6 Inspection of concrete fixed train arrestors shall include the condition of the structural concrete and connecting buffer beam.

3.2.3 Post-engagement inspections

Following notice of an engagement, the components of a train arrestor shall be subject to an immediate inspection to check:

- a) that no part of the train arrestor system has been damaged or displaced to an extent that would constitute a safety risk if the train arrestor were to remain in use;
- b) that the track infrastructure associated with the train arrestor, including signalling and current limiting devices and fixed red warning lights, remains in operable condition;
- c) that the train arrestor is still within the registration marks (friction arrestors only).

3.2.4 Records

- 3.2.4.1 The findings of routine and post-engagement inspections shall be recorded. A post-engagement report form is shown in Attachment 1 (clause 11.1); an alternative form may be used subject to it showing no less information.
- 3.2.4.2 Records of routine and post-engagement inspections shall be retained throughout the service life of the train arrestor.

3.3 Maintenance

3.3.1 General

- 3.3.1.1 Conditions identified in the course of routine inspections which present a risk of reducing the safety of a train arrestor system (including the supporting track), or of degrading its performance, shall be rectified to a timescale commensurate with the risk.
- 3.3.1.2 The design position of train arrestors and associated installations, relative to track features, shall not be altered during maintenance.
- 3.3.1.3 Where buffer beams are provided, their surface which faces approaching trains shall present a diagonal pattern of 75mm-wide alternating red and white stripes.
- 3.3.1.4 Routine and post-engagement maintenance of train arrestors shall follow the manufacturer's recommendations for maintenance where these are available.
- 3.3.1.5 Where maintenance of fixed train arrestors involves material replacement, refer to S1169 for the applicable requirements.