

Technical Specification

T0437 Non-insulated running rail and check rail fishplates

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1 Purpose

- 1.1 The purpose of this specification is to give the requirements for fishplates to join non-insulated running rails and check rails in LU track.

2 Scope

- 2.1 This specification covers non-insulated fishplates for joining running rails and check rails in the following applications:
- 56E1 to 56E1 (running rails and check rails)
 - 95RBH to 95RBH (running rails and check rails)
 - 56E1 to 95RBH (running rails)
 - 33C1 to 33C1 (check rails).
- 2.2 In each running rail application, this specification covers both expansion and tight joints, in both cases including lift plates catering for dissimilar head wear. LU requires to join rails with up to 5mm dissimilar wear (56E1) and 13mm (95RBH).
- 2.3 In each check rail application this specification covers only expansion joints with no provision for dissimilar headwear.
- 2.4 Fishplates for insulated joints are covered by specification T0405.

3 Requirements

3.1 Performance in track

- 3.1.1 Fishplates shall be suitable for the traffic loading and track conditions set out in Attachment 1.

3.2 Metallurgy

- 3.2.1 Fishplates shall be manufactured either in accordance with BS 47-1.
- 3.2.2 If a manufacturer proposes to use alternative standard(s) he shall state the standard(s) concerned and seek LU's approval for their use.

3.3 Test parameters

- 3.3.1 The Charpy impact strength of the steel shall not be less than 120 J when tested in accordance with EN ISO 148-1:2010.
- 3.3.2 The average hardness shall not be less than 130 HV when tested in accordance with EN 6507-1:2005.
- 3.3.3 Where other test parameters are not stated in BS 47-1, manufacturers shall advise which tests will be performed to verify that the plates will sustain the loading conditions to which they will be exposed on LU.

3.4 Configuration

- 3.4.1 A list of the principal fishplates, other than proprietary items, in use by LU is given in Attachment 2. Any alternative designs shall be configured to
- a) provide a wheel flange clearance from the top of the fishplate no less than that provided by drawing RE/PW/261;
 - b) suit the rail-end drilling details on LU drawing T040023;