

E.10/9: SLEWING AND ALIGNMENT

RAILWAY ENGINEERING SPECIFICATION

E.10/9: SLEWING AND ALIGNMENT CONTENTS

Clause		Page
1.	SCOPE	2
2.	INTERPRETATIONS	2
2.1	SUPPORTING SPECIFICATIONS	2
2.2	DEFINITIONS.....	2
3.	MATERIALS	2
4.	PLANT	2
5.	CONSTRUCTION	2
5.1	GENERAL	2
5.2	SAFETY	3
5.3	PROGRAMME AND METHOD STATEMENT	3
5.4	METHODS AND PROCEDURES	3
5.5	STANDARDS	3
5.6	COMPLETION.....	3
6.	TOLERANCES	4
7.	TESTING	4
8.	MEASUREMENT AND PAYMENT	4

1. SCOPE

This specification covers the work necessary for changing and correcting the horizontal alignment of track.

2. INTERPRETATION

2.1 SUPPORTING SPECIFICATIONS

2.1.1 Where this specification is required for a project, the following specifications, shall, inter alia, form part of the contract documents:

- a) The E.10 Gen - General.
- b) The E.10/4 - Ballasting and tamping.
- c) The E.10/11 - Survey and setting out of track alignment and referencing.

2.1.2 In addition the following specifications, inter alia, may be required:

- a) The E.10/1 - Laying of rails.
- b) The E.10/2 - Laying of sleepers.
- c) The E.10/3 - Ballast cleaning.
- d) The E.10/5 - Destressing.
- e) The E.10/6 - Building and replacement of sets.
- f) The E.10/7 - Field welding of rail joints.
- g) The E.10/8 - Field welding and corrective grinding of battered rail joints, skid marks
and rail crown damage.

2.2 DEFINITIONS

Void.

3. MATERIALS

Void.

4. PLANT

Void.

5. CONSTRUCTION

5.1 GENERAL

Void.

5.2 SAFETY

Void.

5.3 PROGRAMME AND METHOD STATEMENT

Void.

5.4 METHODS AND PROCEDURES

5.4.1 GENERAL

When aligning, realigning or slewing track the Contractor shall move the track horizontally and perform all the work necessary to adjust and correct the horizontal alignment of the track, including moving the ballast at the heads of the sleepers and underneath steel sleepers, ballasting and tamping shall be applied to adjust and correct the vertical alignment of the track, cutting the rails, correcting sleeper spacing and squareness, fastening the rails and sleepers, welding, destressing and setting out.

5.4.2 ALIGN TRACK

When aligning track on open lines the Contractor shall ensure that the portion of track which he is aligning remains safe for the passage of trains at the maximum permissible speed on that portion of track or such lesser speed as directed by the Engineer.

5.4.3 REALIGN TRACK

5.4.3.1 After realignment the Contractor shall check whether the ballast profile conform to that specified in specification E10. Gen. Should it be necessary to move ballast to correct the ballast profile, the Contractor will be paid separately.

5.4.4.2 Once the track is in its new position, the Contractor shall align the track on the new defined centre line.

5.4.4 SLEW TRACK

5.4.4.1 The Contractor shall open up the track, clear and prepare the area over which the track is to be slewed, move the existing ballast and prepare a ballast bed on the new centre line of the track.

5.4.4.2 Thereafter the Contractor shall loosen the required sleeper and rail fastenings, cut the rails, if necessary, and move the track horizontally to the new position without damaging the material.

5.4.4.3 Once the track is in its new position, the Contractor shall align the track on the new centre line.

5.5 STANDARDS

Void.

5.6 COMPLETION

Void.

6. TOLERANCES

Void.

7. TESTING

Void.

8. MEASUREMENT AND PAYMENT

8.1 SCHEDULED QUANTITIES

8.1.1 Realign track.....Unit: m or km

Realigning of track will be measured along the centre line of the realigned track.

8.1.1.1 Separate items will be scheduled for the following:

- a) Open lines.
- b) Yard tracks.

8.1.1.2 The rates tendered shall include for the following:

- a) Measuring from the reference pegs.
- b) Moving the track to the correct position.
- c) Aligning the track on the new centre line.
- d) Measuring the ballast profile to check conformance.

8.1.1.3 The rates tendered shall not include for the following items which will be separately measured and paid for :

- a) Moving of ballast to correct the ballast profile.
- b) Ballasting, lifting and tamping.
- c) Destressing.
- d) Welding.

8.1.2 Slewing of track.....Unit: m or km

Slewing of track will be measured along the centre line of the slewed track.

8.1.2.1 Separate items will be scheduled for the following:

- a) Open lines.
- b) Yard tracks.
- c) Various categories of distance of sideways slew.

8.1.2.2 The rates tendered shall include for the following:

- a) Opening up the track.
- b) Moving ballast from the existing alignment to the new alignment.
- c) Loosening the sleeper fastenings.
- d) Slewing the track to the correct position and aligning it on the new centre line.
- e) Cutting, drilling and fastening rails.
- f) Squaring, spacing and fastening sleepers.
- g) Clearing the site of minor rubble, minor offcuts and minor surplus material.

8.1.2.3 The rates tendered shall not include for the following items which will be separately measured and paid for:

- a) Corrective welding and grinding of mismatched rail ends.
- b) Welding of rail joints.
- c) Ballasting, lifting and tamping.

8.1.3 Moving ballast during realignment.....Unit : m

Moving of ballast during realignment of track will be measured along the centre line of those portions of the track where ballast needed to be reprofiled in terms of clause 5.4.3 hereof.

The rates tendered shall include for the following:

- a) Moving the ballast to the required position.
- b) Correcting the ballast profile.

8.1.4 Clear major rubble..... Unit : m³

The volume of rubble cleared will be measured by the method specified in the Project Specification.

8.1.4.1 Separate items will be scheduled for the following :

- a) Disposal with lorries.
- b) Disposal with wagons.

8.1.4.2 The rates tendered shall include for the following :

- a) Loading the rubble.
- b) Transporting it over the free haul distance.
- c) Offloading it at the designated place.
- d) Shaping and treating, as specified in the Project Specification.

GEN0009.HC