

**Issue Details**

Standard Ref:	P&E/313
Title:	Safe Turning of Rails Using Rail Turning Bars
Issue Number:	3
Issue Date:	12/09/2011
Standard Owner:	David Philpott, Professional Head of Railway Engineering

**For the attention of**

Assistant Project Managers (Technical), Delivery Managers, Foreman, Gang staff, Project Managers (who have a track involvement), Sub Contract Labour, Supervisors, Welders, Welding Managers, CEM's, CRE's and Project Engineers (PWay)

**Purpose**

The purpose of this standard is to detail the necessary arrangements so that all persons undertaking the handling and movement of rails by use of hand tools can do so in a safe and competent manner.

**Scope**

This standard applies to VolkerRail and its subcontractors whilst undertaking the turning of rails.

**Summary of Changes**

Reviewed and updated to align to the current organisation, industry standards and best practice.

**Compliance**



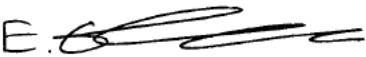
This standard is mandatory for all VolkerRail employees and its subcontractors and must be complied with from 12/09/2011.

**Further Information**

Any issue of clarification relating to this standard should be addressed to the Standard Owner shown above.



# Safe Turning of Rails Using Rail Turning Bars

<b>Prepared by</b>	 Professional Head of Railway Engineering
<b>Approved by</b>	 Engineering Director
<b>Accepted for issue</b>	 Performance & Standards Manager

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### **Issue Details**

This document will be updated when necessary by distribution of a complete replacement.

Amended or additional pages will be marked by a vertical black line in the adjacent margin.

<b>Issue No.</b>	<b>Date</b>	<b>Details of Change</b>
1	Nov 2004	First Issue as GEI/P&E/313. Formerly E&SM 313 which is now superseded and should be removed from E&SM 313 Manual and destroyed.
2	Oct 2007	Change to title of document. Minor modifications throughout
3	12/09/2011	Periodic review and amended for current legislation, client standards, and best practice in line with current organisation & job titles.

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**Appendices**

None

**Associated Forms**

None

### 1. Purpose

The purpose of this standard is to detail the VolkerRail management arrangements so that all persons undertaking the turning of rails by use of hand tools can do so in a safe and competent manner.

### 2. Scope

This standard applies to VolkerRail and its subcontractors whilst undertaking the turning of rails on all sites.

### 3. Compliance

This standard is mandatory across all VolkerRail sites and operations for all employees and VolkerRail subcontractors and should be complied with from 12/09/2011.

Compliance with the requirements of this standard is necessary to enable the company to meet its obligations under current legislation.

All staff that manage, supervise and/or carry out work actively connected with this standard have a legal obligation to comply with the specified arrangements herein.

### 4. Definitions and Abbreviations

None

### 5. References

Health and Safety at Work Act 1974

Construction, Design and Management Regulations 2007

### 6. Management Arrangements

#### 6.1. Turning by Bars in Fish Bolt Holes

The practice of turning rails using any type of bar or tool in a fish bolt hole is **strictly forbidden**. Such practice can cause serious personal injuries, damage to the rail and can result in fish bolt hole failure leading to broken rails and potential derailment during service life.

#### 6.2. Correct Tools

The correct tool for turning rails is a Rail Turning Bar of a type designed to turn rails by applying the tool to either the rail head or foot, at any point within the length of the rail, in such a way as any sudden forward movement releases the rail turning bar safely from the rail.

#### 6.3. Different Rails

Different rail turning bars are required for bull head and flat bottom rails.

**6.4. Safe Method of Work****6.4.1 Implementation**

A Safe System of Work shall be planned and introduced before any work involving Rail Turning Bars commences. The plan shall ensure adequate resources are available (with regard to the length and weight of rail being turned).

**6.4.2 Number of Operatives**

As a guide, on level ground 4 people per 60 ft. rail, each with a rail turning bar. More staff are required on uneven ground, over obstructions or when turning uphill.

**6.4.3 Firm Stance**

Firm underfoot conditions shall be created to ensure that all operatives can gain a secure foothold. Where ground is unnecessarily uneven and cannot be corrected, additional resource shall be planned and used.

**6.4.4 Condition of Equipment**

Equipment must be examined before use to ensure that it is in good condition and that the hooked ends are not worn excessively that could cause them to slip.

**6.4.5 Uneven Ground – Additional Precautions**

On uneven ground, resources should be organised/positioned to prevent the sudden exit of the rail from the bars (when turned) causing unexpected movement of the rail which could endanger those in the vicinity. Staff should always stand as far away from the rail as practicable when turning the rail.

**6.4.6 Team Leader**

The person in charge must coordinate simultaneous activity from all operatives.

**6.5. Approved Rail Turning Bars**

Only the following approved rail turning bars are to be used for turning rails.

These Rail Turning Bars are available via the Unipart Rail catalogue, and for ease of reference the catalogue numbers and descriptions are set out below.

**NRS Cat No. NRS Catalogue description to be used when ordering**

039/002031 Rail Turning Bar for Flat Bottom Rail

039/002032 Rail Turning Bar for Bull Head Rail

039/002033 Rail Turning Bar for Bull Head Rail (Not for 3<sup>rd</sup> rail use)

039/001005 Rail Turning Bar, Ratchet, insulated with fibre glass handle

039/002019 Rail Turning Bar, web type, for Flat Bottom Rail, all metal, not for 3<sup>rd</sup> rail areas

039/031188 Rail Turning Bar, Japanese Cant Hook insulated with fibre glass handle and triangular grip

In addition, there are two approved ratchet type rail turning bars, not currently produced, but which may still be in use. Both types have a slotted rum plate which is fitted over the web at the rail end. These ratchet type rail turning bars may only be used with rails up to a maximum length of 18.3m (60 feet).

**6.6. Safety Requirements**

As a minimum, the following items of PPE must be worn:

- Boots
- Gloves
- Hard hat
- Relevant high visibility clothing as per Client requirements.

All staff not involved in the turning activity shall be at least 3m clear of the rail (and not on a downhill side).

**6.7. Competence & Training**

All staff required to undertake rail turning shall have received adequate training, provided through a Track Induction course. This is best practice for operatives in all Businesses and on all infrastructures. Sub-contract staff that are to undertake this task shall be requisitioned with the requirement for previous attendance at this Track Induction Course. They will then be deemed competent.

**7. Monitoring**

The requirements of this standard may be subject to audit as part of the annual audit programme however, the standard owner must obtain self assurance that the requirements have been implemented through routine inspection/audit.

**8. Retention of Records**

Record	Retained By	Retention Period
Track Induction Course Records	Training & Competence Department	T + 40