

**NEW EQUIPMENT & SYSTEM APPROVAL PROFORMA**

**Ref: 11/27581**

Note: the prompts given below are only a guide to the information required for approval. Dependent on the type of equipment or system that requires approval delete any section that is not applicable or include additional information if necessary. **Mandatory** fields are marked with an asterisk (\*).

**1 Equipment or System to be approved \***

**Fastclip FE Fastening System for concrete sleepers**

**2 Originator Pandrol Australia Pty Limited\***

Name: Harry Olsen

Company: Pandrol

**3 Introduction \***

Fastclip FE system utilises the proven technology of the original Fastclip assembly to create a lower cost assembly by reducing the size and weight of the shoulder with no reduction in functionality. The strength of the shoulder has been improved and the lower profile reduces risk of damage from track machinery.

**4 Determination of Need \***

Performs same function as the current Fastclip system but at lower purchase price with reduced risk of damage during maintenance activities and train operations.

**5 Significant Change or Not \***

This change in equipment or system is assessed as MINOR

**6 Review Panel \***

- John Furness - Manager Standards
- Tim Calver - Track Standards Engineer
- Matthew Hart - Senior Project Manager E/W

**7 Safety**

No changes to current safety practices required, similar procedures as apply to standard Fastclip fastenings but safety improved when using hand tools for extraction and application.

**8 Performance and Suitability**

The FE system has been tested and satisfied all criteria in accordance with AS1085 Part 19.

**(i) Use in other rail networks**

Czech Republic	Sleeper trial installed April '08, commercial sales of 300 and 2200 sleepers in last 2-3 years
Hungary BKV	136 sleeper trial installed November '09, railway have approved the assembly
Hungary MAV	300 sleeper trial installed September '09, railway have approved the assembly
Romania	300 sleeper trial installed November '09, final inspection is this week and we hope to have full approval following the inspection
Norway	500 sleeper trial installed November '09, Jerbanverket will now use FE commercially, sleeper factory is converting moulds as we speak for bulk supply 1st quarter 2011
Serbia	900 sleeper commercial sale, installed May '10. Sleeper factory is currently building a stock of 20k sleepers in preparation for upcoming tenders
Hungary MAV	Sleeper homologation, 185 sleepers have been made, expected installation end 1st quarter 2011.
Bulgaria	~300 sleeper trial, expected installation 2nd quarter 2011
Turkey	240 sleeper trial, sleepers made and awaiting installation date and location from TCDD
Brazil Heavy-Haul	266 tie installation alongside Safelock and Vossloh HH, ties ready to go, just awaiting installation date, expected 2nd quarter 2011
USA	First samples ties cast by Rocla which will be inspected this week, 3 trials planned as soon as sleepers are available

**(ii) Use in the ARTC network**

N/A

**(iii) Issues arising from usage of the equipment/system**

New hand tools are required.

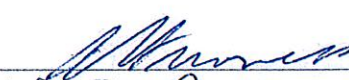
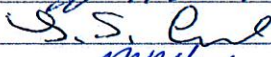

**(iv) Changes required to infrastructure or systems for use of the equipment**

No changes to infrastructure are necessary.

**9 Maintainability**

System to be maintained in similar fashion to existing Fastclip fastening assemblies all machinery currently in use apart from hand tools will complement the FE system.

10	<b>Approval *</b>	Pandrol FE Fastclip is approved for use between the 800km to 850km (near Ivanhoe) in the Parkes to Broken Hill Corridor of the ARTC Network.						
11	<b>Conditions of Approval *</b>	<ul style="list-style-type: none"> <li>• Item to be installed and maintained as per manufacturer's instructions.</li> <li>• In order to progress to a network-wide type approval a report detailing the outcomes of this trial must be provided to Standards after the item has been in track for a minimum period of 12 months.</li> </ul>						
12	<b>Does the Originator accept the additional Conditions of Approval as set by the Review Panel:</b>	<table style="width: 100%; border: none;"> <tr> <td style="border: none;">Yes</td> <td style="border: none;"><input checked="" type="checkbox"/></td> <td style="border: none;">No</td> <td style="border: none;"><input type="checkbox"/></td> <td style="border: none;">N/A</td> <td style="border: none;"><input type="checkbox"/></td> </tr> </table>	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>			

13	<b>Sign off</b>		<b>ARTC office use only</b>
	<b>Review Panel:</b>		
	John Furness		Date: 14/10/11
	Tim Calver		Date: 14/10/11
	Matthew Hart		Date: 14/10/11