



Testing and Marking of Rail Closures

Applicability

ARTC Network Wide		Western Jurisdiction		New South Wales	✓	Victoria	
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Audience	Main Points	Change History
Infrastructure/Delivery Managers Team Managers Work Group Leaders Rail Welders Rail Flaw Detection Officers Project/Delivery Engineers Engineering Compliance Managers	Closures to be ultrasonically tested before use in track Rail brand and heat numbers to be checked – where visible Closure not to be used if defects found Paint marking of satisfactory closures Cutting up defective closures Rail Flaw testers to check for paint marks on closures and test if not visible	Amended version of Civil Eng Instruction A0206 (RIC CTN 02/06) 1.1 – Reference to superseded NSW Standard TEP 19 replaced with ETE-01-03

THIS INSTRUCTION INCLUDES MANDATORY REQUIREMENTS

All rails to be reused including for use as closures must be ultrasonically tested using the same procedures as specified in ARTC Standard ETE-01-03 Non-Destructive Testing of Rail (for Internal & Surface Defects). In addition, testing must include a special examination for vertical split head rail defects. This is done from the outside (field side) of the rail head using a zero degree probe.

If defects of any detectable size are found, the rail must not be used in Class 1 track. In extreme cases, rail with only small defects can be used in closures in Class 2 and below, where suitable. However, this is not the preferred option and should only be followed in extreme cases.

Where visible, the closure rail heat number and manufacturers brand must also be checked. If the brand shows the rail is not BHP or AIS it is not to be used on main lines Class 1 or Class 1C but may be used on sidings and on Class 3G lines. If the heat number contains the "A" character (usually the first character in the heat number) the rail length must not be used and is to be scrapped.

Rails found to be fully satisfactory are to be paint marked with a white stripe about 200mm long on one side of the rail foot at each end of the rail length but leaving the end itself clear for about 200mm. For rails longer than 4 metres which are likely to be subsequently cut up into closures a white stripe should be painted each 3 metres along the rail.

Rails that are not satisfactory for Class 1 or 1C main lines but are suitable for other lines are to be painted similarly to the above but with a blue stripe.

Rails to be scrapped are to be cut up into lengths less than 2 metres. In addition when testing of thermit welds takes place any rail closure which does not exhibit a white stripe (indicating it has been ultrasonically tested) must be ultrasonically tested as indicated above.

Issued by	Date
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