

Drilling of Rail

Scope Includes: Normal and High Manganese rail

Preparation

Tools & Equipment

- Drilling machine with appropriate location plates and drilling templates
- Appropriate drills, broaches and cutters
- Magnet
- Approved rail thermometer
- Lubricant
- Rail Marker
- Tape Measure
- Rail Jacks
- Hand tools shovels, forks etc.

Work planning considerations

- Availability of resource/tools/equipment/plant
- S&T requirements
- Correct rail type

Method

1. Ensure rail to be drilled is adequately supported and secure
2. Check rail steel – normal or high manganese
3. Select correct drill bits/cutters for steel type of correct diameter
4. Check that any bond holes are in permitted locations
5. Select and place drilling template
6. Measure and mark hole positions
7. Fit correct locating plate and secure drilling machine in place
8. Drill holes
9. Remove drilling machine and check hole quality
10. Carryout cold bolt hole expansion of new holes
11. Remove any scrap materials from site
12. Complete records and forward to line manager

NB. If drilling fails leaving an incomplete hole fit emergency clamp plates and arrange for the rail to be replaced in accordance with timescales for temporary rail joints.

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References

Supports Ellipse Standard job

- Code to be created

If applicable refer to the following associated documents:

- NR/SP/TRK/0011 Continuous Welded Rail (CWR) Track
- NR/SP/TRK/008 Saw and Disc Cutting and Drilling of Rail
- NR/L3/TRK/002/C05 Cold bolt hole expansion
- NR/GN/TRK/7001/TWI2G011 How to use a rail drill
- NR/GN/TRK/7001/TWI2P002 How to drill other than normal grade rail
- NR/GN/TRK/7001/TWI2G037 Fitting of emergency clamp plates
- NR/GN/TRK/7001/TWI2G029 How to carry out cold bolt hole expansion

- Risk Control Sheets:
- NR/L3/MTC/0002/TK000 Generic Track Risks
- NR/L3/MTC/0002/TK202 Cold bolt hole expansion