# DETAILED SWINGNOSE CROSSING INSPECTION

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| Location: Track: I.D. No.: |
| **Kilometrage: Date:**   |
| **Ellipse Job: TURN01 Ellipse Work Order No.:**  |
| All speeds in km/h All measurements in mmThis form is to be completed for turnouts with swingnose crossings in addition to ETE0301F-01 Detailed Turnout Inspection. Complete first section and manufacturer specific section as relevant. |
|  | Measure | Response | Comments |
| Swingnose Width at Tip (As presented to the wheel) |  | 4 to 6 – monitor7 to 8 – speed 20/20 and monitor>8 - speed 10/10 and pilot trains |  |
| Swingnose Height at Tip (distance from running surface of wing rail to top of swingnose) |  | 12 to 13 monitor<12 speed 10/10 and pilot trains |  |
| Swingnose Angle at Tip (angle from vertical) |  | Report suspect angles.18 to 25 degrees monitor>25 degrees speed 10/10 and pilot trains |  |
| Swingnose free of built up ballast and other materials |  | Remove obstructions |  |
| Point rail or splice rail (tongue rail in PRE) bearing on the crossing slide plates. |  | Report any air gaps. Adjust track geometry if appropriate. |  |
| Boltsand fasteners tight and effective.  |  | Report defects. Tighten loose, or replace broken/ineffective fasteners. |  |
| Rail head wear on wing rail/point rail/splice rail running surface or gauge face. |  | Report defects and if point rail/wing rail needs grinding. |  |
| Rolling contact fatigue defects (surface checking/cracks, spalls, scale or squats) on point rail, splice rail, or wing rail. |  | Report defects. |  |
| Rail head overflow on wing rail/point rail gauge face adjacent to the point rail(which could prevent the nose closing properly.) |  | Report defects. Remove overflow >1mm. |  |
| Rail head overflow on point rail/splice rail gauge face (which could prevent the nose closing properly) |  | Report defects. Remove overflow >1mm. |  |
| Wing rail/cradle – Vertical Wear |  | 5 mm to 10 mm – monitor>10 mm - speed 40/40 and monitor |  |
| PRE Only | Measure | Response | Comments |
| Condition of huck bolts at all chocks and heel blocks, crossing plates, rail brace to rail stops. |  | Report loose or broken huck bolts |  |
| Condition of crossing plates and rail brace brackets. |  | Report plates and brackets cracked or broken. |  |
| Fit of swingnose against the rail stops.  |  | Report any evidence of clearance between swingnose and rail stops. |  |
| Tongue rail/ splice rail sliding joint plates and fasteners |  | Report loose/ineffective plates or fasteners. |  |

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| VAE only | Measure | Response | Comments |
| Point rail/splice rail sliding joint fasteners, castellated nuts, split pins, disc springs and safety clamps.  |  | All fasteners should be fitted and tight. Loose or broken fasteners should be tightened or replaced. The opening at the tip of the splice rail should be ≤2mm. Report defects |  |
| Fastening system between the crossing frame and wing rails, tongue rail and splice rails. |  | Report loose/broken fasteners, brackets and plates for the length of the crossing frame. |  |
| Condition of crossing frame and anti-creep brackets |  | Report any cracking particularly in the webs, rail seats, and other loaded areas. |  |
| Condition of heel block/anti-creep block huck bolts. |  | Report loose or broken huck bolts |  |
| Condition of point rail/splice rail to crossing frame rail stop brackets |  | Report any evidence of clearance between the rail stop and the point/splice rails in the closed position |  |
| Condition of point rail to splice rail switch stops |  | Report loose or damaged switch stops. Tighten loose stops and fit new split pins as required. |  |
| Martinus only | Measure | Response | Comments |
|  Martinus swingnose crossings may have configurations similar to either PRE or VAE depending on the installed product. Use relevant items from PRE and VAE above as well as the General section. |
| Vossloh Cogifer only | Measure | Response | Comments |
| Fit of swing nose against the wing rail of the cradle. |  | Report if the swing nose does not fit completely to the cradle wing rail or if there is clearance between the rail stops and the swingnose. |  |

**Additional Inspection Notes:**

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Notes:

\* “Monitor” means at an appropriate increased frequency compared to the current inspection

\* Responses are default actions pending appropriate repair / renewal action

\* If the cause of a defect is known, and it is known that it will not deteriorate into an unsafe condition an alternate response to that shown is permitted with appropriate documentation

Name of Inspector: Signature: