



Certificate of Type Approval for a product or system

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|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Discipline | Track Engineering |
| Reference | TR14/3001 |
| Manufacturer | Vossloh Cogifer, Australia, Pty Ltd |
| Supplier | Vossloh Cogifer, Australia, Pty Ltd |
| Place of Manufacture | Orange, NSW; Castlemaine, Vic; Kewdale WA. |
| Product/System description | Manufacture and Provision of Tangential Turnout Assemblies (As listed by standard layout drawings nominated in Supporting Documentation on reverse of this Certificate) |
| Use approved for | Approved Tangential Turnouts as listed on the reverse are approved for installation within the Sydney Metropolitan Network as considered compliant to the requirements of ESC 200, ESC 250 and SPC 251 |

Conditions

1. All Type Approval Certifications will be subject to review within a period not exceeding 5 years.
2. The Place of Manufacture shall hold International Quality System Certification.
3. Should the presence of any previously unidentified defect or condition in service arise, it shall require further collaborative investigation to establish appropriate remedial measures.
4. The supplier or manufacturer must advise TfNSW ASA of any changes made to the product or system that may alter its identification, performance characteristics, form, fit, function, processes required for correct usage or place of manufacture to enable review and revision of this approval.
5. Further Turnout Assemblies shall be added to the above list subject to approval from the Lead Engineer – Track, Asset Standards Authority, Transport for New South Wales.

Approval

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|------------------|-------------------------------------|
| Signature | |
| Name | David Cooper |
| Title | A/Lead Engineer - Track Engineering |
| Date | 17 th September 2014 |



Schedule of Certifications

| Title | Registration Number | Valid till | Issuing Authority | Status |
|-----------------------------------------------------------------------------------------------------|---------------------|---------------------------|----------------------------------------|---------|
| Quality Management System (ISO 9001:2008) Issued by <i>afnor</i> | 2012/52218.3 | 27 th Dec 2016 | <i>afnor</i> | Current |
| Product Approval Checklist for installations at Lithgow Site inspection undertaken by Jim Couper | N/A | N/A | Sydney Trains Subject Matter Expert | Current |

Supporting Documentation

| Title | Company | Designed By | Drawing Number | Status |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------|----------------|----------|
| Lithgow Points 77A/77B, L.H. Crossover, Tangential 3.66m Track Centres, R250m, 1 in 10.5, 1435 Gauge, AS60kg | Vossloh Cogifer Australia Pty Ltd | AMS | A1B17362 Rev A | Approved |
| Lithgow Points 81A/81B, R.H. Crossover, Tangential 3.66m Track Centres, R250m, 1 in 10.5, 1435 Gauge, AS60kg | Vossloh Cogifer Australia Pty Ltd | AMS | A1B17364 Rev A | Approved |

Approved Designs

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|-----------------------------------------------------------------------------------------|-----------------------------------|-----|----------------|----------|
| Tangential Turnout, R250m 1 in 10.5 Crossing, Concrete Bearers, 1435 Gauge, AS60kg Rail | Vossloh Cogifer Australia Pty Ltd | CCB | A0B15390 Rev C | Approved |
| Tangential Turnout, R800m 1 in 15 Crossing, Concrete Bearers, 1435 Gauge, AS60kg Rail | Vossloh Cogifer Australia Pty Ltd | AMS | A0B15428 Rev B | Approved |
| Tangential Turnout, R190m 1 in 9 Crossing, Concrete Bearers, 1435 Gauge, AS60kg Rail | Vossloh Cogifer Australia Pty Ltd | AMS | A0B15602 Rev E | Approved |
| Tangential Turnout, R300m 1 in 9 Crossing, Concrete Bearers, 1435 Gauge, AS60kg Rail | Vossloh Cogifer Australia Pty Ltd | CCB | A0B15604 Rev B | Approved |
| Tangential Turnout, R300m 1 in 12 Crossing, Concrete Bearers, 1435 Gauge, AS60kg Rail | Vossloh Cogifer Australia Pty Ltd | AMS | A0B15605 Rev D | Approved |