



On-Track Plant

Engineering Conformance Certificate

This certificate is issued in accordance with RIS-1530-PLT Issue 6

NAME OF VEHICLE ACCEPTANCE BODY
SNC-Lavalin Rail & Transit Verification Limited

ACCREDITATION CODE
21

Vehicle Class / Description 071/Aquarius/R2R Trailer/OC
Vehicle Owner Aquarius Railroad Technologies Ltd
Issue Date 15 June 2022
Expiry Date 17 September 2027

Vehicle Number(s)
99709 071020-0

First Of Class
99709 071008-5 on Engineering Conformance Certificate 21/1579/16 against RIS-1530-PLT, Issue 6.

Authorised by:

Andrew Hayes
Andrew Hayes
SNC-Lavalin Rail & Transit Verification Limited

OFFICIAL STAMP



SNC • LAVALIN



Reason for issue and Scope of Work

Certification of Aquarius Road to Rail (R2R) Trailer, with demountable modules -
Aquarius R2R Welfare Module,
Aquarius R2R Trailer Crane or
Weedfree RS1 Weed Spraying Module.
Serial No. SA93500LB19198787. Fleet No. R2RT14.
Originally assessed for compliance with RIS-1530-PLT Issue 6.
On this certificate: Update to Limitations of Use No. 2 and Maintenance Instruction. No engineering change.
Expiry date conforms the requirements of RIS-1530-PLT.

Applicant Copy
SN0201195

Certificate Number: 21/0310/22



On-Track Plant

Deviations associated with this certificate

None

Previous Certificate Number

21/0575/20.

Maintenance Plan Details

Aquarius R2R Flat-Bed Trailer Operations Handbook; Issue 2; Revision H; 16/05/2022.
Aquarius R2R Flat-Bed Trailer Maintenance Manual; Issue 1; Revision D, 05/2019.
Aquarius R2R Trailer Crane Addendum to Operator's Handbook; Issue 1; 02/2019.
Aquarius R2R Trailer Crane Addendum to Maintenance Manual; Issue 1; 02/2019.
Weedfree RS1 Operation and Maintenance Manual; Version 1, 04/06/19.

Limitations of Use

1. The trailer shall only operate inside possessions.
2. In travelling and working mode, the trailer has a gauge exceedance to W6a and Plant gauge as defined by RIS-1530-PLT.
The road wheel tyres encroach into the area below rail head level by 4mm and extends 152mm outwards and 38mm inwards from the running edge of each rail.
The rail gear exceeds into the four foot of W6a gauge by up to 30mm and Plant gauge by up to 69mm.
Note - Prior to use, a site survey to assess the potential for damage to the infrastructure equipment and identify restrictions which take into account guardrails, checkrails, the road tyres.
3. The trailer may on/off track, travel and work under live OLE in conjunction with a safe system of work (SSoW) as determined and authorised by taking guidance from the requirements of GE/RT8024.
When under live OLE, access is not permitted on to any surfaces greater than 1.4 m above rail.
4. The trailer shall NOT on/off track or work on live conductor rails.
5. The trailer may NOT activate train operated points.
6. The trailer shall NOT travel or work on track with:
- Cants greater than 200mm; gradients greater than 1:25 and/or curves less than 80m.
7. For on/off tracking, a site specific plan shall be used taking into account of the applicable module of Network Rail Infrastructure Plant Manual NR/L2/RMVP/0200.
8. In travelling and working mode the trailer shall be subject to the limitations of the towing vehicle.
9. The trailer shall only be coupled to an RRV approved for towing this type of trailer.
10. The trailer (on rail) payload of 3,000kg shall not be exceeded.

Supplementary Information

Applicant Copy

Certificate Number: 21/0310/22

SN0201195

Page 2 of 3



On-Track Plant

1. Aquarius 2 rail-wheel R2R Trailer to work with compatible RRV.
2. Serial No: SA93500LB19198787. Fleet No. R2RT14.
3. Fitted with air spring-operated emergency/park brakes and air-operated service brakes.
Air parking brake release pressure 5.2 - 10 bar; service brake pressure 0 - 10 bar.
4. A CCTV camera is fitted to the rear of the trailer.
5. Trailer (on rail) gross weight: 4,100kg; tare weight 1,100kg; payload 3,000kg.
6. Maximum speeds (travel and working) shall not be exceeded:
 - 10mph plain line; 5mph switches and crossings; 1mph raised check/guard rails.
7. The trailer may be fitted with Aquarius Welfare Module (personnel carrier) that shall only be used in accordance with the Operations Handbook and the SSoW for the possession.
It must carry one machine controller (to comply with the SSoW for line of sight of track and signals) and up to six additional personnel in the module.
The emergency stop control from the Welfare Module to the towing vehicle shall be verified as correct and operational before each use.
8. The trailer (on rail) may be fitted with Aquarius R2R Trailer Crane Module that shall only be used in accordance with the Operator's Handbook and the SSoW, and the following additional Limitations:
 - The crane is interlocked and shall be stowed for travel; it does NOT have a lift and carry mode.
 - The payload of the trailer with the crane fitted is 1,700kg.
 - When using the crane, the cant limitation is 125mm.
 - The lateral gauge exceedance of the crane boom (not including loads or attachments) is 3,607mm (i.e. 3,607mm from the running edge of the rail).
 - The crane is NOT approved to be used with the adjacent lines open (ALO) and the SSoW shall take account of all gauge exceedances.
 - The crane is permitted to be used under live OLE, minimum wire height 4.165m above rail; also see Limitation 3.
 - All Stabiliser Legs shall be used at all times when lifting.
 - The stabiliser legs (including stabiliser leg base) shall NOT be placed on rails or sleeper ends.
 - The crane emergency stop control; crane slew isolation to prevent lifting over the operator; and crane warning horn in the cab shall all be verified as correct and operational before each possession use.
9. The trailer may be fitted with Weedfree Railway Spray Module that shall only be used in accordance with the Operations Handbook and the SSoW for the possession, taking account of adjacent lines open to traffic and lineside equipment.

Authorised by:

Andrew Hayes

Andrew Hayes
.....

Applicant Copy

SN0201195

Certificate Number: 21/0310/22

Page 3 of 3