On-Track Plant Engineering Conformance Certificate

In accordance with RIS-1530-PLT – Issue 7.2
Certificate no.: 71/1283/25
Report no.: TRUK/B 25/104, (Issue 1, 29/05/2025). This report is an integral part of this Certificate.

Name of Plant Assessment Body	TÜV Rheinland UK Limited 5 Mallard Way Pride Park Derby DE24 8GX United Kingdom	**Organisation Code:**	71 *(a UKAS accredited certification body No. 8400)*

Vehicle Class / Description	911/Liebherr/R920/9B
Vehicle Asset Manager	Story Plant Ltd
Issue Date	30-05-2025
Expiry Date (if any)	21-01-2029
Vehicle Number(s)	99709 911398-4
First in Class:	No
Certificate No. of First in Class:	AC/0417/21, against RIS-1530-PLT Issue 6.

Authorised by: **Official Stamp of TRUK, CAB Rail**

ESig: NDC/TUV/25/0566

TÜVRheinland® Conformity Assessment Body Rail
TÜV Rheinland UK Limited

Certifier / Signatory Name **Neil Charles Senior Engineer**

Reason for Issue and Scope of Work
Previous Certificate:
Engineering Change to RCI Screen to single port, removing wireless Tandem Lifting functionality.

This Certificate:
Engineering Change to RCI Screen to allow for Wireless Tandem Lifting duties to be undertaken.

Serial No. 51638 Fleet No. 1327

Engineering Change assessed for compliance with RIS-1530-PLT, Issue 7.2.

Deviations associated with this Certificate (if none state "NONE")
TR71840 Certificate of Authorisation of Variation Allan Hargreaves Plant Engineers Ltd – GKD Wireless Link for Tandem Lifting facility.

Previous Certificate No.
(if none state "NONE"): 71/1260/25

Maintenance Instruction Details

Maintenance Instruction Title: Operation and Maintenance Manual		
Maintenance Instruction Number: HMM0021 **Maintenance Instruction Title:** Liebherr Original Operators Manual	**Issue No.:** 1	**Date:** 23/06/2021
Maintenance Instruction Number: 12201151 **Maintenance Instruction Title:** Liebherr Original Maintenance Manual	**Issue No.:** 01	**Date:** 16/07/2020
Maintenance Instruction Number: 12214598	**Issue No.:** 02	**Date:** 10/06/2020

Limitations of Use *(these words are mandatory where applicable)*

1. The RRV shall only operate inside possessions.
2. When travelling, the vehicle is within the Plant gauge as defined in RIS-1530-PLT.
3. When working the vehicle may be out of the Plant gauge.
   Minimum underside height of tail swing above rail is 1413mm.
   Maximum lateral tail swing gauge is 1365mm from the running edge of the rail. (673mm horizontal gauge exceedance).
   A site survey shall be undertaken to assess potential damage to infrastructure equipment prior to use.
4. The vehicle shall NOT on/off track, travel or work on live conductor-rail lines.
5. The vehicle shall NOT on/off-track, travel or work under live OLE, unless the GKD SpaceGuard RCI system is active, the Height Limit correctly set and the system functionality been proven correct prior to vehicle use.
   Under live OLE, working shall only be in accordance with the safe system of work for the possession, determined and approved by taking guidance from the requirements of GE/RT8000-HB16, and accounting for:
   - A maximum SpaceGuard default height of the boom above the rail of 3.500m.
   - A minimum OLE wire height of 4.165m.
   - The earth bonds on the RRV shall have been examined for security and presence, prior to use.
   - Attachments and their load shall not exceed the height of the top of the boom.
6. Except for the cab, when the vehicle is under live OLE access is NOT permitted onto any surfaces higher than 1.4m above rail.
7. The vehicle shall NOT on/off track or work if the immediately adjacent line(s) are open to traffic.
8. The vehicle shall NOT on/off track if the immediately adjacent line(s) are open to traffic, unless a site specific, safe system of work (SSoW) is used, taking account of the requirements of the Liebherr Operations Manual and the applicable module of the Network Rail Infrastructure Plant Manual NR/L2/RMVP/0200.
9. The vehicle shall only be permitted to work ALO with the GKD SpaceGuard RCI system active, the Slew Limit and/or Virtual Wall correctly set and the system functionality has been proven correct prior to vehicle use.
   ALO working shall only be in accordance with the approved safe system of work (SSoW) for the possession, taking account of the extra gauge exceedance caused by attachments.
10. For access/egress, the vehicle shall only operate with the door to the cab adjacent to a cess or a line closed to all train movements, or the safe system of work takes account of adequate clearances to the adjacent line or lines.
11. The vehicle shall NOT travel on track with:
    - Cants greater than 150mm;
    - Gradients greater than 1:25
    - Curves less than 80m.
12. The vehicle shall NOT work on track with:
    - Cants greater than 150mm;
    - Gradients greater than 1:25
    - Curves less than 80m.
13. When reversing, the vehicle shall only proceed at walking speed with the driver utilising the CCTV and/or ground staff, until the superstructure/boom can be slewed to face the direction of travel.
14. The vehicle shall NOT be on/off tracked on:
    - Cants greater than 150mm
    - Gradients greater than 1:25.
15. It is permitted to tow and/or propel rail trailers with compatible coupling and brake systems:
    Air brakes - supply pressure for park brake release is 8.5bar, and for service brake is 8.5bar.
    Hydraulic brakes – supply pressure for park brake release is 60bar, and for service brake is 60bar.
    Maximum weight is 80 tonnes/4 trailers.
    NOTE:- The towed and/or propelled trailer consist shall not be of mixed brake types. The maximum towed and/or propelled weight may have to be reduced where the railhead conditions for adhesion and/or the ruling gradient may affect the safe traction performance of the RRV.
    The hydraulic braking system may be used if the host machine is not compatible with the air brake system, however if the host machine is compatible, the air brake system shall be used.

Supplementary Information - *(Optional – minimum requirements where applicable)*

1. The RRV is a OEM Liebherr with 2.08m two-piece off-set boom, 3.61m artic boom and 2.26m dipper.
   Can also be fitted with AJH 1001-3511 “rhino horn” extended jib.
2. Manufacturer Serial No. 51638 Story Fleet No. 1327
3. The vehicle is approved to carry 1-persons seated in the driver's cab.
4. Gross vehicle weight is 31.6 tonnes.
5. Maximum speeds travelling on rail not to exceed:-
   - 15mph plain line;
   - 5mph switches and crossings;
   - 5mph raised check/guard rails;
   - 5mph reversing;
   - 8mph towing/propelling;
6. Maximum speeds travelling on rail not to exceed:-
   - 5mph plain line;
   - 5mph switches and crossings;
   - 5mph raised check/guard rails;
   - 5mph reversing;
   - 8mph towing/propelling;.
7. Safe Working Loads NOT to be exceeded:
   - Auxiliary lifting eye - 7.5tonnes
   - Main Load Lifting Point – 10tonnes.
8. The RCI shall be switched on at all times, unless in digging mode.
9. Where an attachment is known to have a significant adverse effect on the RRV stability, the RCI shall always be in 'Lift Mode' when using the attachment.
10. The machine is fitted with a High-Performance Movement Limiting Device.
11. RCI information:

- Fitted with a GKD SpaceGuard Rated Capacity Indicator (RCI);
- Model: GKD-3RCI Touch Screen;
- RCI Software: V9.61.0BSP;
- Serial Number: 2305TM;
- Duty chart reference: Liebherr R920, Serial No C051638. All charts Dated 24-Jan-2022.
- The RCI has a Tandem Lifting mode.

12. GKD SpaceGuard RCI Information:
The vehicle is fitted with an electronic slew and height limiting system through the GKD SpaceGuard RCI which has been approved as High Performance, against RIS-1530-PLT Issue 6.
This machine is fitted with the GKD Wireless link tandem lift facility. When utilising this system, the machine is not required to derate the Safe Working Load by 67% when tandem lifting, as permitted by derogation TR71840.
13. Dipper Extension (Rhino Horn):
The RRV may work with dipper extension (Rhino Horn) in accordance with an approval method statement and a safe system of work.
The vehicle shall not work under live OLE with the dipper extension (Rhino Horn) fitted.
Functional test shall be undertaken prior to work on Network Rail Infrastructure.