



### **On-Track Plant**

## **Engineering Conformance Certificate**

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

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Applicant Copy		Certificate Number: 21/0361/22	2
None.			
Deviations associated with the	nis certificate		
Serial No. K018460. Story Flee Assessed for compliance with Expiry date conforms to the re	et No. 1100. RIS-1530-PLT, Issue 6. quirements of RIS-1530-PLT.		
Certification of upgraded Liebh	herr 972 Road Rail Vehicle.		
Reason for issue and Scope	of Work		
David Wass SNC-Lavalin Rail & Transit Ve	Wall	<b>SNC·LAVALIN</b>	UKAS PRODUCT CERTIFICATION
Authorised by:		OFFICIAL STAMP	<b>L</b>
99709 940570-3 on certificate :	21/0748/20 against RIS-1530-PL <sup>-</sup>	۲ Issue 6.	
First Of Class			
99709 940621-4			
Vehicle Number(s)			
Expiry Date	22 July 2029		
Issue Date	22 July 2022		
Vehicle Owner	Story Plant Ltd		
Vehicle Class / Description	940/Liebherr/A900ZW972/	9B	
<b>NAME OF VEHICLE ACCEPTANCE BODY</b> SNC-Lavalin Rail & Transit Verification Limited		ACCREDITATION CODE	





### **On-Track Plant**

#### **Previous Certificate Number**

21/0224/21.

#### **Maintenance Plan Details**

Story Maintenance Plan Road Rail - Liebherr A900zw (High Rail Type 972) STORY/MP/LIEBHERR 972. Issue No: Issue 2. Issue Date: September 2021.

#### Limitations of Use

- 1. The RRV shall only operate inside possessions.
- 2. When travelling, the vehicle is within the Plant gauge and exception for road wheels as RIS-1530-PLT. When travelling, mirrors must be folded in.
- When working the vehicle the counterweight, boom, dipper and attachments can be out of the Plant gauge, dependent on the RCI settings in use. Minimum underside height of tail swing above rail is 1400mm.
   Maximum lateral tail swing gauge is 1300mm from the running edge of the rail. (680mm)

Maximum lateral tail swing gauge is 1390mm from the running edge of the rail. (680mm 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/RT8024, 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 if the immediately adjacent line(s) are open to traffic.
- 8. The vehicle shall NOT work if the immediately adjacent lines are open to traffic, except in accordance with Limitation of Use 9.
- 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.
- The vehicle shall NOT travel on track with:
   Cants greater than 200mm; gradients greater than 1:25 and/or curves less than 80m.
- 12. The vehicle shall NOT work on track with:Cants greater than 150mm; gradients greater than 1:25 and/or 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.

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# **On-Track Plant**

14. For on/off tracking, a site specific, safe system of work (SSoW) shall be used, taking account of the requirements of the Story Operations Manual and the applicable module of the Network Rail Infrastructure Plant Manual NR/L2/RMVP/0200.

- The vehicle shall NOT be on/off tracked on cants greater than 150mm and/or 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 4-8bar, and for service brake is 0-8bar.
- Trailers with park and service brakes. Maximum weight is 96tonnes/4 trailers on gradient not steeper than 1:25.

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.

#### **Supplementary Information**

- 1. The RRV is a Liebherr OEM road-rail excavator with with a three piece boom (Stub 2.08m, fore-boom 3.40m, dipper 1.70m).
- 2. Manufacturer Serial No. K018460. Story Fleet No. 1100.
- 3. The vehicle is approved to carry 2-persons seated in the driver's cab.
- 4. It operates on rail in high-mode only.
- 5. CCTV camera fitted to the side and rear.
- 6. Gross vehicle weight is 23.65tonnes.
- 7. Fitted with Adrian Phillips Engineering Ltd direct rail wheel braking system.
- 8. Maximum speeds travelling on rail not to exceed:-
  - 20mph plain line;
    - 5mph switches and crossings;
    - 1mph raised check/guard rails;
    - 10mph towing/propelling;
- 3mph emergency recovery.
  9. The dipper pin maximum Safe Working Load (SWL) of 10 tonnes and the auxiliary lifting eye SWL of 5 tonnes shall NOT be exceeded.
- 10. The RCI shall be switched on at all times, unless in digging mode.
- 11. Where an attachment is known to have a significant adverse affect on the RRV stability, the RCI shall always be in 'Lift Mode' when using the attachment.
- 12. RCI information:
  - Fitted with a GKD SpaceGuard Rated Capacity Indicator (RCI);
  - Model: GKD-3RCI Touch Screen;
  - RCI Software: V9.61.0BSP;
  - Serial Number: 2023TM;
  - Duty chart reference: Serial No K018460. All charts Dated 21-Jul-2022.
  - The RRV has Normal and Tandem Lifting Modes.
- 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.

Authorised by: David Wass	David Wall
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