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	**911/Colmar/T10000FSC/9A**
Vehicle Owner	**Keltbray Rail Plant**
Issue Date	**18 August, 2017**
Expiry Date	**14 August, 2022**

Vehicle Number(s)

99709_911324-0

First Of Class

99709 911310-9. IF/0020/15.

Authorised by:

Adrian Staples .....

SNC-Lavalin Rail & Transit Verification Limited

OFFICIAL STAMP

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Reason for issue and Scope of Work

Certification of Colmar T10000FSC Tracked Road Rail Vehicle.
Serial No 8708 Fleet No E1323

On this certificate: Change of owner only. No engineering change.

Fitted with GKD SpaceGuard RCI system that has been approved by Network Rail Technical Services. Document reference MLD/L077 details the: "Approval of MLD026 Colmar/GKD SpaceGuard T10000FSC, against RIS-1530-PLT Issue 5. The "Limitations of Use" on this certificate permit operation of this RRV with Adjacent Line Open (ALO) and/or under live Overhead Line Equipment (OLE).

Originally assessed for compliance against RIS-1530-PLT, Issue 5.

Expiry date conforms to RIS-1530-PLT.

Deviations associated with this certificate

None

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Certificate Number: 21/0692/17

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Previous Certificate Number

No previous Engineering Conformance Certificate against RIS-1530-PLT issue 6.

Previous Engineering Acceptance Certificate: IF/0490/15.

Maintenance Plan Details

Colmar User and Maintenance Instruction Manual FSC-02-11 Issue 09, Date 23-09-15.

Limitations of Use

1. The RRV shall only operate inside possessions.
2. When travelling, the RRV is within W6a gauge as defined in RIS-1530-PLT.
3. When working the RRV may be out of W6a gauge.
   Minimum underside height of tail swing above rail is 1325mm.
   Maximum tail swing gauge exceedance with counter-weight retracted is 341mm, (1046mm from the running edge of the rail).
   Maximum tail swing gauge exceedance with counter-weight fully extended is 1181mm, (1886mm from the running edge of the rail).
   A site survey shall be undertaken to assess potential damage to infrastructure equipment prior to use.
4. The vehicle tracks when on rail MUST be fully retracted and the track locking pins MUST be in place before on/off tracking, travelling or working on rail.
5. The vehicle shall NOT on/off track, travel or work on live conductor-rail lines.
6. The vehicle shall NOT on/off track, travel or work under live OLE, unless the SpaceGuard RCI system is active, the Height Limit correctly set and the system functionality has been proven correct prior to vehicle use.
   The use of the RRV under live OLE 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 account taken of:
   > 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 loads shall not exceed the height of the top of the boom.
7. The vehicle shall NOT work under live OLE with the dipper extension (Rhino Horn) fitted.
8. Except for the cab, when the RRV is under live OLE access is NOT permitted onto any surfaces higher than 1.4m above rail.
9. It shall NOT on/off track if the adjacent line or lines are open to traffic.
10. The vehicle shall only be permitted to work ALO with the 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 safe system of work for the possession, taking account of the extra gauge exceedance caused by attachments.
11. The RCI shall be switched on at all times, unless in digging mode.
12. 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 adjacent lines.
13. Vehicle shall not travel on:
    Track cants greater than 200mm;
    Track gradients greater than 1:25;
    Curve less than 80m.
14. Vehicle shall not work on:
    Track cants greater than 150mm;
    Track gradients greater than 1:25;
    Curve less than 80m.
15. 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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16. For on/off tracking, a site specific work plan shall be used taking account of the requirements in Network Rail Infrastructure Plant Manual NR/PLANT/0200.
    The vehicle shall not be on/off tracked on cants greater than 100mm and/or gradients greater than 1:25.
17. It is permitted to tow and/or propel compatible rail trailers with air service and park braking systems coupled.
    Maximum braked towed/propelled weight is 60 tonnes/4 trailer.
    Air supply pressure for service brake application is 0-8bar and park brake release is maximum is 0-8bar.
    NOTE: The maximum towed and/or propelled weight may have to be reduced where the railhead and conditions for adhesion and/or running gradient may affect the safe traction performance of the RRV.

Supplementary Information

1. The RRV is a OEM Colmar T10,000FSC tracked excavator (Crawler) with 4.077m boom and 2.20m dipper.
2. Manufacturer Serial No. 8708.
3. The vehicle is approved to carry 2- persons seated in the driver's cab.
4. The RCI has a tandem lifting mode.
5. It operates on rail in high-mode only.
6. CCTV camera fitted to the side and rear.
7. Gross vehicle weight is 40 tonnes.
8. Fitted with hydrostatic rail wheel braking system.
9. Maximum speeds travelling on rail not to exceed:-
   - 20mph plain line;
   - 5mph switches and crossings;
   - 5mph raised check/guard rails;
   - 5mph towing/propelling;
   - 5mph emergency recovery.
10. 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.
11. RCI information:
    Fitted with GKD SpaceGuard RCI system that has been approved by Network Rail Technical Services. Document reference MLD/L077 details the: "Approval of MLD026 Colmar/GKD SpaceGuard Slew and Height Limiter on T10,000FSC, against RIS-1530-PLT Issue 5. The "Limitations of Use" on this certificate permit operation of this RRV with Adjacent Line Open (ALO) and/or under live Overhead Line Equipment (OLE).
    - Model: GKD 3RCI Touch Screen;
    - Software: V8.57.
    - Duty chart reference: Serial 8708 Dated 06/08/2015. Rhino Horn Date 22/09/2015.
    - The RRV has Normal and Tandem Lifting Modes.

12. 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. SpaceGuard is deactivated when Rhino Horn is fitted.
    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.

Authorised by:

Adrian Staples .....

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