On-Track Plant Engineering Conformance Certificate

In accordance with RIS-1530-PLT – Issue 6
Certificate no.: 71/1218/23
Report no.: TRUK/B 23/004, (Issue 1, 23-02-2023). The 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	940/Colmar/T10000FS/9B
Vehicle Asset Manager	Keltbray Rail Plant
Issue Date	21-07-2023
Expiry Date (if any)	16-06-2030
Vehicle Number(s)	99709 940820-2
First in Class:	No
Certificate No. of First in Class:	99709 940818-6 on certificate 71/1002/23, against RIS-1530-PLT Issue 6.

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

TÜVRheinland® Conformity Assessment Body Rail TÜV Rheinland UK Limited

ESig: NDC/TUV/23/498

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

Reason for Issue and Scope of Work
Reason for Issue:
Certification of upgraded Colmar T10000FS Excavator.

Manufacturer Serial No: 8720 Fleet No: E1326.

Assessed for compliance with RIS-1530-PLT, Issue 6.
Expiry date conforms to the requirements of RIS-1530-PLT.

Scope of Work
Addition of Rhino Horn information. No other engineering changes.

Deviations associated with this Certificate (if none state "NONE")
NONE

Previous Certificate No.
(if none state "NONE"): 71/1188/23

Maintenance Instruction Details
Maintenance Instruction Title: Colmar User and Maintenance Instruction Manual
Maintenance Instruction Number: M-T10000FS-02-13 **Issue No.:** 1 **Date:** 11/03/2015

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

1. The RRV shall only operate inside a possession.
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 1385mm.
   Maximum tail swing gauge exceedance with counter-weight retracted is 390mm, (1080mm from the running edge of the rail).
   Maximum tail swing gauge exceedance with counter-weight extended is 1230mm, (1920mm from the running edge of the rail).
   A site survey shall be undertaken to assess potential damage to the infrastructure equipment prior to use.
4. The RRV shall NOT on/off track, travel or work on live conductor-rail lines.
5. The RRV shall NOT be on/off tracked on:
   - Cants greater than 100mm and/or;
   - Gradients greater than 1:25.
6. The RRV 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/RT8000 HB16, 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 RRV 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. The RRV shall NOT on/off track if the adjacent line or lines are open to traffic.
10. The RRV 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 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. When fitted with a Rhino Horn, ALO working shall only be permitted with slew angle limitation.
12. For access/egress, the RRV shall only operate with the door to the cab adjacent to a cess or a line closed to all train movements, or a safe system of work takes account of adequate clearances to adjacent lines.
13. The RRV shall NOT travel on track with:
    - Cants greater than 200mm;
    - Gradients greater than 1:25 and/or;
    - Curves less than 80m.
14. The RRV shall NOT work on track with:
    - Cants greater than 150mm;
    - Gradients greater than 1:25 and/or;
    - Curves less than 80m.
15. When reversing, the RRV 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.
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/L2/RMVP/0200.
17. The RCI shall be switched on at all times, unless in digging mode.
18. The RRV is permitted to tow and/or propel rail trailers with both air service and park braking systems coupled.
    Maximum braked towed/propelled weight is 80 tonnes/4 trailers.
    Air supply pressure for the service brake application is 0-8 bar and park brake release is maximum 8 bar.
    NOTE: The maximum towed and/or propelled weight may have to be reduced where the railhead conditions for adhesion and/or running gradient may affect the safe traction performance of the RRV.

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

1. The RRV is a OEM Colmar T10,000FS with 4.077m boom and 2.20m dipper.
   Can also be fitted with a 3.0m dipper extension (Rhino Horn).
2. Manufacturer Serial No. 8720, Fleet No. E1326.
3. The RRV is approved to carry 2 – persons seated in the driver's cab.
4. The RRV operates on rail in high-mode only.
5. CCTV camera fitted to the side and rear.
6. Gross vehicle weight is 33 tonnes.
7. Fitted with rail wheel braking system.
8. Load Lifting Point:
   - Dipper pin 10T SWL.
9. Fitted with inner and outer foam filled tyres.
10. Maximum permitted 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.
11. 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.
12. RCI information;
    Fitted with GKD SpaceGuard RCI system that has been approved by Network Rail Technical Services.
    Document reference MLD/L044 details the: "Approval of MLD026 Colmar/GKD SpaceGuard T10000FS", against RIS-1530-PLT.
    - Model: GKD 3RCI Touch Screen;
    - Serial Number: 2399TM.

- Software: V9.61.0
- Duty chart references: Colmar T10,000FS, 8720, Date 18-Mar-2022.
- The RRV has Normal and Tandem Lifting Modes.

13. Dipper Extension (Rhino Horn):
The RRV may be used with the dipper extension (Rhino Horn) in accordance with a safe system of work.
SpaceGuard is deactivated when Rhino Horn is fitted.
The RRV shall NOT work under live OLE with the Rhino Horn fitted.
Functional test shall be undertaken prior to work on Network Rail Infrastructure.