ENGINEERING ACCEPTANCE CERTIFICATE

This certificate issued in accordance with RIS-1530-PLT Issue 5.

NAME OF CERTIFICATION BODY	ACCREDITATION CODE
Atkins Rail	NS

Vehicle Class/Description	Road Rail Vehicle Colmar T10000 (Type, 9B)
Vehicle Owner	Lundy Projects Ltd
Issue Date	24th April 2015
Expiry Date	11th February 2020

Vehicle Numbers: **99709 940783-2**

	YES	NO
FIRST OF CLASS		**X**

Certificate number of First of Class IF/0087/14

Authorised by :

Signatory Name: SP Rice

Authorised Signatory:

Reason for issue and Scope of Work

Previous scope of work;
Certification of new Colmar T10,000FS Road Rail Vehicle. Serial No. 8646. Lundy Fleet No LPL026.
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 T10000F, against RIS-1530-PLT Issue 4. 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).
May be fitted with 3.00m dipper extension (Rhino Horn).
Assessed for compliance with RIS-1530-PLT Issue 4.
Expiry date conforms to the requirements of RIS-1530-PLT, Issue 4.

Scope of work for this certificate;
Modification carried out to GKD software to enable the use of the 3.00m dipper extension (Rhino Horn) when GKD SpaceGuard is enabled, this system **ONLY** works when the left and right slew angular limits are enabled and **NOT** when the "virtual wall" is being used. See Limitation 10.
Addition of Limitation 7.
Removal of Supplementary Information 11, wording now incorporated in Limitations 7 & 10.
Software updated to: V.8.48. See Supplementary Information 10.

Deviations associated with this certificate (if none state "NONE") **None**

Previous Engineering Acceptance certificate number: IF/0226/14

	Identification Number	Issue No.	Date
Maintenance plan Id.	Colmar User and Maintenance Instruction Manual T10,000FS	01	31/03/2014
Maintenance plan title	Colmar User and Maintenance Instruction Manual T10,000FS		

Limitations of Use

Taken from previous Engineering Acceptance Certificates IF/0226/14, amended as in Scope.

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 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 fully extended is 1230mm, (1920mm 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 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 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 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.
6. Except for the cab, when the RRV is under live OLE access is NOT permitted onto any surfaces higher than 1.4m above rail.
7. The vehicle shall **NOT** work under live OLE with the dipper extension (Rhino Horn) fitted.
8. It shall NOT on/off track if the adjacent line or lines are open to traffic.
9. 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.
10. The RRV may work ALO with dipper extension (Rhino Horn) fitted, in accordance with an approved method statement and a safe system of work. **Note:** this system **ONLY** works when the left and right slew angular limits are enabled and **NOT** when the "virtual wall" is being used.
    Functional test shall be undertaken prior to work on Network Rail Infrastructure.
11. 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 line or lines.
12. Vehicle shall not travel on:
    Track cants greater than 200mm;
    Track gradients greater than 1:25;
    Curve less than 80m.
13. Vehicle shall not work on:
    Track cants greater than 150mm;
    Track gradients greater than 1:25;
    Curve less than 80m.
14. 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.

15. 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.
16. The RCI shall be switched on at all times, unless in digging mode.
17. The RCI has a tandem lifting mode.
18. It 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 trailer.
    Air supply pressure for service brake application is 0-8bar and park brake release is maximum 8bar.
    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

1. The RRV is a OEM Colmar T10,000FS with 4.00m boom, 2.10m tele dipper.
   Can also be fitted with a 3.00m extension (Rhino Horn).
2. Manufacturer Serial No. 8646. Lundy Fleet No LPL026.
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 weight is 32 tonnes.
7. Fitted with rail wheel braking system.
8. 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.
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. 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 T10000F, against RIS-1530-PLT Issue 4.
    - Model: GKD 3RCI Touch Screen;
    - Software: V8.48
    - Duty chart reference: Serial 8664 Dated 14/02/2014. Rhino Horn 09/04/2014.
    - The RRV has Normal and Tandem Lifting Modes.

Authorised by:

Name of Signatory: S P Rice