

1 . PURPOSE

1-1 - Nature of the work

This specification defines the inspection operations to be carried out for the application and acceptance of paint systems for railway vehicles.

1-2 - Classification

The inspections to be carried out concern the following points :

- preparation of the surfaces before painting,
- application of the paint,
- application of the thermal and sound insulation products,
- application of the inscriptions.

1-3 - Reference documents

Reference is made to the following documents in the text of this specification:

UIC Leaflets 842-1 : Paint products for the protection of railway vehicles and containers.

842-2 : Technical specification for methods for testing paint products.

UIC Leaflets 842-3 : Surface preparation of metallic and non-metallic materials used in the construction of railway vehicles and containers.

842-4 : Protection against corrosion and painting of wagons and containers.

842-5 : Protection against corrosion and painting of coaches and tractive units.

ISO/R 2409 : Quadrillage tests.

2 . INSPECTION OPERATIONS

2-1 - Inspection of the surface preparation

The representative of the purchasing Railway shall verify that the surface preparation of the vehicles and containers and their component parts is carried out in accordance with the regulations of UIC Leaflet 842-3.

2-2 - Inspection of the application of the paint

2-21 - Paint inspection

The representative of the purchasing Railway shall verify that the materials used for protection against corrosion and the paint itself comply with all the provisions of UIC Leaflets 842-1 and 842-2.

2-22 - Inspection of the conditions of application of the paint

The representative of the purchasing Railway shall verify that the painting premises are free of dust, and that the temperature and degree of relative humidity are in accordance with the provisions of UIC Leaflets 842-4 and 842-5.

He shall also verify that the previous coat of paint is completely dry before a coat of paint is applied.

2-23 - Inspection of surface protection

The representative of the purchasing Railway shall verify that all parts of the vehicle, especially the edges, angles and parts which subsequently become inaccessible, have been given the specified protective treatment.

He shall also check that metal parts have been completely covered, particularly in those places difficult of access, by means of special electric contact equipment (e.g. lamp), in accordance with the provisions of 3-3310 of UIC Leaflet 842-2.

This inspection shall be carried out by spot check on a complete paint system. The lamp must not light up more than twice per square metre of area checked.

2-24 - Inspection of the dry film thicknesses of the coats of paint

The representative of the purchasing Railway shall verify, in accordance with the methods described in UIC Leaflet 842-2, that the dry film thicknesses of the coats of paint prescribed in Appendix 5 to UIC Leaflets 842-4 and 842-5, are fully observed.

This inspection shall be effected by spot check at a number of points decided by the representative of the purchasing Railway.

2-25 - Inspection of adhesion by quadrillage

The representative of the purchasing Railway shall carry out the quadrillage test by spot check, to verify the adhesion of the anti-corrosive priming paint, the coating or the complete paint system.

This test, which can be effected at any point of the painted surface of the vehicle, is carried out in accordance with the provisions of UIC Leaflet 842-2 or ISO/Recommendation 2409.

Its classification must correspond to Grade one of ISO/Recommendation R 2409.

The tested areas are restored in accordance with the provisions of UIC Leaflets 842-4 and 842-5, at the manufacturer's expense.

2-26 - Visual inspection of the paint

The representative of the purchasing Railway shall carry out a visual inspection to ensure satisfactory appearance of the paint and that the colours conform to those approved by the purchasing Railway.

He shall also ensure that the visible parts are free from defects detracting from the appearance.

2-3 - Inspection of the application of thermal and sound insulation materials

2-31 - Inspection of thermal and sound insulation materials

The representative of the purchasing Railway shall verify that the thermal and sound insulation materials comply with all the instructions of the purchasing Railway.

2-32 - Inspection of the application of the thermal and sound insulation materials

The representative of the purchasing Railway shall verify that the thermal and sound insulation materials have been applied to the areas specified and to the thicknesses stipulated in the order or its appended documents.

2-4 - Inspection of the application of inscriptions

The representative of the purchasing Railway shall verify that the surfaces to which the inscriptions and markings are to be applied have been properly prepared as prescribed by UIC Leaflets 842-4 and 842-5.

He shall subsequently verify that all the markings and inscriptions prescribed in the drawings have been applied as specified.

3 . DOCUMENTS

The results of the inspection shall be set down in a report, which can be prepared either for an individual vehicle or for a group of vehicles.

This report shall be attached to the acceptance documents of the vehicle(s).

APPLICATION

As from 1st July 1979.

All Railways in the Union.

RECORD REFERENCES

Headings under which the question has been dealt with :

- Preparation of specifications for paints for vehicles,
(Sub-Committee for Specifications : Paris, January 1975).
- Revision of UIC Leaflet 842-6 "Quality inspection of railway vehicle paint systems".
(Sub-Committee for specifications : Paris, January 1979).