

## **NOBO MISSION-SD**

# **AUDIT REPORT**

**OF THE QUALITY MANAGEMENT SYSTEM (CERTIFIED ISO 9001)  
OF VA-KO**

**APPLIED TO THE SUBSYSTEMS:  
“ROLLING STOCK – FREIGHT WAGONS”  
AND “ROLLING STOCK – NOISE”**



## **TEMELLI SITE**

*CONFIDENTIAL*

LIST OF SUCCESSIVE ISSUES:

Version	Date	Changes
1	13/06/2022	Creation of document
2	08/08/2022	§5 Added information about closure of non-conformities
3	10/08/2022	§6 Certification committee comments

*The latest version supersedes the previous*

VALIDATION:

Name: Nick SANTOS Function: Project manager	Signature 
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*People who have written and checked this report (listed on the cover) approved it using secure electronic authorization, with CERTIFER's EDM software keeping a trace of it*

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## Appendix

### Appendix 1: Record of opening and closing meetings attendees

# 1. Applicable documents and abbreviations

## Regulations

- DIRECTIVE (EU) 2016/797 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 May 2016 on the interoperability of the rail system within the European Union.
- Commission Regulation (EU) No 321/2013 of 13 March 2013 concerning the technical specification for interoperability relating to the subsystem 'rolling stock — freight wagons' of the rail system in the European Union and repealing Decision 2006/861/EC.
- Commission Regulation (EU) No 1236/2013 of 2 December 2013 concerning the technical specification for interoperability relating to the subsystem 'rolling stock — freight wagons' of the rail system in the European Union and amending Regulation (EU) No 321/2013.
- Commission Regulation (EU) 2015/924 of 8 June 2015 amending Regulation (EU) No 321/2013 concerning the technical specification for interoperability relating to the 'rolling stock — freight wagons' subsystem of the rail system in the European Union.
- Commission implementing regulation (eu) 2019/776 of 16 May 2019
- Commission implementing regulation (eu) 2020/387 of 9 March 2020
- Commission Regulation (EU) No 1304/2014 of 26 November 2014 on the technical specification for interoperability relating to the subsystem "rolling stock – noise" amending Decision 2008/232/EC and Decision 2011/229/EU.
- Commission implementing regulation (eu) 2019/774 of 16 May 2019
- ERA Technical Document, 000MRA1044 version 1.1 14/06/2017;

## Standards:

- Standard NF EN ISO 9001:2015: "Quality Management System: Requirements".
- Standard NF EN ISO 19011:2012: "Guidelines for quality and/or environmental management systems audit".

## Other documents:

- CERTIFER Audit plan ref. EC\_9593\_0200\_01 issued on 10/06/2022

## 2. Audit description

### 2.1. Audit Scope

The quality audit described in this report is part of the mission recorded under the reference EC\_9593, detailed in the audit plan ref. EC\_9593\_0200\_01\_AP issued on 10/06/2022.

The purpose of this quality audit was to establish if the quality management system of Va-Ko is effectively and correctly applied to “Rolling Stock – Freight Wagons” and “Rolling Stock – Noise” Subsystems in application of module SD.

### 2.2. Audit standards

The Quality Auditor has examined the conformity and the relevance of the pre-established dispositions to answer:

- to the applicable quality requirements of module SD of the TSIs, detailed in the harmonized standard ISO 9001,

and their implementation.

The Technical Expert has assessed the conformity and the relevance of methods and means (human and material) which are planned in order to fulfil:

- the requirements of the applicable TSIs.

and their implementation.

*Note 1: The conformity of the system to the safety requirements has not been determined during this audit, which purpose was only to assess the capacity of the quality management system to minimise human errors in installation phase of the system and to ensure the compliance to the safety requirements.*

*Note 2: CERTIFER took into account ISO9001 certification of Va-Ko, by reducing the duration of its on-site audit.*

### 2.3. Audit team

- Quality Auditor – Audit Leader: Gönül YILDIRIM
- Technical Expert: Mert TÜRKKAN

### 2.4. Date of on-site audit

- Va-Ko Temelli Site: Monday, the 13th of June 2022.

### 2.5. Audit place

- Va-Ko Temelli factory - Bacı Mahallesi, Bacı Yolu Serpmeleri - Mevkii, Tren Yolu Kenarı - Temelli - Sincan / Ankara – Turkey

### 2.6. Attendees

See record of opening and closing meetings attendees in appendix 1.

### 3. Specific auditee's statements

- The Va-Ko plant's paper archives are stored at Ankara's head office and can be consulted at the Temelli Site.

#### 4.1. General presentation of the company and of the project/product

*Consulted documents during the audit:*

- ✓ *Va-Ko general presentation*
- ✓ *OC-01 ORGANISATION CHART*
- ✓ *ISO 9001:2015, ISO 45001:2015, ISO 14001, EN 15085-2 Certificates*

Va-Ko Vagon Konteyner company was established in 2007. Va-Ko produces new freight wagons of several types (Sgnss, Sggmrs, Eanoss, Falns etc.). Currently Va-Ko made investment on 2 new facilities which will be built in Beypazari as manufacturing facility.

Va-Ko is also carrying out the maintenance of freight wagons and is ECM certificated according to the OTIF ATMF Annex A - Annex II - function IV.

The main clients for their freight wagons are KLN, MSC, ATIR, Mars Lojistik, VTG. The main types of freight wagons Va-Ko which are produced are: Sgss-W Container-Platform wagon, Sggmrs Platform wagon, Sgnss Platform wagon, Eanoss Open Top wagon, Falns wagon, Laags-W Cotainer wagon, Ks-W Platform wagon.

Two prototypes of this Sgns(s) 60' Platform wagons have been manufactured in order to have a TSI certificate for related subsystem.

Va-Ko also manufactures Y25Ls(s)-D bogies for its Sgns(s) 60' Platform freight wagon.

The company Va-Ko is composed of three different plants located in Beypazari and Temelli; the activities of the two plants are different and complementary.

In 2022, Va-Ko has 220 employees in Beypazari and Temelli sites combined.

Some activities are subcontracted:

- İTÜ (Istanbul Technical University): Tests (non-accredited entity)

There has been a modification of the design of the bogie (based on the description of the Y25 Ls(s)-D type bogie). Brake disc holding plates were observed during under normal wagon payload and VaKo decided to improve of the design of holding plates. Plates designs have been changed by R&D department and the situation was brought under control.

Va-Ko holds the main following certificates: ISO9001, ISO14001, OSHAS18001, EN15085-2.

#### 4.2. Control of projects documents and records

*Consulted documents during the audit:*

- ✓ *Managing Documentation procedure PD.16 Rev02 20.04.2020*
- ✓ *PD.03 Control of Quality Records*
- ✓ *LST-41 List of Quality Records*

- ✓ *LST.03 Rev01 01.07.2020 Documents Master List*

The list of applicable technical documents, drawings, welding maps, instructions for the manufacture of the Sgns(s) Platform wagon have been established.

**Area of Concern n°1:** LST.03 Documents Master List has been examined during audit. Content of this list contains revision information's of all documents used at VaKo premises. Some documents in this list were not updated regarding its status (revoke, update, first release...). Revision information of these documents shall be revised by the Quality Responsible.

The quality management system documentation is comprehensive and detailed.

### 4.3.Resources and competencies management

*Consulted documents during the audit:*

- ✓ *LST.40 Rev03 04.10.2021 Competency Polyvalance*
- ✓ *PRD.17 Competency Management*
- ✓ *FRM.103 Employee Evaluation Form*
- ✓ *IWE Certificate Emre Duran TR/IWE/02-23092019-18 13.02.2020*
- ✓ *PD.21 Training & Education Procedure Rev0 04.11.2010*
- ✓ *2022 Annual Training Plan PL.10*
- ✓ *LST.07 Competence Matrix Rev05 04.10.2021*
- ✓ *LST.08 Competence Matrix (Blue Collar) Rev02 4.102021*
- ✓ *Welding Qualification Certificates of Employees in Temelli Site*
- ✓ *FRM.158 Rev0 Mert Üstündağ, Hüseyin Özkan, Turgay Yılmaz Initial Training Form*
- ✓ *Arif Göçmen 43599-2018 UT Level II certificate 28.12.2023*

The job descriptions, authorities and responsibilities are defined for each employee. During the site inspections, some of the employee's names were recorded by CERTIFER team and cross-checked from the polyvalence and competency matrix.

Competency matrix and PD.17 Competency Management procedure have been evaluated. Initial evaluation of new employees have been conducted by foreman or related chief of the operation. After the practical examination of new employees, decision maker makes his decision about his competencies concerning specific activity and according to this evaluation new employee can be evaluated in competency matrix by the numbers 1-4.

The 2022 training plan has been determined, but the trainings will start in July. Therefore, the training records were not examined during the audit.

### 4.4.Purchasing and control of subcontractors

*Consulted documents during the audit:*

- ✓ *PD.04 Rev02 06.02.2021 Procurement Procedure*
- ✓ *LST.15 Approved Suppliers List*
- ✓ *PD.40 Rev0 16.02.2015 Supplier Selection and Evaluation Procedure*
- ✓ *All IC's TSI certificates (wheel, draw gear, brake shoe, bogie etc..)*

The criteria for supplier selection are defined. The suppliers are evaluated on an annual basis on defined criteria. When the results of the annual evaluation are not conforming to the internal requirement of the evaluation, the supplier is blacklisted. The list of approved suppliers is defined.

All of the IC certificates (wheel, axle box, brake equipments..) were submitted to the CERTIFER audit team.

Depending on its own will, Va-Ko performed UT and MT activities on related project by using a third party inspection body, Sila Kalite. UT and MT reports are available on-site.

**Non critic non-conformity N°1 8.4:** Some suppliers (e.g. Bonatrans for wheel supplier) that determined to be used in related project, could not be seen in approved suppliers list. The list should be updated according to the suppliers' selection.

#### 4.5.Manufacturing

*Consulted documents during the audit:*

- ✓ VTG ITP PQP (Project Quality Plan)
- ✓ Sgns(s) Wagon Chasis Measurement Form FRM.156-1
- ✓ FRM.72-1 Y25 Ls(s)-D Bogie Static Test Form
- ✓ Assembly Traceability Chart Form FRM.91-20
- ✓ FRM.59-1 Wagon Final Check Form
- ✓ Sgns(s) Traceability Form FRM.113
- ✓ Welding Map
- ✓ AB01072-22 Radiues Gauge
- ✓ Tape Measurement AB01053-22
- ✓ LST.04 Calibration Plan
- ✓ Sheet Metal CE Certificate
- ✓ BoM (Bills of Material) List of Sgns(s) Wagon
- ✓ PD.09 Welding Consumables Storage Procedure
- ✓ Ultrasonic Testing Report P.BG-1 Bogie
- ✓ Verification of Equipments PD.45
- ✓ FRM.13 Non-Conformity Form

The list of measurement instruments used in the plant is in place. The measurement instruments are identified and calibrated on an annually basis.

**Critic non-conformity N°1 7.1.5.2:** The calibration certificate of the ultrasonic testing device was not seen. VaKo stated that the device is brand new. Although the device is new, it must be calibrated by an accredited laboratory for the very first inspection activities with the device.

All the calibrations are carried out by an accredited laboratory. All calibration certificates are stored and available.

The welding machines are annually calibrated too. The used welding machines seen in the workshops are in their validity period.

**Area of Concern n°2:** Where performing welding activities with the protective gas (MIG, MAG), no disruptive air flow in workshop environment is desired. Because the irregular air flow over welding line may cause welding defect.



**Area of Concern n°3:** Some WPS-PQR documents for specific welding stations were missing. This situation is not inclusive for every single welding station. WPS-PQR sheets shall be available and accessible in welding stations.

Final check forms of Sgns(s) 60' prototype wagon has been examined during the audit. Control forms prepared detailed and on point. Measurement instruments are regularly checked internally in order to ensure there is no deviation before using these equipments.

#### 4.6. Monitoring and measurement process

*Consulted documents during the audit:*

- ✓ PL.09 2022 Internal Audit Plan
- ✓ PD.24 Internal Procedure
- ✓ Corrective and Preventative Actions FRM.10
- ✓ Management Review Form FRM.17-1
- ✓ Management Responsibility Procedure PD.34
- ✓ VTG Open Item List
- ✓ LST-18 Risk Evaluation and Risk Acceptance Matrix

Customer of this Sgns(s) type platform wagon (VTG Rail Logistic GmbH.) has conducted a quality control audit in Temelli. In line with their quality check an Open List List has been created by VaKo and non-conformities arising from manufacturing have been recorded in this list. Corrective actions regarding these non-conformities have been fixed by VaKo.

**Area of Concern n°4:** Employees who are in charge of internal audits have left the job. However, their names and allocations can still be found in internal audit plans. Internal audit for 2022 was planned but wasn't carried out yet. The plan should be revised, and internal auditors shall be selected by their qualification to perform audit.

**Area of Concern n°5:** 2022 Quality Targets have not been determined. It should be done annually.

**Critic non-conformity n°2 9.3.2:** Management review form has been examined during the audit. Content of the document deviates from the previous year. Evaluations of the previous year has not taken place in 2022 and the content of the 2022 Management Review was criticized as insufficient.

**Area of Concern n°6:** LST-18 Risk Evaluation and risk Acceptance Matrix has been examined during audit. Risk acceptance criteria are set as Explicit Risk Estimation (ErE) and Code of Practice (CoP). However, some criteria that set as CoP, were evaluated as ErE even though their related standards are determined true. This application is not correct, and it shall be revised by the VaKo.

## 4. Audit results

### 5.1. Strengths

- The general quality of the manufacturing
- The expertise in railway vehicles

### 5.2. Area of concern

*Improvement opportunities for which CERTIFER will not necessarily require short term actions. However, those subjects could be reconsidered later to check their actual seriousness.*

**Area of Concern n°1:** LST.03 Documents Master List has been examined during audit. Content of this list contains revision information's of all documents used at VaKo premises. Some documents in this list were not updated regarding its status (revoke, update, first release...). Revision information of these documents shall be revised by the Quality Responsible.

**Area of Concern n°2:** Where performing welding activities with the protective gas (MIG, MAG), no disruptive air flow in workshop environment is desired. Because the irregular air flow over welding line may cause welding defect.

**Area of Concern n°3:** Some WPS-PQR documents for specific welding stations were missing. This situation is not inclusive for every single welding station. WPS-PQR sheets shall be available and accessible in welding stations.

**Area of Concern n°4:** Employees who are in charge of internal audits have left the job. However, their names and allocations can still be found in internal audit plans. Internal audit for 2022 was planned but wasn't carried out yet. The plan should be revised, and internal auditors shall be selected by their qualification to perform audit.

**Area of Concern n°5:** 2022 Quality Targets have not been determined. It should be done annually.

**Area of Concern n°6:** LST-18 Risk Evaluation and risk Acceptance Matrix has been examined during audit. Risk acceptance criteria are set as Explicit Risk Estimation (ErE) and Code of Practice (CoP). However, some criteria that set as CoP, were evaluated as ErE even though their related standards are determined true. This application is not correct, and it shall be revised by the VaKo.

### 5.3. Remarks

*The answer given is not fully satisfactory, but it is not a non-conformity in terms of "criticity". A remark will not make CERTIFER refuse the issuing of a conformity certificate if a corrective action has been done. However, several remarks on a unique subject can be a reason to refuse the issuing of a conformity certificate.*

- No remarks were identified

### 5.4. Non-Conformities

*The answer given by the auditee is not fully satisfactory, but it is not a critical non-conformity. A minor non-conformity will not make CERTIFER refuse the issuing of a positive advice, providing that a suitable corrective action has been planned. However, several minor non-conformities on a unique subject may be unacceptable.*

- Critic Non-Conformities:

**Critic non-conformity N°1 7.1.5.2:** The calibration certificate of the ultrasonic testing device was not seen. VaKo stated that the device is brand new. Although the device is new, it must be calibrated by an accredited laboratory for the very first inspection activities with the device.

**Critic non-conformity n°2 9.3.2:** Management review form has been examined during the audit. Content of the document deviates from the previous year. Evaluations of the previous year has not taken place in 2022 and the content of the 2022 Management Review was criticized as insufficient.

- Non-Critic Non-Conformities:

**Non critic non-conformity N°1 8.4:** Some suppliers (e.g. Bonatrans for wheel supplier) that determined to be used in related project, could not be seen in approved suppliers list. The list should be updated according to the suppliers' selection.

## 5. Conclusion

The audit took place in an excellent condition; all planned points have been audited.

Critic non-conformity N°1 7.1.5.2, Critic non-conformity n°2 9.3.2 and Non critic non-conformity N°1 8.4 has been closed after the audit, the evidences are recorded in the forms : EC\_9593\_206\_1\_NC form, EC\_9593\_207\_1\_NC form and EC\_9593\_208\_1\_NC form respectively.

The quality management system of Va-Ko is correctly applied to “Rolling Stock – Freight Wagons” and “Rolling Stock – Noise” Subsystems according to module SD.

The auditors have confidence in Va-Ko’s ability to manufacture the Sgns(s) 60’ Platform wagon in accordance with the applicable standards, directives and regulations.

## 6. Audit Follow up

Corrective actions will be followed during the next surveillance audit.

• APPENDIX 1



AUDITS: attendees list

Place: *Temelli site*

Date: *13.06.2022*

First Name and NAME	Company	Role
<i>İrem Nur GETİNER</i>	<i>VAKO</i>	<i>Quality Assurance Eng. <i>İrem</i></i>
<i>Volkan Yaman</i>	<i>VAKO</i>	<i>Quality Manager</i>
<i>Erdem ERYALIN</i>	<i>Certifertur</i>	<i>Teknik Uzman (Technical specialist) <i>Erdem</i></i>
<i>Sorper SALT</i>	<i>Certifertur</i>	<i>Teknik Uzman (Technical specialist) <i>Sorper</i></i>
<i>Mert TÜRKKAN</i>	<i>Certifertur</i>	<i>Technical Specialist</i>
<i>Gözü YILDIZIM</i>	<i>Certifertur</i>	<i>Kalite Baş Denetçisi</i>
<i>Erişan KOTUNCU</i>	<i>VAKO</i>	<i>Quality Control Eng. <i>Erişan</i></i>