



According to RFU-STR-011 version 11 of 02/03/2021

SUBSYSTEM ROLLING STOCK SGNS(S) 60' WAGON

Written by: Nick SANTOS Checked by: Rudy DENOYELLE Project number: EC_9593 Customer: VAKO

Reference: EC_9593_0213 version 1

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LIST OF SUCCESSIVE VERSIONS

Version	Date	Change	Reason for Change
1DA	05/08/2022	/	First Issue
1DB	08/08/2022	§0, §1.3, §3, §6	Certification committee comments
1	10/08/2022	§6	Official release

The most recent version supersedes the previous version(s).

VALIDATION

	Signature
	PTIEN
Name: Nick SANTOS Position: Project Manager	* Edmand Venhble 5940 m

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.

Template reference : 01_86011_EN_02

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0 ATTACHED DOCUMENTS

PJ1.	Assessment Plan: DP_3818_0001_1
PJ2.	Assessment Report : EC_9593_0205_1
PJ3.	Audit report : EC_9593_0201_3
PJ4.	Clause by clause Workbook TSI-WAG 2019: EC_9593_0203_10
PJ5.	Clause by Clause Workbook TSI-NOI 2019: EC_9593_0202_03

1 ACTORS

1.1 NOTIFIED BODY

NoBo Company	CERTIFER SA
Postal adress	18 Rue Edmond Membrée CS40141 59308 VALENCIENNES CEDEX FRANCE
NoBo ID nr	2593

1.2 APPLICANT

Applicant	VА-КО
Postal adress	Fatih Sultan Mah. 2368 Sok. No:6 Çamlıkpark , Etimesgut / Ankara - TURKEY

1.3 MANUFACTURER(S) AND SIGNIFICANT SUBCONTRACTOR(S)

Manufacturer	VА-КО
Postal adress	Fatih Sultan Mah. 2368 Sok. No:6 Çamlıkpark , Etimesgut / Ankara - TURKEY
Fabrication site	VA-KO Temelli factory Bacı Mahallesi, Bacı Yolu Serpmeleri - Mevkii, Tren Yolu Kenarı Temelli - Sincan / Ankara – TURKEY

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2 NOTIFIED BODY CERTIFICATE(S)

EC type Examination Certificate :	2593/1/SB/2022/RST/EN/9593-0210 V1
Quality Management System Approval:	2593/4/SD/2022/RST/EN/9593-0211 V1
Certificate of Verification	2593/6/SD/2022/RST/EN/9593-0212 V1

3 CONDITIONS AND LIMITS OF USE

The wagon is technically compliant to:

- CORE TSI
- the clause 7.1.2. Mutual recognition of the first authorisation of placing on the market
- the Appendix C totally [GE wagon].

The technical characteristics are the following:

Type standard design	Sgns(s)
Tare	20 t ±%1
Axle Load	22,5 tons
Max. Load	72t
Track Gauge	1.435 mm
Length Buffer to Buffer	19.740 mm
Loading Length	18.500 mm
Distance between bogie pivots	14.200 mm
Loading Height	1.160 mm
Gauge	G1
Climate condition	T1
Brake	KE-GP-A(D)-8XWZ
Brake Regime	S(100 km/h) & SS (120 km/h)
Minimal curve radius (single wagon)	R 75 m
Ferry ramp angle	2°30′ – R 150 m
International Usability	TEN GE
Traction	Reinforced (min. 1.35 MN)

4 PROJECT SCOPE

4.1 GENERAL PROJECT DESCRIPTION

The purpose is to evaluate the design of a Sgns(s) 60'-type flat wagon, designed and manufactured in Turkey by VAKO. This Sgnss wagon is based on existing types of Sgnss wagon, subject to evolutions related to the length and the running gear.

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4.2 LEGAL SCOPE AND PROJECT HISTORY

4.2.1 LEGAL SCOPE

- Directive (EU) 2016/797 of 11 May 2016 concerning the interoperability of the rail system within the Community as amended
- 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, repealing Decision 2006/861/EC and Amended by Commission Implementing Regulation (EU) 2019/776 of 16 May 2019
- 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, repealing Decision 2011/229/EU and Amended by Commission Implementing Regulation (EU) 2019/774 of 16 May 2019
- COMMISSION IMPLEMENTING REGULATION (EU) 2018/545 of 4 April 2018 establishing practical arrangements for the railway vehicle authorisation and railway vehicle type authorisation process pursuant to Directive (EU) 2016/797 of the European Parliament and of the Council
- Regulation (UE) 2020/387 of the commission of the 9 March 2020 modifying the Regulation (UE) no 321/2013 concerning extension of the area of uses and transition phases
- Technical document 000MRA1044 of ERA version 1.1

4.2.2 PROJECT HISTORY

The assessment was carried out according to the SB+SD modules of the TSI (EC-Type Examination and EC verification based on quality management system of the production process) according to the assessment plan referenced DP_3818_0011_1 of 07/03/2022.

4.3 TECHNICAL SCOPE AND INTERFACES

The examined file corresponds to a Sgns(s) 60' wagon.

4.4 NON-APPLICATION OF TSIS

NA

4.5 LIST OF SPECIFIC CASES

NA

4.6 LIST OF SPECIFIC ENVIRONMENTAL CONDITIONS

Temperature class: T1

5 PROJECT DOCUMENTATION PROVIDED BY THE APPLICANT

5.1 EVIDENCE DOCUMENTS

The assessed documents are listed in the "Documents" tabs of EC_9593_0202_03 and EC_9593_0203_10.

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5.2 INTEROPERABILITY CONSTITUENTS

The IC related supporting documents (e.g. IC NoBo certificates, NoBo files, reports) which were supplied by the applicant to Certifer are listed in the "CI" tab of EC_9593_0203_10.

Running gear	
	Y25 Ls(s)-D (VA-KO)
EC Certificate	2593/2/CH1/2022/RST/EN/9932-0103/V01
Valid until	07/04/2032
Quality system approval	2593/4/CH1/2022/RST/EN/9932-0100/V01
Valid until	24.12.2023
Wheelset	
	R61 Wheelset (KOLOWAG)
EC Certificate	1358/1/CB/2018/RST/EN/281
Valid until	With unlimited validity
Quality system approval	1358/4/CD/2022/RST/EN/1027/V01
Valid until	03.04.2024
	R61 Wheelset (BONOTRANS)
EC Certificate	1010/1/CB/2015/RST/DEEN/ LC2691208
Valid until	Validity as long as the object is not modified
Quality system approval	1010/4/CD/2021/RST/DEEN/TRRC3623689N01
Valid until	02.04.2023
Wheel	
	Railway wheel AAE25t drawing number KP-0023-17 Rev2 PJSC (INTERPIPE NTRP)
FC Certificate	1991 /1 /CB/2017 /RST/EN/CRG-9880
Valid until	This certificate is valid as long as the interoperability constituent remains unchanged.
Quality system approval	1991 /4/CD/2020 /RST/DEEN/OM-10080
Valid until	08 12 2022
	CELIST\/t KOLO 0920 VOLLBAD 0920 (BONOTBANS)
FC Certificate	1010/1/CB/2015/RST/DEEN/I C2701209
Valid until	This Cerlificate is valid for the Object of Assessment as mentioned above and as long as the Object of Assessment and the relevant technical documentation are not modified.
Quality system approval	1010/4/CD/2021/RST/DEEN/TRRC3623689/V01
Valid until	02.04.2023
Axle	
	Axle 25t with Brake disks (KoLOWAG)
EC Certificate	BG/000 BG 112131492/2018/002496
Valid until	11.11.2022

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Quality system approval	1358/4/CD/2020/RST/EN/709/V01
Valid until	11.11.2022
	Railway axle AAE drawing N°: 455.0.000.236.08, b (BONOTRANS)
Valid until	Validity as long as the object is not modified
Quality system approval	1010/4/CD/2021/RST/DEEN/TRRC3623689/V01
Valid until	02/04/2023

5.3 SUBSYSTEM CLDS FROM OTHER NOBOS

NA

5.4 DETAILED CONFORMITY ASSESSMENT REQUIREMENTS

The detailed conformity assessment is detailed in clause by clause workbooks EC_9593_0202_03 and EC_9593_0203_10.

6 EC CONFORMITY ASSESSMENT PROCESS INFORMATION AND RESULTS PROVIDED BY THE NOBO

The assessment was carried out according to the SB+SD module.

The CERTIFER assessment report and the results of compliance with the "freight wagon" and "noise" TSIs are recorded in report EC_9593_0205_1. The assessment is documented in workbooks EC_9593_0202_03 and EC_9593_0203_10.

The CERTIFER audit for the approval of the Quality Management system is recorded in document EC_9593_0201_3.

The design examination does not show any deviation from the TSI "freight wagons". The wagon is compliant with:

- the general requirements of the TSI,
- the requirements of Annex C allowing a "TEN-GE" marking,
- in § 7.1.2 Mutual recognition of the first authorization for putting into service,

The demonstration was carried out for the 1435 mm track gauge.

The design examination also concludes compliance with the Noise TSI.

Inspection of a wagon with parking brake will be done as soon as a wagon with parking brake will be available.

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