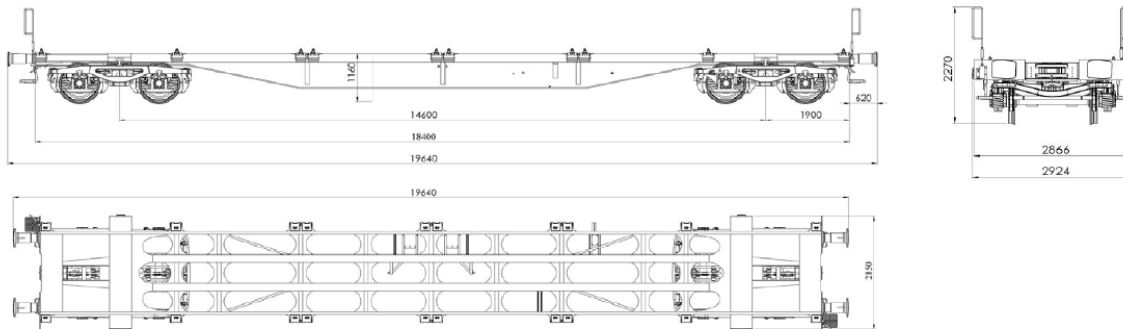


NOBO

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

SUBSYSTEM

VAKO SGNSS AND SGNS WAGON



Written by: R. DENOYELLE

Checked by: H. LAGNEAU

Project number: 9593


Customer: Vako

LIST OF SUCCESSIVE VERSIONS

Version	Date	Change	Reason for Change
1	28/07/2020	Initial version	
2	05/10/2020	Clarification on the area of use: Wagon Marked as "TEN GE"	
3	05/07/2021	Update of the assessment with BA303 wheelsets	
4	03/02/2022	Update for SGNS wagon	

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

VALIDATION

	Signature
Name: R. DENOYELLE Position: Project Manager	

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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0 ATTACHED DOCUMENTS

EC_9593_0002_10 Workbook TSI-WAG 2019

EC_9593_0004_3 Workbook TSI-NOI 2014

EC_9593_0005_4 NoBo Report

1 ACTORS

1.1 NOTIFIED

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

1.2 APPLICANT

Applicant	VAKO
Postal adress	Fatih Sultan Mah. 2368 Sok. No:6 Çamlıkpark , Etimesgut / Ankara

1.3 MANUFACTURER(S) AND SIGNIFICANT SUBCONTRACTOR(S)

Manufacturer:

VAKO

**Fatih Sultan Mah. 2368 Sok. No:6
Çamlıkpark , Etimesgut / Ankara**

Main sub-contractors :

Sub-systems	Sub-Contractors
Brake system	Knorr
Wheel	MA Steel

wheelset	Jiangsu Railteco
Screw Coupling	MSV metal
Buffer	MSV metal
Draw Hook	MSV metal
Brake Shoes	Cofren
Bogies	Vako

2 NOTIFIED BODY CERTIFICATE(S)

- EC-type examination certificate N° 2593/1/SB/2022/RST/EN/9593-0112/V01
- EC certificate of verification N° 2593/6/SD/2022/RST/EN/9593-0108/V01
- Quality Management system approval N° 2593/4/SD/2022/RST/EN/9593-0109/V01

3 CONDITIONS AND LIMITS OF USE

Wagons Marked as “TEN GE” (conformity to core TSI + § 7.1.2 + appendix C)

List of harmonized and national restriction codes - conditions and limits of use ((EU) 2019/250 Annex V)			
Cat	Type	Value or specification	Name
1	1	75 m	Minimum curve radius in meters
1	3	120 km/h @ 20 t/axle 100 km/h @ 22,5 t/axle	Speed restrictions (on the given network) in km/h
2	1	G1	Kinematic gauge (coding WAG TSI)
2	2	4	Wheelset gauge
2	7	2	Noise category
3	1	1	Climatic zone EN50125:2014, Clause 4.3
4	2	2	Condition based (distance travelled, wear, etc.)

4 PROJECT SCOPE

4.1 GENERAL PROJECT DESCRIPTION

This Nobo File deals with Sgnss and Sgns types flat wagons, designed and manufactured in Turkey by VAKO.

This Sgnss wagon is based on an existing type of Sgnss wagon, subjected to changes related to the braking equipment and the brake blocks. The wagon has two versions: 22.5 t axle load and 25 t axle load.

The Sgns wagon is derived from the Sgnss type, version 25 t axle load, after converting to the S regime by a change in the spring setting of the brake system.

TECHNICAL SPECIFICATIONS						
1	MAX. LOAD CAPACITY	70000 Kg.				
2	TARE	19920 Kg.				
3	SOLE AREA	38,6 m ²				
4	BETWEEN BOGIE AXIS	14600 mm				
5	CHASSIS LENGTH	18400 mm				
6	BUFFER TO BUFFER LENGTH	19640 mm				
7	HEIGHT OF WAGON	2250 mm				
8	WAGON WIDTH	2100 mm				
9	HEIGHT OF THE PLATFORM	1160 mm				
10	BOGIE TYPE	Y25 Ls(s)d1 with K type brake shoes				
11	BETWEEN THE BOGIE AXLES	1800 mm				
12	WHEEL DIAMETER and TYPES	Ø 920 mm - BA303 or BA004				
13	AXLE LOAD	22,5 Tons and 25 Tons				
14	DRAW GEAR	Elastomer				
15	DRAW HOOK	150 Ton				
16	SPARE PARTS	According to the VPI				
17	BUFFER TYPE	CAT A - EN15551+A1				
18	AIR BRAKE	Knorr Bremse				
19	REGULATOR TYPE	DRV2A-450H				
20	MAX. SPEED AT AN AXLE LOAD 20/22.5 t	120/100 km/h				
21	ROLLER BEARING	NJ/NJP 130 x 240				
22	CONTAINER TYPE - GAUGE - TRACK GAUGE	10°, 20°, 30°, 40° - G1 - 1435 mm				
23	WORKING TEMPERATURE INTERVAL OF WAGONS (T1)	T1: -25 C° to +40 C° (Nominal)				
24	INTERNATIONAL CONFORMITY	RIV - TSI WAG 321/2013				
25	INSTALLING TABLE		A	B	C	D
		S	44 t	52 t	60 t	70 t
		SS	44 t	52 t	60 t	

Technical specification for SGNSS Wagon

TECHNICAL SPECIFICATIONS						
1	MAX. LOAD CAPACITY	70000 Kg.				
2	TARE	19920 Kg.				
3	BETWEEN BOGIE AXIS	14600 mm				
4	CHASSIS LENGTH	18400 mm				
5	BUFFER TO BUFFER LENGTH	19640 mm				
6	HEIGHT OF WAGON	2250 mm				
7	WAGON WIDTH	2100 mm				
8	HEIGHT OF THE PLATFORM	1160 mm				
9	BOGIE TYPE	Y25 Ls(s)d1 with K type brake shoes				
10	BETWEEN THE BOGIE AXLES	1800 mm				
11	WHEEL DIAMETER	Ø 920 MONOBLOCK - BA303-25 t axle load				
12	AXLE LOAD	22,5 Ton (For wagon)				
13	DRAW GEAR	Elastomer				
14	DRAW HOOK	150 Ton				
15	SPARE PARTS	According to the VPI				
16	BUFFER TYPE	CAT A - EN15551+A1				
17	AIR BRAKE	Knorr Bremse				
18	REGULATOR TYPE	DRV2A-450H				
19	MAX. SPEED AT AN AXLE LOAD	Empty 120km/h / Full Load 100km/h				
20	ROLLER BEARING	NJ/NJP 130 x 240				
21	CONTAINER TYPE - GAUGE - TRACK GAUGE	10", 20", 30", 40" - G1 - 1435 mm				
22	WORKING TEMPERATURE INTERVAL OF WAGONS (T1)	T1: -25 C° to +40 C° (Nominal)				
23	INTERNATIONAL CONFORMITY	RIV - TSI WAG 321/2013				
24	INSTALLING TABLE		A	B	C	D
		S	44 t	52 t	60 t	70 t
		SS	00			

Technical specification for SGNS Wagon

4.2 LEGAL SCOPE AND PROJECT HISTORY

- 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, 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
- Technical document 000MRA1044 de l'ERA version 1.1

This scope is the scope frozen at the beginning of the contract (contract signed the 07/02/2020) corresponding to the phase A defined in the TSI "Rolling stock-Freight Wagon" corresponding to the assessment plan ref. DP_3818_0001_2 and the assessment plan DP_3818_0008_2 for SGNS Wagon.

4.3 TECHNICAL SCOPE AND INTERFACES

Refer to §4.1

4.4 NON-APPLICATION OF TSIs

Not applicable

4.5 LIST OF SPECIFIC CASES

Not applicable

4.6 LIST OF SPECIFIC ENVIRONMENTAL CONDITIONS

Working Temperature : T1

5 PROJECT DOCUMENTATION PROVIDED BY THE APPLICANT

5.1 EVIDENCE DOCUMENTS

See annex 1

5.2 INTEROPERABILITY CONSTITUENTS

Constituent	Declaration	Date Of validity	Conditions of use		
AXLE	303 EC Declaration of Conformity for BA004 wheelset BA002 Axle	29/03/2022	Maximum vertical static force	23,5	t
WHEEL	302_1 EC Declaration of Conformity for BA004 Wheel	14/11/2021	Nominal tread diameter	920	mm
			Maximum vertical static force	11,75	t
			Maximum speed	120	km/h
			In-service limits	840	mm
			Maximum braking energy	50	Kw
WHEELSET	303 EC Declaration of Conformity for BA004 wheelset BA002 Axle	29/03/2022	Track gauge	1435	mm
			Nominal wheel tread diameter	920	mm
			Maximum vertical static force	23,5	t

Running gear (BOGIE)	TR/00008830306445/2020/00001 And TR/00008830306445/2020/00001 version 2	23/01/2021	Track gauge	1435	mm
			Maximum speed	120	km/h
			Maximum cant deficiency	130	mm
			Minimum tare of the unit	16	t
			Maximum axle load	22,5	t
			Range of distances between bogie pivots or range of wheelbase of 'two-axle units'	6.5-20.0	m
			Maximum height of centre of gravity of empty unit	2500	mm
			Coefficient of height of centre of gravity of loaded unit	2350	mm
			Minimum torsional stiffness coefficient of car body	0,5x10 ¹⁰	N.mm ² /rad
			Maximum mass distribution coefficient for empty units	0,55	
			Minimum nominal wheel diameter	920(new)	mm
			Rail inclination	1:20 and 1:40	
			Friction element for wheel tread brakes (BRAKE SHOES)	359 Declaration of Conformity - COFREN-S501	
Minimum static friction coefficient	According the UIC A12 test program, the minimum static coefficient for a K block is 0,20. With C810, the absolute minimum found is 0,21				
Maximum permitted brake forces applied on the element	According UIC is 40 KN but on our blocks it's permitted also higher values				
Suitability for train detection by systems based on track circuits	According the UIC A7 program (shuntage test) performed in Becorit, the material C810 is suitable for this application				
Suitability for severe environmental conditions	UIC define the winter test in A5 test program. The test was done and passed .				
AXLE	363.3 Declaration For Axle BA 302_CR321 KOLOWAG-VUD R4	17/09/2021	Maximum vertical static force	25,0	t

WHEEL	364.3 EC Declaration 2019_TSI_CB-CD_BA303 Version 4.0 (01-04-2021)	17/09/20 21		
			BA303	
			Nominal tread diameter	920 mm
			Maximum vertical static force	12,5 t
			Maximum speed	120 km/h
			In-service limits	840 mm
Maximum braking energy	50 Kw			
WHEELS ET	365.3 Declaration For Wheelset BA 303_CR321- Rev11	21/11/20 22		
			BA303	
			Track gauge	1435 mm
			Nominal wheel tread diameter	920 mm
Maximum vertical static force	25,0 t			

Conditions of use have been checked by CERTIFER and are coherent with technical specifications (§3) and conditions and limits of use (§2).

5.3 SUBSYSTEM CLDs FROM OTHER NOBOS

Not applicable

5.4 DETAILED CONFORMITY ASSESSMENT REQUIREMENTS

For the detail of conformity assessment refer to the compliance matrices **EC-9593_0002_10** for TSI-WAG 2019 and **EC_9593_0004_03** for TSI-NOI 2014.

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

The assessment was done according module SB and the results of the conformity is recorded in the report EC9593_0005_4 corresponding to the clause by clause EC_9593_0002_10 and EC_9593_0004_03 dealing with the TSIs “Rolling Stock – Freight Wagons” and “Rolling Stock – Noise”. All the opened items in these CbC are now closed. The wagons are marked as TEN GE and are compliant to core TSI + § 7.1.2 + appendix C.

The SD certificate was already edited before to start the Design examination. The audit’s results are recorded in the report EC9593B_0007_1 and the conclusion was positive:

“All the planned topics could be audited, in spite of not being present in the Company’s premises, thanks to the ability of the auditees to provide answers and documents.

The result of the audit is satisfactory as the Quality Management System of VA-KO VAGON & KONTEYNER is correctly documented and applied to the manufacturing of Sgnss Wagons.

The conclusion of the audit team is positive towards renewing the Quality System Approval [QMSA] of Sgnss Wagons equipped with bogies Y25 Ls(s)d1..”

This audited wagon was the SGNSS wagon. As the SGNS wagon is very similar to the SGNS. Therefore it is possible to extend the quality management system approval to SGNSS AND SGNS wagon.

ANNEX 1 : LIST OF EVIDENCE DOCUMENTATION

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
101_1	2	SGNSS - Project Drawings REV2	No Change	No Change	No Change
102	0	Signal Support	No Change	No Change	No Change
104	0	BA002 Axle	No Change	No Change	No Change
105	0	Shunter Space	No Change	No Change	No Change
106	0	Safety Area of Coupling Cock	No Change	No Change	No Change
114	0	Screw Coupling_ 1350kN	No Change	No Change	No Change
115	0	Handbrake	No Change	No Change	No Change
116	0	BA004 Wheel	No Change	No Change	No Change
117	0	Buffer kat.A MINER 35kJ 450	No Change	No Change	No Change
118	0	BA004 Wheelset	No Change	No Change	No Change
124	0	Draw Gear 1500kN MINER ST-9-2	No Change	No Change	No Change
125	0	Draw Hook 150t	No Change	No Change	No Change
126	0	Tow Hooks	No Change	No Change	No Change
129	0	Draw Hook Clearance	No Change	No Change	No Change
131	0	Buffer und Draw Gear Configuration	No Change	No Change	No Change
132	0	Draw Hook and Draw gear Clearance	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
133	0	Earthing Cable	No Change	No Change	No Change
134	0	Draw Hook and Buffing Centre	No Change	No Change	No Change
135	0	Tail Light Bracket	No Change	No Change	No Change
138	0	Working Space of Buffer	No Change	No Change	No Change
139	0	Buffer Configuration	No Change	No Change	No Change
149	0	Footsteps And Handrails	No Change	No Change	No Change
150	0	Label Holders and Attachment Devices	No Change	No Change	No Change
151	0	Location of Tow Hooks	No Change	No Change	No Change
152	0	Lifting and Jacking Points	No Change	No Change	No Change
153	0	Buffer Dimensions	No Change	No Change	No Change
154	1	Slack Adjuster Clearance rev.01	No Change	No Change	No Change
155	0	Technical Drawing - C810-S501	No Change	No Change	No Change
156	0	SKF Roller Bearing Drawing	No Change	No Change	No Change
157	0	BA182 Axlebox Drawing	No Change	No Change	No Change
158	0	Container Locks	No Change	No Change	No Change
159	0	Y25Ls(s)d1- HABD	No Change	No Change	No Change
160	0	Y25 Bogie BJ.06.00.00.00	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
161	0	Container Locks	No Change	No Change	No Change
202	0	Electrical installations	No Change	No Change	No Change
203	0	Buffer 3.1	No Change	No Change	No Change
204	0	Screw Coupling 3.1	No Change	No Change	No Change
205	0	Draw Hook 3.1	No Change	No Change	No Change
208	1	Operating Rules Rev1	No Change	No Change	No Change
209	0	Marking of Units (to be considered as a template)	256	0	Marking of Units
212	0	System Protection Rules	No Change	No Change	No Change
213	0	Maintenance Description File	No Change	No Change	No Change
213_1	0	Maintenance Manual Quarterly	No Change	No Change	No Change
214	0	The Grease Technical Data Sheet	No Change	No Change	No Change
216	0	3.1 certificate for BA004 wheelsets	No Change	No Change	No Change
216_1	0	Wheel Mounting Pressure Curve Chart-1	No Change	No Change	No Change
216_2	0	Mounting Pressure Curve Chart-2	No Change	No Change	No Change
218	0	SGNSS Bracing_Calculation	No Change	No Change	No Change
219	1	Calculation of Meter Pressure rev1	No Change	No Change	No Change
220	0	SGNSS Safety and Health Guidelines	No Change	No Change	No Change
221	0	Draw Gear 3.1	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
221_1	0	Draw Gear Technical Diagram	No Change	No Change	No Change
222	0	Tow Hooks Calculation	No Change	No Change	No Change
223	0	Technical Descriptions	257	0	Technical Descriptions
224	5	General Documentation - Rev5 (contains the marking)	No Change	No Change	No Change
225	0	Outer Spring	No Change	No Change	No Change
226	0	Inner Spring	No Change	No Change	No Change
227	0	Spring	No Change	No Change	No Change
230_1	0	Piping Diagram TA50887_11_EN00	No Change	No Change	No Change
230_10	0	Slack Adjuster	No Change	No Change	No Change
230_11	0	End Cocks	No Change	No Change	No Change
230_12	0	Brake Coupling	No Change	No Change	No Change
230_13	0	Hose Pipe	No Change	No Change	No Change
230_14	0	Brake Changeover Device	No Change	No Change	No Change
230_15	0	Angle Cock	No Change	No Change	No Change
230_2	0	Brake Modes and Calculation TA50887_41_EN00	258	0	Brake Modes and Calculation TA_50887_44
230_3	0	Changeover Device G-P	No Change	No Change	No Change
230_4	0	Distributor Valve	No Change	No Change	No Change
230_5	0	Minimum Brake Performance	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
230_6	1	Dynamic Test Calculations Rev1	No Change	No Change	No Change
230_7	0	Air Reservoir	No Change	No Change	No Change
230_8	0	Brake Cylinder	No Change	No Change	No Change
230_9	0	KE Bracket	No Change	No Change	No Change
231	1	Brake Block Holder Rev1	No Change	No Change	No Change
232	0	Brake Coupling Head	No Change	No Change	No Change
233	0	Brake Pipe Hose Coupling	No Change	No Change	No Change
234	0	Temperature ranges	No Change	No Change	No Change
235	0	SGNSS Track Gauge (1435 mm)	No Change	No Change	No Change
236	0	Reference Profile of Gauge	No Change	No Change	No Change
239	1	SGNSS Wheelset Properties rev1	No Change	No Change	No Change
241	0	SGNSS Health And Safety Conditions	No Change	No Change	No Change
242	0	SGNSS Compability With Train Detection Systems	No Change	No Change	No Change
243	0	C10_Location of Parking Brake Handles	No Change	No Change	No Change
244	1	C14_Specific Brake Thermal Capacity Rev1	No Change	No Change	No Change
245	1	Minimum Parking Brake Performance rev1	No Change	No Change	No Change
246	0	SGNSS Kinematic Gauge	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
247	1	SGNSS Parking Brake Declaration of Conformity Rev1	No Change	No Change	No Change
248	0	Inspection Certificates COFREN-S501	No Change	No Change	No Change
249	0	Static Brake Test Report	No Change	No Change	No Change
250	0	TA50887_42 EN00_Parking_Brake	No Change	No Change	No Change
251	0	General technical conditions of axle box	No Change	No Change	No Change
252	0	Maintenance Plan	No Change	No Change	No Change
253	0	SGNSS Simplified Evaluation TSI Noise	No Change	No Change	No Change
254	0	Brake Coupling Assembly	No Change	No Change	No Change
255	0	Parking Brake Explanation	No Change	No Change	No Change
256	1	Air Reservoir Calculation of SGNSS rev1	No Change	No Change	No Change
301	0	EC Declaration Axle	No Change	No Change	No Change
301	0	TSI-BA002 Axle	No Change	No Change	No Change
301_1	0	TSI Certificate BA002 Axle	No Change	No Change	No Change
302	0	BA004 wheel TSI certificate	No Change	No Change	No Change
302	0	TSI-BA004 Wheel	No Change	No Change	No Change
302_1	0	BA004 wheel EC certificate	No Change	No Change	No Change
302_1	0	EC Declaration of Conformity for BA004 Wheel	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
302_2	0	EC declaration of conformity Wheel	No Change	No Change	No Change
303	0	EC Declaration of Conformity for BA004 wheelset BA002 Axle	No Change	No Change	No Change
303	0	TSI Certificate BA004 Wheelset	No Change	No Change	No Change
303_1	0	EC Declaration of Wheelset	No Change	No Change	No Change
303_1	0	SI-BA004 Wheelset	No Change	No Change	No Change
306_1	0	Screw Coupling SB	No Change	No Change	No Change
306_2	0	Screw Coupling SD	No Change	No Change	No Change
307_1	0	Buffer SB	No Change	No Change	No Change
307_2	0	Buffer SD	No Change	No Change	No Change
308_1	0	Draw Gear SB	No Change	No Change	No Change
308_2	0	Draw Gear SD	No Change	No Change	No Change
309_1	0	Draw Hook SB	No Change	No Change	No Change
309_2	0	Draw Hook SD	No Change	No Change	No Change
312	0	Declaration of Conformity Brake System	No Change	No Change	No Change
312_1	0	Brake Cylinder EC Declaration	No Change	No Change	No Change
312_2	0	Slack Adjuster EC Declaration	No Change	No Change	No Change
312_3	0	Pneumatic Kupplung EC Declaration	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
312_4	0	Distributor Valve EC Declaration	No Change	No Change	No Change
312_5	0	Angle Cock EC Declaration	No Change	No Change	No Change
312_6	0	Relay Valve EC Declaration	No Change	No Change	No Change
312_7	0	Weighing Valve EC Declaration	No Change	No Change	No Change
313	0	TSI Cert Brake System	No Change	No Change	No Change
318	0	VAKO 15085 Certification	No Change	No Change	No Change
330	0	BA004 wheels thermal mechanical type test	No Change	No Change	No Change
336	0	Running Dynamic Behaviour Declaration	No Change	No Change	No Change
337	0	Declaration of conformity SKF	No Change	No Change	No Change
337_1	0	TSI cert. SKF	No Change	No Change	No Change
340	0	VAKO_AcousticReportv01c	No Change	No Change	No Change
344	0	VAKO_Vagon2_Equipment and Torsional Stiffness_v01b	No Change	No Change	No Change
346	0	VAKO_Vagon2_FatigueFEM_v03a	No Change	No Change	No Change
347	0	VAKO_Vagon2_StaticFEM_v01e	No Change	No Change	No Change
356	0	VAKO_DecayRate_Reportv01a	No Change	No Change	No Change
357	0	ISO 9001-2015	No Change	No Change	No Change
358	0	VAKO_Wagon2_BuffingImpactTest_v01d	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
359	0	Declaration of Conformity - COFREN-S501	No Change	No Change	No Change
360	0	Module CH Vako Y25 Bogie	No Change	No Change	No Change
361	0	EC Declaration of Y25Ls(s)d1 Bogie	No Change	No Change	No Change
362	0	VAKO - SGNSS Dynamic Brake Test Report v.01d	No Change	No Change	No Change
365.3	0	TSI-BA303 Wheelset	No Change	No Change	No Change
360	0	1370_4_CH_2020_RST_EN_943_V01 vers01	No Change	No Change	No Change
366.3	0	VAKO - EC Declaration of Y25 Bogie vers02	No Change	No Change	No Change
164	0	Wheelset - BA303 R2	No Change	No Change	No Change
365.1	0	ws BA303_1358_1_CB_2018_RST_EN_348_1	No Change	No Change	No Change
365.2	0	ws BA 303_1358_4_CD_2020_RST_EN_708_V01	No Change	No Change	No Change
365.3	11	Declaration For Wheelset BA 303_CR321-Rev11	No Change	No Change	No Change
363.3	4	Declaration For Axle BA 302_CR321 KOLOWAG-VUD R4	No Change	No Change	No Change
363.1	0	Ax BA302_1358_1_CB_17_RST_EN	No Change	No Change	No Change
363.2	0	AX BA302_1358_4_CD_2019_RST_EN_474	No Change	No Change	No Change
162	4	Axle_25t_EN-Rev4	No Change	No Change	No Change
165	0	ZLH N-800-00-11-001(L)_B_V_1_A1	No Change	No Change	No Change
367.1	0	1714-8.1-SB-2017-RST-EN-2677	No Change	No Change	No Change

Sgnss 60' wagon documents			Sgns 60' wagon documents		
Document Reference	Revision	Full Title	Document Reference	Revision	Full Title
367.2	0	1714-8.4-SD-2017-RST-EN-2678.1	No Change	No Change	No Change
364.1	0	wh BA 303_1358_1_CB_2019_RST_EN_389	No Change	No Change	No Change
364.2	0	wh BA 303_1358_4_CD_2021_RST_EN_792_V01	No Change	No Change	No Change
364.3	0	EC Declaration 2019_TSI_CB-CD_BA303 Version 4.0 (01-04-2021)	No Change	No Change	No Change
162	0	BA302 Axle	No Change	No Change	No Change
163	0	BA303 Wheel	No Change	No Change	No Change
165	0	ZLH N-800-00-11-001(L)_B_V_1_A1	No Change	No Change	No Change
363.3	4	Declaration For Axle BA 302_CR321 KOLOWAG-VUD R4	366_3	5	Declaration For Axle BA 302_CR321 KOLOWAG-VUD R5
363.1	0	Ax BA302_1358_1_CB_17_RST_EN	No Change	No Change	No Change
363.2	0	AX BA302_1358_4_CD_2019_RST_EN_474	366_2	0	AX BA302_1358_4_CD_2021_RST_EN_872_V01
364.1	0	wh BA 303_1358_1_CB_2019_RST_EN_389	No Change	No Change	No Change
364.2	0	wh BA 303_1358_4_CD_2021_RST_EN_792_V01	No Change	No Change	No Change
163	3	KP-0021-15, rev. 3_BA 303	No Change	No Change	No Change

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