

Track inspection – Safeguarding the operational safety

The security in the railway transportation begins with the knowledge about possible weak spots. A weak spot shows among other things the wear of the track panel, however, also all symptoms of old age of the roadbed and track.

One of our central task is controlling the inventory of our clients sites in accordance with legal regulations, being documented in a technically reasonable scope and structured and illustrated in a simple way for further planning of investment and construction projects.

The basis for recording and examination of rail facilities and its analysis and technical documentation of the superstructure is established by the trolley "crab"



Goal-oriented project handling

Problemstellung / Problem definition

- *Definition der Aufgabe / Task definition*
- *Orientierungsgespräche / First discussions*
- *Begehung / perperatration*
- *Festlegung der Arbeiten / Specification of the works*

DATA

Datenaufnahme / Data recording

- *Grundlagenermittlung / Basic project data*
- *Vermessungsarbeiten / Surveying work*
- *Inspektion der Anlagen / Inspection of the railway facilities*

DATA

Auswertung / Evaluation

- *Auswertung der Messergebnisse / Evaluation of the measurement results*

DATA

Arbeitsgrundlagen erstellen / Working basis

- *Berichte, Listen, Messschriebe, Kartierung, Querprofile, Längsprofile, Dokumentation*
- *reports, schedule, mapping, cross-section, longitudinal section, siteplan,documentation*

DATA

Planung / Planning

- *Entwurfs- und Ausführungsplanung / Design and implementation planning*
- *Sanierungsplanung / Reconstruction planning*

Kundenbetreuung / Customer support

- *Sanierung, Instandhaltung, Prüfung / Reconstruction, maintenance, Examination*

Name : Strecke 9402 Mannheim - Weinheim Rechtes Gleis Teil 1

Bemerkung : ab ca. km 0.82 (EBO/BoStrab) bis ca. km 12.26

Messdatei : 61221011_n.KRK

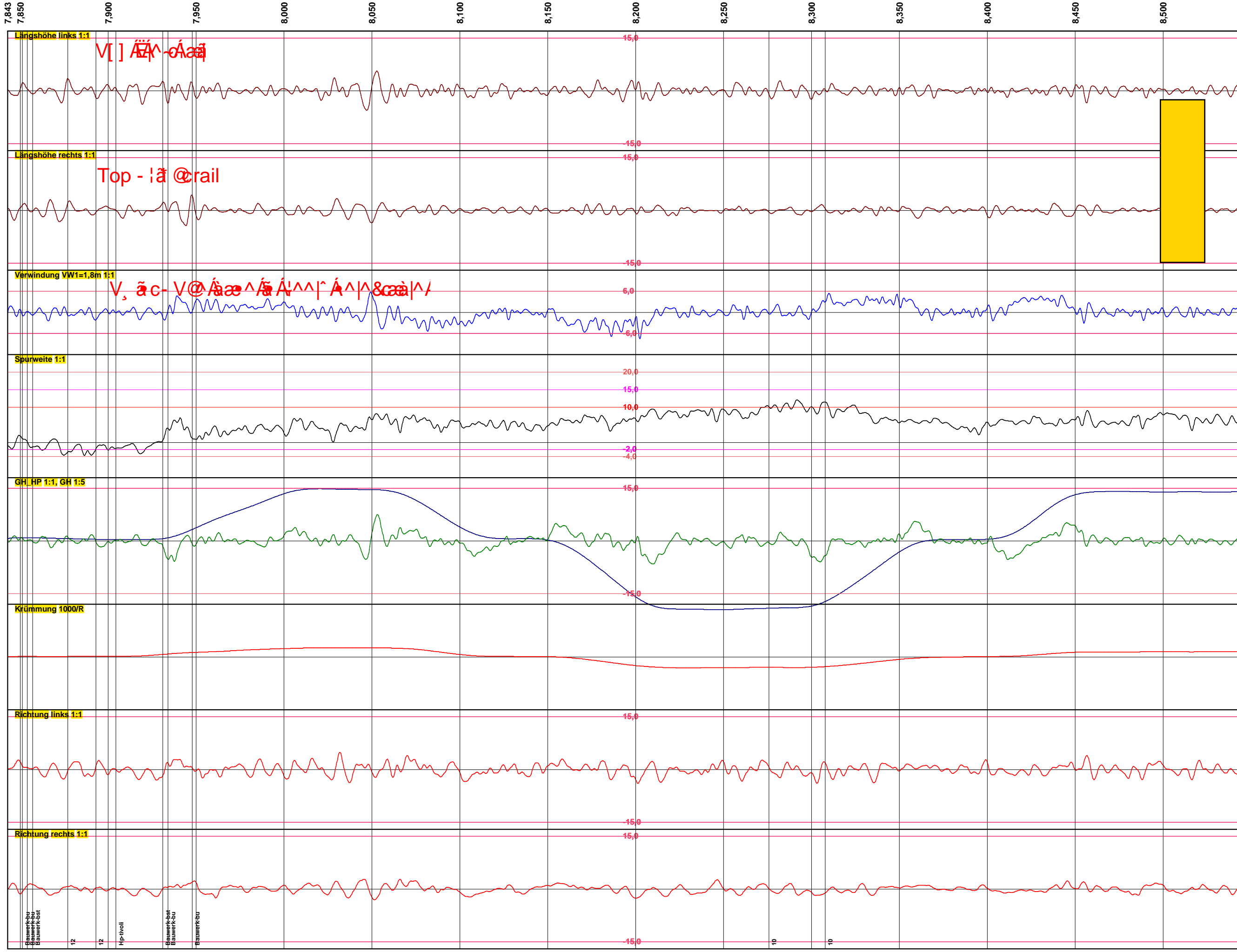
GB 1.part: Uniform SZ [RNV Parameter]

Toleranzen : SR100

KM von bis: 7,842800 - 9,271050 km

Datum, Zeit: 13/6/2012, 1:5; -1196 min.

Stellung : Vorwärts



Extended collecting evaluation of track geometry and visual examination

Name : EXAMPLE
 Remark : Prellbock - W9
 Datafile : 170405092820.krx
 Date, Time: 5/4/2017, 9:28,

Parameter	-	Srlim	Sr100
Gauge	-	-5/+30 mm	-5/+27 mm
Top	-	21 mm	15 mm
Alignment	-	21 mm	15 mm
Twist	-	3,5 mm/m	3,5 mm/m
Cant	-	13 mm	13 mm

Explanation: Example 60+10,2
 Limit is exceeded on 60 m length
 Maximum in section is +10,2mm.
 Algebraic sign + is gauge widening
 Algebraic sign - is gauge restriction

INVENTORY

Track-Km	Events	Alignment		Gauge [mm]	Cant [mm]	Twist 1,8m [mm]	Top		Defect assessment		INVENTORY										
		left [mm]	right [mm]				left [mm]	right [mm]	Reason	Service recommendation	Srlim	no defect	OPERATIONAL RISK	critical value	rail	sleepers	recovery	fixation	other	constructions	
-0,0110						1-7,0			track geometry	track set defect (displacement in balasted track)	Carry out tamping and straightening works	Srlim					V	H	S	K	
-0,0070		4+19,8							track geometry	abruptly change of curvature	No need for action	no defect					V	H	S	K	
-0,0070			1+22,4						track geometry	abruptly change of curvature	No need for action	no defect					V	H	S	K	
-0,0003	Turnout Start-14																V	H	S	K	
0,0220						0-6,6			turnout area	TWIST in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,0250	Turnout End-14																V	H	S	K	
0,0270						1+8,0			Weichenbereich	TWIST in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,0320				1-5,7					track geometry	gauge widening II	gauge adjustment / checking the ironmongery	OPERATIONAL RISK	critical value				V	H	S	K	
0,0438	Turnout End-12																V	H	S	K	
0,0440								2+28,5	Weichenbereich	TOP in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,0450									Weichenbereich	TOP in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,0520				2-5,7					Weichenbereich	GAUGE in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,0660	Turnout Start-12																V	H	S	K	
0,0660								0-15,1	Weichenbereich	TOP in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,0670						1+12,5			Weichenbereich	TWIST in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,0678	Turnout Start-11																V	H	S	K	
0,0860								2+16,8	track geometry	track set defect (displacement in balasted track)	Carry out tamping and straightening works	Srlim					V	H	S	K	
0,0870						3-8,5			track geometry	track set defect (displacement in balasted track)	Carry out tamping and straightening works	Srlim					V	H	S	K	
0,0880								1+16,3	track geometry	track set defect (displacement in balasted track)	Carry out tamping and straightening works	Srlim					V	H	S	K	
0,0910			2+19,3						track geometry	abruptly change of curvature	No need for action	no defect					V	H	S	K	
0,0910		3+17,8							track geometry	abruptly change of curvature	No need for action	no defect					V	H	S	K	
0,0920	Turnout End-11																V	H	S	K	
0,0920								1-16,2	Weichenbereich	TOP in the turnout area is faulty	turnouts / track crossings are examined separately						V	H	S	K	
0,1003	Turnout End-9																V	H	S	K	
0,1060			3-19,6						track geometry	abruptly change of curvature	No need for action	no defect					V	H	S	K	
0,1070	Turnout Start-9																V	H	S	K	