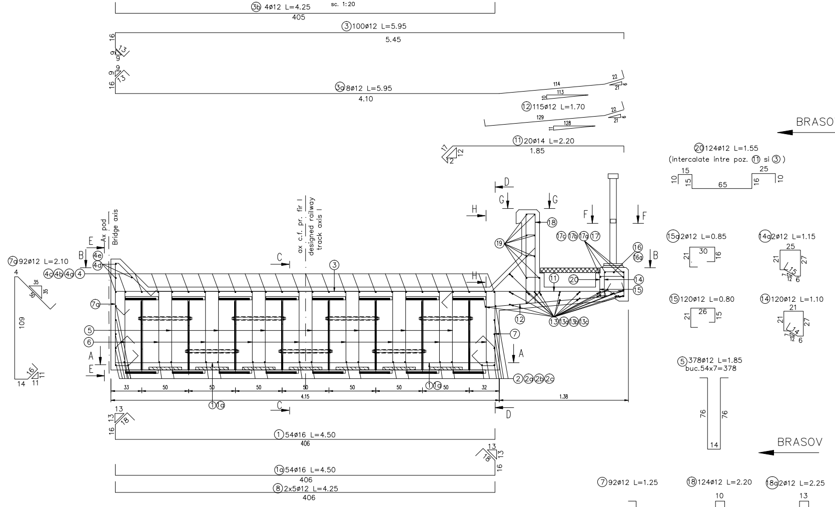
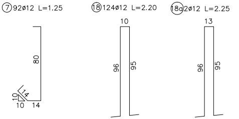
SECTIUNE TRANSVERSALA
CROSS SECTION

sc. 1:20



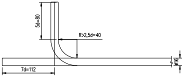
③b 4ø12 L=4.25
405
③100ø12 L=5.95
5.45
16
9
13
9
③a 8ø12 L=5.95
4.10
114
113
10
22
21
6
⑫115ø12 L=1.70
129
128
11
⑪20ø14 L=2.20
1.85
17
12
BRASO
⑳124ø12 L=1.55
(intercalate intre poz. ⑪ si ③)
15
25
10
65
16
Ax pod
Bridge axis
ax c.f. pr. fir I
designed railway
track axis I
⑦a 92ø12 L=2.10
4
35
50
109
16
11
14
④c ④b ④a ④
④e
④d
⑦a
⑤
⑥
③
⑲
⑱
⑰c ⑰b ⑰a ⑰
⑯
⑯a
⑭
⑮
⑳
⑪
⑫
⑬ ⑬a ⑬b ⑬c
⑦
② ②a ②b ②c
①①a
A
B
C
D
E
F
G
H
33
50
32
4.15
1.38
⑮a 2ø12 L=0.85
30
21
⑭a 2ø12 L=1.15
25
27
7
12
6
⑮120ø12 L=0.80
26
⑭120ø12 L=1.10
21
14
⑤378ø12 L=1.85
buc.54x7=378
76
14
BRASOV
13
18
①54ø16 L=4.50
406
①a 54ø16 L=4.50
406
⑧2x5ø12 L=4.25
406



⑦92ø12 L=1.25
80
14
10
⑱124ø12 L=2.20
10
96
95
⑱a 2ø12 L=2.25
13
96
95

DETALIU "a" (STAS 10111/2-87)
"a" DETAIL (STAS 10111/2-87)

sc. 1:10

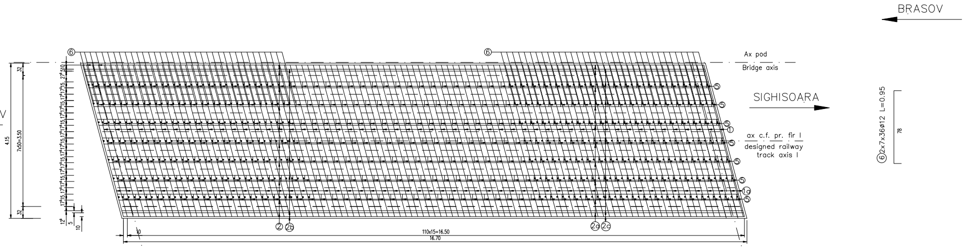


5d=80
R>2,5d=40
ø16
7d=112

Beton: Concrete:	– C30/37 suprastructura/superstructure
Tipul grinzilor: Beams type:	– grinzi metalice inglobate/metal beams bean
Otel pentru grinzi: Steel for the beams:	– (OL 37-EP) S275J_3G_3 (EN 10025/2004)
Armatura: Reinforcement:	– S355; S345
Strat de acoperire: Concrete cover	– min. 4cm expunere in aer/air exposed

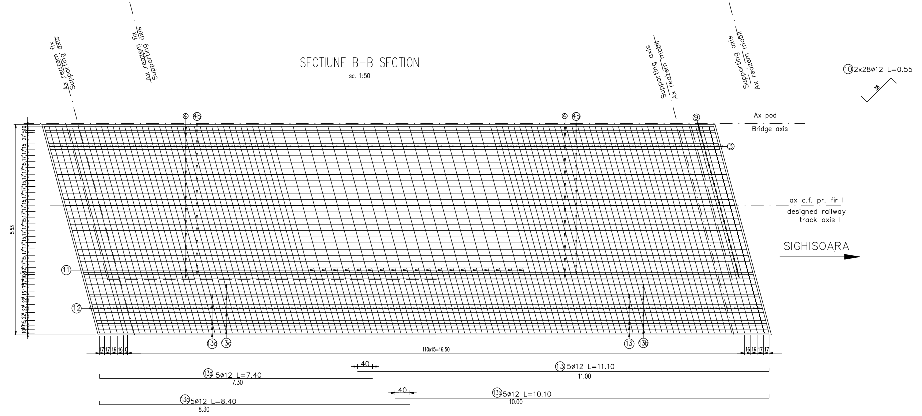
SECTIUNE A-A SECTION

sc. 1:50


BRASOV
⑥
⑥
Ax pod
Bridge axis
SIGHISOARA
⑤
⑤
⑤
①
ax c.f. pr. fir I
designed railway
track axis I
⑤
⑤
⑤
①a
⑤
4.15
32
7x50=3.50
32
12⁵
5
10
② ②b
②a ②c
10
110x15=16.50
16.70
⑥2x7x36ø12 L=0.95
78

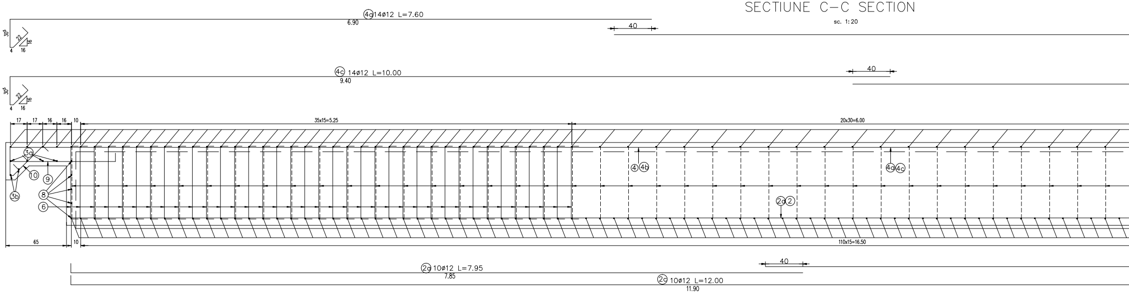
SECTIUNE B-B SECTION

sc. 1:50


Ax reazem fix
Supporting axis
Ax reazem fix
Supporting axis
Supporting axis
Ax reazem mobil
Supporting axis
Ax reazem mobil
⑩2x28ø12 L=0.55
36
④ ④b
④ ④b
⑨
Ax pod
Bridge axis
③
ax c.f. pr. fir I
designed railway
track axis I
SIGHISOARA
5.53
⑪
⑫
⑬a ⑬c
⑬ ⑬b
17 17 16 16 10
110x15=16.50
16 16 17 17
40
⑬a 5ø12 L=7.40
7.30
⑬ 5ø12 L=11.10
11.00
40
⑬c 5ø12 L=8.40
8.30
⑬b 5ø12 L=10.10
10.00

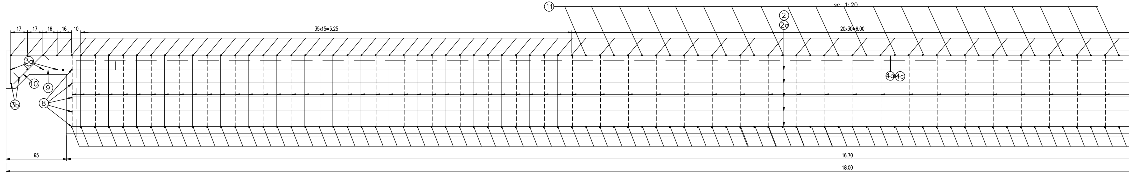
SECTIUNE C–C SECTION

sc. 1:20


4a 14ø12 L=7.60
6.90
40
30⁵
22
16
4
16
4c 14ø12 L=10.00
9.40
40
17
17
16
16
10
35x15=5.25
20x30=6.00
3a
10
9
3b
8
6
4
4b
4a
4c
2a
2
65
10
110x15=16.50
2a 10ø12 L=7.95
7.85
40
2c 10ø12 L=12.00
11.90

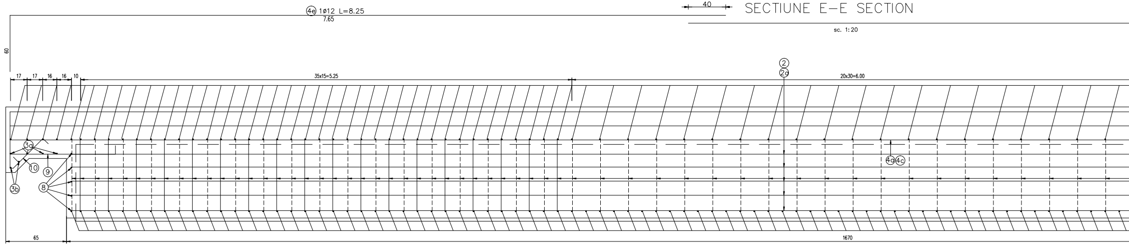
SECTIUNE D–D SECTION

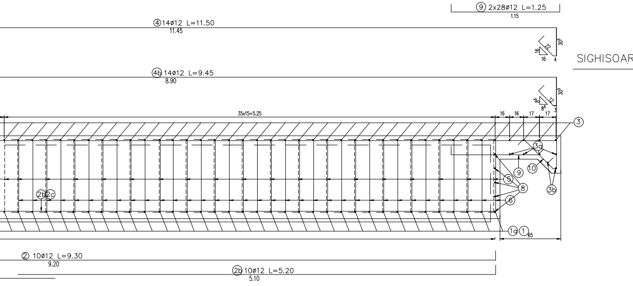
sc. 1:20

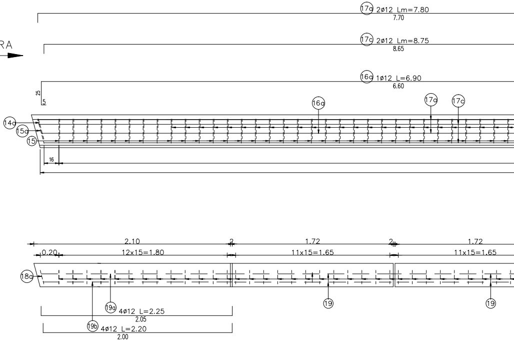

11
2
2a
17
17
16
16
10
35x15=5.25
20x30=6.00
3a
10
9
3b
8
4a
4c
65
16.70
18.00

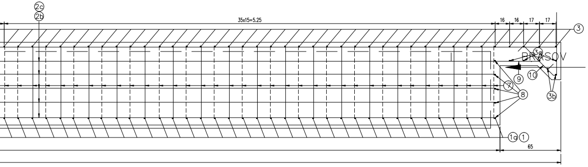
SECTIUNE E–E SECTION

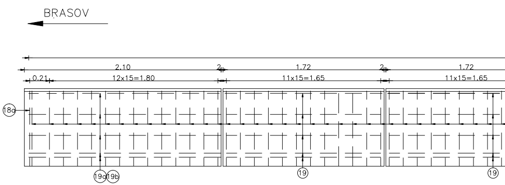
sc. 1:20

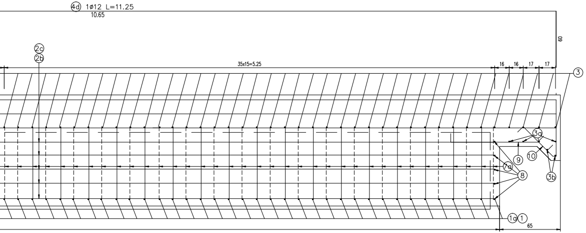

4e 1ø12 L=8.25
7.65
40
60
2
2a
17
17
16
16
10
35x15=5.25
20x30=6.00
3a
10
9
3b
8
4a
4c
65
1670


⑨ 2x28ø12 L=1.25
1.15
④14ø12 L=11.50
11.45
④b 14ø12 L=9.45
8.90
SIGHISOARA
35x15=5.25
16 16 17 17
③
③a
⑨
⑩
⑤
⑧
⑥
③b
②b②c
①a①
65
② 10ø12 L=9.30
9.20
②b 10ø12 L=5.20
5.10


⑰a 2ø12 Lm=7.80
7.70
⑰c 2ø12 Lm=8.75
8.65
⑯a 1ø12 L=6.90
6.60
25
5
⑯a
⑰a
⑰c
⑭a
⑮a
⑮
16
2.10
1.72
1.72
0.20
12x15=1.80
11x15=1.65
11x15=1.65
⑱a
⑲a
⑲
⑲
⑲a 4ø12 L=2.25
2.05
⑲b 4ø12 L=2.20
2.00


②c
②b
35x15=5.25
16 16 17 17
③
BRASOV
③a
⑨
⑩
⑦
⑧
③b
①a①
65


BRASOV
2.10
1.72
1.72
0.21
12x15=1.80
11x15=1.65
11x15=1.65
⑱a
⑲a⑲b
⑲
⑲


④d 1ø12 L=11.25
10.65
60
②c
②b
35x15=5.25
16 16 17 17
③
③a
⑨
⑩
⑦a
⑧
③b
①a①
65

NOTA

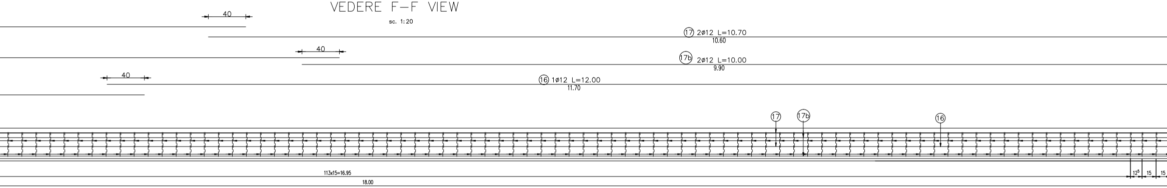
1. Prezentul plan a fost intocmit pe baza:
   - Dispozitiei generale 22PP22DDE001
   - Plan cofraj suprastructura 22PP22DDE006
2. La executie se vor respecta cu strictete prevederile din "Codul de practica pentru executarea lucrarilor din beton, beton armat si beton precomprimat" NE 012-99.
3. Verificarea lucrarilor si receptia lor se va face conform prevederilor Normativului C56-85.

NOTE

1. This Plan was drawn up based on the following data:
   - General Disposition 22PP22DDE001
   - Supersructure shuttering 22PP22DDE006
2. The following shall be strictly complied with: norm NE 012-1999 "Regulation for carrying out the works in concrete, in reinforced concrete and in pre-stressed" concrete" for building.
3. Verifying the quality of the works and their acceptance will be carried out according with Norm C56-1985.

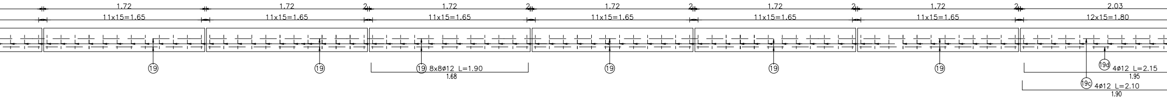
VEDERE F–F VIEW

sc. 1:20


40
40
40
⑰ 2ø12 L=10.70
10.60
17b 2ø12 L=10.00
9.90
⑯ 1ø12 L=12.00
11.70
⑰
17b
⑯
113x15=16.95
18.00
12⁵
15
15

VEDERE G–G VIEW

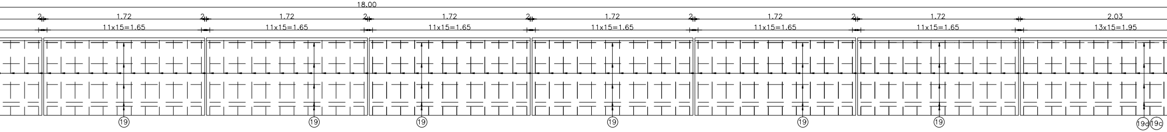
sc. 1:20


1.72
11x15=1.65
1.72
11x15=1.65
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2
2.03
12x15=1.80
⑲
⑲
⑲ 8x8ø12 L=1.90
1.68
⑲
⑲
⑲
19d 4ø12 L=2.15
1.95
19c 4ø12 L=2.10
1.90

VEDERE H–H VIEW

sc. 1:20

SIG


18.00
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2
1.72
11x15=1.65
2.03
13x15=1.95
⑲
⑲
⑲
⑲
⑲
⑲
19d
19c

NOTA/NOTE

Pentru mentinerea pozitiei corecte in timpul betonarii, se vor monta distantieri minim 4buc./m^2. Distantierii trebuie legati cu sarma de carcasa de armatura.

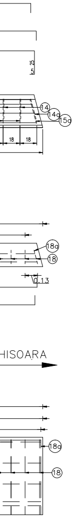
In order to maintain the correct position during concreting, minimum 4pcs./m^2 distance pieces shall be mounted. The distance pieces shall be connected to the reinforcing framework, using wire.

NOTA:

1. Prezentul plan s–a intocmit in conformitate cu dispozitia generala
2. Toate colturile betonului se vor tesi 25/25mm.
3. Convoaiele de calcul pentru infrastructura sunt UIC (LM 71 si SW/2.
4. La executie se vor respecta cu strictete prevederile din "Normativ pentru producerea betonului si executarea lucrarilor din beton, beton armat si beton precomprimat. Partea 1: Producerea betonului", indicativ NE 012/1–2007 si "Normativ pentru producerea betonului si executarea lucrarilor din beton, beton armat si beton precomprimat. Partea 2: Executarea lucrarilor din beton", indicativ NE 012/2–2010, iar verificarea calitatii lucrarilor si receptionarea lor se va face conform normativului C56–1985.
5. Constructia se incadreaza in categoria de importanta B (constructii de importanta deosebita), modelul 1–de asigurare a calitatii si clasa de importanta B, conform HG 766/1997.
6. Proiectul va fi verificat la exigentele A4.2; B2.2; D2.2.

NOTE:

1. This plan has been drawn up according to the general disposition.
2. All concrete corners will be chamfered 25/25mm.
3. The bridge corresponds to the UIC determination convoys UIC(LM71 SW/2)
4. The execution will strictly comply with the provisions of "Practice code for the concrete production and works execution, reinforced and pre–stressed concrete – Part 1: Practice code for concrete production" NE 012/1–2007 and "Practice code for the concrete production and works execution, reinforced and pre–stressed concrete – Part 2: The execution of concrete works." NE 012/2–2010, and the quality and the reception of the works shall be made accordingly to Norm C 56–1985.
5. The construction has been classified in B category of importance (high important constructions), model 1–ensuring the quality and class of importance B according to G.O. 766/97.
6. The project will be checked in order to comply with the A4.2; B2.2; D2.2 requirements.


25
5
14
14a
15a
18
18
18a
18
0.13
HISOARA
18a
18

EXTRAS DE ARMATURA
TABLE FOR REINFORCEMENTS

M	ø	B	L(m)	PC52		
				S 355	S 345	
				ø12	ø14	ø16
1	16	54	4.50			243.00
1a	16	54	4.50			243.00
2	12	10	9.30	93.00		
2a	12	10	7.95	79.50		
2b	12	10	5.20	52.00		
2c	12	10	12.00	120.00		
3	12	100	5.95	595.00		
3a	12	8	5.95	47.60		
3b	12	4	4.25	17.00		
4	12	14	11.50	161.00		
4a	12	14	7.60	106.40		
4b	12	14	9.45	132.30		
4c	12	14	10.00	140.00		
4d	12	1	11.25	11.25		
4e	12	1	8.25	8.25		
5	12	378	1.85	699.30		
6	12	504	0.95	478.80		
7	12	92	1.25	115.00		
7a	12	92	2.10	193.20		
8	12	10	4.25	42.50		
9	12	56	1.25	70.00		
10	12	56	0.55	30.80		
11	14	20	2.20		44.00	
12	12	115	1.70	195.50		
13	12	5	11.10	55.50		
13a	12	5	7.40	37.00		
13b	12	5	10.10	50.50		
13c	12	5	8.40	42.00		
14	12	120	1.10	132.00		
14a	12	2	1.15	2.30		
15	12	120	0.80	96.00		
15a	12	2	0.85	1.70		
16	12	1	12.00	12.00		
16a	12	1	6.90	6.90		
17	12	2	10.70	21.40		
17a	12	2	7.80	15.60		
17b	12	2	10.00	20.00		
17c	12	2	8.75	17.50		
18	12	124	2.20	272.80		
18a	12	2	2.25	4.50		
19	12	64	1.90	121.60		
19a	12	4	2.25	9.00		
19b	12	4	2.20	8.80		
19c	12	4	2.10	8.40		
19d	12	4	2.15	8.60		
20	12	124	1.55	192.20		
LUNGIMI/ø				4524.70	44.00	486.00
GREUTATI/ML (kg)				0.888	**1.210**	1.578
GREUTATI/ø				4017.90	53.24	766.91
GREUTATI PE TIP DE OTEL				5080		

TOTAL POD (2 TABLIERE): 2 x 5080 kg=10160 kg
TOTAL BRIDGE (2 DECKS): 2 x 5080 kg=10160 kg

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D					
C					
B					
A					
Indice **Index**	**Data** **Date**	**Modificare** **Modification/Revision**	**Proiectant** **Designer**	**Aprobat Consultant** **Approved Consultant**	**Aprobat CFR** **Approved CFR**

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EURO
EUROPEAN UNION FINANCED PR

CFR

C.N.C.F. "C.F.R." - S.A.

CLIENT / CLIENT

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT

			Data **Date**	**Semnătură** **Signature**
Aprobat **Approved**	**Şef proiect** **Project manager**	**R. Liuzza**		
Aprobat **Approved**	**Coordonator Secțiune 1** **Section 1 Coordinator**	**C. Gambelli**		
Verificat **Checked**	**Expert Cheie** **Checking Expert**	**V. Kallidromitis**		

SUBCONTRACTANT / SUBCONTRACTOR

Aprobat **Approved**	**Responsabil Subconsultant** **Subconsultant Responsible**	**A.Stanciu - Dinulescu**	**01.2012**	
Întocmit **Elaborated**	**Proiectant** **Designer**	**Rentea Ioan**	**02.2012**	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Braşov - Sighişoara
Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Braşov - Sighişoara

Proiect/Project
2004/RO/16/P/PA/003

Faza / Phase:
D.E. / E.D.

Denumire desen / Drawing Title :

POD Km.242+992.058 LINIA 1 L=16.00m
PLAN ARMARE SUPRASTRUCTURA

BRIDGE Km.242+992.058 TRACK 1 D=16.00m
SUPERSTRUCTURE REINFORCEMENT PLAN

Codificare / Codification System	**Scara / Scale** **1:10 / 1:20 / 1:50**	**LOT / LOT**	**Nr. / No** **01 / 01**

EA51 01 E 14 BC PV 02 6 3 008 0