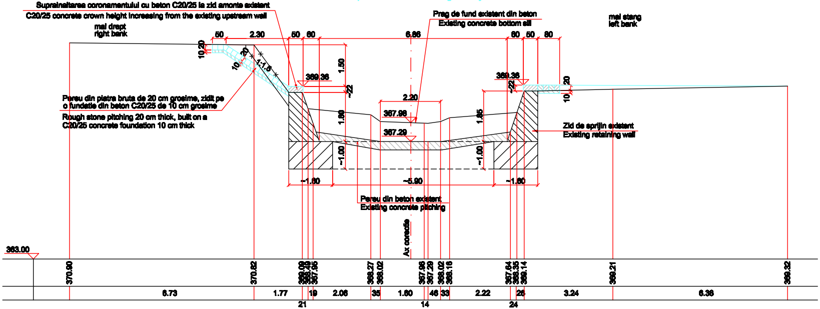
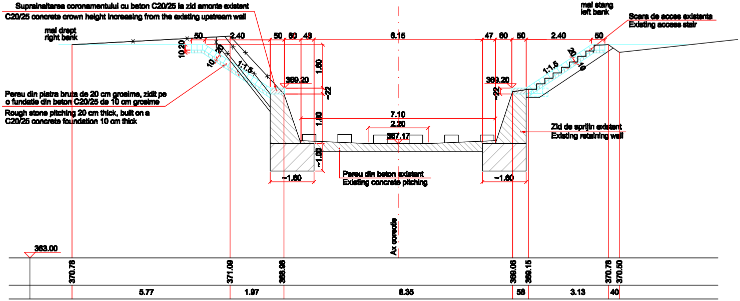
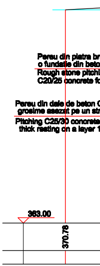
PROFIL 1
la 12.00 m amonte de ax c.f. 1 existent
at 12.00 m upstream of the existing railway axis 1


Supraînaltarea coronamentului cu beton C20/25 la zid amonte existent
C20/25 concrete crown height increasing from the existing upstream wall
mal drept
right bank
Prag de fund existent din beton
Existing concrete bottom sill
mal stang
left bank
Pereu din piatra bruta de 20 cm grosime, zidit pe o fundatie din beton C20/25 de 10 cm grosime
Rough stone pitching 20 cm thick, built on a C20/25 concrete foundation 10 cm thick
Zid de sprijin existent
Existing retaining wall
Pereu din beton existent
Existing concrete pitching
Ax corectie
1:1.5
369.36
369.36
367.98
367.29
2.20
6.86
2.30
50
50
60
60
50
80
1.50
~22
~22
1.80
1.85
~1.00
~1.00
~1.60
~5.90
~1.60
10.20
20
10
20
10
363.00
370.90
370.82
369.09
368.49
367.95
368.27
368.02
367.96
367.29
368.02
368.16
367.64
368.35
369.14
369.21
369.32
6.73
1.77
19
2.06
35
1.80
46
33
2.22
26
3.24
6.36
21
14
24

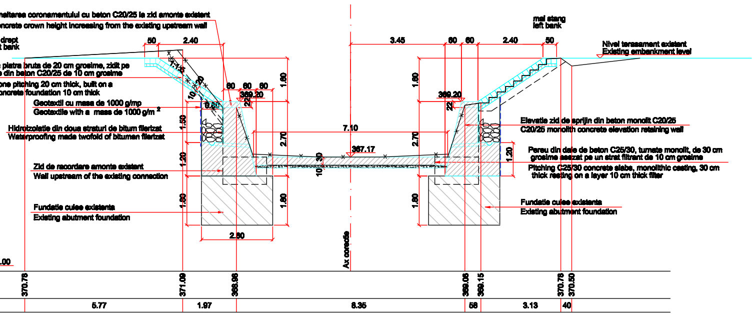
PROFIL 2-1
la 8.00 m amonte de ax c.f. 1 existent
at 8.00 m upstream of the existing railway axis 1


Supraînaltarea coronamentului cu beton C20/25 la zid amonte existent
C20/25 concrete crown height increasing from the existing upstream wall
mal drept
right bank
mal stang
left bank
Scara de acces existenta
Existing access stair
Pereu din piatra bruta de 20 cm grosime, zidit pe o fundatie din beton C20/25 de 10 cm grosime
Rough stone pitching 20 cm thick, built on a C20/25 concrete foundation 10 cm thick
Zid de sprijin existent
Existing retaining wall
Pereu din beton existent
Existing concrete pitching
Ax corectie
1:1.5
1:1.5
369.20
369.20
367.17
50
2.40
50
60
48
6.15
47
60
50
2.40
50
7.10
2.20
1.60
~22
~22
1.80
~1.00
~1.60
~1.60
10.20
20
10
20
10
363.00
370.78
371.00
368.86
369.06
369.15
370.78
370.50
5.77
1.97
8.35
58
3.13
40

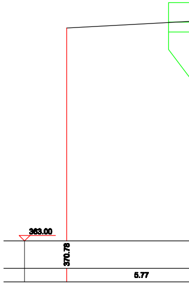
Suprai
C20/25 co
mal
righ
Pereu din
o fundatie
Rough sto
C20/25 co
363


Pereu din piatra br
o fundatie din beto
Rough stone pitchi
C20/25 concrete fo
Pereu din dale de beton C
grosime asezat pe un str
Pitching C25/30 concrete
thick resting on a layer 1
363.00
370.78

PROFIL 2-2
la 8.00 m amonte de ax c.f. 1 existent
at 8.00 m upstream of the existing railway axle 1

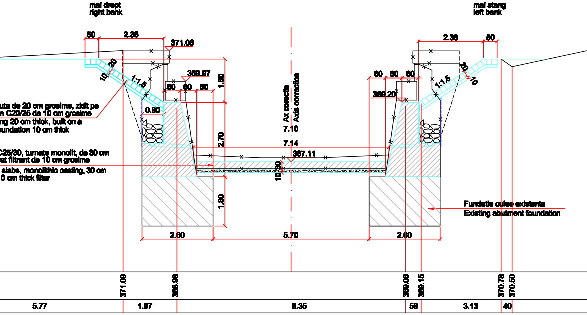


naltarea coronamentului cu beton C20/25 la zid amonte existent
oncrete crown height increasing from the existing upstream wall
drept
t bank
e piatra bruta de 20 cm grosime, zidit pe
e din beton C20/25 de 10 cm grosime
one pitching 20 cm thick, built on a
oncrete foundation 10 cm thick
Geotextil cu masa de 1000 g/mp
Geotextile with a mass de 1000 g/m 2
Hidroizolatie din doua straturi de bitum filerizat
Waterproofing made twofold of bitumen filerizat
Zid de racordare amonte existent
Wall upstream of the existing connection
Fundatie culee existenta
Existing abutment foundation
mal stang
left bank
Nivel terasament existent
Existing embankment level
Elevatie zid de sprijin din beton monolit C20/25
C20/25 monolith concrete elevation retaining wall
Pereu din dale de beton C25/30, turnate monolit, de 30 cm grosime asezat pe un strat filtrant de 10 cm grosime
Pitching C25/30 concrete slabs, monolithic casting, 30 cm thick resting on a layer 10 cm thick filter
Fundatie culee existenta
Existing abutment foundation
Ax corectie
50
2.40
1:1.5
20
10
60
60
60
369.20
0.60
22
1.80
1.50
1.20
1.80
2.70
1.80
2.80
7.10
367.17
30
10
3.45
60
60
2.40
50
1.80
369.20
22
2.70
1.20
1.80
.00
370.78
371.09
368.96
369.06
369.15
370.78
370.50
5.77
1.97
8.35
58
3.13
40



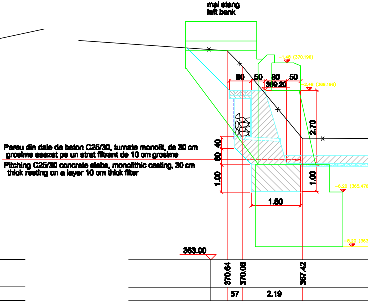
363.00
370.78
5.77

PROFIL 2-3
la 8.00 m amonte de ax c.f. 1 existent
at 8.00 m upstream of the existing railway axle 1



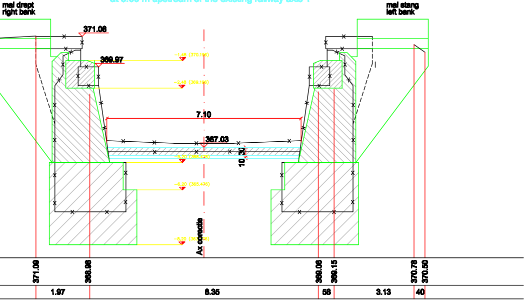
mal drept
right bank
mal stang
left bank
50
2.38
371.08
20
10
1:1.5
369.97
60
60
60
0.60
uta de 20 cm grosime, zidit pe
n C20/25 de 10 cm grosime
ng 20 cm thick, built on a
undation 10 cm thick
C25/30, turnate monolit, de 30 cm
at filtrant de 10 cm grosime
slabs, monolithic casting, 30 cm
0 cm thick filter
1.80
2.70
1.80
Ax corectie
Axis correction
7.10
7.14
367.11
30
10
2.38
50
60
60
60
369.20
1:1.5
20
10
Fundatie culee existenta
Existing abutment foundation
2.80
5.70
2.80
371.09
368.96
369.06
369.15
370.78
370.50
5.77
1.97
8.35
58
3.13
40

PROFIL 3
la 5.60 m a
at 5.60 m d



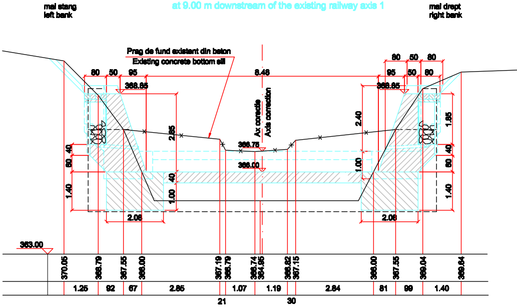
mal stang
left bank
Pereu din dale de beton C25/30, turnate monolit, de 30 cm grosime asezat pe un strat filtrant de 10 cm grosime
Pitching C25/30 concrete slabs, monolithic casting, 30 cm thick resting on a layer 10 cm thick filter
-1,48 (370.196)
-2,48 (369.196)
-6,20 (365.476
-8,20 (363
80
50
80
50
369.20
2.70
40
60
1.00
1.00
1.80
363.00
370.64
370.06
367.42
57
2.19

PROFIL 2-4
la 8.00 m amonte de ax c.f. 1 existent
ax fir II proiectat
at 8.00 m upstream of the existing railway axis 1



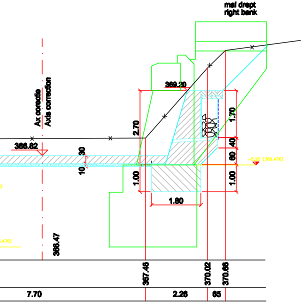
mal drept
right bank
mal stang
left bank
371.08
369.97
7.10
367.03
10
30
Ax corectie
371.09
368.98
369.06
369.15
370.78
370.50
1.97
8.35
58
3.13
40

PROFIL 4
la 9.00 m aval de ax c.f. 1 existent
at 9.00 m downstream of the existing railway axis 1



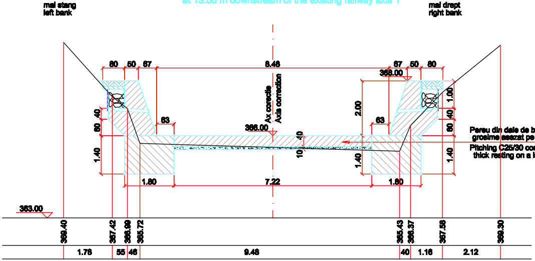
mal stang
left bank
mal drept
right bank
Prag de fund existent din beton
Existing concrete bottom sill
80
50
95
8.48
95
50
80
80
50
80
368.85
368.85
Ax corectie
Axis correction
2.85
2.40
1.85
366.75
366.00
40
60
1.40
40
1.00
1.00
40
60
1.40
2.06
2.06
363.00
370.05
368.79
367.55
366.00
367.19
366.79
366.74
364.95
366.82
367.15
366.00
367.55
369.04
369.64
1.25
92
67
2.85
1.07
1.19
2.84
81
99
1.40
21
30

val de ax c.f. 1 existent
ownstream of the existing railway axis 1



mal drept
right bank
Ax corectie
Axis correction
369.20
2.70
1.70
366.82
30
10
40
60
1.00
1.00
1.80
366.47
367.46
370.02
370.66
7.70
2.26
65

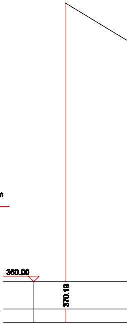
PROFIL 5
la 13.50 m aval de ax c.f. 1 existent
at 13.50 m downstream of the existing railway axis 1



mal stang
left bank
mal drept
right bank
80
50
67
8.48
67
50
80
368.00
Ax corectie
Axis correction
2.00
1.00
40
60
63
63
366.00
40
10
40
60
1.40
1.40
1.40
1.80
7.22
1.80
363.00
369.40
367.42
366.99
365.72
365.43
366.37
367.56
369.30
1.78
55
46
9.48
40
1.16
2.12

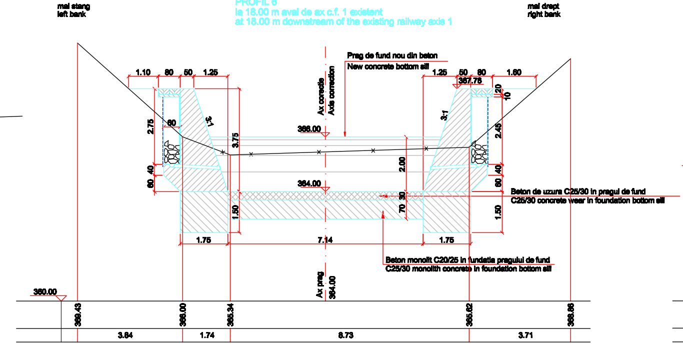
Pereu din dale de beton C25/30, turnate monolit, de 30 cm grosime asezat pe un strat filtrant de 10 cm grosime

Pitching C25/30 concrete slabs, monolithic casting, 30 cm thick resting on a layer 10 cm thick filter

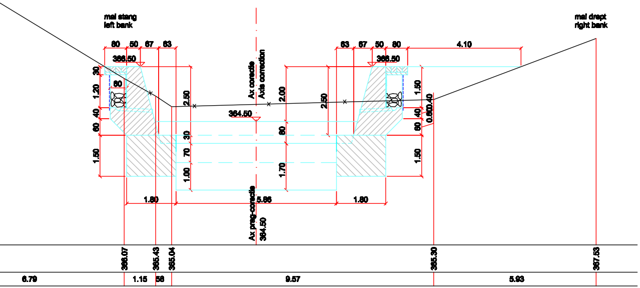


360.00
370.19

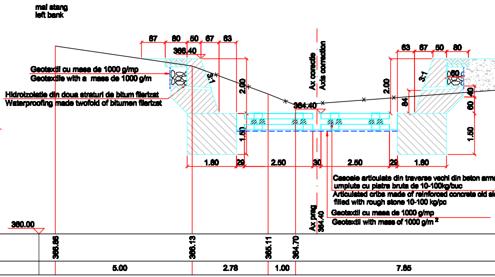
PROFIL 6
la 18.00 m aval de ax c.f. 1 existent
at 18.00 m downstream of the existing railway axis 1


mal stang
left bank
mal drept
right bank
Prag de fund nou din beton
New concrete bottom sill
Ax corectie
Axis correction
1.10
80
50
1.25
1.25
50
80
1.60
367.78
20
10
2.75
60
3:1
3:1
3.75
366.00
2.45
2.00
40
60
40
60
364.00
30
70
1.50
1.50
Beton de uzura C25/30 in pragul de fund
C25/30 concrete wear in foundation bottom sill
1.75
7.14
1.75
Beton monolit C20/25 in fundatia pragului de fund
C25/30 monolith concrete in foundation bottom sill
Ax prag
364.00
360.00
369.43
366.00
365.34
365.62
368.86
3.84
1.74
8.73
3.71

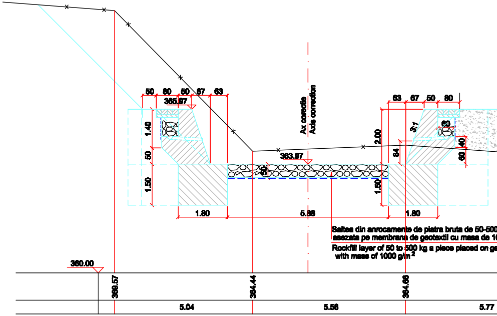
PROFIL 7
la 25.00 m aval de ax c.f. 1 existent
at 25.00 m downstream of the existing railway axis 1

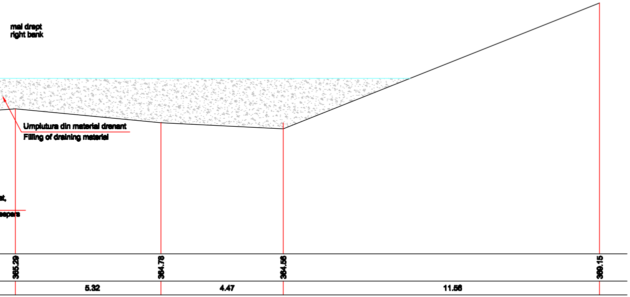

mal stang
left bank
mal drept
right bank
80
50
67
63
63
67
50
80
4.10
366.50
366.50
30
1.20
60
40
60
1.50
2.50
Ax corectie
Axis correction
2.00
2.50
1.50
0.40
0.60
40
60
364.50
30
70
1.00
80
1.70
1.50
1.80
5.86
1.80
Ax prag-corectie
364.50
366.07
365.43
365.04
365.30
367.53
6.79
1.15
58
9.57
5.93

PROFIL 8
la 27.70 m aval de ax c.f. 1 existent
at 27.70 m downstream of the existing railway axis 1

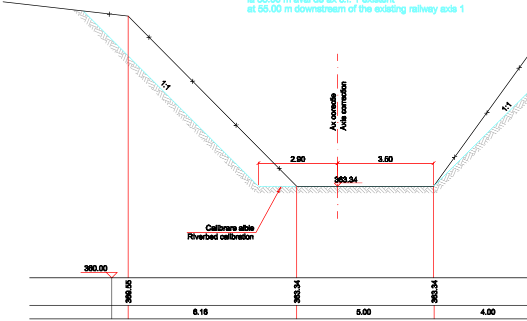

mal stang
left bank
87
80
50
67
63
366.40
63
67
50
80
Geotextil cu masa de 1000 g/mp
Geotextile with a mass de 1000 g/m
Hidroizolatie din doua straturi de bitum filerizat
Waterproofing made twofold of bitumen filerizat
3:1
3:1
2.00
2.00
Ax corectie
Axis correction
364.40
60
84
40
60
1.50
1.50
1.80
29
2.50
30
2.50
29
1.80
Casoaie articulate din traverse vechi din beton arm
umplute cu piatra bruta de 10-100kg/buc
Articulated cribs made of reinforced concrete old sl
filled with rough stone 10-100 kg/pc
Geotextil cu masa de 1000 g/mp
Geotextil with mass of 1000 g/m²
Ax prag
364.40
360.00
368.86
366.13
365.11
364.70
5.00
2.78
1.00
7.85

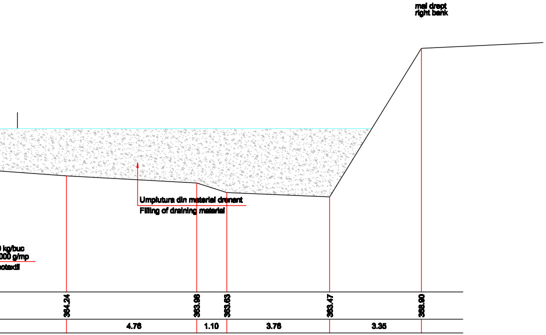
PROFIL 9
la 40.00 m aval de ax c.f. 1 existent
at 40.00 m downstream of the existing railway axis 1


mal stang
left bank
50
80
50
67
63
365.97
63
67
50
80
1.40
50
1.50
Ax corectie
Axis correction
2.00
3:1
60
84
40
60
363.97
50
1.50
1.80
5.86
1.80
Saltea din anrocamente de piatra bruta de 50-500
asezata pe membrana de geotextil cu masa de 1
Rockfill layer of 50 to 500 kg a piece placed on ge
with mass of 1000 g/m²
360.00
369.57
364.44
364.66
5.04
5.58
5.77

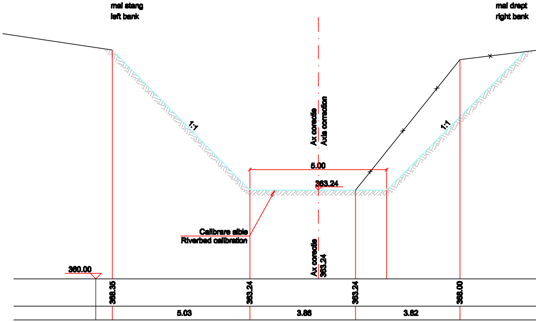

mal drept
right bank
Umplutura din material drenant
Filling of draining material
at,
eepers
365.29
364.76
364.56
369.15
5.32
4.47
11.56

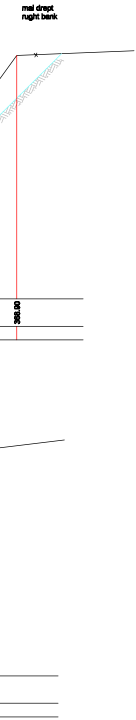
PROFIL 10
la 55.00 m aval de ax c.f. 1 existent
at 55.00 m downstream of the existing railway axis 1


mal stang
left bank
1:1
1:1
Ax corectie
Axis correction
2.90
3.50
363.34
Calibrare albie
Riverbed calibration
360.00
369.55
363.34
363.34
6.16
5.00
4.00


mal drept
right bank
Umplutura din material drenant
Filling of draining material
0 kg/buc
000 g/mp
eotextil
364.24
363.98
363.63
363.47
368.90
4.76
1.10
3.78
3.35

PROFIL 11
la 64.00 m aval de ax c.f. 1 existent
at 64.00 m downstream of the existing railway axis 1


mal stang
left bank
mal drept
right bank
1:1
1:1
Ax corectie
Axis correction
5.00
363.24
Calibrare albie
Riverbed calibration
Ax corectie
363.24
360.00
368.35
363.24
363.24
368.00
5.03
3.86
3.82



mal drept
rught bank
368.90

D					
C					
B					
A	12.2011	Revizia 1	**Popescu Anca Raluca**		
Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANTAT DE UNIUNEA EUROPEANA
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

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

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	°ef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator SecÞiune 1 Section 1 Coordinator	C. Gambelli		
Verificat Checked	Expert Cheie Checking Expert	V. Kallidromitis		VK

SUBCONTRACTANT / SUBCONTRACTOR

AREX

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A. Dinulescu Stanciu		
Întocmit Elaborated	Proiectant Designer	Popescu Anca-Raluca	04.05.2011	

Reabilitarea liniei **de cale ferata** Brasov – Simeria, parte componentă a coridorului IV Pan European, pentru circulaţia 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:
P.Th. / P.Th

Denumire desen / Drawing Title :

INTERVAL VANATORI-ALBESTI / VANATORI-ALBESTI SECTION
PROTECTIE POD C.F. KM. 273+693.416
SECTIUNI TRANSVERSALE
273+693.416 KM RAILWAY BRIDGE PROTECTION
CROSS SECTIONS

Codificare / Codification System	Scara / Scale 1:100	**LOT / LOT**	Nr. / No 01 / 01
E A 5 1 0 1 E 1 8 W 9 A P 0 2 9 2 0 0 3 1			