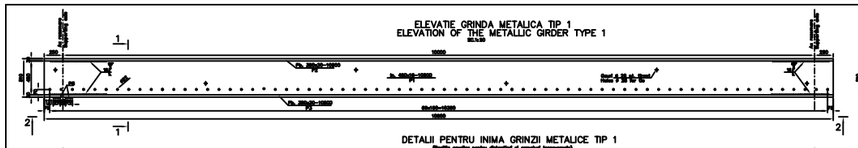
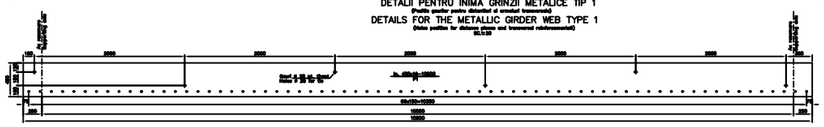
ELEVATIE GRINDA METALICA TIP 1
ELEVATION OF THE METALLIC GIRDER TYPE 1



DETALII PENTRU INIMA GRINZII METALICE TIP 1
(Pozitia gaurilor pentru dispozitivul de cuplat transversala)
DETAILS FOR THE METALLIC GIRDER WEB TYPE 1
(Holes position for distance clamps and transversal reinforcements)

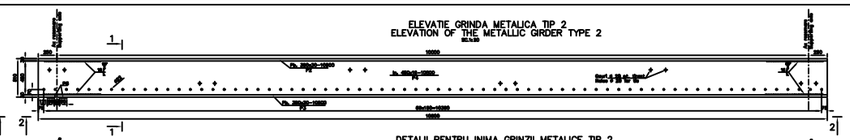


VEDERE 2-2
VIEW 2-2

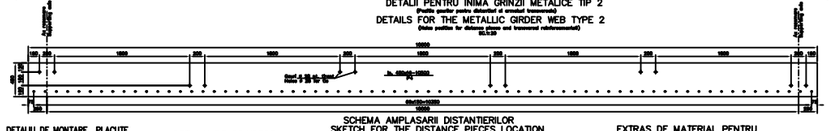
NOTA/NOTE
Placutele de la aparatele de reazem se vor sanfrena cu un unghi de 60°.
Gaurile din talpa pentru armatura de rezistenta vor fi oloase.
The plates of the bearing blocks will be chamfered at an angle of 60°.
The web holes for the strong reinforcements will be bored.

ELEMENTE DE ASAMBLARE
-Piulita M24 STAS 4971-88 Clasa de proclus "C"
-Saiba STAS 5200/4-91-24-OL 34

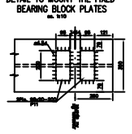
ELEVATIE GRINDA METALICA TIP 2
ELEVATION OF THE METALLIC GIRDER TYPE 2



DETALII PENTRU INIMA GRINZII METALICE TIP 2
(Pozitia gaurilor pentru dispozitivul de cuplat transversala)
DETAILS FOR THE METALLIC GIRDER WEB TYPE 2
(Holes position for distance clamps and transversal reinforcements)



DETALIU DE MONTARE PLACUTE APARAT DE REAZEM FIX
DETAIL TO MOUNT THE FIXED BEARING BLOCK PLATES

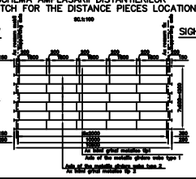


DETALIU DE PRINDERE A GRINZILOR METALICE
DETAIL FOR METALLIC GIRDERS FASTENING

ASSEMBLY ELEMENTS
-Nut M24 STAS 4971-Procliden class "C"
-Washer STAS 5200/4-91-24-OL 34

SCHEMA AMPLASARII DISTANTIERILOR
SKETCH FOR THE DISTANCE PIECES LOCATION

BRASOV — SIGHISOARA



EXTRAS DE MATERIAL PENTRU SOLIDARIZAREA GRINZILOR METALICE PENTRU UN TABLIER DE CALE FERATA SIMPLA
TABLE OF MATERIALS TO JOIN THE METALLIC GIRDERS FOR SINGLE TRACK RAILWAY BRIDGE DECK

Poz.	Denumire	Dimensiuni	Nr. buc. ansamblu	Greutate OL37 EP		
				kg/ml	kg/buc.	Total(kg)
P1	Bloc. aparat reazem fix Bearing block	H62x2-304	42	5.69	1.49	71
P2	Trest. fixare Ground fixing	435, L=600	42	3.85	2.69	113
P3	Placa Plate	8/24	84	–	0.10	8
P4	Bolt Bolt	M24	84	–	0.033	3
					Total(kg)	200

TOTAL POD (2 TABLIERE): 2 x 200kg=400kg
TOTAL BRIDGE (2 DECKS): 2 x 200kg=400kg

EXTRAS DE MATERIAL PENTRU O GRINDA METALICA TIP 1 OL37-EP
MEASURING MATERIAL FOR UNE METALLIC GIRDERS TYPE 1 OL37-EP

Poz.	Denumire	Dimensiuni	Nr. buc. ansamblu	Greutate OL37 EP		
				kg/ml	kg/buc.	Total(kg)
P1	Inima Web	4500x10-10000	1	35.32	353.40	353
P2	Talpa sup. / Upper flange	350x25-10000	1	68.45	685.00	685
P3	Talpa inf. / Lower flange	350x25-10000	1	68.45	685.00	685
P4	Nervura / Stiffener	110x25-300	2	14.42	4.33	9
					Total(kg)	2040
					Rotiri 15%	47
					Total(kg)	2086

TOTAL PENTRU UN TABLIER: 2 grinzi x 2380kg=4760kg
TOTAL PENTRU 2 TABLIERE: 2 x 2 grinzi x 2380kg=9520kg
TOTAL FOR 1 DECK: 2 girders x 2380kg=4760kg
TOTAL FOR 2 DECKS: 2 x 2 girders x 2380kg=9520kg

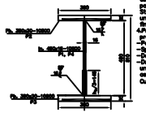
EXTRAS DE MATERIAL PENTRU O GRINDA METALICA TIP 2 OL37-EP
MEASURING MATERIAL FOR UNE METALLIC GIRDERS TYPE 2 OL37-EP

Poz.	Denumire	Dimensiuni	Nr. buc. ansamblu	Greutate OL37 EP		
				kg/ml	kg/buc.	Total(kg)
P1	Inima Web	4500x10-10000	1	35.32	353.40	353
P2	Talpa sup. / Upper flange	350x25-10000	1	68.45	685.00	685
P3	Talpa inf. / Lower flange	350x25-10000	1	68.45	685.00	685
P4	Nervura / Stiffener	110x25-300	2	14.42	4.33	9
					Total(kg)	2040
					Rotiri 15%	47
					Total(kg)	2086

TOTAL PENTRU UN TABLIER: 6 grinzi x 2380kg=14280kg
TOTAL PENTRU 2 TABLIERE: 2 x 6 grinzi x 2380kg=28560kg
TOTAL FOR 1 DECK: 6 girders x 2380kg=14280kg
TOTAL FOR 2 DECKS: 2 x 6 girders x2380kg=28560kg

TOTAL OL37-EP=39100kg
TOTAL S275JxG2=39100kg

SECTIUNE 1-1
1-1 SECTION



MATERIALE
(- OL37 EP STAS 12187-88 elemente grinzilor metalice,)
- S275JxG2 EN 10025/2004

NOTA

1.Le assortile le usilno a grinzilor metalice sudate se vor respecta cu strictete prevederile STAS 9407-75.
2.In usina se va aplica o protectie anticoroziva pe talpile inferioare si pe o treime din latime grinzilor metalice.
3. Protectia anticoroziva se va executa dupa-un strat de baza obtinut dupa-o pelicula de circa de 60 m grosime si doua straturi de bruila poliuretanica, fiecare de 60 m.
Stratul de baza si un bruila poliuretanica se vor aplica in usina, urmand ca ultimul strat poliuretanic sa fie aplicat pe santier dupa montarea barurilor in superstructura.
4-Pregatirea suprafetelor ce urmeaza a fi vopsite se va face prin sablare cu nisip sau prin orice alt procedeu de curatire superficiala a metalului.
-Pulverea de zinc va aplicata doar pentru sudura.
-Suprafetele neprelucrate metalice.
-Degresarea cu solventi organici prin stergere cu carpe.
-Dupa degresare se spala cu jet de apa pentru indepartarea urmelor de detergent. Solutia pentru degresare va fi aleasa astfel incat sa nu ataceze metalul.
Curatirea suprabilelor se va face conform gradului SA 1 1/2.

NOTE

1.The prescriptions STAS 9407-75 will be strictly observed when the welded metallic girders are manufactured in the factory.
2.In the plant, corrosion protection will be applied on the inner flanges and on one third of the web of metallic girders.
3.The protection against corrosion will consist in a primary layer made of a zinc membrane (50 m thickness) and two polyurethane covering layer, each of 60 m thickness.
The primary layer and the first polyurethane covering layer will be applied in the factory and completing polyurethane layer will be applied on the site after completing the superstructure works.
Stiffeners have/bar in superstructure.
4.Preparing the metallic surfaces in order to apply the corrosion-proof procedures shall be made by:
-Rust removed using wire brushes.
-Blasting the metallic surfaces.
-Organic solvent degreasing by wiping or using emulsions.
-After degreasing, the surface is washed by water jet to eliminate the detergent stains. The solution selected for degreasing shall not affect the environment.
Cleaning the surfaces is made according to the SA 1 1/2.

In blocurile reazem, diferite tronsoane (BR) (Brasov si Sighisoara) vor fi prevazute cu placute de reazem fixe si mobile, tip "POT", cu forta verticala de 2000 kN, fiecare, conform STAS 1504/84, si cu deplasare de 100 mm, aprobate de RENK Liner Company de Stat Germania.

D						
C						
B						
A	12.2011	Revizie / Revision	Carmen Vlaic			
Faza / Stage	Data / Date	Denumire / Description	Proiectat / Designed	Verificat / Checked	Aprobat CNCF / Approved CNCF	

GUVERNUL ROMANIEI / ROMANIAN GOVERNMENT
PROIECT FINANTAT DE UNIUNEA EUROPEANA / EUROPEAN UNION FINANCED PROJECT

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

CONSULTANT / CONSULTANT

			Data / Date	Semnatura / Signature
Director	Director	R. Lăcătuș		
Asistent	Project manager			
Asistent	Project Engineer	C. Gavrilă		
Asistent	Structural Engineer			
Asistent	Road Design	V. Năstăsoiu		
Asistent	Geodezie / Geodesy			

SUBCONTRACTANT / SUBCONTRACTOR

Asistent	Responsabil Tehnic cu Execuția / Technical Responsible	A. Dăscălescu Sterică	09.2011	
Asistent	Desenator / Drafter	Carmen Vlaic	09.2011	

Reabilitarea liniei de cale ferată Brașov - Sighișoara, parte componentă a coridorului IV Pan European, pentru viteză de circulație de maximum 160 km/h.
Transcoral I. Brașov - Sighișoara
Rehabilitation of the railway line Brașov - Sighișoara, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h.
Section I. Brașov - Sighișoara

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

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

Denumirea desen / Drawing Title :

INTERVAL / SECTION STATIA ARCHITA
POD Km.258+218.255 L=10.00m/GRINZI METALICE
BRIDGE Km.258+218.255 L=10.00m/METALLIC GIRDERS

Coordonare / Coordination System

Scara / Scale	Nr. Lot	Nr. / Nr. Pl.
1:20		

0	0	0	1	0	0	2	5	8	0	0	0	0	0	0	0	0	1