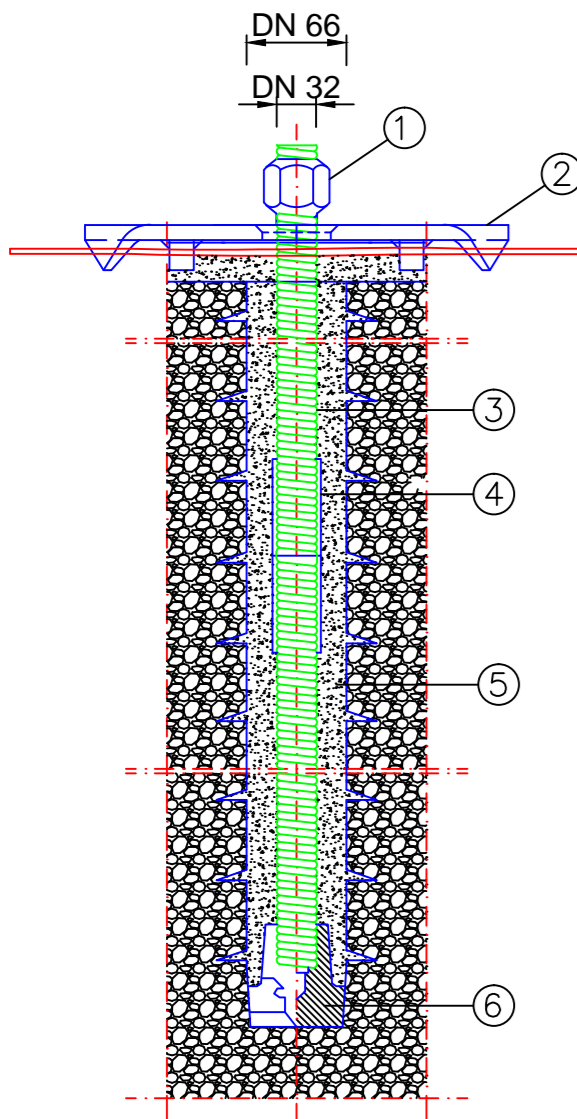
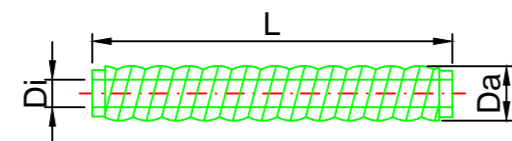


Structura cuiului de sol
Structure of the soil nail



Țeavă / Pipe

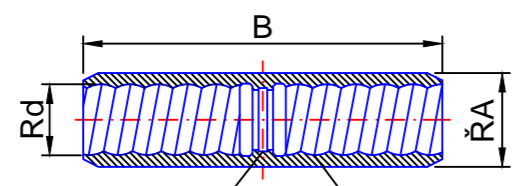


Lungime Length [mm]
1000
2000
3000
4000
6000

Tip Type	Da [mm]	Di* [mm]	Secțiune Section [mm²]	Putere maximă Maximum power [kN]	Putere la limita de tensionare Power - tensiing yield point [kN]	Greutate Weight [kN/m]
32/18	31.34	18.5	430	280	230	3.4
32/15	31.34	15.0	500	360	280	4.1
38/19	37.99	19.0	750	500	400	6.0

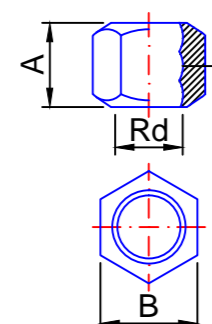
Di* = diametru interior mediu Di* = average inside diameter
Execuție filetare conform ISO 10208 Threading complying with ISO 10208

Ștuțul de conectare
Connection fitting



Etanșare Sealing Filetare conform ISO 10208 Threading complying with ISO 10208

Piulița cu șase canturi, convexă
Hexagonal nut, convex



Filetare conform ISO 10208 Threading complying with ISO 10208

LEGENDĂ

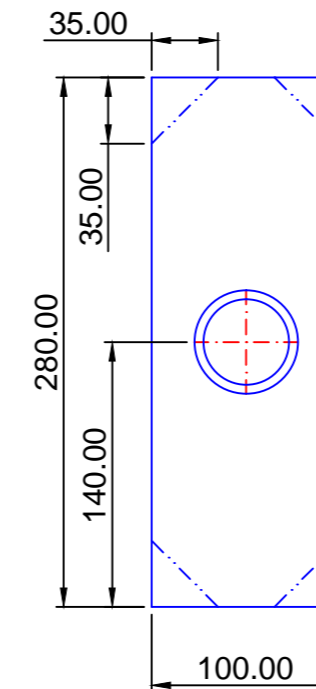
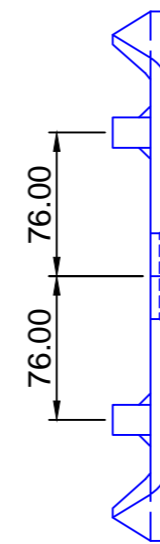
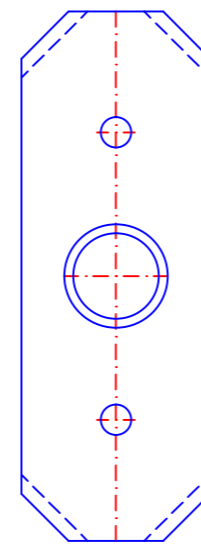
- (1) Piuliță șase canturi convexă
- (2) Placă cu gheare
- (3) Țeavă tubulară
- (4) Ștuț de conectare
- (5) Mortar de ciment conform EN447
- (6) Sapă de foraj

LEGEND

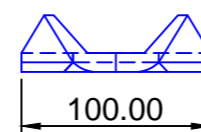
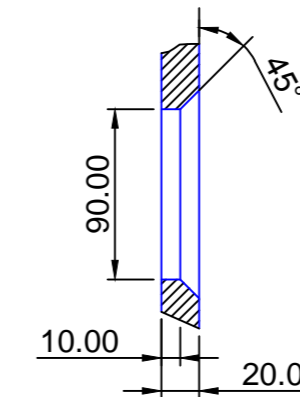
- (1) Nut
- (2) Spike Plate
- (3) Hollow bar
- (4) Coupler
- (5) Cement mortar according to EN 447
- (6) Drilling bit

Accesorii / Accessories

Placa cu gheare / Spike plate



DETALIU "A"
DETAIL "A"



Dimensiune Dimension	Rd	ØA	B
32/18	32	42.4	145
32/15	32	42.4	190
38/19	38	51	220

Denumire Denomination	Materie primă Raw material
Țeavă / Pipe	28Mn6 conform EN 10083-1 Nr. materie primă: 1.1170 28Mn6 complying with EN 10083-1 No. raw material: 1.1170
Ștuț de conectare Connection fitting	28Mn6 conform EN 10083-1 Nr. materie primă: 1.1170 28Mn6 complying with EN 10083-1 No. raw material: 1.1170
Placă Plate	S235JR conform EN 10025 Nr. materie primă: 1.0037 S235JR complying with EN 10025 No. raw material: 1.0037
Piuliță cu șase canturi, convexă Hexagonal nut, convex	Ck45 întărită conform EN 10083-1 Nr. materie primă: 1.1191 Ck45 complying with EN 10083-1 No. raw material 1.1191

Pierdere de capacitate portante în funcție de rata de oxidare Loss of the scaring capacity depending on the oxidatyon ratio		Rata de oxidare în mm Oxidation ratio in mm						
Tip cui de sol Type of the soil nail	Mărime / Size	0	0.2	0.4	0.5	0.6	1.0	2.0
		32/18	Diametru / Diameter [mm*] Putere maximă / Maximum power [kN] Pierdere / Loss [%]	430 280 0	410 287 5	391 255 9	382 249 11	372 242 14
32/15	Diametru / Diameter [mm*] Putere maximă / Maximum power [kN] Pierdere / Loss [%]	500 360 0	400 346 4	461 331 8	452 325 10	442 318 12	408 294 18	- - -
38/19	Diametru / Diameter [mm*] Putere maximă / Maximum power [kN] Pierdere / Loss [%]	750 500 0	726 484 3	703 469 6	691 461 8	680 453 0?	634 423 15	524 349 30

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 EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

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

CLIENT / CLIENT

ITAFERR
 GRUPPO FERROVIE DELLO STATO
 Joint Venture leader

Scott Wilson

OBERMEYER
 PLANEN + BERATEN GmbH

TECNIC
 Consulting Engineers

CONSULTANT / CONSULTANT			Data Date	Semnătură Signature
Aprobat Approved	Șef proiect Project manager	R. Liuzza	dec. 2011	
Aprobat Approved	Coordonator Secțiune 1 Section 1 Coordinator	C. Gambelli	dec. 2011	
Verificat Checked	Expert Cheie Key Expert	A. Troiano	dec. 2011	

SUBCONTRACTANT / SUBCONTRACTOR				
Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A. Stanciu - Dinulescu		
Întocmit Elaborated	Proiectant Designer	V. Gradin		

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

Proiect/Project
 2004/RO/16/P/PA/003
 Faza / Phase:
 D.E. / E.D.

Denumire desen / Drawing Title :
 PROTECTIE VERSANT CU PLASA ANCORATA.
 DETALII CUIE DE SOL (ANCORE PASIVE) MAI.
 SLOPE PROTECTION WITH ANCHORED NET.
 MAI SOIL NAILS (PASIVE ANCHORS) DETAILS.

Codificare / Codification System	Scara / Scale	LOT / LOT	Nr. / No 01 / 01
E A 5 1	0 1	E 0 0	Q Z C T 0 0 0 6 0 1 6 0