

DYNAMIC PENETROMETRIC TEST

Customer:
Site: ИГП ЗА ИЗГРАЖДАНЕ НА МОСТ НАД РЕКА ЯНТРА, ГРАД ГАБРОВО
Location:

Technical Probing equipment characteristics PROVE SPT IN FORO

Regulation ref.	DIN 4094
Weight of striking mass	63,5 Kg
Freefall height	0,76 m
Weight of striking system	4,2 Kg
Diameter of cone tip	50,46 mm
Area of tip base	20 cm ²
Rod length	1 m
Weight of rods /mt.	7 Kg/m
Depth first rod joint	0,80 m
Tip penetration	0,30 m
Number of blow by tip	N(30)
Correlation coeff.	1
Coating/Slurries	No

OPERATOR

RESPONSIBLE

TEST...MC1

Utilised equipment...
 No GWT found
 Processing Type: Average

PROVE SPT IN FORO

Depth (m)	No. of blows
1,15	6
1,30	10
1,45	14

ESTIMATE TEST GEOTECHNIC PARAMETERS MC1**COHESIONLESS SOILS****Relative density**

Description	Nspt	Layer Depth (m)	Nspt correct for presence of water table	Correlation	Relative density (%)
[1] - Strato	49	1,45	49	Gibbs & Holtz 1957	100

Shear resistance angle

Description	Nspt	Layer Depth (m)	Nspt correct for presence of water table	Correlation	Angle of friction (°)
[1] - Strato	49	1,45	49	Schmertmann (1977) Gravels	44,5

Young's modulus

Description	Nspt	Layer Depth (m)	Nspt correct for presence of water table	Correlation	Young's modulus (Mpa)
[1] - Strato	49	1,45	49	Schultze-Menzenbach Gravel and sand	63,32

Confined consolidation modulus

Description	Nspt	Layer Depth (m)	Nspt correct for presence of water table	Correlation	Confined consolidation modulus (Mpa)
[1] - Strato	49	1,45	49	Begemann (1974)	52,85

Unit volume weight

Description	Nspt	Layer Depth (m)	Nspt correct for presence of water table	Correlation	Unit Weight (KN/m³)
[1] - Strato	49	1,45	49	Meyerhof ed altri	21,87

Subgrade reaction modulus

Description	Nspt	Layer Depth (m)	Nspt correct for presence of water table	Correlation	Ko (Kg/cm²)
[1] - Strato	49	1,45	49	Navfac 1971-1982	8,04

Qc (CPT Cone resistance)

Description	Nspt	Layer Depth (m)	Nspt correct for presence of water table	Correlation	Qc (Mpa)
[1] - Strato	49	1,45	49	Robertson 1983	9,61

TEST...MC2

Utilised equipment...
No GWT found

PROVE SPT IN FORO

Processing Type: Average

Depth (m)	No. of blows
2,15	8
2,30	7
2,45	5

ESTIMATE TEST GEOTECHNIC PARAMETERS MC2**COHESIVE SOILS****Undrained cohesion**

Description	Nspt	Layer Depth (m)	Correlation	Cu (KPa)
[1] - Strato	8	2,45	Shioi - Fukui 1982	39,23

Qc (CPT Cone resistance)

Description	Nspt	Layer Depth (m)	Correlation	Qc (Mpa)
[1] - Strato	8	2,45	Robertson (1983)	1,57

Confined consolidation modulus

Description	Nspt	Layer Depth (m)	Correlation	Eed (Mpa)
[1] - Strato	8	2,45	Stroud e Butler (1975)	3,60

Young's modulus

Description	Nspt	Layer Depth (m)	Correlation	Ey (Mpa)
[1] - Strato	8	2,45	Apollonia	7,85

Unit volume weight

Description	Nspt	Layer Depth (m)	Correlation	Unit volume weight (KN/m ³)
[1] - Strato	8	2,45	Meyerhof ed altri	18,63

TEST...MC2

Utilised equipment...
No GWT found

PROVE SPT IN FORO

Processing Type: Average

Depth (m)	No. of blows
4,60	11
4,75	9
4,90	5

ESTIMATE TEST GEOTECHNIC PARAMETERS MC2

COHESIVE SOILS**Undrained cohesion**

Description	Nspt	Layer Depth (m)	Correlation	Cu (KPa)
[1] - Strato	6	2,45	Shioi - Fukui 1982	29,42

Qc (CPT Cone resistance)

Description	Nspt	Layer Depth (m)	Correlation	Qc (Mpa)
[1] - Strato	6	2,45	Robertson (1983)	1,18

Confined consolidation modulus

Description	Nspt	Layer Depth (m)	Correlation	Eed (Mpa)
[1] - Strato	6	2,45	Stroud e Butler (1975)	2,70

Young's modulus

Description	Nspt	Layer Depth (m)	Correlation	Ey (Mpa)
[1] - Strato	6	2,45	Apollonia	5,88

Unit volume weight

Description	Nspt	Layer Depth (m)	Correlation	Unit volume weight (KN/m³)
[1] - Strato	6	2,45	Meyerhof ed altri	17,75

TEST...MC2

Utilised equipment...
No GWT found

PROVE SPT IN FORO

Processing Type: Average

Depth (m)	No. of blows
6,00	4
6,15	7
6,30	8

ESTIMATE TEST GEOTECHNIC PARAMETERS MC2**COHESIVE SOILS****Undrained cohesion**

Description	Nspt	Layer Depth (m)	Correlation	Cu (KPa)
[1] - Strato	8	2,45	Shioi - Fukui 1982	39,23

Qc (CPT Cone resistance)

Description	Nspt	Layer Depth (m)	Correlation	Qc (Mpa)
[1] - Strato	8	2,45	Robertson (1983)	1,57

Confined consolidation modulus

Description	Nspt	Layer Depth (m)	Correlation	Eed (Mpa)
[1] - Strato	8	2,45	Stroud e Butler (1975)	3,60

Young's modulus

Description	Nspt	Layer Depth (m)	Correlation	Ey (Mpa)
[1] - Strato	8	2,45	Apollonia	7,85

Unit volume weight

Description	Nspt	Layer Depth (m)	Correlation	Unit volume weight (KN/m ³)
[1] - Strato	8	2,45	Meyerhof ed altri	18,63