



SLOVENSKI STANDARD
oSIST prEN ISO 22282-1:2008
01-julij-2008

**Geotehnično preiskovanje in preskušanje - Hidrogeološke preiskave - 1. del:
Splošna pravila (ISO/DIS 22282-1:2008)**

Geotechnical investigation and testing - Geohydraulic testing - Part 1: General rules
(ISO/DIS 22282-1:2008)

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Reconnaissance et essais géotechniques - Essais géohydrauliques - Partie 1: Règles
générales (ISO/DIS 22282-1:2008)

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Ta slovenski standard je istoveten z: prEN ISO 22282-1

ICS:

93.020	Zemeljska dela. Izkopavanja.	Earthworks. Excavations.
	Gradnja temeljev. Dela pod	Foundation construction.
	zemljo	Underground works

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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN ISO 22282-1

April 2008

ICS 13.080.40

English Version

Geotechnical investigation and testing - Geohydraulic testing - Part 1: General rules (ISO/DIS 22282-1:2008)

Reconnaissance et essais géotechniques - Essais
géohydrauliques - Partie 1: Règles générales (ISO/DIS
22282-1:2008)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 341.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (prEN ISO 22282-1:2008) has been prepared by Technical Committee CEN/TC 341 "Geotechnical Investigation and Testing", the secretariat of which is held by ELOT, in collaboration with Technical Committee ISO/TC 182 "Geotechnics".

This document is currently submitted to the parallel Enquiry.

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DRAFT INTERNATIONAL STANDARD ISO/DIS 22282-1

ISO/TC 182/SC 1

Secretariat: DIN

Voting begins on:
2008-04-17

Voting terminates on:
2008-09-17

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Geotechnical investigation and testing — Geohydraulic testing —

Part 1: General rules

Reconnaissance et essais géotechniques — Essais géohydrauliques —

Partie 1: Règles générales

ICS 93.020

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ISO/DIS 22282-1

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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ISO 22282-1 was prepared by Technical Committee ISO/TC 182, *Geotechnics*, Subcommittee SC 1, and by Technical Committee CEN/TC 341, *Geotechnical investigation and testing* in collaboration.

ISO 22282 consists of the following parts, under the general title *Geotechnical investigation and testing — Geohydraulic testing*:

- Part 1: *General rules*
- Part 2: *Water permeability tests in a borehole using an open system*
- Part 3: *Water pressure test in rocks*
- Part 4: *Pumping tests*
- Part 5: *Infiltrometer tests*
- Part 6: *Water permeability tests in a borehole using a closed system*

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Introduction

The EU water directive requires the member states to increase the activities to protect groundwater and fresh surface water both quantitatively and qualitatively. At the same time society requires more water and more and deeper constructions below groundwater level. In addition sea level may rise as the result of climate change. This contradiction requires engineers working on construction projects below groundwater level to make more reliable predictions of the effects of such structures on the groundwater conditions. This can partly be achieved by better assessment of the permeability of the ground by in-situ tests as required in EN 1997-1 Clause 3.3.9.1. According to prEN 1997-2 the following shall apply:

“2.1.4 Groundwater –

(1) *Groundwater investigations shall provide all relevant information on groundwater needed for geotechnical design and construction.*

(2) *Groundwater investigations should provide, when appropriate, information on:*

- *the depth, thickness, extent and permeability of water-bearing strata in the ground, and joint systems in rock;*
- *the chemical composition and temperature of groundwater.*

(3) *The information obtained should be sufficient to assess the following aspects, where relevant:*

- *the scope for and nature of groundwater lowering work;*
- *possible harmful effects of the groundwater on excavations or on slopes (e.g. risk of hydraulic failure, excessive seepage pressure or erosion);*
- *any measures necessary to protect the structure (e.g. water proofing, drainage and measures against aggressive water);*
- *effects of groundwater lowering, desiccation, impounding, etc. on the surroundings;*
- *the capacity of the ground to absorb water injected during construction work;*
- *whether it is possible to use local groundwater, given its chemical constitution, for construction purposes.*

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