TECHNICAL SPECIFICATION SPÉCIFICATION TECHNIQUE TECHNISCHE SPEZIFIKATION

CEN ISO/TS 17892-10

October 2004

ICS 13.080.20; 93.020

English version

Geotechnical investigation and testing - Laboratory testing of soil - Part 10: Direct shear tests (ISO/TS 17892-10:2004)

Reconnaissance et essais géotechniques - Essais de sol au laboratoire - Partie 10: Essai de cisaillement direct (ISO/TS 17892-10:2004) Geotechnische Erkundung und Untersuchung -Laborversuche an Bodenproben - Teil 10: Direkte Scherversuche (ISO/TS 17892-10:2004)

This Technical Specification (CEN/TS) was approved by CEN on 2 February 2004 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

		page
Fore	word	3
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Equipment	6
5	Specimen	9
6	Test procedure	10
7	Test results	12
8	Test report	
Bibli	iography	16
Figu	res	
Figu	re 1 — Schematic drawing of a conventional and a parallel controlled shearbox	7
Figu	re 2 — Example of a ring shear apparatus	8
Figu	re 3 — Example of time-settlement-curve to determine the time for primary consolidation	n10
Figu	ire 4 — Determination of the friction angle $oldsymbol{arphi}'$ as a function of the void ratio e	14

Foreword

This document (CEN ISO/TS 17892-10:2004) has been prepared by Technical Committee CEN/TC 341 "Geotechnical investigation and testing", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 182 "Geotechnics".

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

CEN ISO/TS 17892 consists of the following parts, under the general title *Geotechnical investigation and testing* — *Laboratory testing of soil*:

- Part 1: Determination of water content.
- Part 2: Determination of density of fine-grained soil.
- Part 3: Determination of particle density Pycnometer method.
- Part 4: Determination of particle size distribution.
- Part 5: Incremental loading oedometer test.
- Part 6: Fall cone test.
- Part 7: Unconfined compression test of fine-grained soils.
- Part 8: Unconsolidated undrained triaxial test.
- Part 9: Consolidated triaxial compression tests.
- Part 10: Direct shear tests.
- Part 11: Permeability tests.
- Part 12: Determination of Atterberg limits.

Introduction

This document covers areas in the international field of geotechnical engineering never previously standardised. It is intended that this document presents broad good practice throughout the world and significant differences with national documents is not anticipated. It is based on international practice (see [1]).