INTERNATIONAL STANDARD

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Testing of concrete —

Part 6: Sampling, preparing and testing of concrete cores

Essais du béton —

Partie 6: Échantillonnage, préparation et essais sur des carottes de béton



Reference number ISO 1920-6:2004(E)

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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 traison 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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The main task of technical convertees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires applying by at least 75 % of the member bodies casting a vote.

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ISO 1920-6 was prepared by Technical Committee ISO/TC 71, Concrete, reinforced concrete and pre-stressed concrete, Subcommittee SC 1, Test methods for concrete.

0 ral eview Generated by FLS ISO 1920 consists of the following parts, under the general title *Testing of concrete*:

- Part 1: Sampling of fresh concrete
- Part 2: Properties of fresh concrete
- Part 3: Making and curing test specimens
- Part 4: Strength of hardened concrete
- Part 5: Properties of hardened concrete other than strength
- Part 6: Sampling, preparing and testing of concrete cores
- Part 7: Non-destructive tests on hardened concrete

Testing of concrete —

Part 6: Sampling, preparing and testing of concrete cores

1 Scope

This part of ISO 1920 specifies a method for taking cores from hardened concrete, their examination, preparation for testing and determination of compressive strength.

The part of ISO 1920 does not gree guidance on the decision to drill cores or on the locations for drilling nor does it provide procedures for interpreting the core strength results.

NOTE It is recommended that before coring, full agreement should be reached by all parties on the need for core testing and how the results should be interpleted.

2 Normative references

The following referenced documents are essential for the application of this part of ISO 1920. For dated references, only the edition cited applies. For uncated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1920-4, Testing of concrete — Part 4: Strength of hardened concrete

ISO 1920-5, Testing of concrete — Part 5: Properties of hardened concrete other than strength

EN 12390-4:2000, Testing hardened concrete — Part 4: Compressive strength — Specification for testing machines

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3 Definitions

For the purposes of this document, the following definition applies.

3.1

core strength

compressive strength of the cored specimen, as determined by the test defined in this part of ISO 1920

4 Apparatus

4.1 Core drill, capable of extracting cores from the hardened concrete to the dimensions specified in 5.3 with the tolerances specified in Clause 7.

4.2 Compression testing machine, conforming to EN 12390-4 or to an equivalent national document and related to the size of specimens and their expected failure load.