Advantages

In practice, several specialist institutes and building material manufacturers have already carried out comparative tests between the known test method, which includes the Austrian concrete filter press, and the BAUER Concrete Filter Press in order to establish a correlation between the two test methods. The advantage of the BAUER Concrete Filter Press lies in the much easier handling and the shorter test time.



BAUER Concrete Filter Press in the transport case

Standard

The test with the BAUER Concrete Filter Press is already applied in practice for decades. For example, the EFFC's "Guide to Tremie Concrete for Deep Foundations" and the Australian "Tremie Concrete for Deep Foundations" manual provide a standard test for determining the water retention ability and filter cake thickness.

Contact

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Bauer Spezialtiefbau

BAUER Concrete Filter Press

Determining the water retention ability and filter cake thickness



Description

The **Technical Service** Department of BAUER Spezialtiefbau GmbH has been successfully using the **BAUER Concrete Filter Press** as a testing device for determining the water retention ability and filter cake thickness of fresh concrete under pressure for decades. The test method was developed on the basis of the tests according to API (American Petroleum Institute) for the determination of the filtration water of stabilizing slurries (e. g. bentonite suspensions).

Pressure regulator Locking bolt frame Top part Sealing ring Top part of test cylinder Test cylinder Test cylinder Sealing ring Bottom part of test cylinder Filter paper Frame Screen Sealing ring Lower part

Setup BAUER Concrete Filter Press

Individual components

Measuring principle

The applied pressure for carrying out the test with the

BAUER Concrete Filter Press was set to 5 bar, which

is kept constant over a period of 5 minutes.

Measured data

Due to the numerous experiences with the BAUER concrete filter press and in particular the international application, following guide values for the fresh concrete stability of special foundation engineering concrete:

Filtration water

- High requirements ≤ 22 ml
- Medium requirements ≤ 40 ml
- Low requirements ≤ 60 ml

Filter cake

The filter cake produced in the test provides additional information on the suitability of the fresh concrete. A low filter cake height and a soft filter cake is advantageous.



Test setup