#### **TESTING** Bluhm & Feuerherdt GmbH

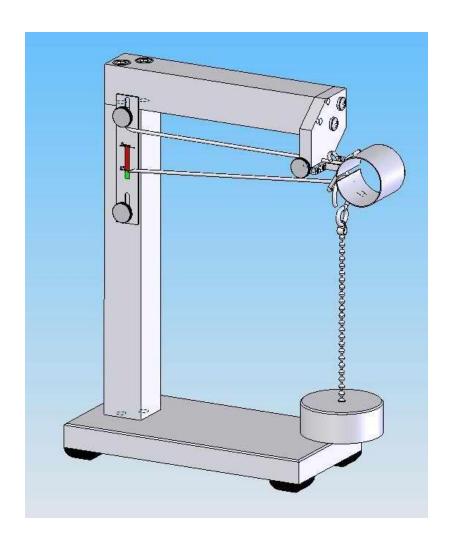
Manufacture and sale of construction material testing devices



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# **Directions for use**

# Testing apparatus for Le Chatelier rings



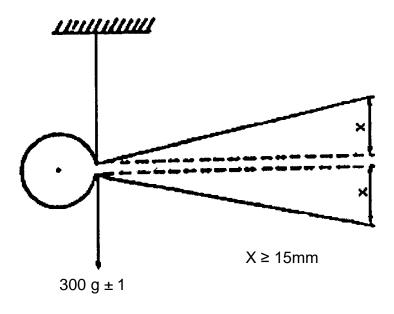


## 1. Execution of the test

# 1.1 Nature of the operation

Le Chatelier rings for determining the soundness of cement according to EN 196-3 need to show the following important characteristics:

The spring force of the ring must be such that the force of a fixed mass of (300+/-1) g will bend it apart at least 15 mm without any permanent distortion.



This above conforms to the standard EN 196-6.

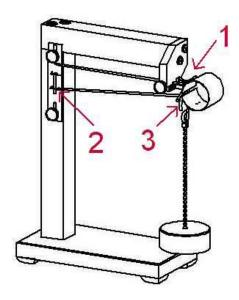


To test this property of the Le Chatelier rings there is the

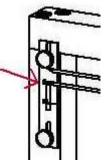
### 1.2 test apparatus for Le Chatelier rings

Use of the apparatus

1. The empty Le Chatelier ring (without weight) is set up by feeding the <u>upper</u> needle through the feedthrough hole of the apparatus until it is in direct contact with the ring and is secured with the knurled screw so that the needles are located one above the other with the tips positioned in front of the scaling on the stand.



2. The scale can be moved by loosening the thumbscrews. The lower needle tip should match the 0 of the scale.



3. The weight of 300 g will be suspended from the eye of the lower needle in such a way that the eye will also be in direct contact with the ring. This is how the demand of the standard is met; the points of the active forces work opposite each other on the ring.

The deformation of the needle by the weight can be read at the needle tip against the background of the scale.

The red-green scale indicates the bad-good classification of the spring force of the Le Chatelier-ring at (ror = bad / green = good).

This is how the **test apparatus for Le Chatelier rings** meets the demands of EN 196-6 standards.



# 2. After-sales service and spare parts

A great deal of care has been taken to ensure that this Operating Manual is correct. We cannot, however, guarantee that it is without mistakes or errors, or that all information contained herein will continue to remain valid in the event of technical changes.

### 2.1 Date of issue of this Operating Manual

Issue no. 7 Sept. 2016

#### 2.2 Copyright

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# 2.3 Contact for spare parts and technical help

If you have any technical questions, or if you require spare parts, please get directly in touch with the following address:

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