kiwa
Partner for progress

Test Report

Client

Hauff Technik GmbH & Co. KG
Giengener Straße 35
89428 Syrgenstein – Landshausen

Order no.

A 9040-3a / 2012
replacement for
A 9040-3 / 2012

Date of contract	:	May 25th, 2012
Contract	:	Testing of the water-tightness of a wall collar DN110 encased in concrete with an inserted universal pipe DN110
Delivery of test items	:	Client
Date of receipt of test items		May 30th, 2012
Testing period	:	May 30th - 31th, 2012

Augsburg, July 5th, 2012
lo/di

Department Manager

Holger Dietrich

Prüf- und Ingenieurleistungen bautest

Laboratory Manager

Hendrik Zaus

This Test Report consists of 8 pages.
It may only be published unabridged.
The test results relate only on the items tested. The test material is dissipated.

bautest
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CONTENTS

1 General

Kiwa MPA Bautest GmbH was contracted by Hauff-Technik GmbH & Co. KG to evaluate the water tightness of a wall collar DN110 encased in concrete with an inserted universal pipe DN110.

Therefore a prefabricated test setup was delivered by Hauff-Technik GmbH & Co. KG to our test laboratory in Augsburg. The test setup consists of a concrete test member with an encased wall collar DN110 with an inserted universal plastic pipe DN110 (see Figure 1 to Figure 4).

Figure 1: Pipe including internal seal

2 Test procedure

2.1 Test preparation (Hauff-Technik)

According to the Manufacturer information the test setup was pre-assembled by the Manufacturer as follows:

A wall collar DN110 with a pipe DN110 was encased in a concrete test member. Afterwards the pipe was assembled with a dummy plug for water tightness.

Furthermore a compression bell with manometer and rubber ring seal was provided by the Manufacturer. The compression bell was designated to be put on the test member and pressed against the concrete by four tension rods (see Figure 2 and Figure 4).

2.2 Test procedure (Kiwa MPA Bautest)

The test member which was delivered by the Manufacturer was a pre-assembled concrete test member with a test setup in accordance with section 2.1 and with a pre-assembled manometer (see Figure 2 to Figure 4). A calibration of the manometer was not carried out by Kiwa MPA Bautest GmbH.

After consultation with the Manufacturer a tightness test with a water filled pressure bell over a period of 20 hours with a nominal pressure of 5,0 bar was carried out.

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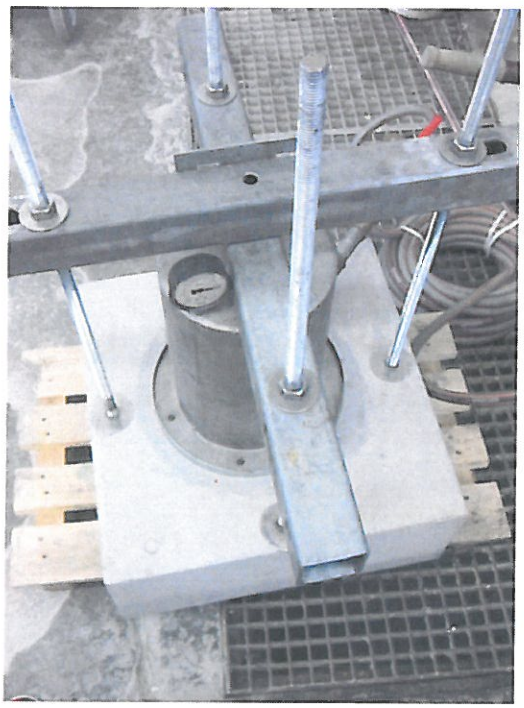

Figure 2: Test setup

Figure 3: Pipe and internal sealing

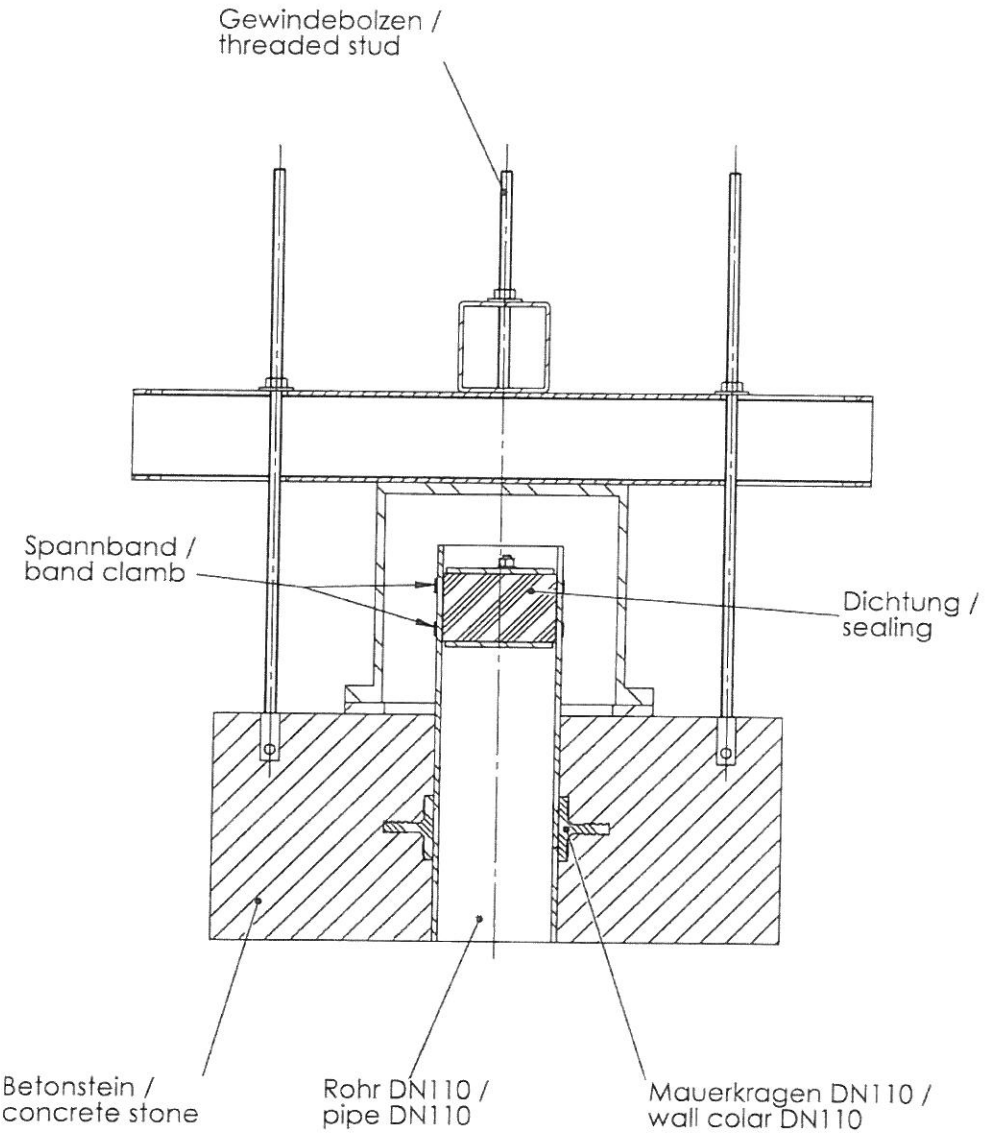

Figure 4: Test setup (drawing by the manufacturer)

3 Test results

Subsequent the manometer display at the beginning and at the end of the tightness test is shown in Figure 5.

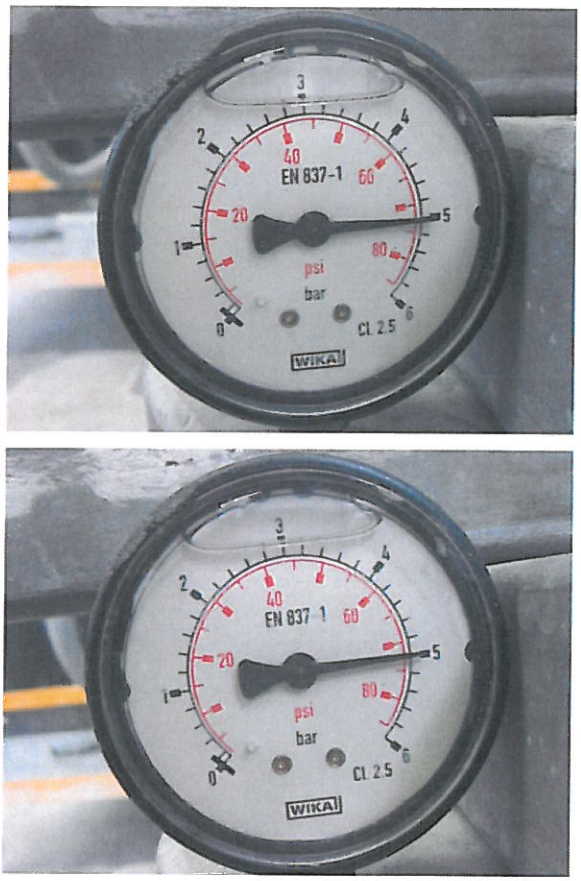

Figure 5: Tightness test with water filled pressure bell (above: manometer display at the beginning of the test at 05/30/2012 10:00; below: manometer display at the end of the test at 05/31/2012 06:00)

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4 Summary

During the tightness test of the wall collar DN110 with the inserted universal pipe DN110 encased in concrete with water filled pressure bell with a nominal pressure of 5.0 bar no defect in water tightness as a result of water discharge could be detected.

Augsburg, July 5th, 2012

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