kiwa
Partner for progress

Test Report

Client

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

Order no.:

A 9091-2 / 2010

Date of contract	:	December 8th, 2010
Contract	:	Testing of the water-tightness of the sealing system flange plate with HRD 150-F2-0 in core hole Ø 150 mm
Specimen delivery	:	Client
Delivery on	:	March 3th, 2011
Test period	:	March 3th - 4th, 2011

Augsburg, June 1st, 2011
di

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Prüf- und Ingenieurleistungen
bautest

Laboratory Manager

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This Test Report consists of 9 pages.
It may only be published unabridged
The test results relate only on the items tested. The test material is dissipated.

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1 General

Kiwa MPA Bautest GmbH was contracted by Hauff-Technik GmbH & Co. KG to evaluate the water tightness of flange plate with ring seal insert for use as house lead-in.

Therefore a prefabricated test setup was delivered by Hauff-Technik GmbH & Co. KG to our test laboratory in Augsburg.

2 Test procedure

2.1 Test preparation (Hauff-Technik GmbH & Co. KG)

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

On the surface of a test member with the dimensions 500 x 500 x 350 mm with a core hole ø 150 mm a flange plate with ring seal insert HRD 150-2F-0 was fixed according to the installation instruction. Therefore Fischer long shaft fixing SXR 10 x 80 with screw 7 x 87 was used (see Figure 1). The long shaft fixings SXR were tightened with a torque moment of 20 Nm. Afterwards a pressure bell with manometer and pressure regulator was fixed over the flange on the surface of the test member (see Figure 2).

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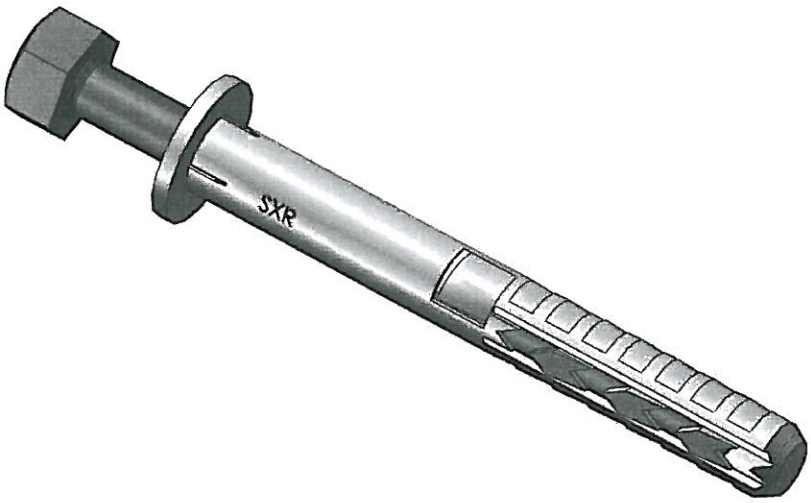

Figure 1: Fischer long shaft fixing SXR with screw (Manufacturer drawing)

2.2 Test procedure (Kiwa MPA Bautest GmbH)

The test member delivered by the Manufacturer was a pre-assembled test member with a test setup with pre-assembled manometer and pressure regulator in accordance with section 2.1 (see Figure 2 to Figure 5). A calibration of the manometer and the pressure regulator by Kiwa MPA Bautest GmbH was not carried out.

After consultation with the Manufacturer a tightness test with water filled pressure bell over a period of 24 h with a nominal pressure of 2,5 bar was carried out. The filling of the pressure bell with water was carried out until the water-level reached the inlet and the air bleed valve respectively.

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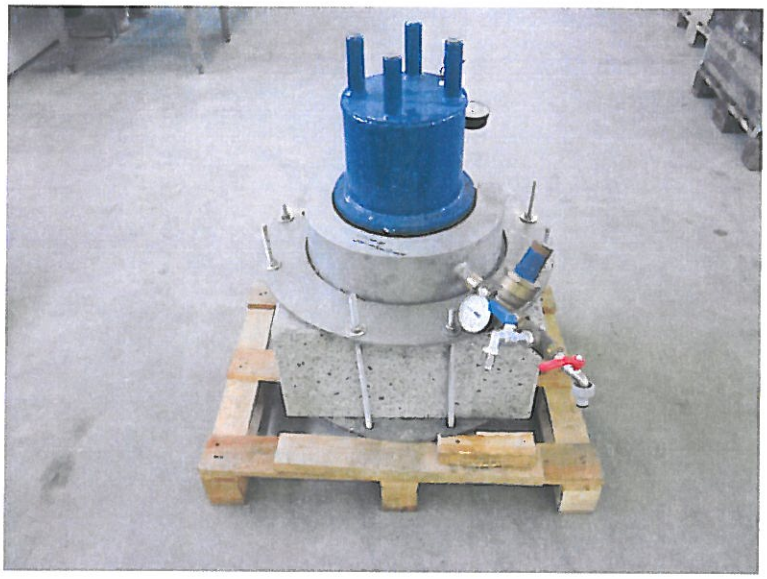

Figure 2: Test setup

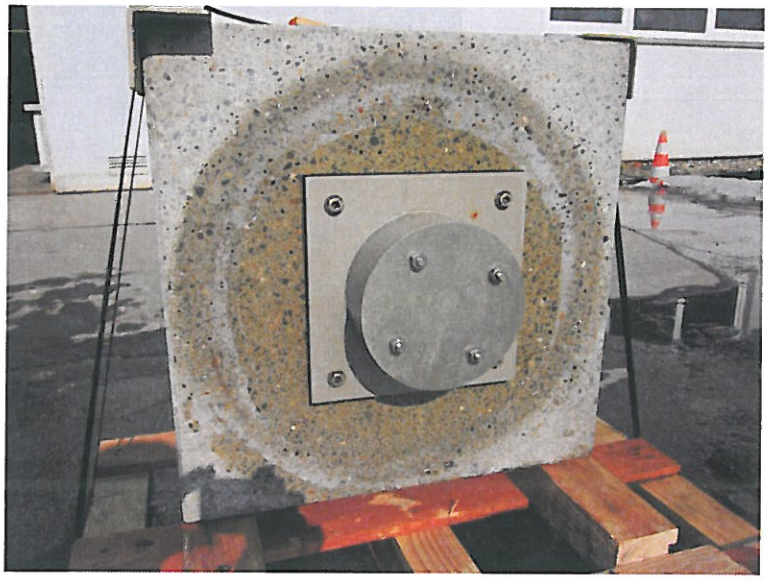

Figure 3: Flange plate with inserted HRD 150-2F-0

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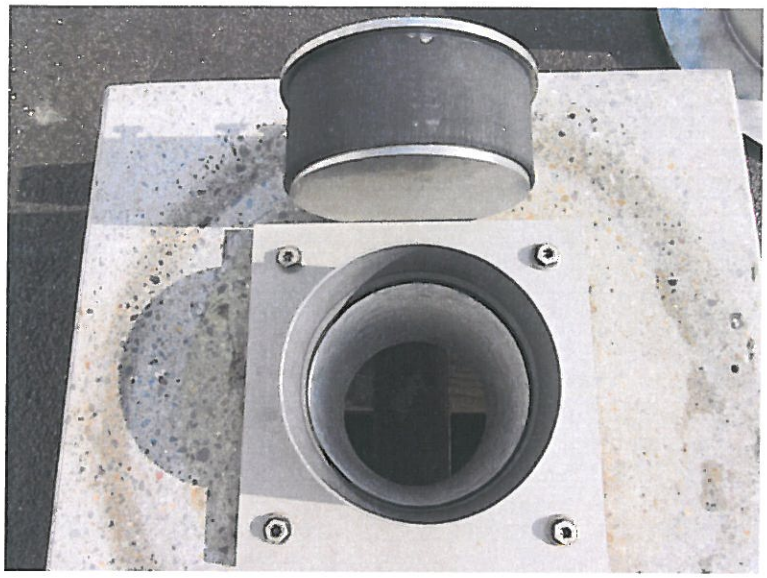

Figure 4: Flange plate with removed HRD 150-2F-0

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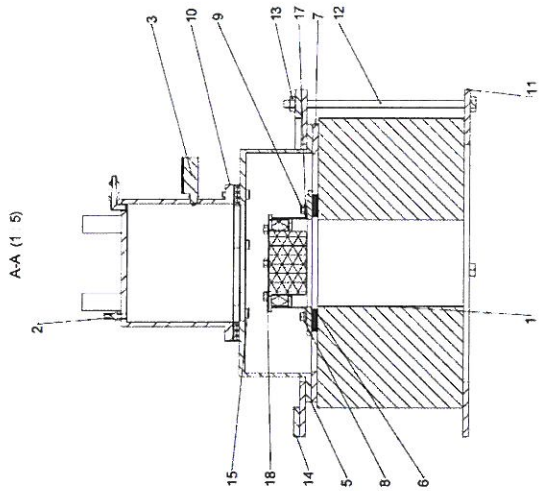

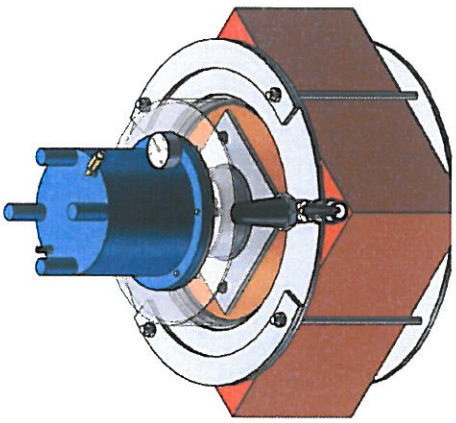

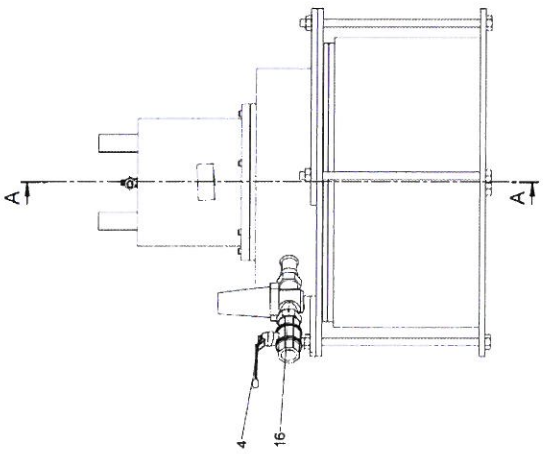

item	Quantity	Designation		Material
1	1	Touchstone 500x500x250	C30/35	Polymer cement
2	1	Pressure die casting flange		
3	1	Pressure gauge		
4	1	Ball valve		
5	1	Intermediate flange		EPDM 50±5
6	1	Rubber part		
7	1	Rubber seal		EPDM 50±5
8	1	SXR Anchor bolt		
9	1	Flange 150		EPDM 55±5
10	1	Pressure container		
11	2	Special stell ring		
12	4	Thread rod M12		
13	11	Screw nut M12		
14	2	Back up ring	DIN EN ISO 6912	
15	6	Allen head screw M8x60		
16	1	Pressure reducing regulator		
17	1	SXR Anchor bolt 10x80		
18	1	HRD 150-2F-0		

Figure 5: Test Setup (Manufacturer drawing)

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3 Test result

Subsequent in Figure 6 the manometer display at the beginning and at the end of the tightness test is shown.

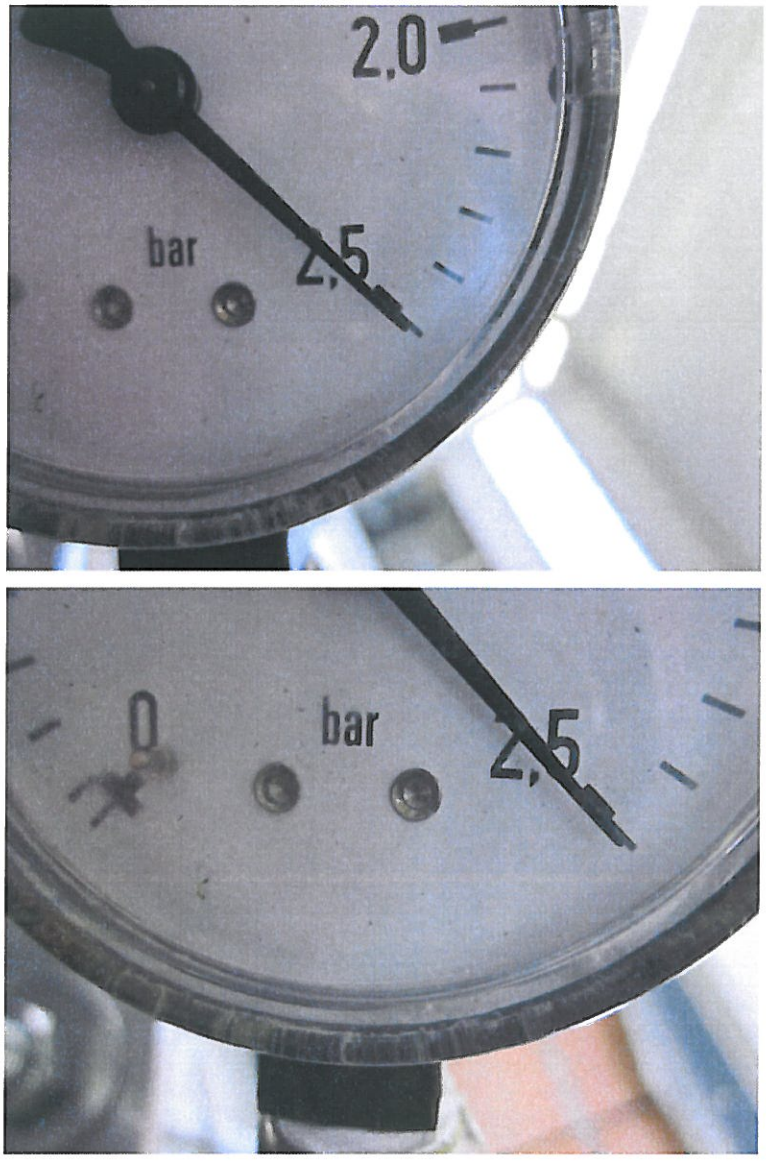

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Figure 6: Tightness test with water filled pressure bell at a nominal pressure of 2,5 bar (above: manometer display at the beginning of the test at 03/03/2011 13:00; below: manometer display at the end of the test at 03/04/2011 13:00)

4 Summary

During the tightness test of the sealing system flange plate with HRD 150-2F-0 with water filled pressure bell with a nominal pressure of 2,5 bar over a test period of 24 h no defect as a result of water discharge could be detected.

Augsburg, June 1st, 2011