

## Test Report

Client

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

Order no.

A 9026-1 / 2011

Date of contract : April 11<sup>th</sup>, 2011

Contract : Testing of the gas tightness of the ring sealing  
HSD 100-SSG-18-65 for building entries with  
compressed air at a test temperature of 23 °C

Delivery of test items : Client

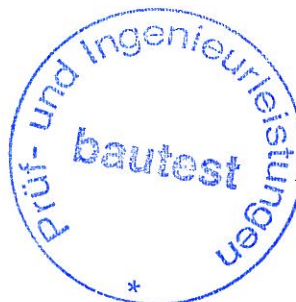
Date of receipt of test items : April 14<sup>th</sup>, 2011

Testing period : April 18<sup>th</sup> – April 20<sup>th</sup>, 2011

Augsburg, May 4<sup>th</sup>, 2011  
di

Department Manager

  
Holger Dietrich



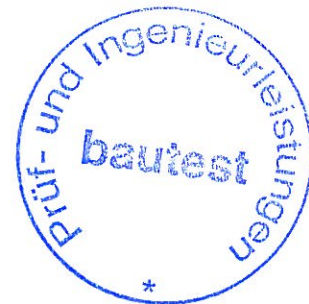
Laboratory Manager

  
Hendrik Zaus

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 gas tightness of the ring sealing system HSD 100-SSG-18-65 at a test temperature of 23 °C.

Therefore a prefabricated test setup was delivered by the Manufacturer to our test laboratory in Augsburg.

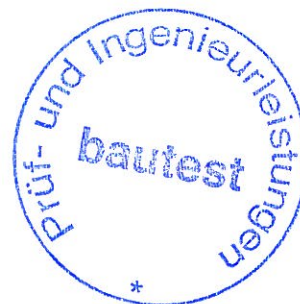
The ring sealing system HSD 100-SSG-18-65 is a divided seal insert with an insert for one cable for use as a cable lead-through for buildings with an existing casing or core hole of Ø 102 mm. HSD 100-SSG-18-65 is a sealing insert of rubber EPDM with a sealing width of 40 mm.

## 2 Test procedure

### 2.1 Test preparation (Manufacturer)

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

The ring sealing system HSD 100-SSG-18-65 was installed in a testing cylinder as shown in Figure 1 and Figure 3. The used sealing insert was assembled with one dummy plug Ø 45 mm.



## 2.2 Test procedure (Kiwa MPA Bautest GmbH)

The test member which was delivered by the Manufacturer was a pre-assembled test member with a test setup in accordance with section 2.1 and with a pre-assembled manometer (see Figure 1 and Figure 3). A calibration of the manometer by Kiwa MPA Bautest GmbH was not carried out.

After consultation with the Manufacturer a tightness test with compressed air over a period of 24 h with a nominal pressure of 5 bar and a test temperature of 23 °C was carried out with a test specimen as shown in Figure 2.

Subsequent a second tightness test with compressed air over a period of 24 h with a nominal pressure of 6 bar and a test temperature of 23 °C was carried out with a test specimen as shown in Figure 2.

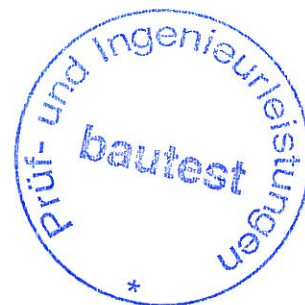


Figure 1: Test setup





Figure 2: Ring sealing HSD 100-SSG-18-65





### 3 Test results

Subsequent in Figure 4 to Figure 5 the manometer display at the beginning and at the end of the tightness tests are shown.

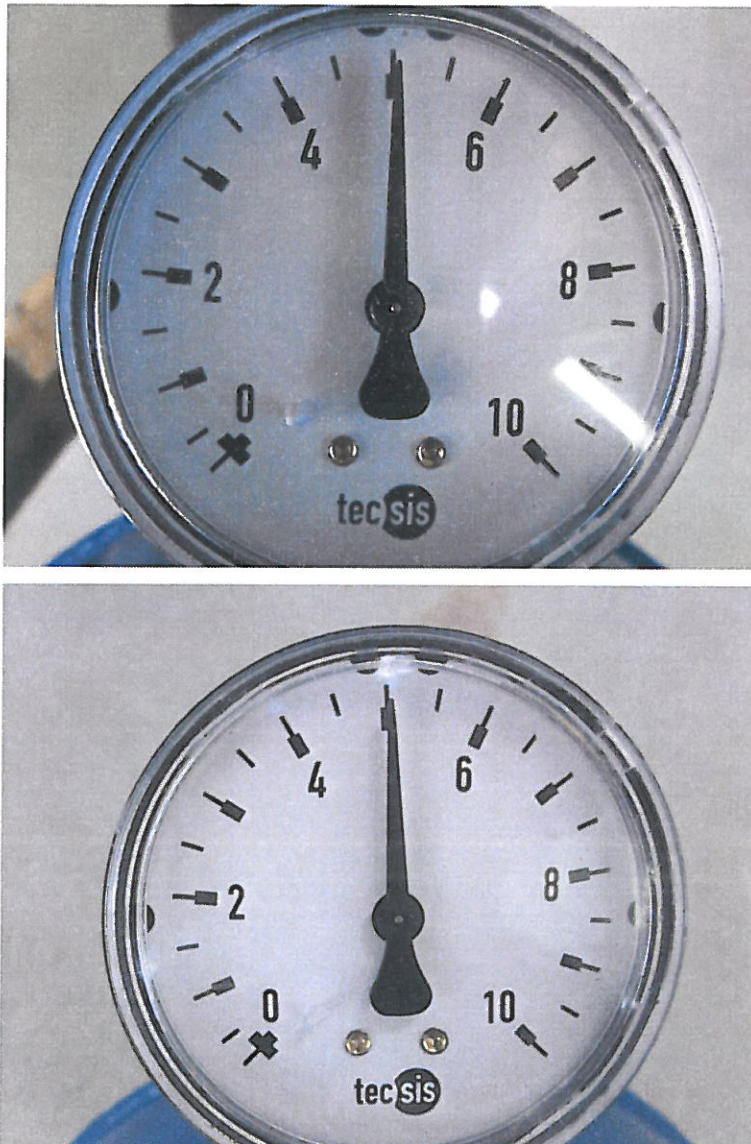
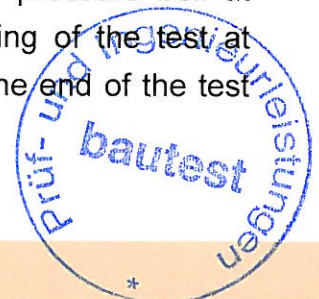


Figure 4: Tightness test with compressed air (5 bar) filled pressure bell at 23 °C (above: manometer display at the beginning of the test/ at 04/18/2011 07:45; below: manometer display at the end of the test/ at 04/19/2011 10:10)



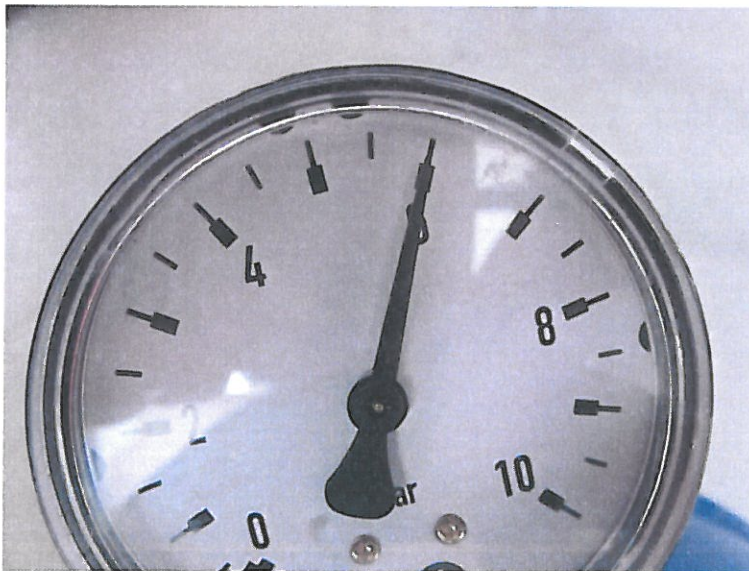


Figure 5: Tightness test with compressed air (6 bar) filled pressure bell at 23 °C (above: manometer display at the beginning of the test at 04/19/2011 11:30; below: manometer display at the end of the test at 04/20/2011 11:30)



#### 4 Summary

*During the tightness tests of the ring sealing system HSD 100-SSG-18-65 at a test temperature of 23 °C with compressed air filled pressure bell with nominal pressure of 5 bar and 6 bar respectively over the respective test period of 24 h no defect could be detected.*

Augsburg, May 4<sup>th</sup>, 2011

