



EBRO Armaturen Gebr. Bröer GmbH

Office: Hamburg

Date: 19 October 2018

This Certificate is issued to the above client to certify that a surveyor to Lloyd's Register did, at their request, attend the undermentioned manufacturer for the purpose of inspecting and witnessing tests on the product listed below.

**FLAME – RESISTANCE TEST CERTIFICATE**  
**Butterfly Valve HP111/HP111-E, HP112, HP114/HP114-E/HP114-C/HP114-K3**  
**Seat "FIRESAFE"**  
**DN 50 (2") and below to DN 200 (8") and above**

|   |   |
|---|---|
| <b>Test requirements:</b>               | DIN EN ISO 10497:2010<br>API 607, 7 <sup>th</sup> edition   |
| <b>Tested sizes of butterfly valve:</b> | 1.) HP111 DN 50 class150<br>2.) HP111 DN 125 class150<br>3.) HP111 DN 125 class150 – Body 1.4408<br>4.) HP111 DN 200 class150                                   |
| <b>Body material:</b>                   | 1.0619 and 1.4408   |
| <b>Seat material:</b>                   | "Firesafe" – PTFE / Inconel   |
| <b>Drawing nos.:</b>                    | to 1.) DPH-050-0067-00, rev. 0, dated 20.09.2018<br>to 2. and 3.) DPH-125-0108-00, rev. 0, dated 20.09.2018<br>to 4.) DPH-200-0350-00, rev. 0, dated 20.09.2018 |
| <b>Part list nos.:</b>                  | to 1.) 6112066<br>to 2.) 6112070<br>to 3.) 6112073<br>to 4.) 6112071  |
| <b>Qualified Sizes:</b>                 | DN 50 (2") and below to DN 200 (8") and above   |
| <b>Qualified Pressure Ratings:</b>      | Class150, Class 300<br>PN10, PN16, PN25, PN40   |
| <b>Test procedure and results:</b>      | as per test reports IBB-2086, IBB-2090, IBB-2092 and IBB-2094<br>dated 16.10.2018 and 17.10.2018  |

***The following examinations were carried out with satisfactory results in accordance with the above specification:***

- Reviewed test specification and accepted test facilities.
- Verified selected butterfly valve against drawing and visual inspection to compliance to above stated type.
- Checked calibration status of used test gauges.
- Witnessed of flame-resistance tests, results: OK.
- Reviewed and endorsed documentation.

For further details please refer to attached documentation.



M. Di Blasi  
Surveyor to Lloyd's Register EMEA

a member of the Lloyd's Register group.

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