

# CERTIFICATE

No. 06/LBMU/12.05.2014

**Laboratory**  
**of Sealing Materials**  
**SPETECH Sp. z o.o.**

**SPETECH®**

LBMU

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The packing set:

## **SPETOPAK® WGR-TA 12**

consisting of 3 packing rings, 4 graphite rings and 6 steel foils

of the manufacturer:

**C.S.U.T SPETECH Sp. z o.o.**

**43-382 Bielsko-Biała, ul. Szyprów 17, Poland**



LB - 124/02



www.tuv.com  
210/A13/5952

were verified in accordance with the VDI 2440:2000 the compliance with the tightness criteria.

The test was performed under the following conditions:

geometry:	40/60/60	mm/mm/mm
pre deformation:	50	MPa
initial packing set stress:	40	MPa
temperature of exposure:	400	°C
absolute test pressure:	40	bar
test medium:	helium	
number of stem cycles:	3500	
stroke:	40	mm
period of leakage measurement:	24	h

The leak rate at the end of the period of the leakage measurement was:

$$3,64 \cdot 10^{-3} \text{ mbar} \cdot \text{l}/(\text{m} \cdot \text{s})$$

The requirement of VDI 2440 is, in test temperature, the leakage must be less than  $1 \cdot 10^{-2} \text{ mbar} \cdot \text{l}/(\text{m} \cdot \text{s})$ . Therefore the packing set fulfill that criteria and can be used as a sealing system for the purposes of TA Luft.

This certificate is valid only with the test report No. TALP/12052014/06/LBMU

Bielsko-Biała, May 12<sup>th</sup>, 2014

M.Sc.Eng. Janusz Zajaczek