

## CERTIFICATE

No. 30291602E/SW/24.05.2016

The valve with the brand name

**Crane@FKX-9000**

of the manufacturer

**Krombach GmbH & Co. KG  
D – 57223 Kreuztal**

was tested according to the standard DIN EN ISO 15848-1 (edition November 2015).  
The following sealing systems were used:

- stem sealing: - Supagraf ® Premier packing set consisting of 5 rings; material: graphite; manufacturer: James Walker; dimensions: 50 x 40 x 25 mm
- body sealing: - Sigraflex Hochdruck Pro (V20011Z3I-P); material: graphite; manufacturer: SGL; dimensions: 65 x 51 x 2 mm.

In the laboratory of amtec a test was conducted under the following test conditions:

test no.:	15-580
test date:	November 18, 2015
endurance class:	CO3 (isolating valve)
mechanical cycles:	2,500 pcs.
temperature:	RT / 400 °C
test pressure:	50 / 34.7 bar
medium:	He
tightness class:	BH
stem diameter:	40 mm
number of stem seal adjustments (SSA):	1 pcs.

The maximal leak rate measured with the helium leak detector during the test with 2,500 mechanical cycles and 4 thermal cycles was  $9.7 \cdot 10^{-5}$  mg/s/m for the stem sealing. The concentration for the body sealing was less than 50 ppmv.

The performance class of the tested valve is:

**ISO FE BH – CO3 – SSA 1 – t(RT, 400 °C) – (50/34.7 bar) – ISO 15848-1**

This qualification can be extended to untested valves if the criteria listed in chapter 8 of the DIN EN ISO 15848-1 are fulfilled. This certificate is only valid in combination with the test report 3029162/- and the herein defined boundary conditions.

Lauffen, May 24, 2016

amtec Services GmbH



Dipl.-Ing. S. Weiler

amtec Services GmbH  
Hoher Steg 13  
D-74348 Lauffen  
Tel.: +49 7133 9502-0  
Fax: +49 7133 9502-22  
E-mail: info@amtec.de  
Internet: www.amtec.de



quality  
certified  
ISO 9001  
KTA1401



Deutsche  
Akkreditierungsstelle  
D-PL-12008-01-00