



Gas welding equipment
Certificate N°: BAM/ZBA/007/03
10th revised version

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Hereby it is certified by the BAM certification body that the

Safety devices and quick-action couplings
with the designations listed in the annex to this certificate

of the manufacturer

IBEDA Sicherheitsgeräte und Gastechnik GmbH & Co. KG
Bahnhofstraße 27
53577 Neustadt

meet the requirements of the standards

DIN EN ISO 5175-1:2018 "Gas welding equipment - Safety devices - Part 1: Devices incorporating a flame (flashback) arrestor"

DIN EN 561:2002 "Gas welding equipment - Quick-action couplings with shut-off valves for welding, cutting and allied processes"

additionally in compliance with the requirements of the standard operating procedures

BAM-StAA-SE-16 "Test for resistance to solvents for non-metallic materials" dated 14.11.2017

BAM-StAA-SE-18 „Test for resistance to ageing in oxygen for non-metallic materials“ dated 12.04.2018

BAM-StAA-SE-19 „Test of pressure-sensitive cut-off valve for quick opening“ dated 8.12.2020

The applied standards as a basis of this certificate and the specific terms of application can be found in the annex to this certificate. According to DIN EN ISO/IEC 17065:2013 the certification contains a type examination with periodical surveillance of the products (BAM certification system II). The certification and surveillance procedures are set out in **contract N° BAM-ZBF-0011-2020-IBEDA** incl. its annex in their currently valid versions. The test reports and/or procedure numbers listed in the annex to this certificate form the basis of this document.

The products certified by BAM may be labelled with the BAM certification mark "Geprüft und überwacht" and/or "BAM certified and under surveillance" together with the Certificate number.

The certificate is valid until 31st December 2024.

Bundesanstalt für Materialforschung und -prüfung (BAM)
Unter den Eichen 87, 12200 Berlin, **2022-08-19**

By order

Dr. S. Aris
BAM Certification Officer



Distribution list: 1st Manufacturer 2nd BAM Certification Body

This certificate may only be published in full wording and without any additions. The revocable written consent shall be obtained from BAM beforehand for changed reproduction and excerpts. The German version is legally binding, except an English version is issued exclusively. Place of jurisdiction is Berlin.

CERTIFICATE

1 Safety devices according to DIN EN ISO 5175-1:2018

The safety devices listed below comply with the requirements of DIN EN ISO 5175-1:2018, at the operating conditions specified in the following table. Furthermore, the safety devices listed below comply with the extensions of paragraph 4.2 "Materials" of DIN EN ISO 5175-1:2018, which are specified within the following BAM Standard Operating Procedures

- BAM-StAA-SE-16 "Test for resistance to solvents for non-metallic materials" dated 14.11.2017 and
- BAM-StAA-SE-18 „Test for resistance to ageing in oxygen for non-metallic materials“ dated 12.04.2018.

Furthermore, the listed safety devices insofar applicable fulfill the BAM Standard Operating Procedure

- BAM-StAA-SE-19 „Test of pressure-sensitive cut-off valve for quick opening“ dated 8.12.2020

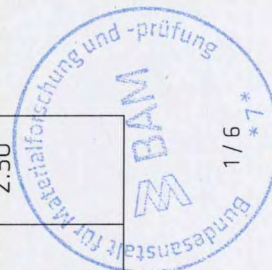
Additionally, the non-metallic materials were positively tested for the application in gaseous oxygen, for the maximum working overpressures listed below (testing for reactivity with oxygen under the influence of oxygen pressure surges).

Construction series „100“

The following BAM Test reports and/or procedure numbers cover all the types listed for construction series "100":

- 2-1964/2012 of 06.03.13; - 18006872 of 07.08.18; - BZS-GS/070/18;
- 2-1830/2014 of 16.01.15; - BZS-GS/019/18; - 15041150 of 11.09.2018
- BZS-GS/079/15; - BZS-GS/065/18; - 18041529-I of 26.11.2019

Construction series „100“		max. operating overpressure (MPa)							
		fuel gases			Com-pressed air	oxygen			
Type	Ident.-No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	acetylene		propane	methane	hydrogen	with stainless steel filter
DG	01	10	II-699 of 18.03.99; BZS-GS/41/06; BZS-GS/054/14	0.15	0.50	0.50	0.35	2.50	2.50
DGN	02	10	10120/94; 4-5385 of 20.07.95; II-2877/95 of 28.07.95; BZS-GS/41/06; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14	0.15	0.50	0.50	0.35	2.50	2.50



Construction series „100“			max. operating overpressure (MPa)							
Type	Ident.- No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	fuel gases			Com- pressed air	oxygen		
				acetylene	propane	methane		hydrogen	with stainless steel filter	without filter
DGNDK	04	10	10120/94; 4-5385 of 20.07.95; II-2877/95 of 28.07.95; BZS-GS/41/06; 2-2002/2013 II of 06.09.13; BZS-GS/126/13	0.15	0.50	0.50	0.35	-	2.00	2.00
DG-U	104	10	2-2002/2013 II of 06.09.13 BZS-GS/126/13;	0.15	0.50	0.50	0.25	2.50	2.50	2.50
DGN-U	105	10	BZS-GS/054/14	0.15	0.50	0.50	0.30	2.50	2.50	2.50
DEMAX 5N	45	25	II-613/2001; II-4121/2001; II-699/99; II-2012/2003; BZS-GS/41/06; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14; 2-2484/2014 of 24.11.15	0.15	0.50	0.50	0.30	2.50	2.50	2.50
DS1000	67	10	BZS-226/2004; BZS-GS/41/06; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14; 2-2484/2014 of 24.11.15	0.15	0.50	0.50	0.35	1.50	1.50	1.50
DS1000-30°	67	10	2-253/2012 of 10.02.12; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14; 2-2484/2014 of 24.11.15	0.15	0.50	0.50	0.35	1.50	1.50	1.50
FRT	02	10	BZS-GS/179/09; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14	0.15	0.50	0.50	0.35	2.50	2.50	2.50
FR	01	10	BZS-GS/179/09 I; BZS-GS/054/14	0.15	0.50	0.50	0.35	2.50	2.50	2.50



Construction series „200“

The following BAM Test reports and/or procedure numbers cover all the types listed for construction series „200“:

- 2-2589/2012 of 24.09.12;
- 2-1964/2012 of 06.03.13;
- 2-2589/2012 of 24.09.12;
- BZS-GS/060/12;
- 18006872 of 07.08.18
- BZS-GS/019/18;
- BZS-GS/065/18;
- BZS-GS/079/15;
- 15041150 of 11.09.2018
- 18041529-I of 26.11.2019
- BZS-GS/101/20

Construction series „200“		max. operating overpressure (MPa)									
Type	Ident.- No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	fuel gases				Com- pressed air		with stainless steel filter	oxygen without filter
				acetylene	propane	methane	hydrogen	hydrogen	oxygen		
SR	106	10	BZS-GS/054/14	0.15	0.40	0.40	0.40	0.35	2.50	2.50	2.50
SRT	107	10	2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14; 2-1830/2014 of 16.01.15	0.15	0.50	0.50	0.35	2.50	2.50	2.50	2.50
SHT	114	10	BZS-GS/115/13; BZS-GS/054/14	0.15	0.40	0.40	0.40	0.35	2.50	-	2.50
TDK	110	10	-	0.15	0.40	0.40	0.40	0.35	-	2.00	2.00
GDK	111	10	BZS-GS/115/13;	0.15	0.40	0.40	0.40	0.35	-	2.00	2.00
SRDK	112	10	2-2002/2013 II of 06.09.13 BZS-GS/126/13;	0.15	0.40	0.40	0.40	0.35	-	2.00	2.00
GT	113	10	BZS-GS/115/13; BZS-GS/054/14	0.15	0.40	0.40	0.40	0.35	2.00	2.00	2.00
GG	114	10	BZS-GS/115/13; BZS-GS/054/14	0.15	0.40	0.40	0.40	0.35	2.50	2.50	2.50
TT	115	10	BZS-GS/054/14	0.15	0.40	0.40	0.40	0.35	2.00	2.00	2.00
DKST	118	10	-	0.15	0.40	0.40	0.40	0.35	-	2.00	2.00
DKSG	119	10	-	0.15	0.40	0.40	0.40	0.35	-	2.00	2.00
GG-A	120	10	BZS-GS/054/14	0.15	0.40	0.40	0.40	0.35	2.00	-	2.00
FT	113/ 114/ 115	10	BZS-GS/179/09 II BZS-GS/115/13; BZS-GS/054/14	0.15	0.40	0.40	0.40	0.35	2.00	2.00	2.00

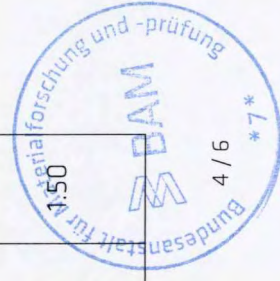


Construction series „300“

The following BAM Test reports and/or procedure numbers cover all the types listed for construction series „300“:

- BZS-GS/170/13;
- 2-2002/2013 II of 06.09.13
- BZS-GS/126/13;
- 2-1830/2014 of 16.01.15;
- BZS-GS/109/15;
- BZS-GS/079/15;
- 18006872 of 07.08.18
- BZS-GS/019/18;
- BZS-GS/065/18;
- 15041150 of 11.09.2018
- 18041529-I of 26.11.2019

Construction series „300“		max. operating overpressure (MPa)									
Type	Ident.- No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	fuel gases				hydrogen	com- pressed air	oxygen	
				acetylene	propane	methane	with stainless steel filter			without filter	
DG91-20	142	10	II-65/2000 of 13.1.00; BZS-GS/41/06;	-	0.25	0.25	-	2.50	2.50	2.50	2.50
DG91-UA-20	143	10	BZS-GS/054/14; BZS-GS/033/18	-	0.25	0.25	-	2.50	2.50	2.50	2.50
DG91-U-20	76	10	BZS/45/08; II-1149/2008 of 04.07.08; BZS-GS/054/14; II-1149/2008 a of 28.09.16	-	0.25 (natural gas)	0.25 (natural gas)	-	2.50	2.50	2.50	2.50
DG91	05	10	6420/98; II-5424 of 16.11.98; BZS-GS/41/06;	0.15	0.50	0.50	0.40	2.50	2.50	2.50	2.50
DG91UA	07	10	BZS-GS/054/14	0.15	0.50	0.50	0.40	2.50	2.50	2.50	2.50
DG91N	06	10	II-5190/98 of 16.10.98; BZS-GS/41/06 BZS-GS/48/07; BZS-GS/054/14	0.15	0.50	0.50	0.40	2.50	2.50	2.50	2.50
DG91NH 0,5	36	10	II-1293 of 16.03.99; BZS-GS/41/06; BZS-GS/054/14 BZS-GS/050/20	0.25*	1.00	1.00	0.90	-	-	-	-
DS2000	49	10	II-5192/98 of 16.10.98; II-2655/2001; BZS-GS/41/06; BZS-GS/054/14; 2-2484/2014 of 24.11.15	0.15	0.50	0.50	0.40	1.50	1.50	1.50	1.50



Construction series „300“		max. operating overpressure (MPa)								
Type	Ident.-No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	fuel gases			com-pressed air	oxygen		
				acetylene	propane	methane		hydrogen	with stainless steel filter	without filter
DS2000-30°	49	10	2-253/2012 of 10.02.12; BZS-GS/054/14; 2-2484/2014 of 24.11.15	0.15	0.50	0.50	0.40	1.50	1.50	1.50
SIMAX 3N	98	25	II-388/99 of 10.03.99; II-2012/2003 of 24.07.03; BZS-GS/41/06;	0.15	-	-	-	2.50	2.50	-
SIMAX 5N	98	25	BZS-GS/101/10 I, II-2107/2010 of 21.07.10; BZS-GS/156/13;	0.15	-	-	-	2.50	2.50	-
SIMAX 8N	98	25	BZS-GS/054/14; BZS-GS/021/18	0.15	-	-	-	2.50	2.50	-
SIMAX3-20	99	25	II-65/2000 of 13.1.00; BZS-GS/41/06;	-	0.25	0.25	-	2.50	2.50	-
SIMAX5-20	99	25	BZS-GS/156/13; BZS-GS/054/14;	-	0.25	0.25	-	2.50	2.50	-
SIMAX8-20	99	25	BZS-GS/021/18	-	0.25	0.25	-	2.50	2.50	-
SIMAX4-20	99	40	BZS/45/08; II-1149/2008 of 04.07.08; BZS-GS/054/14;	-	0.25	0.25	-	2.50	2.50	-
SIMAX3 NH 0,5	77	25	II-1149/2008 a of 28.09.16 BZS/85/08; II-1838/2008 of 25.07.08; BZS-GS/156/13; BZS-GS/021/18	0.25*	-	-	-	-	-	-

* In DIN EN ISO 5175-1:2018 the max. test pressure for acetylene is 0,15 MPa, therefore the test with 0,25 MPa acetylene was carried out "in the style" of DIN EN ISO 5175-1:2018.



2. Construction series "400" Quick-action couplings according to DIN EN 561:2002

The quick-action couplings listed in the following meet the requirements of DIN EN 561:2002, at the operating conditions specified in the following table.

The compliance with the requirements of paragraph 6.5, is extended within BAM Standard Operating Procedures

- BAM-StAA-SE-16 "Test for resistance to solvents for non-metallic materials" dated 14.11.2017 and
 - BAM-StAA-SE-18 „Test for resistance to ageing in oxygen for non-metallic materials“ dated 12.04.2018.
- Additionally, the non-metallic materials were positively tested for the application in gaseous oxygen, for the maximum working overpressures listed below (testing for reactivity with oxygen under the influence of oxygen pressure surges).

The following BAM Test reports and/or procedure numbers cover all the types listed for construction series "400":

- 2-76/2012 of 11.09.12
- BZS-GS/173/11;
- 2-2002/2013 I of 06.09.13
- BZS-GS/126/13;
- 2-1910/2014 of 10.07.14
- BZS-GS/056/14;
- 2-1830/2014 of 16.01.15;
- 18006872 of 07.08.18
- BZS-GS/019/18;
- BZS-GS/065/18;
- 15041150 of 11.09.2018;
- 18041529-I of 26.11.2019

Type	Ident.-No.	max. connectable inner tube/hose diameter in mm	BAM Test report and/or procedure number	max. operating overpressure (MPa)	
				fuel gases	acetylene oxygen
DKT-F	122	10	2-2484/2014 of 24.11.15	2.0	0.15
DKT-O	123	10		-	-
DKG-F	125	10		2.0	0.15
DKG-O	126	10		-	-
DKD-F	127	10		2.0	0.15
DKD-O	128	10		-	-
DKT-W-F	133	10		2.0	0.15
DKT-W-O	134	10		-	-
DKG-W-F	136	10		2.0	0.15
DKG-W-O	137	10		-	-
DKD-W-F	138	10		2.0	0.15
DKD-W-O	139	10		-	-

Berlin, xxth August 2022

Place / date

Signature (BAM Certification Officer)

