



Gas welding equipment
Certificate N°: BAM/ZBA/007/03
9th Revised Version



BAM

Bundesanstalt für
 Materialforschung
 und -prüfung

Hereby it is certified by the BAM certification body that the

Gas welding equipment - Safety devices and quick-action couplings
with the designations and terms of application 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 procedure

**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 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 August, 2028.

The test reports and/or procedure numbers listed in the annex to this certificate form the basis of this document.

for Bundesanstalt für Materialforschung und -prüfung (BAM)
 Unter den Eichen 87, 12200 Berlin, **2022-01-12**

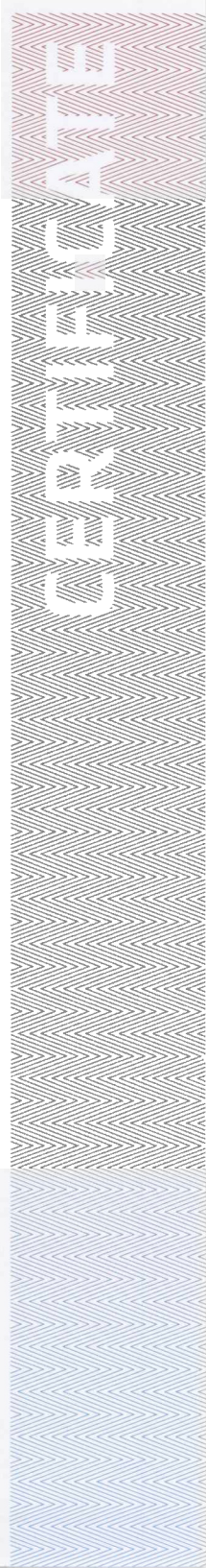
Dr. S. Aris
 BAM Certification Officer



Distribution list: 1st Manufacturer

2nd BAM Certification Body

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Annex: Products of Company IBEDA within the scope of Certificate N° BAM/ZBA/007/03, 9th Revised Version

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, for the respective gases and maximum working overpressures. 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.

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).

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

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

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
- 2-1830/2014 of 16.01.15 - BZS-GS/019/18;
- BZS-GS/079/15 of 31.08.18; - BZS-GS/065/18 of 31.08.18;
- BZS-GS/070/18 of 31.08.18
- 15041150 of 11.09.2018
- 18041529-I of 26.11.2019

Additional BAM test reports and/or procedure numbers specific to certain types are listed in the table below:

Type	Ident.-No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	max. operating overpressure (MPa)						
				fuel gases			Com-pressed air	oxygen	with stainless steel filter	without filter
				acetylene	propane	methane				
DG	01	10	II-699 of 18.03.99; BZS-GS/41/06 of 10.07.06; BZS-GS/054/14 of 10.07.14	0.15	0.50	0.50	0.35	2.50	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 of 10.07.06; 2-2002/2013 II of 06.09.13 BZS-GS/126/13 BZS-GS/054/14 of 10.07.14	0.15	0.50	0.50	0.35	2.50	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
DCNDK	04	10	10120/94; 4-5385 of 20.07.95; II-2877/95 of 28.07.95; BZS-GS/41/06 of 10.07.06; 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; BZS-GS/054/14 of 10.07.14	0.15	0.50	0.50	0.25	2.50	2.50	2.50	
DGN-U	105			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 of 10.07.06; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14 of 10.07.14; 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 of 05.12.04; BZS-GS/41/06 of 10.07.06; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14 of 10.07.14; 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 of 10.07.14; 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 I of 01.04.10; 2-2002/2013 II of 06.09.13 BZS-GS/126/13; BZS-GS/054/14 of 10.07.14	0.15	0.50	0.50	0.35	2.50	2.50	2.50	
FR	01	10	BZS-GS/179/09 I of 01.04.10; BZS-GS/054/14 of 10.07.14	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;
- BZS-GS/060/12;
- 2-1964/2012 of 06.03.13;
- BZS-GS/079/15 of 31.08.18;
- 18006872 of 07.08.18
- BZS-GS/019/18;
- BZS-GS/065/18 of 31.08.18;
- BZS-GS/070/18 of 31.08.18
- 15041150 of 11.09.2018
- 18041529-I of 26.11.2019

Additional BAM test reports and/or procedure numbers specific to certain types are listed in the table below:

Type	Ident.- No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	max. operating overpressure (MPa)							
				fuel gases			Com- pressed air	oxygen with stainless steel filter	oxygen without filter		
				acetylene	propane	methane				hydrogen	
SR	106	10	BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	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 of 10.07.14;	0.15	0.50	0.50	0.35		2.50	2.50	2.50
SHT	114	10	2-1830/2014 of 16.01.15 BZS-GS/115/13 of 29.07.13; BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	2.50	-	2.50
TDK	110	10	-	0.15	0.40	0.40	0.40	0.40	-	2.00	2.00
GDK	111	10	BZS-GS/115/13 of 29.07.13;	0.15	0.40	0.40	0.40	0.40	-	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	0.40	-	2.00	2.00
GT	113	10	BZS-GS/115/13 of 29.07.13; BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	2.00	2.00	2.00
GG	114	10	BZS-GS/115/13 of 29.07.13; BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	2.50	2.50	2.50
TT	115	10	BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	2.00	2.00	2.00
DKST	118	10	-	0.15	0.40	0.40	0.40	0.40	-	2.00	2.00
DKSG	119										
GG-A	120	10	BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	2.00	-	2.00
IGG	121	10	BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	2.00	2.00	2.00
FT	113/ 114/ 115	10	BZS-GS/179/09 II of 30.06.10 BZS-GS/115/13 of 29.07.13; BZS-GS/054/14 of 10.07.14	0.15	0.40	0.40	0.40	0.40	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 of 28.08.13;
- 2-2002/2013 II of 06.09.13
- BZS-GS/126/13;
- 2-1830/2014 of 16.01.15;
- BZS-GS/109/15 of 18.01.16;
- BZS-GS/079/15 of 31.08.18;
- 18006872 of 07.08.18
- BZS-GS/019/18;
- BZS-GS/065/18 of 31.08.18;
- 15041150 of 11.09.2018
- 18041529-I of 26.11.2019

Additional BAM test reports and/or procedure numbers specific to certain types are listed in the table below:

Type	Ident.- No.	max. connectable inner tube/hose diameter (in mm)	Additional BAM Test report and/or procedure number	max. operating overpressure (MPa)					
				fuel gases			com- pressed air		oxygen
				acetylene	propane	methane	hydrogen	with stainless steel filter	without filter
DG91-20	142	10	II-65/2000 of 13.1.00; BZS-GS/41/06 of 10.07.06; BZS-GS/054/14 of 10.07.14; BZS-GS/033/18 of 31.08.18	-	0.25	0.25	-	2.50	2.50
DG91-UA-20	143								
DG91-U-20	76	10	BZS/45/08; II-1149/2008 of 04.07.08; BZS-GS/054/14 of 10.07.14; II-1149/2008 a of 28.09.16	-	0.25	0.25 (natural gas)	-	2.50	2.50
DG91	05	10	6420/98; II-5424 of 16.11.98; BZS-GS/41/06 of 10.07.06; BZS-GS/054/14 of 10.07.14	0.15	0.50	0.50	0.40	2.50	2.50
DG91UA	07								
DG91N	06	10	II-5190/98 of 16.10.98; BZS-GS/41/06 of 10.07.06 BZS-48/07 of 12.06.07; BZS-GS/054/14 of 10.07.14	0.15	0.50	0.50	0.40	2.50	2.50
DG91NH 0,5	36	10	II-1293 of 16.03.99; BZS-GS/41/06 of 10.07.06; BZS-GS/054/14 of 10.07.14	0.25	1.00	1.00	1.00	-	-
DS2000	49	10	II-5192/98 of 16.10.98; II-2655/2001; BZS-GS/41/06 of 10.07.06; BZS-GS/054/14 of 10.07.14; 2-2484/2014 of 24.11.15	0.15	0.50	0.50	0.40	1.50	1.50
DS2000-30°	49	10	2-253/2012 of 10.02.12; BZS-GS/054/14 of 10.07.14; 2-2484/2014 of 24.11.15	0.15	0.50	0.50	0.40	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	with stainless steel filter	oxygen without filter
						acetylene	propane	methane			
SIMAX 3N	98	25	II-388/99 of 10.03.99;	0.15	-	-	-	2.50	2.50	-	
SIMAX 5N	98		II-2012/2003 of 24.07.03;	0.15	-	-	-	2.50	2.50	-	
SIMAX 8N	98		BZS-GS/41/06 of 10.07.06; BZS-GS/101/10 I, II-2107/2010 of 21.07.10; BZS-GS/156/13 of 13.08.13; BZS-GS/054/14 of 10.07.14; BZS-GS/021/18 of 12.09.2019	0.15	-	-	-	2.50	2.50	-	
SIMAX3-20	99	25	II-65/2000 of 13.1.00;	-	0.25	0.25	-	2.50	2.50	-	
SIMAX5-20			BZS-GS/41/06 of 10.07.06;								
SIMAX8-20			BZS-GS/156/13 of 13.08.13; BZS-GS/054/14 of 10.07.14; BZS-GS/021/18 of 12.09.2019								
SIMAX4-20	99	40	BZS/45/08;	-	0.25	0.25	-	2.50	2.50	-	
			II-1149/2008 of 04.07.08; BZS-GS/054/14 of 10.07.14; II-1149/2008 a of 28.09.16								
SIMAX3 NH 0,5	77	25	BZS/85/08; II-1838/2008 of 25.07.08; BZS-GS/156/13 of 13.08.13; BZS-GS/021/18 of 12.09.2019	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, for the respective gases and maximum operating overpressures.

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
- 2-1910/2014 of 10.07.14
- BZS-GS/173/11;
- BZS-GS/056/14;
- 2-2002/2013 I of 06.09.13
- 2-1830/2014 of 16.01.15;
- BZS-GS/126/13;
- 18006872 of 07.08.18
- BZS-GS/019/18;
- BZS-GS/065/18 of 31.08.18;
- 15041150 of 11.09.2018;
- 18041529-I of 26.11.2019

Additional BAM test reports and/or procedure numbers specific to certain types are listed in the table below:

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	2.0
DKT-O	123	10				
DKG-F	125	10			0.15	
DKG-O	126	10				2.0
DKD-F	127	10			0.15	
DKD-O	128	10				2.0
DKT-W-F	133	10			0.15	
DKT-W-O	134	10				2.0
DKG-W-F	136	10			0.15	
DKG-W-O	137	10				2.0
DKD-W-F	138	10			0.15	
DKD-W-O	139	10				2.0

Berlin, January 12th, 2022

Place / date



Signature (BAM Certification Body)