



1. **EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**

3. EC-Type Examination Certificate Number: **ITS03ATEX21357U**

4. Component: **BDI Burst Disc Indicator**

5. Manufacturer: **CONTINENTAL DISC CORPORATION**

6. Address: **3160 West Heartland Drive
Liberty
Missouri 64068-3385
USA**

7. This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8. Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive 94/9/EC of 23 March 1994.



The examination and test results are recorded in confidential Intertek Report Ref 11051417B dated July 2011.

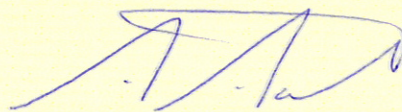
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2009, EN 60079-11:2007 and EN 61241-11:2006 except in respect of those requirements referred to at item 18 of the Schedule.

10. The sign "U" is placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

11. This EC Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12. The marking of the equipment or protective system shall include the following:-

 II 2 G, Ex ia IIC Gb
 II 2 D, Ex ia IIIC Db
(Tamb = -40°C to + 204°C)



A T Austin
Certification Officer
20th July 2011

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13. SCHEDULE

14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS03ATEX21357U

15. DESCRIPTION OF COMPONENT

The BDI BURST DISC INDICATOR consists essentially of two parallel flexible copper or tantalum strips located between layers of Kapton film. The strips are linked at the end remote from the electrical connections. The centre section of each strip is reduced in width.

The copper or tantalum strip assembly is mounted on a Teflon membrane and is installed between pipeline flanges. The assembly may be integral with a bursting disc or mounted separately from, but adjacent to, a bursting disc.

The maximum intrinsically safe input parameters are as follows:

$U_i = 24V$ dc

$I_i = 50$ mA

$P_i = 0.3W$

The equivalent parameters are:

$C_i = 0$

$L_i = 0$

16. REPORT NUMBER

Intertek Report Ref 11051417B dated July 2011.

17. SCHEDULE OF LIMITATIONS

1. The arrangements for connection of the external circuits must comply with the requirements of clause 6.2 of EN 60079-11:2007
2. The component must be housed in an enclosure which provides a degree of protection of at least IP 20.
3. The final installation shall comply with the 500 Volt electrical strength test requirement of clause 6.3.12 of EN 60079-11:2007
4. The installation shall prevent electrostatic charging of the BDI strip, which is non-conductive and may exceed the surface area limitations of EN 60079-0:2009 clause 7.4.2

18. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSR'S)

The relevant EHSR's have been identified and assessed originally in Intertek Report Ref 11051417B dated July 2011.

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19. DRAWINGS

Number	Sheet	Title	Issue	Date
MEB-XXXX-73-DX-UBD	1 of 2	1"-3" Universal Burst Disc Indicator Flat Membrane For PN 10/40 DIN Bolting	C	5-11-11
MEB-XXXX-73-DX-UBD	2 of 2	4"-36" Universal Burst Disc Indicator Flat Membrane For PN 10/40 DIN Bolting	C	5-11-11
MEB-XXXX-73-J1-UBD	1 of 2	1"-3" Universal Burst Disc Indicator Flat Membrane For JIS Bolting	B	5-11-11
MEB-XXXX-73-J1-UBD	2 of 2	4"-36" Universal Burst Disc Indicator Flat Membrane For JIS Bolting	B	5-11-11
UBD-XXXX-DX-XXXXXX	1 of 3	1"-3" Universal Burst Disc Indicator Assembly For PN 10/40 DIN Bolting	H	5-11-11
UBD-XXXX-DX-XXXXXX	2 of 3	4"-12" Universal Burst Disc Indicator Assembly For PN 10/40 DIN Bolting	H	5-11-11
UBD-XXXX-DX-XXXXXX	3 of 3	14"-36" Universal Burst Disc Indicator Assembly For PN 10/40 DIN Bolting	H	5-11-11
UBD-XXXX-J1-XXXXXX	1 of 3	1"-3" Universal Burst Disc Indicator Assembly For JIS Bolting	B	5-11-11
UBD-XXXX-J1-XXXXXX	2 of 3	4"-12" Universal Burst Disc Indicator Assembly For JIS Bolting	B	5-11-11
UBD-XXXX-J1-XXXXXX	3 of 3	14"-36" Universal Burst Disc Indicator Assembly For JIS Bolting	B	5-11-11
UBT-XXXX-DX-XXXXXX		1"-3" Tantalum Universal Burst Disc Indicator Assembly For PN 10/40 DIN Bolting	B	5-11-11
BET-XXXX-D3-XXXXXX		4"-36" Tantalum ENVIRO-SEAL I Burst Disc Indicator Assembly For PN 10/16 and PN 10 Bolting	A	5-11-11
UBT-XXXX-AX-XXXXXX	1 of 2	1" to 3" Tantalum Universal Burst Disc Indicator Assembly	C	5-11-11
UBT-XXXX-AX-XXXXXX	2 of 2	4" to 36" Tantalum Universal Burst Disc Indicator Assembly	C	5-11-11
BET-XXXX-A1-XXXXXX		1" to 36" Tantalum ENVIRO-SEAL I Burst Disc Indicator Assembly	B	5-11-11
UBL-0X0X-A1-XXXXXX		1" to 2" Tantalum Universal Burst Disc Indicator Assembly for Low Pressure	A	5-11-11
STP-XX00-08-XX-BDI		3" to 12" Tantalum Burst Disc Indicator Strip for Integral BDI's	H	5-11-11
LMD-BSL-1001-01		Burst Disc Indicator Strip Label	AC	7-20-11
UBD-XXXX-AX-XXXXXX	1 of 3	1" to 3" Universal Burst Disc Indicator Assembly For ANSI Bolting	V	5-11-11
UBD-XXXX-AX-XXXXXX	2 of 3	4" to 12" Universal Burst Disc Indicator Assembly For ANSI Bolting	V	5-11-11
UBD-XXXX-AX-XXXXXX	3 of 3	14" to 36" Universal Burst Disc Indicator Assembly For ANSI Bolting	V	5-11-11

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14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS03ATEX21357U

19. DRAWINGS Cont...

Number	Sheet	Title	Issue	Date
MEB-XXXX-73-AX-UBD		1" to 3" Universal Burst Disc Indicator Flat Membrane for ANSI Bolting	F	5-11-11
MEB-XXXX-73-XX-UBD		4" to 36" Universal Burst Disc Indicator Formed Membrane for ANSI Bolting	F	5-11-11
STP-XX0X-24-XX-BDI		1" to 12" Copper Burst Disc Indicator Strip	H	5-11-11
STP-XX00-24-XX-BDI		14" and Larger Copper Burst Disc Indicator Strip	R	5-11-11
SBD-XXXX-SF-XXXXXX	1 of 2	1"-4" Sanitary BDI Continental Burst Disc	A	7-1-11
SBD-XXXX-SF-XXXXXX	2 of 2	1"-4" Sanitary BDI Continental Burst Disc	A	7-1-11
BDA-0100-SF-XXXXXX	1 of 2	Sanitrx LP NA/Sanitrx MP NA Continental Burst Disc Indicator Assembly, 1"	B	7-1-11
BDA-0100-SF-XXXXXX	2 of 2	Sanitrx LP NA/Sanitrx MP NA Continental Burst Disc Indicator Assembly, 1"	B	7-1-11
BDA-0XOX-SF-XXXXXX	1 of 2	Sanitrx NA/Sanitrx LP NA/Sanitrx MP NA Continental Burst Disc Indicator Assembly Sizes 1 1/2" thru 4"	E	7-1-11
BDA-0XOX-SF-XXXXXX	2 of 2	Sanitrx NA/Sanitrx LP NA/Sanitrx MP NA Continental Burst Disc Indicator Assembly Sizes 1 1/2" thru 4"	E	7-1-11
BDS-0100-SF-XXXXXX	1 of 2	Sanitrx LP/Sanitrx MP Continental Burst Disc Indicator Assembly, 1"	B	7-1-11
BDS-0100-SF-XXXXXX	2 of 2	Sanitrx LP/Sanitrx MP Continental Burst Disc Indicator Assembly, 1"	B	7-1-11
BDS-0XOX-SF-XXXXXX	1 of 2	Sanitrx/Sanitrx LP/Sanitrx MP Continental Burst Disc Indicator Assembly Sizes 1 1/2" Thru 4"	N	7-1-11
BDS-0XOX-SF-XXXXXX	2 of 2	Sanitrx/Sanitrx LP/Sanitrx MP Continental Burst Disc Indicator Assembly Sizes 1 1/2" Thru 4"	N	7-1-11

20. REVISIONS

Issue 2: IS Parameters Pi amended (10 February 2005)

Issue 3: Drawing List updated (14 March 2008)
 Typographical errors corrected
 Schedule of limitation item 3 added.

Issue 4: IDrawing List updated (23 July 2009)
 Additional alternative flexible tantalum strips
 Typographical error corrected

Issue 5: Standards updated, new drawing list
 Schedule of limitation item 4 added

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

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