Certificate no: Page 1 of 2 HSN1710249/01



CERTIFICATE OF ASSESSMENT to ATEX Directive (2014/34/EU)

Project: Rupture Discs and Holders

Client: Continental Disc Corporation

3160 West Heartland Drive Liberty, MO 64068 USA

Client's Order Number: LR-REF-HSN1710249 Date: 12 July 2017

Order Status: **Complete**

Houston

Office:

Inspection Dates

First: **09 May 2017** Final: **12 July 2017**

This certificate is issued to Continental Disc Corporation, to state that the series of equipment detailed below has been assessed to comply with the Essential Health and Safety requirements that relate to the design of Category 2 GD equipment, which is intended for use in potentially explosive atmosphere. The Essential Health and Safety Requirements are given in Annex II of ATEX Directive 2014/34/EU.

Equipment or Protective System Intended for Use in Potentially Explosive Atmospheres

Certificate Number: HSN1710249/01

Equipment: Rupture Discs and Holders
Manufacturer: Continental Disc Corporation

Address: 3160 West Heartland Drive, Liberty, MO 64068 USA

- The assessed equipment is specified in the Description of Equipment to this certificate and the documents therein referred to.
- The assessment and review of documentation are recorded in confidential reports no.:

HSN1710249/IC/XM/001

- Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed against Annex II of 2014/34/EU and with reference to following harmonised standards:

EN 1127-1:2011 EN 80079-36:2016

- This Certificate relates only to the assessment of design through document review of the specified equipment for the relevant clauses of the Essential Health & Safety Requirements of ATEX.
- The marking of the equipment shall include the following:

Note: Temperature Class Tx is determined based on the service temperature, i.e., the maximum temperature of process fluid.

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Description of Equipment:

- Continental Disc Corporation Rupture Disc and Holder Assemblies including Reverse Acting, Tension/Forward Acting, Ultra-Low Pressure Composite types. The detailed list of product models and ranges are listed in assessment report HSN1710249/IC/XM/001 referenced in this certificate.

Descriptive Documents:

- This certificate is issued based on assessment of documents provided by Continental Disc Corporation on May 09 2017 and subsequent amendments as of July 11 2017. The complete descriptive documents and drawings are listed in the assessment report no. HSN1710249/IC/XM/001 referenced in this certificate.

Conditions for Safe Use:

- Magnesium, Titanium or Zirconium in total of more than 7.5% by mass shall not be used or be assembled at the downstream for MRA, WMR, STD, FAS, FAV, WMP, WSP rupture disc types for Zone 1 or Zone 21 hazardous locations.
- Aluminium, magnesium or titanium in combination with ferritic steel shall not be used or be assembled when mechanical impact of the equipment may be a concern.
- Aluminium in combination with stainless steel shall not be constructed jointly when installing rupture disc assembly with piping or flanges. If both materials are used they shall be isolated such that cathode corrosion will not occur.

Essential Health and Safety Requirements of Annex II (EHSRs):

- Based on the review and assessment of the equipment as per the applicable contents of Annex II of 2014/34/EU as shown above, the Continental Disc Corporation series Rupture Disc and Holders as detailed above is considered to meet the applicable essential health and safety requirements of ATEX Directive. The relevant EHSRs have been identified in Report No. HSN1710249/IC/XM/001.
- -The Technical Construction File has been stored in accordance with Article 13 Item (1)(b)(ii) of the ATEX Directive 2014/34/EU.

END OF CERTIFICATE



Xiuping Mu, Ph.D., P.E. Technical Specialist to Lloyd's Register Quality Assurance, Inc. 1330 Enclave Parkway Suite 200, Houston, TX 77077 USA.

A subsidiary of Lloyd's Register Group Limited