# TYPE EXAMINATION
## CERTIFICATE

**Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**

1. **Type Examination Certificate Number: ITS19ATEX14526X Issue 00**

2. **Product:** Model WDG-V UOP gas analyzer.

3. **Manufacturer:** **Ametek Process & Analytical Instruments**

4. **Address:** 150 Freeport Road
Pittsburgh, PA 15238
USA

5. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

6. Intertek Testing and Certification Limited, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the products intended for use in potentially explosive atmospheres given in Annex II of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2018 and EN 60079-2: 2014 except in respect of those requirements referred to within item 14 of the Schedule

8. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.

9. This Type Examination Certificate relates only to the design of the specified product and not to specific items subsequently manufactured.

10. The marking of the product shall include the following:

II 3 G

Ex pzc IIC T3 Gc

-20°C to +60°C

**Certification Officer:** Kevin J. Wolf **Date:** 30 Septemebr 2019

Kevin J. Wolf

# SCHEDULE:

**TYPE EXAMINATION CERTIFICATE NUMBER ITS19ATEX14526X - Issue 00**

## 11. Description of Equipment or Protective System

Model WDG-V UOP gas analyser.

The AMETEK Model WDG-V UOP is an oxygen analyzer. The oxygen measurement is achieved with a Zirconium Oxide cell heated to 680 deg C. The WDG-V UOP is typically used in petrochemical process to measure the concentrations of oxygen of UOP CCR (Continuous Catalyst Regeneration) platforming process.

The equipment is intended to be permanently installed in a Zone 2 hazardous location and utilizes type pzc (Equipment protection by pressurized enclosure) protection.

**Purge system ratings:**

- Purge air: Clean dry instrument air -20°C to +60°C, 80 – 120 PSI / 5.5 to 8.3 bar)
- Overpressure: 0.15" H2O min, 0.35" H2O max,
- Leakage rate: 15 LPM

## 12. Report Number

Intertek Report: 103772901CRT-002 Dated: 30 September 2019.

## 13. Conditions of Certification

(a). Special Conditions of Use

• Do not open the enclosure unless the power is removed from both sensor and control unit for 90 minutes while maintaining pressurization, or the area is demonstrated to be non-hazardous.

• Use only appropriate approved conduit fittings or cable glands for cable entry (IIC, IP40 minimum). no holes shall be left unplugged.

• Internal temperature rises above the rated T-class. The end user must take immediate action on the loss of pressure to reinstate purge.

(b). Conditions of Manufacture - Routine Tests per EN 60079-2: 2014

• Functional test

The performance of safety devices provided with the pressurized enclosure shall be verified (indication upon loss of pressure).

• Leakage test

The pressure in the pressurized enclosure shall be adjusted to the maximum overpressure specified by the manufacturer for normal service. With the outlet aperture closed, the leakage flow rate shall be measured at the inlet aperture. The leakage rate shall not exceed the equipment leakage rating.

## 14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) affected by this variation have been identified and assessed in Intertek Report: 103772901CRT-002 Dated: 30 September 2019.

## 15. Drawings and Documents

| Title: | Drawing No.: | Rev. Level: | Date: |
|---|---|---|---|
| ASSY, SENSOR, WDG-V UP W/ISOLATION VALVES, ATEX IIC | 9700-148-VE | A | 04-SEP-2019 |
| Thermox ATEX WGD-V UP Essential Health & Safety Requirements | 9000-279-VE | C | -- |
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