

CERTIFICATE

of Product Conformity (QAL1)

Certificate No.: 0000033596

Certified AMS: AMESA-D for the long-term sampling of dioxins and furans

Manufacturer: Environnement S.A. Deutschland
Benzstraße 11
61352 Bad Homburg
Germany

Test Institute: TÜV Rheinland Energie und Umwelt GmbH

**This is to certify that the AMS has been tested
and found to comply with:**

**Uniform Practice in monitoring emissions*
and EN 15267-1: 2009 and EN 15267-2: 2009**

Certification is awarded in respect of the conditions stated in this certificate
(see also the following pages).



Suitability Tested
QAL1 Certified
EN 15267
Regular
Surveillance

www.tuv.com
ID 0000033596

Publication in the German Federal Gazette
(BAnz.) of 01 April 2014

This certificate will expire on:
31 March 2019

German Federal Environment Agency
Dessau, 29 April 2014

TÜV Rheinland Energie und Umwelt GmbH
Cologne, 28 April 2014



i. A. Dr. Marcel Langner



ppa. Dr. Peter Wilbring

www.umwelt-tuv.de / www.eco-tuv.com
teu@umwelt-tuv.de
Tel. +49 221 806-5200

TÜV Rheinland Energie und Umwelt GmbH
Am Grauen Stein
51105 Cologne

Accreditation according to EN ISO/IEC 17025 and certified according to ISO 9001:2008.

* Uniform Practice in monitoring emissions, - Circular from the Federal Environment Ministry of June 13, 2005 - IG I 2 - 45053/5 - and August 4, 2010 - IG I 2 - 51134/0

Test report:	936/21221445/A of 09 October 2013
Initial certification:	01 April 2014
Expiry date:	31 March 2019
Publication:	BAnz AT 01 April 2014 B12, chapter III, No. 1.1

Approved application

The tested long term sampling system is suitable for use for continuous sampling of dioxins and furans. The tested ranges have been chosen with respect to the wide application range of the AMS.

The suitability of the AMS for this application was assessed on the basis of a laboratory test and a fourteen-month field test at two waste incinerators.

The AMS is approved for an ambient temperature range of +5 °C to +40 °C.

Any potential user should ensure, in consultation with the manufacturer, that this AMS is suitable for the installation at which it will be installed.

Basis of the certification

This certification is based on:

- test report 936/21221445/A of 09 October 2013 of TÜV Rheinland Energie und Umwelt GmbH
- suitability announced by the German Federal Environment Agency (UBA) as the relevant body
- the ongoing surveillance of the product and the manufacturing process
- publication in the German Federal Gazette (BAnz AT 01 April 2014 B12, chapter III, No. 1.1, Announcement by UBA from 27 February 2014)

AMS designation:

AMESA-D for the long-term sampling of dioxins and furans

Manufacturer:

Environnement S.A. Germany, Bad Homburg

Field of application:

Continuous sampling of dioxins/furans

Measuring ranges during the performance test:

Velocity	1.1 - 30	m/s
Dioxin*	up to 0.5	ng/m ³ TEQ

*with 260 m³ flue gas to 70 g XAD-2

Software version:

P86.017.0

Restriction:

The performance criterion as related to losses during sampling was not fulfilled in the 6-hour comparison measurements. Therefore, the probe tube shall be rinsed before and after the comparison measurements and the result of the analysis of the rinsing solution after measurement shall be added to the analysed value.

Note:

The integrated velocity measuring system cannot be used in saturated exhaust gas.

Test report:

TÜV Rheinland Energie und Umwelt GmbH, Cologne
Report No.: 936/21221445/A of 9 October 2013

Certified product

This certificate applies to automated measurement systems conforming to the following description: The AMESA-D dioxin/furan monitoring system isokinetically samples a partial flow of the flue gas. Dioxins and furans are adsorbed on a replaceable cartridge filled with adsorber resin. AMESA-D is fully automatic and saves all necessary data internally. The data can be transferred to an USB stick using an USB interface. Data transfer is also possible via internet. The amount of dioxins/furans (PCDD/PCDF) over the variable period of 4 hours to 6 weeks is determined in an accredited laboratory.

The AMESA D system comprises:

- a cooled glass probe (during performance testing 2 materials were tested but only glass proved to be suitable at the field test location) with velocity measurement (velocity pressure) and temperature measurement
- a cartridge box with adsorber cartridge and process computer to measurement data recording and Control
- a measuring cabinet with:
 - sample gas cooler with condensation separator
 - mass flow meter
 - gas meter
 - pump

General notes

This certificate is based upon the equipment tested. The manufacturer is responsible for ensuring that on-going production complies with the requirements of the EN 15267. The manufacturer is required to maintain an approved quality management system controlling the manufacture of the certified product. Both the product and the quality management systems shall be subject to regular surveillance.

If a product of the current production does not conform to the certified product, TÜV Rheinland Energie und Umwelt GmbH must be notified at the address given on page 1.

A certification mark with an ID-Number that is specific to the certified product is presented on page 1 of this certificate. This can be applied to the product or used in publicity material for the certified product.

This document as well as the certification mark remains property of TÜV Rheinland Energie und Umwelt GmbH. With revocation of the publication the certificate loses its validity. After the expiration of the certificate and on requests of the TÜV Rheinland Energie und Umwelt GmbH this document shall be returned and the certificate mark must not be employed anymore.

The relevant version of this certificate and its expiration is also accessible on the internet: qal1.de.

Certification of AMESA-D for the long-term sampling of dioxins and furans is based on the documents listed below and the regular, continuous monitoring of the Quality Management System of the manufacturer:

Initial certification according to EN 15267

Certificate No. 0000033596: 29 April 2014

Expiry date of the certificate: 31 March 2019

Test report: 936/21221445/A of 9 October 2013
TÜV Rheinland Energie und Umwelt GmbH, Cologne

Publication: BAnz AT 01 April 2014 B12, chapter III, No. 1.1
Announcement by UBA from 27 February 2014

CONFIRMATION

Notification on changes according to EN 15267 regarding
certificate 0000033596 dated 29 April 2014

Measuring system: AMESA-D for the long term sampling of dioxins and furans

Manufacturer: Environnement S.A. Deutschland
Benzstraße 11
61352 Bad Homburg
Germany

German Federal Environmental Agency (UBA)

**Announcement about the uniform practice in
monitoring emissions and ambient air.**

22 July 2015

Federal Gazette: BAnz AT 26 August 2015 B4

**V Notifications to the uniform practice for the continuous monitoring of
emission and ambient air:**

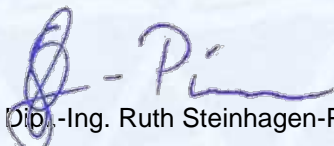
22 Notification as regards Federal Environment Agency (UBA) notice of 27 February 2014
(Federal Gazette (BAnz.) AT 1 April 2014 B12, chapter III number 1.1)

The current software version for the AMESA-D for dioxins / furans long-term sampling
system, manufactured by Environnement S.A. Deutschland, is:

P86.019.9

Statement of TÜV Rheinland Energie und Umwelt GmbH of 25 March 2015

TÜV Rheinland Energie und Umwelt GmbH
Cologne, 04 November 2015


i. A. Dipl.-Ing. Ruth Steinhagen-Pinnow


i. A. Dipl. Ing. Carsten Röllig

www.umwelt-tuv.de
teu@umwelt-tuv.de
Tel. +49 221 806-5200

TÜV Rheinland Energie und Umwelt GmbH
Am Grauen Stein
51105 Cologne

Test institute accredited to EN ISO/IEC 17025:2005 by DAkkS (German Accreditation Body). This accreditation is
limited to the accreditation scope defined in the enclosure to the certificate D-PL-11120-02-00.

CONFIRMATION

Notification: 0000033596_00_02
on changes according to EN 15267 regarding certificate 0000033596_00 dated 29 April 2014

Measuring system: AMESA-D long-term sampling system for dioxins/furans

Manufacturer: Environnement S.A. Deutschland
Benzstraße 11
61352 Bad Homburg
Germany

German Federal Environmental Agency (UBA)

**Announcement about the uniform practice in
monitoring emissions and ambient air
dated 14 July 2016
Federal Gazette: BAnz AT 01.08.2016 B11**

**V. Notifications to the uniform practice for the continuous monitoring
of emission and ambient air:**

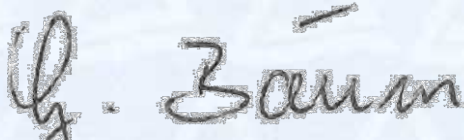
**4 Notification as regards Federal Environmental Agency (UBA) notices
of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and
of 22 July 2015 (BAnz AT 26.08.2015 B4 chapter V notification 22)**

The current software version of the AMESA-D long-term sampling system for dioxins/furans
manufactured by Environnement S.A. Deutschland is:
P86.020.1

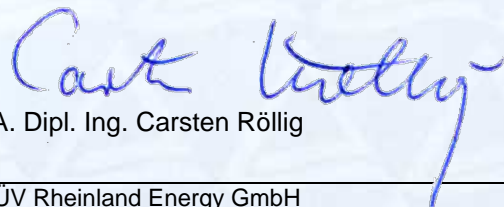
The 10A power supply type QUINT-PS-100-240AC/24DC/10-2938604 which has been used
so far will be replaced by the QUINT-PS/1AC/24DC/10-2866763 model in the future.
The 2.5A power supply type QUINT-PS-100-240AC/24DC/2.5-2938578 which has been used
so far will be replaced by the QUINT-PS/1AC/24DC/3.5-2866747 model in the future.

Statement issued by TÜV Rheinland Energie und Umwelt GmbH
dated 28 February 2016.

TÜV Rheinland Energy GmbH
Cologne, 18 August 2016



i. V. Dipl.-Ing. Guido Baum



i. A. Dipl. Ing. Carsten Röllig

www.umwelt-tuv.eu
tre@umwelt-tuv.eu
Tel. +49 221 806-5200

TÜV Rheinland Energy GmbH
Am Grauen Stein
51105 Cologne

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CONFIRMATION

Notification: 0000033596_00_03
on changes according to EN 15267 regarding certificate 0000033596_00 dated 29 April 2014

AMS designation: AMESA-D for long-term sampling of dioxins/furans

Manufacturer: Environnement S.A. Deutschland
Benzstraße 11
61352 Bad Homburg
Germany

German Federal Environment Agency (UBA)

**Announcement regarding the uniform practice in
monitoring emissions and ambient air
dated 13 July 2017
Publication: BAnz AT 31.07.2017 B12**

**II. Notifications as regards the uniform practice for the continuous monitoring
of emission and ambient air:**


**15 Notification as regards Federal Environment Agency notices
of 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and
of 14 July 2016 (BAnz AT 01.08.2016 B11, chapter V 4th notification)**


The current software version of the AMESA-D long-term sampling system for dioxins/furans
manufactured by Environnement S.A. Deutschland is: P86.020.6

The Hitachi L200 frequency converter used so far has now been replaced by the successor
model Hitachi WL200.

Statement issued by TÜV Rheinland Energy GmbH dated 5 January 2017

TÜV Rheinland Energy GmbH
Cologne, 08 September 2017


i. V. Dipl.-Ing. Guido Baum


i. A. Dipl.-Ing. Carsten Röllig

www.umwelt-tuv.eu
tre@umwelt-tuv.eu
Tel. +49 221 806-5200

TÜV Rheinland Energy GmbH
Am Grauen Stein
51105 Köln

Test institute accredited to EN ISO/IEC 17025:2005 by DAkkS (German Accreditation Body).
This accreditation is limited to the accreditation scope defined in the enclosure to the certificate D-PL-11120-02-00.

CONFIRMATION

Notification: 0000033596_00_04
on changes according to EN 15267 regarding Certificate no. 0000033596_00 dated 29 April 2014

AMS designation: AMESA-D for dioxins/furans

Manufacturer: Environnement SA Deutschland
Benzstraße 11
61352 Bad Homburg
Germany

German Federal Environment Agency (UBA)

Announcement regarding the uniform practice in
monitoring emissions and ambient air
dated 3 July 2018
Publication: BAnz AT 17.07.2018 B9

III. Notifications as regards the uniform practice for the continuous monitoring of emissions and ambient air:

11 Notification as regards Federal Environment Agency (UBA) notices dated 27 February 2014 (BAnz AT 01.04.2014 B12, chapter III number 1.1) and dated 13 July 2017 (BAnz AT 31.07.2017 B12, chapter II 15th notification)


The current software version of the AMESA-D long-term sampling system for dioxins/furans manufactured by Environnement S.A. Deutschland is:

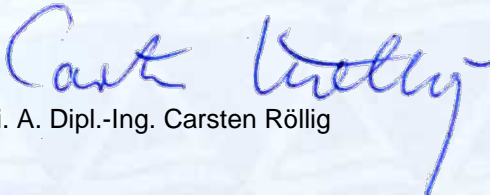
P86.020.7

The CP-Single pump manufactured by Bühler Technologies replaces the peristaltic pump, type SP04 G/1, by the same manufacturer used for condensate draining so far.

Statement issued by TÜV Rheinland Energy GmbH dated 20 February 2018

TÜV Rheinland Energy GmbH
Cologne, 1 August 2018


i. V. Dipl.-Ing. Guido Baum


i. A. Dipl.-Ing. Carsten Röllig

www.umwelt-tuv.eu
tre@umwelt-tuv.eu
Phone: +49 221 806-5200

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Am Grauen Stein
51105 Köln

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