

# CERTIFICATE

## of Product Conformity (QAL1)

Certificate No.: 0000085397\_00

**Certified AMS:** DECS® for Longterm-Sampling of PCDD/F

**Manufacturer:** TCR Tecora srl.  
Via delle Primule, 16  
20815 Cogliate (MB)  
Italy

**Test Institute:** TÜV Rheinland Energy & Environment GmbH

**This is to certify that the AMS has been tested  
and found to comply with the standards  
BEP (2017)\*, CEN/TS 1948-5 (2015),  
EN 15267-1 (2009), EN 15267-2 (2023),  
as well as EN 14181 (2014).**

Certification is awarded in respect of the conditions stated in this certificate  
(this certificate contains 6 pages).



Suitability Tested  
EN 15267  
QAL1 Certified  
Regular  
Surveillance

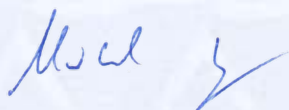
www.tuv.com  
ID 0000085397

Publication in the German Federal Gazette  
(BAnz) of 31 October 2024

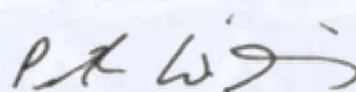
This certificate will expire on:  
30 October 2029

German Environment Agency  
Dessau, 15 November 2024

TÜV Rheinland Energy & Environment  
GmbH Cologne, 8 November 2024



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Test institute accredited to EN ISO/IEC 17025 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.

\* Uniform practice in monitoring emissions 2017 – Circular of the FME 23.1.2017 – IG I 2 -45053/5

<b>Test report:</b>	EuL/21250093/C dated 26 February 2024
<b>Initial certification</b>	31 October 2024
<b>Expiry date:</b>	30 October 2029
<b>Publication:</b>	BAnz AT 31.10.2024 B9, chapter II No. 1.1

### Approved application

The tested long-term sampling system is suitable for sampling of dioxins and furans. The measured ranges have been selected so as to ensure as broad a field of application as possible.

The suitability of the AMS for this application was assessed on the basis of a laboratory test and a four month field test at a waste incineration plant.

The AMS is approved for an ambient temperature range of Analyser system 0 °C to +40 °C / Sampling probe and box -20 °C to +50 °C.

The notification of suitability of the AMS, performance testing and the uncertainty calculation have been effected on the basis of the regulations applicable at the time of testing. As changes in legal provisions are possible, any potential user should ensure that this AMS is suitable for monitoring the measured values and emission limit values relevant to the application.

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

### Note

The legal regulations mentioned correspond to the current state of legislation during certification. Each user should, if necessary, in consultation with the competent authority, ensure that this AMS meets the legal requirements for the intended use. In addition, it cannot be ruled out that legal regulations governing the use of a measuring device for emission monitoring may change during the lifetime of the certificate.

### Basis of the certification

This certification is based on:

- Test report EuL/21250093/C dated 26 February 2024 of TÜV Rheinland Energy & Environment 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 31.10.2024 B9, chapter II No. 1.1,  
Announcement by UBA dated 21 August 2024:

**AMS designation:**

DECS® for Longterm-Sampling of PCDD/F

**Manufacturer:**

TCR Tecora srl. , Cogliate (MB), Italy

**Field of application:**

Ongoing sampling of PCDD/F

**Measuring ranges during the performance test:**

Component	Certification range	Unit
Waste gas velocity	2 - 30	m/s
PCDD/F *	up to 0.5	ng TEQ/m <sup>3</sup>

\* with 250 m<sup>3</sup> sample gas extraction to 60 g XAD-2

**Software version:**

4.0.1

**Restrictions:**

none

**Notes:**

1. The maintenance interval for the exhaust gas velocity is 4 weeks.
2. The integrated velocity measurement cannot be used in exhaust gases saturated with water vapour.

**Test institute:**

TÜV Rheinland Energy & Environment GmbH, Cologne  
Report No.: EuL/21250093/C dated 26 February 2024

## Certified product

This certificate applies to automated measurement systems conforming to the following description:

The measuring system tested here consists of a measuring cabinet with integrated control unit, and sample gas conditioning as well as sampling lines and the sampling probe box. The sampling lines are only heated (to max. +30 °C) when the outside temperature falls below +5 °C to avoid condensation.

The sampling cabinet contains the complete control electronics, a pump and a gas volumeter for sample gas conditioning. The parameters and control of the sampling are adjusted and set via an LCD control display located on the cabinet door.

The measuring system tested here consists of

- two measuring cabinets CU2110001 / CU2110002 (here: Control Unit)
- Pump and gas volume counter (sample gas preparation)
- sampling line 10 m (max. temperature +30 °C)
- two sampling probes SU2110001 / SU2110002 (here: Sampling Unit)

## 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 Energy & Environment 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 certification mark may be applied to the product or used in advertising materials for the certified product.

This document as well as the certification mark remains property of TÜV Rheinland Energy & Environment GmbH. With revocation of the publication the certificate loses its validity. After the expiration of the certificate and on requests of the TÜV Rheinland Energy & Environment 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: [gal1.de](http://gal1.de).

**History of documents**

Certification of DECS 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. 0000085397\_00: 12 November 2024

Expiry date of the certificate: 30 October 2029

Test report: EuL/21250093/C dated 26 February 2024

TÜV Rheinland Energy & Environment GmbH

Publication: BAnz AT 31.10.2024 B9, chapter II number 1.1

UBA announcement dated 21 August 2024

**Calculation of overall uncertainty according to EN 14181 and EN 15267-3**

**Measuring system**

Manufacturer	TCR Tecora srl.
AMS designation	DECS®
Serial number of units under test	CU2110001 -- SU2110001/CU2110002 -- SU2110002
Measuring principle	isokinetische Langzeitprobenahme

**Test report**

Test laboratory	EuL/21250093/C TÜV Rheinland
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**Measured component**

Certification range	Velocity 2 - 30 m/s
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**Evaluation of the cross-sensitivity (CS)**

(system with largest CS)

Sum of positive CS at zero point	0,00 m/s
Sum of negative CS at zero point	0,00 m/s
Sum of positive CS at span point	0,00 m/s
Sum of negative CS at span point	0,00 m/s
Maximum sum of cross-sensitivities	0,00 m/s
Uncertainty of cross-sensitivity	$u_i$ 0,000 m/s

**Calculation of the combined standard uncertainty**

**Tested parameter**

			$u^2$
Standard deviation from paired measurements under field conditions *	$u_D$ 0,285 m/s		0,081 (m/s) <sup>2</sup>
Lack of fit	$u_{lof}$ -0,116 m/s		0,013 (m/s) <sup>2</sup>
Zero drift from field test	$u_{d,z}$ 0,052 m/s		0,003 (m/s) <sup>2</sup>
Span drift from field test	$u_{d,s}$ -0,052 m/s		0,003 (m/s) <sup>2</sup>
Influence of ambient temperature at span	$u_t$ 0,058 m/s		0,003 (m/s) <sup>2</sup>
Influence of supply voltage	$u_v$ 0,049 m/s		0,002 (m/s) <sup>2</sup>
Cross-sensitivity (interference)	$u_i$ 0,000 m/s		0,000 (m/s) <sup>2</sup>
Influence of sample gas pressure	$u_p$ 0,000 m/s		0,000 (m/s) <sup>2</sup>
Influence of sample gas flow	$u_n$ 0,000 m/s		0,000 (m/s) <sup>2</sup>
Uncertainty of reference material at 70% of certification range	$u_{rm}$ 0,242 m/s		0,059 (m/s) <sup>2</sup>

\* The larger value is used :

"Repeatability standard deviation at set point" or

"Standard deviation from paired measurements under field conditions"

Combined standard uncertainty ( $u_c$ )

$$u_c = \sqrt{\sum (u_{max,j})^2} \quad 0,41 \text{ m/s}$$

Total expanded uncertainty

$$U = u_c * k = u_c * 1,96 \quad 0,80 \text{ m/s}$$

**Relative total expanded uncertainty**

**U in % of the range 30 m/s** **2,65**

**Requirement of 2010/75/EU**

**U in % of the range 30 m/s** **7,84 \*\***

Requirement of EN 15267-3

U in % of the range 30 m/s 5,88

\*\* The EU-directive 2010/75/EC on industrial emissions does not define requirements for this component.

A value of 7,84 % was used instead.