

CONFIRMATION

of Product Conformity (QAL1)

Approved AMS: OPM 19 ED for dust

Manufacturer: Dr. Födisch Umweltmesstechnik AG
Zwenkauer Str. 159
04420 Markranstädt
Germany

Test Institute:: TÜV Rheinland Energy & Environment GmbH

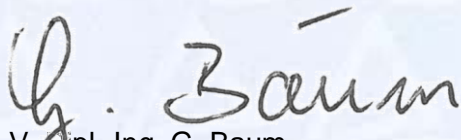
**This is to certify that the AMS has been tested
according to the standards**

**EN 15267-1 (2009), EN 15267-2 (2023), EN 15267-3 (2023),
as well as EN 14181 (2014).**

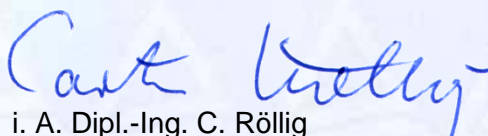
The AMS underwent independent expert testing and was accepted.
This confirmation is valid up to the publication of the certificate,
but no longer than 6 months from the date of issue
(this document contains 4 pages).

This confirmation is valid until: 30 April 2026

TÜV Rheinland Energy & Environment GmbH
Cologne, 4 July 2025



i. V. Dipl.-Ing. G. Baum



i. A. Dipl.-Ing. C. Röllig

www.umwelt-tuv.eu
qal1-info@tuv.com
Tel. +49 221 806-5200

TÜV Rheinland Energy & Environment GmbH
Am Grauen Stein
51105 Köln

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 certificate D-PL-11120-02-00.

Confirmation:
4 July 2025

Test Report: EuL/21257032/C dated 3 February 2025
Initial certification: 19 May 2025
Expiry date: 30 April 2026

Approved application

The tested AMS is suitable for use at plants according to Directive 2010/75/EC, chapter III (combustion plants / 13th BImSchV:2021), chapter IV (waste incineration plants / 17th BImSchV:2023), Directive 2015/2193/EC (44th BImSchV:2022), TA Luft:2021 and 30th BImSchV:2019. 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 fourteen month field test at a lignite-fired power plant.

The AMS is approved for an ambient temperature range of +0 °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 emission limit values relevant to the application.

Note

The legal regulations mentioned do not correspond to the current state of legislation in every case. 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 confirmation

This confirmation is based on:

- Test report EuL/21257032/C dated 3 February 2025 issued by TÜV Rheinland Energy & Environment GmbH
- The ongoing surveillance of the product and the manufacturing process
- Expert testing and approval by an independent body
- Suitability announced by the relevant body.

Confirmation:
4 July 2025

AMS designation:

OPM 19 ED for Dust

Manufacturer:

Dr. Födisch Umweltmesstechnik AG, Markranstädt, Germany

Field of application:

For installations subject to authorisation under the 13th BImSchV, the 17th BImSchV, the 30th BImSchV, the 44th BImSchV and TA Luft

Measuring ranges during performance testing:

Component	Certification range	Supplementary measuring ranges			Unit
Dust	0 - 7,5	0 - 15	0 – 50	0 – 500	mg/m ³

Software version:

v1.22

Version v1.21 can also be used.

Restrictions:

The measuring system can only be used at constant exhaust gas velocities ($\pm 10\%$ of the average exhaust gas velocity) or with particle sizes $\leq PM4$.

Notes:

1. The maintenance interval is six months.
2. The measuring system is operated and controlled using the PC_DUx_ED software, which is run on a Windows PC that is an integral part of the measuring system.
3. Since the validity of the measurements with fluctuating exhaust gas flows has only been proven for particle sizes smaller than PM4, the initial calibration (QAL2) must cover the bandwidth of the relevant exhaust gas velocity at the installation site.
4. Supplementary test (extension of the maintenance interval) to the announcement of the Federal Environment Agency of 02 April 2025 (BAnz AT 19.05.2025, B3, Chapter I Number 1.1).

Test Institute:

TÜV Rheinland Energy & Environment GmbH, Cologne
Report No.: EuL/21257032/C dated 3 February 2025

Tested product

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

The OPM 19 ED measuring device is an extractive continuous dust measurement system. In this process, a defined partial flow is taken from the exhaust gas flow. This partial flow is continuously heated and diluted with clean, temperature-controlled ambient air. In the measuring chamber, the partial current is optically measured.

The principle of operation of this system is described below: To measure the dust concentration, the sample gas is removed from the process with a temperature-controlled probe and fed to an optical sensor unit. The sample gas sucked in is continuously diluted and dried with hot and dust-free ambient air. The dust concentration of the conditioned sample gas is measured by an optical sensor. The sample gas is sucked out of the duct by an ejector.

The principle of dust measurement is based on optical scattered light measurement. In the electronics of the optical sensor, the scattered light signal is converted into an equivalent dust signal.

All results and necessary parameters can be checked and set by a PC software connected to the USB-C port of the probe. The results of the dust monitor are always provided via analogue and digital interfaces. The OPM 19 ED OS optical sensor is located in the probe of the OPM 19 ED. It combines the optical measuring cell and the control electronics of the OPM 19 ED.

The laser light penetrates the sample gas and is scattered by the particles present. The scattered light generated by the dust particles in the sample gas is measured by the detector. The remaining laser light is directed via the reflectors to a light trap.