

DIN EN 14884:2023-02 (E)

Stationary source emissions - Determination of total mercury - Automated measuring systems

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Symbols and abbreviations	6
4.1	Symbols	6
4.2	Abbreviations	7
5	Principle	8
6	Calibration and validation of the AMS (QAL2)	8
6.1	General	8
6.2	Functional test	9
6.2.1	General	9
6.2.2	Zero and span check (EN 14181:2014, A.7)	9
6.2.3	Linearity test (EN 14181:2014, A.8 and Annex B)	10
6.2.4	Response time (EN 14181:2014, A.11)	10
6.2.5	Converter efficiency	10
6.3	Parallel measurements with the SRM	10
6.4	Data evaluation	11
6.4.1	Preparation of data	11
6.4.2	Selection of data points from automated SRM	11
6.4.3	Establishing the calibration function	11
6.5	Calibration function of the AMS and its validity	11
6.6	Calculation of variability	11
6.7	Test of variability	12
6.8	QAL2 report	12
7	Ongoing quality assurance during operation (QAL3)	12
8	Annual Surveillance Test (AST)	12
9	Documentation	12
Annex A (informative) Example of calculation of the calibration function and of the variability test ..		13
A.1	General	13
A.2	Data evaluation	13
A.2.1	General	13
A.2.2	Calculation of measured values of the SRM at standard conditions	15
A.2.3	Calibration function	16
A.2.4	Calibrated values of AMS	18
A.2.5	Conversion of data to standard conditions	19
A.2.6	Valid calibration range	20
A.2.7	Test of variability	21
Annex B (informative) Significant technical changes		24
Bibliography		25