# MERCURY MONITORING TOOLKIT



**US EPA Method 30B** 



#### **Method**

The US EPA's method 30B is designed as a reference method for determination of mercury emissions with stack gases. The method uses sorbent traps to capture total mercury from stack gas. Use of different sorbent traps also enables mercury speciation measurement. Method 30B is widely used for regulatory CEMM verification and for national and international research programs. This technology was also adopted for PRC (HJ 917-2017) and EC (TS 17286:2019).

The US EPA's Mercury Measurement Toolkit is designed for efficient and cost-effective on-site determination of total and speciated mercury emissions in accordance with method 30B. The Toolkit also enables onsite mercury determination in all kinds of solid and liquid samples: coal, fly and bottom ash, gypsum, waste water, and other wastes and effluents.

# **Advantages**

- Low detection limit
- Easy to use, maintain, and transport
- ✓ No special requirements for site preparation
- Versatility: analyses of stack gas, coal, ash, sludge, waste water
- On site analyses and results
- ✓ No cylinders with compressed oxygen or any other gas
- User-friendly software
- Low operating and maintenance costs

### Design

Mercury Monitoring Toolkit comprises a sampling probe and metering console (1), sorbent traps (2), and analytical system based on direct Zeeman mercury analyzer (3) with RAPID software (4).



Report created Instrument RA915M

N Sample of 1 Vapor-Spiked Sorbent Tri 2 Vapor-Spiked Sorbent Tri 3 Sorbent Trap #114/95 Ser 4 Sorbent Trap #114/95 Ser 5 Ser 5



2



3

## **Analytical Specs**

- ✓ Wide dynamic measurement range: 0.5 to 50,000 ng mercury absolute
- ✓ Direct analysis according to ASTM method D6722-11
- ✓ Includes the quality assurance and quality control requirements built in the method
- ✓ Analysis time is 1–10 minutes per sample

#### **Calibration**

Multipoint calibration protocol complies with the EPA Performance Based Criteria Method. Set of NIST traceable standards.



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