### ENVIRONMENT

List of standards (ISO, ASTM, EN, EPA, etc.) for MGA spectrometers

<table>
<thead>
<tr>
<th>Standard No</th>
<th>Title</th>
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<tbody>
<tr>
<td>ISO 5961:1994</td>
<td>Water quality – Determination of cadmium by atomic absorption spectrometry</td>
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<tr>
<td>ISO 8518:2001</td>
<td>Workplace air – Determination of particulate lead and lead compounds – Flame or electrothermal atomic absorption spectrometric method</td>
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<tr>
<td>ISO 9855:1993</td>
<td>Ambient air – Determination of the particulate lead content of aerosols collected on filters – Atomic absorption spectrometric method</td>
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<tr>
<td>ISO 1041:1996*</td>
<td>Workplace air – Determination of particulate arsenic and arsenic compounds and arsenic trioxide vapour – Method by hydride generation and atomic absorption spectrometry</td>
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<tr>
<td>ISO 11174:1996</td>
<td>Workplace air – Determination of particulate cadmium and cadmium compounds – Flame and electrothermal atomic absorption spectrometric method</td>
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<tr>
<td>ISO 15586:2003</td>
<td>Water quality – Determination of trace elements using atomic absorption spectrometry with graphite furnace</td>
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<tr>
<td>ISO/TS 17073:2013</td>
<td>Soil quality – Determination of trace elements in aqua regia and nitric acid digests – Graphite furnace atomic absorption spectrometry method (GFAAS)</td>
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<tr>
<td>ISO 17211:2015</td>
<td>Stationary source emissions – Sampling and determination of selenium compounds in flue gas</td>
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<tr>
<td>ISO 20279:2005</td>
<td>Soil quality – Extraction of thallium and determination by electrothermal atomic absorption spectrometry</td>
</tr>
<tr>
<td>ISO 20280:2007*</td>
<td>Soil quality – Determination of arsenic, antimony and selenium in aqua regia soil extracts with electrothermal or hydride-generation atomic absorption spectrometry</td>
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</tbody>
</table>

ASTM D858-12  Standard test methods for manganese in water
ASTM D1068-15 Standard test methods for iron in water
ASTM D1687-12 Standard test methods for chromium in water
ASTM D1688-12 Standard test methods for copper in water
ASTM D1886-14 Standard test methods for nickel in water
ASTM D2972-15  Standard test methods for arsenic in water
ASTM D3373-12  Standard test method for vanadium in water
ASTM D3557-12  Standard test methods for cadmium in water
ASTM D3558-15  Standard test methods for cobalt in water
ASTM D3559-15  Standard test methods for lead in water
ASTM D3645-15  Standard test methods for beryllium in water
ASTM D3859-15* Standard test methods for selenium in water
ASTM D3866-12  Standard test methods for silver in water
ASTM D3919-15  Standard practice for measuring trace elements in water by graphite furnace atomic absorption spectrophotometry
ASTM D4382-12  Standard test method for barium in water, atomic absorption spectrophotometry, graphite furnace
ASTM D4517-15  Standard test method for low-level total silica in high-purity water by flameless atomic absorption spectroscopy
ASTM D6071-14  Standard test method for low level sodium in high purity water by graphite furnace atomic absorption spectroscopy
ASTM D6357-11  Standard test methods for determination of trace elements in coal, coke, and combustion residues from coal utilization processes by inductively coupled plasma atomic emission spectrometry, inductively coupled plasma mass spectrometry, and graphite furnace atomic absorption spectrometry
ASTM D6414-14* Standard test methods for total mercury in coal and coal combustion residues by acid extraction or wet oxidation/cold vapor atomic absorption
ASTM D6785-13  Standard test method for determination of lead in workplace air using flame or graphite furnace atomic absorption spectrometry
ASTM E1613-12  Standard test method for determination of lead by inductively coupled plasma atomic emission spectrometry (ICP-AES), flame atomic absorption spectrometry (FAAS), or graphite furnace atomic absorption spectrometry (GFAAS) techniques

EN 14902:2005  Ambient air quality – Standard method for the measurement of Pb, Cd, As and Ni in the PM10 fraction of suspended particulate matter
EN 15411:2011  Solid recovered fuels – Methods for the determination of the content of trace elements (As, Ba, Be, Cd, Co, Cr, Cu, Hg, Mo, Mn, Ni, Pb, Sb, Se, Tl, V and Zn)
EN 15841:2009  Ambient air quality – Standard method for determination of arsenic, cadmium, lead and nickel in atmospheric deposition
CEN/TS 16172:2013 Sludge, treated biowaste and soil – Determination of elements using graphite furnace atomic absorption spectrometry (GF-AAS)

EPA Method 30B* Determination of mercury from coal-fired combustion sources using carbon sorbent traps
EPA Method 101A* Determination of particulate and gaseous mercury emissions from sewage sludge incinerators
EPA Method 105* Determination of mercury in wastewater treatment plant sewage sludges
EPA Method 108* Determination of particulate and gaseous arsenic emissions
EPA Method 200.9  Trace elements by stabilized temperature graphite furnace atomic absorption spectrometry, Revision 2.2
EPA Method 231.2  Gold, atomic absorption, furnace technique
EPA Method 235.2  Iridium, atomic absorption, furnace technique
EPA Method 245.1*  Mercury in water by cold vapor atomic absorption spectrometry, Revision 3.0
EPA Method 252.2  Osmium, atomic absorption, furnace technique
EPA Method 253.2  Palladium, atomic absorption, furnace technique
EPA Method 255.2  Platinum, atomic absorption, furnace technique
EPA Method 265.2  Rhodium, atomic absorption, furnace technique
EPA Method 267.2  Ruthenium, atomic absorption, furnace technique
EPA Method 279.2  Thallium, atomic absorption, furnace technique
EPA Method 283.2  Titanium, atomic absorption, furnace technique
EPA Method 289.2  Zinc, atomic absorption, furnace technique
EPA Method 306  Chromium emissions electroplating/anodizing
EPA Method 0060  Determination of metals in stack emissions
EPA Method 7195  Chromium, hexavalent (coprecipitation)
EPA Method 7470A*  Mercury in liquid waste (manual cold-vapor technique)

APHA / AWWA / WEF Standard Method 3113  Metals by electrothermal atomic absorption spectrometry
APHA / AWWA / WEF Standard Method 3114B*  Arsenic and selenium by hydride generation/atomic absorption spectrometry

NIOH 6001  Arsine
NIOH 6007  Nickel carbonyl
NIOH 7102  Beryllium and compounds, as Be
NIOH 7105  Lead by GFAAS
NIOH 7901  Arsenic trioxide, as As

* with RGP-915 hydride generation system.

Last update: 12/15/2016