

# Rugged. Reliable.

Agilent 55B AA spectrometer



## Rugged. Reliable.

The Agilent 55B AA instrument is rugged and reliable, making it ideal for remote sites requiring a simple, standalone, double beam AA that doesn't compromise on performance.

#### High performance, standalone AA

- Simple control via the LCD screen and dedicated keyboard
- High sample throughput using Integrate Repeat
- Simple calibration with direct concentration readout
- Configured for direct LIMS connection via RS-232
- Suitable for challenging conditions and harsh environments

#### Fast, simple operation

- Easy set-up. View and edit instrument parameters on screen
- No complex alignment. Wavelength and slit selection is fully automated
- Improve result accuracy. Two lamp positions enable operation while prewarming the lamp for the next element

#### Storage for all your methods

- Cookbook methods provided for all elements
- Recall and modify methods at any time
- Save up to 30 customized methods for common analyses

#### **Onscreen results display**

- Confirm results with each replicate reading
- Review the concentration, precision, and absorbance result
- View the calibration to visually check linearity and check concentration or absorbance results
- Multiple language capabilities are standard. Select from eight languages at any time via the Options menu
- The industrial LCD screen and dedicated keypad are suitable for rugged laboratory conditions, unlike failure-prone touch screens

#### Rugged design for lifetime operation

- Ideal for operation in challenging conditions
- Sealed optics with quartz overcoated mirrors provide protection from dust or vapors and ensure long term, stable performance
- Enhance protection using the internal air purge to maintain a positive flow of clean air through the instrument



Achieve precise results quickly and handle complex matrices with Agilent's flexible and convenient Mark 7 atomization system.

#### Tune your performance

- Achieve precise results quickly and handle complex matrices with Agilent's flexible and convenient Mark 7 atomization system
- Tune performance using the externally adjustable impact bead
- Achieve high sensitivity—typically > 0.9 Abs from 5 mg/L Cu
- Optimize precision—typically < 0.5% RSD from 10 five second readings
- Reduce interferences with complex samples.
   The removable twin headed mixing paddles ensure thorough mixing and a superfine aerosol, for precise, accurate determinations
- Minimize burner blockage—the contoured design provides outstanding resistance to blockage, even with difficult samples
- Inert components provide compatibility with high acid and organic matrices

### **Deuterium background correction**

- Provides accurate correction with a fast 2 ms response time
- Easy access to the deuterium lamp within the lamp compartment
- Simple lamp optimization and fast user replacement
- Long lamp lifetime due to the optimized electronic control

#### **Optional upgrades**

- Add a printer for hard copy results
- Add the SIPS 10/20 for online dilution capability
- Add the VGA 77 for trace level determinations of mercury and hydride forming elements (As, Se, etc.)
- Add a PC for semi-automated, sequential, multi-element determinations using the SPS 4 autosampler

#### Determination of low As levels in high nickel ores

Excellent reproducibility and good read back on the QC standards is achieved, even with < 1 ppm As in solution, eliminating the need for extraction.

CAL ZERO         0.0         -0.0033           STANDARD 1         25.0         0.1717           STANDARD 2         50.0         0.3342           STANDARD 3         75.0         0.4805           STANDARD 4         100.0         0.6186           50ppm Standard 2         49.1         0.3281           Blank         0.2         0.0017           Sample 001         13.3         0.0916           Sample 001Dup         13.8         0.0950         104%           50 ppm Standard 2         45.6         0.3064         91%           Sample 013         11.9         0.0816           Sample 014         5.7         0.0395           Sample 013 Dup         11.5         0.0791         97%           Sample 014 Dup         5.4         0.0372         95%           Sample 017         0.1         0.0007           100 ppm Standard 4         92.6         0.5790         93%           Sample 023         23.4         0.1604           Sample 024         12.2         0.0841           Sample 025         0.6         0.0043           Sample 026         0.9         0.0065           100 ppm Standard 4         9	Sample ID	Concentration mg/L	Mean Abs	Recovery
STANDARD 2       50.0       0.3342         STANDARD 3       75.0       0.4805         STANDARD 4       100.0       0.6186         50ppm Standard 2       49.1       0.3281         Blank       0.2       0.0017         Sample 001       13.3       0.0916         Sample 001Dup       13.8       0.0950       104%         50 ppm Standard 2       45.6       0.3064       91%         Sample 013       11.9       0.0816         Sample 014       5.7       0.0395         Sample 013 Dup       11.5       0.0791       97%         Sample 014 Dup       5.4       0.0372       95%         Sample 017       0.1       0.0007         100 ppm Standard 4       92.6       0.5790       93%         Sample 023       23.4       0.1604         Sample 024       12.2       0.0841         Sample 025       0.6       0.0043         Sample 026       0.9       0.0065         100 ppm Standard 4       97.3       0.6029       97%         Sample 023 Dup       23.6       0.1613       101%         Sample 024 Dup       11.6       0.0801       95%	CAL ZERO	0.0	-0.0033	
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Blank -0.3 -0.0019	Sample 023 Dup	23.9	0.1634	102%
	Blank	-0.3	-0.0019	



Perform trace level determination of mercury and hydride forming elements precisely with Agilent's VGA 77.

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