PinAAcle 500
Flame Atomic Absorption Spectrometer

IMPROVES BOTH WORKFLOWS & CASHFLOWS
Engineered to deliver an uncompromising level of performance at an unbeatable price, the PinAAcle™ 500 puts the industry’s most robust, reliable Flame AA within reach of even the most budget-conscious laboratories.

The PinAAcle 500 offers superior durability, longer life, lower maintenance costs, and the fastest return on investment of any Flame AA.

Discover an instrument engineered to outlast and outperform. And take your laboratory to a new PinAAcle of productivity and profitability.

The world’s first Flame AA System engineered for complete corrosion resistance.
THE HARSHEST ENVIRONMENTS AND CORROSIVE SAMPLES

- Enjoy the confidence and sample flexibility of working with the world’s first Flame AA System engineered for complete corrosion resistance
- Discover the new benchmark for durability and reliability
- Peace of mind with fast return on investment

MINIMUM MAINTENANCE AND MAXIMUM SPEED

- Reduce operating costs with a rugged design that virtually eliminates maintenance
- Boost profitability with the lowest cost-per-element Flame AA analysis using a FAST Flame-enhanced system
- Optimize your investment with a longer-lasting, corrosion-resistant platform

EXCEPTIONAL SENSITIVITY AND PRECISION

- Analyze lower concentrations with the accuracy of higher-end AA systems
- Achieve precision of less than 0.3%, consistently better than competitive instruments
- Increase throughput without sacrificing accuracy or precision with an optional FAST Flame sample automation system

FAST, SIMPLE, REPRODUCIBLE OPERATION

- Speed through every analysis with the intuitive, icon-based interface of Syngistix Touch™ or Syngistix™ for AA Software
- Minimize downtime with the quick-change, modular sample introduction system
- Proven precision with a FAST Flame-enabled system, providing high accuracy and reproducible results

DESIGNED FOR...

PINAACLE 500 FLAME AA
Harsh environments and corrosive samples have finally met their match in a Flame AA. Run your PinAAcle 500 with complete confidence knowing that every circuit board is conformal coated for unparalleled durability, corrosion resistance, and long life.

Isn’t it time for a tool that works with everything in your lab while working within your budget?
Real-time, true double-beam optics
- High light throughput for best detection limits available
- Fully contained, maintenance-free fiber optic technology
- Automatically adjusts to changes in lamp intensity for stable baselines and compensates for drift multiple times per second
- Fast start-up and exceptional long-term stability without recalibration

Solid-state detector
- Accurately measures even the most difficult elements (including arsenic and barium)
- Excellent signal-to-noise ratios
- No need for expensive photomultiplier tubes

Syngistix Touch software
- Quickly and easily save and share all methods and results
- Large, easy-to-use, full-color touchscreen
- Flexibility to mount touchscreen on either side of instrument

Corrosion-resistant design
- Industry’s first completely corrosion-resistant system featuring:
  - Conformal-coated circuit boards
  - Polymer-coated flame shield
  - Polymeric sample introduction module

Small footprint
- 26” (w) x 25” (d) x 25” (h)
- Saves valuable bench space
- Upgradable on-board computer

Genuine PerkinElmer lamps
- Coded 2-inch Lumina™ cableless Hollow Cathode Lamps (HCLs) provide exceptional performance and stability
- Electrodeless Discharge Lamps (EDLs) ensure improved sensitivity and extended lamp life

Quick-change modular sample introduction
- Simplifies routine maintenance/cleaning
- Corrosion-resistant, durable design
Depending on the needs of your laboratory, the PinAAcle 500 can be run using your choice of Syngistix software options. Whether you select the innovative and easy-to-use Syngistix Touch or the more comprehensive Syngistix for AA package, you’ll enjoy a full suite of powerful tools and a remarkably simple user experience.

- Intuitive software interface features a left-to-right, icon-based design that mirrors your workflow
- Go from setup to analysis in just three clicks
- World’s first cross-platform atomic spectroscopy software offers a simpler, more efficient user experience across AA, ICP and ICP-MS instruments

### PLATFORM

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<tr>
<th>Syngistix Touch</th>
<th>Syngistix for AA Software</th>
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<tr>
<td><strong>OVERVIEW</strong></td>
<td>Speed and simplify every step from setup and method development to sample analysis and report generation:</td>
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<td></td>
<td>- Easy-to-use touchscreen interface</td>
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<td>- On-board PC allows all methods and results to be saved</td>
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<td>- Multi-language capability</td>
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<td>- Built-in cookbook with recommended conditions for each element</td>
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<td><strong>KEY BENEFIT</strong></td>
<td>Fingertip control for fast, easy setup and analysis</td>
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<td><strong>IDEAL FOR</strong></td>
<td>Laboratories working with limited sample types looking for a fast, simple, highly efficient interface and operating system</td>
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Optimizing the performance of your PinAAcle 500 Flame AA spectrometer is as easy as customizing it to your specific needs. And there’s no better way to do that than with the following array of specialized accessories and consumables.

**Sample Automation Solutions**

**FAST Flame Sample Automation Platform**
- Eliminates the variability of manual sample preparation for more accurate and precise results
- Enhances the speed, consistency and precision of daily workflows
- Delivers the lowest cost-per-element analysis on the market
- Offers a fast, automated, error-free way to:
  - Prepare calibration standards
  - Dilute over-range sample solutions
  - Add chemicals and other flame sampling needs

**AutoPrep 50 Automatic Dilution System**
- Precise, intelligent online dilution for faster, more accurate analyses
- Provides fully automated sample introduction when paired with a PerkinElmer autosampler
- Lower-cost automation solution

**S10 Autosampler**
- Creates an efficient, flexible, fully-automated analytical workstation
- Rugged design and corrosion-resistant components ensure long-term reliability and reproducible, precise results

**Additional Sample Preparation Solutions**

**Flow Injection for Atomic Spectroscopy (FIAS)**
- Automates and accelerates the measurement of mercury and hydride-generating elements with exceptional detection limits

**PerkinElmer Sample Preparation Blocks (SPB)**
- Ensure reliable, reproducible results for any digestion/heating method requiring a temperature below 180 °C fully controlled by the user

**Titan MPS™ Microwave Sample Preparation System**
- Complete control of real-time temperature and pressure for the mineralization of a broad range of sample types
- Choice of contaminant-free rotors and vessels for specific digestion needs
- Saves time and aggravation with easy loading and simple operation

**PerkinElmer AA Consumables**

Our complete portfolio of consumables, parts, supplies, training and service helps you meet both routine and demanding measurement challenges. We invest heavily in testing and validating our products to ensure you receive guaranteed compatibility and performance. For a complete listing of PinAAcle consumables, please visit [www.perkinelmer.com/AAsupplies](http://www.perkinelmer.com/AAsupplies)
Discover the new PinAAcle of performance in Flame AA and take your laboratory to a whole new level of productivity and profitability.

See what the PinAAcle 500 can do for you at www.perkinelmer.com/PinAAcle500