



Learn More About Your Samples —Quickly and Cost Effectively

Agilent AA Duo Flame and Furnace AAS Package

The Agilent AA Duo package

Agilent 280FS flame AA system

- Fast sequential AA measurements are the same speed as sequential ICP-OES. Multiple elements are measured during a single sample aspiration—saving time, gas and sample volume
- Learn more about each sample by quickly and easily performing multi-element analysis
- Reduce gas costs with precision optimized measurement time. This function automatically optimizes the measurement time for each element
- Automatic optimization of gas conditions for each element
- Eight lamp positions means you can measure up to 19 elements per run, using multi-element lamps

Agilent 280Z furnace AA system

- Agilent transverse Zeeman background correction with polynomial interpolation has great correction accuracy, giving the highest analyte signal and thus the best precision
- The constant temperature zone furnace design and maximum light throughput can measure ppb levels of toxic heavy metals in challenging matrices
- Get the right method, with automated surface response methodology wizard to achieve the optimum furnace conditions for your analysis

Run flame and furnace AAS at the same time



The Agilent AA Duo package allows you to run both your high and low concentration analytes at the same time. By controlling a dedicated flame and a dedicated furnace instrument from a single computer you can get simultaneous results from both.

The AA Duo package is ideal for those labs who don't have the budget, expertise, or sample load to justify ICP-OES or ICP-MS. With over 10,000 Agilent 200 series instruments installed globally, our AAS technology is proven and reliable.

With the AA Duo system you can:

- Install and align each atomizer only once. You can enjoy never having to swap between flame and furnace atomizers again.
- Enjoy fast results with the Agilent fast sequential mode. This mode measures samples in almost half the time it takes other flame AA systems.
- Confidently analyze down to ppb levels using the Agilent 280Z Zeeman furnace instrument with transverse Zeeman background correction
- Simplify setup, method development and daily operation by using the Agilent SpectrAA worksheet software. The software integrates the operation of both systems at the same time.

How fast flame AA is achieved

Having eight lamp positions allows eight elements per run with single element lamps, or up to 19 elements if multi-element lamps are used. This gives you flexibility in selecting which elements to measure.

Measuring multiple elements during a single aspiration

In fast sequential mode all lamps are operated simultaneously. The wavelength is automatically set with the high speed wavelength drive. Automatic gas control delivers the ideal gas settings for each element. All elements are measured in one aspiration. This reduces sample measurement time and means you need less sample volume, compared to other conventional flame AAS systems.

Precision optimized measurement time (PROMT) is a instrument function that can be used in combination with fast sequential mode. PROMT monitors the precision of results for each element as the sample is measured. When the desired precision is achieved, measurement stops. This saves even more time and gas.

The design of the atomization system and a burner made from Incoloy 825 alloy minimize burner blockages and are ideal for high acid matrices.

Automating furnace AA method development

Method development for the Agilent 280Z furnace AA is automated with a surface response methodology wizard. The wizard finds the optimum furnace ash and atomization conditions and automatically creates a method. This significantly reduces the method development time, while ensuring the best performance.

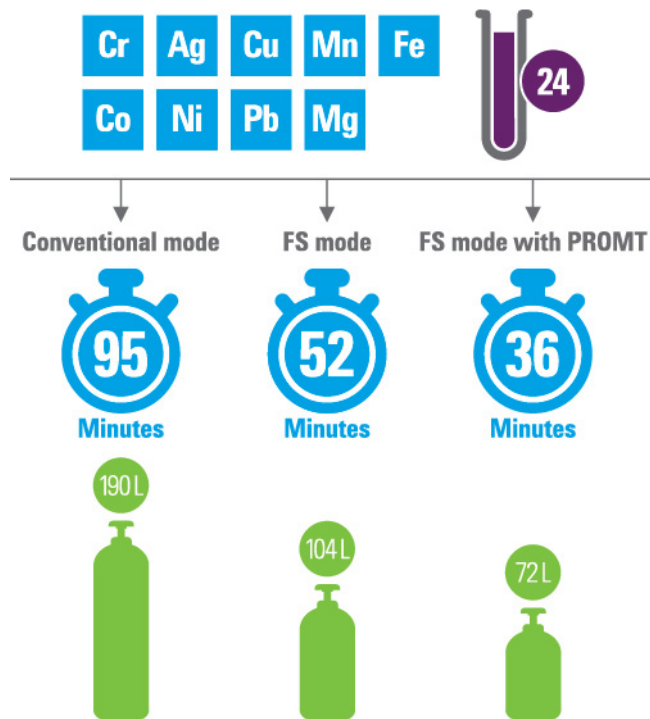
The furnace design features both a constant temperature zone and optimal geometry for Zeeman Background correction. Both design features deliver an excellent signal-to-noise ratio, high sensitivity, and low detection limits. Running costs are also reduced by extending tube lifetimes and achieving a 40% decrease in gas consumption, when compared to other furnace AA instruments.

For more information visit:

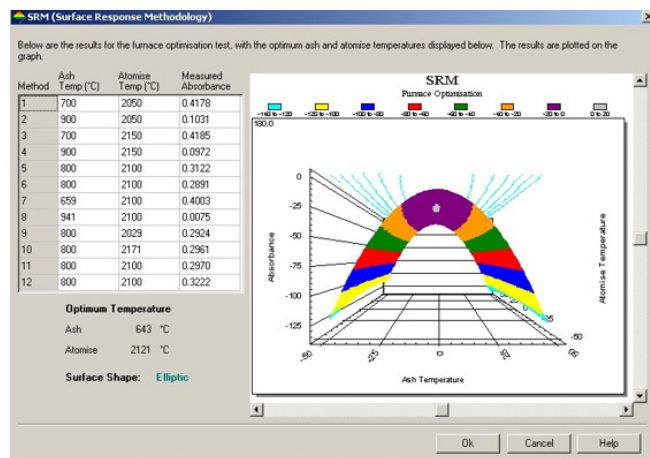
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Fast sequential mode, when combined with the precision optimized measurement time function is more than 60% faster and uses approximately 60% less acetylene*



The unique automated surface response methodology wizard finds the optimum furnace conditions for your analysis. This significantly reduces method development time, while ensuring the best performance.

*FS mode with PROMT can greatly improve productivity for a typical high throughput analysis of 9 elements in 24 solutions saving up to 118 L of gas.