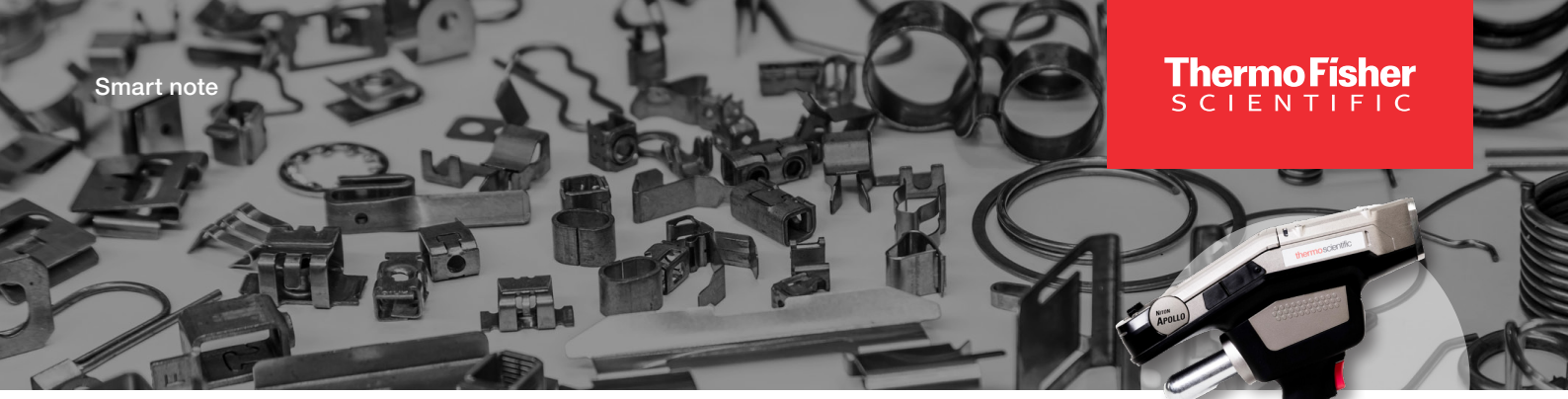

Small parts analysis with the Niton Apollo LIBS Analyzer

Small parts and precision components are critical to product quality and safety. Their limited surface areas and complex geometries make them some of the most challenging items to analyze accurately. Traditional optical emission spectroscopy (OES) delivers excellent accuracy but often lacks the portability needed for challenging environments.

The Thermo Scientific™ Niton™ Apollo™ Handheld Laser-Induced Breakdown Spectroscopy (LIBS) Analyzer changes the equation by delivering accurate analysis of steel and stainless steel in a portable format.

Key differentiators

- **Argon seal**
  Among handheld LIBS analyzers, the Apollo analyzer stands out with its fully-purged Argon Seal surrounding the measurement chamber. This unique design mimics the controlled environment of a benchtop OES, ensuring stable plasma formation, improved repeatability, and more accurate results than air-based LIBS units.
- **Updated small nose design**
  The Apollo analyzer's updated small nose design provides the ability to measure small parts that other handheld LIBS units cannot.
  - This includes ¼" piping, ¼" bar, and larger weld wire.
  - By reaching into tight spaces and accommodating small geometries, Apollo analyzers ensure accurate analysis even on the most challenging samples.

Application impact: Small parts, big stakes

Fasteners, connectors, weld filler wires, and thin washers may be small, but their roles are critical. Any mix-up or misidentification can result in costly downtime, safety issues, or product recalls.

With the Apollo LIBS analyzer's argon seal and updated small nose design, users can achieve OES-level verification in a handheld device, ensuring that even smaller parts meet specifications.

A lower cost of ownership, with repeatability and reliability you can trust

For industries where a single incorrect part can have significant consequences, consistency is crucial. The Apollo analyzer delivers the dependable features you need, in a unit designed to save users time and money over the long term:

- **Carbon detection** – Detects carbon for equivalent carbon content (C.E.) for welding & L/H grade ID of stainless steel
- **Efficient argon use** – Optimized purge minimizes gas consumption.
- **Reduced downtime** – Portable OES-like accuracy eliminates long lab lead time.
- **Rugged durability** – Field-ready build lowers repair and replacement costs.
- **Ease of training** – Intuitive interface reduces errors and onboarding costs.
- **Designed to perform** – Reliable data across a wide range of finishes and geometries

By combining technical performance with durability and efficiency, the Apollo analyzer delivers the lowest total cost of ownership in its class.

Conclusion

The Niton Apollo LIBS analyzer sets the standard for small parts analysis. With its unique argon seal and updated small nose design, it delivers repeatable, OES-like accuracy unmatched by any other handheld LIBS device for the analysis of steel and stainless-steel including carbon. Add in a lower total cost of ownership, and the Apollo analyzer becomes the clear choice for manufacturers and inspectors who demand precision, reliability, and value.

Learn more at **thermofisher.com/apollo**