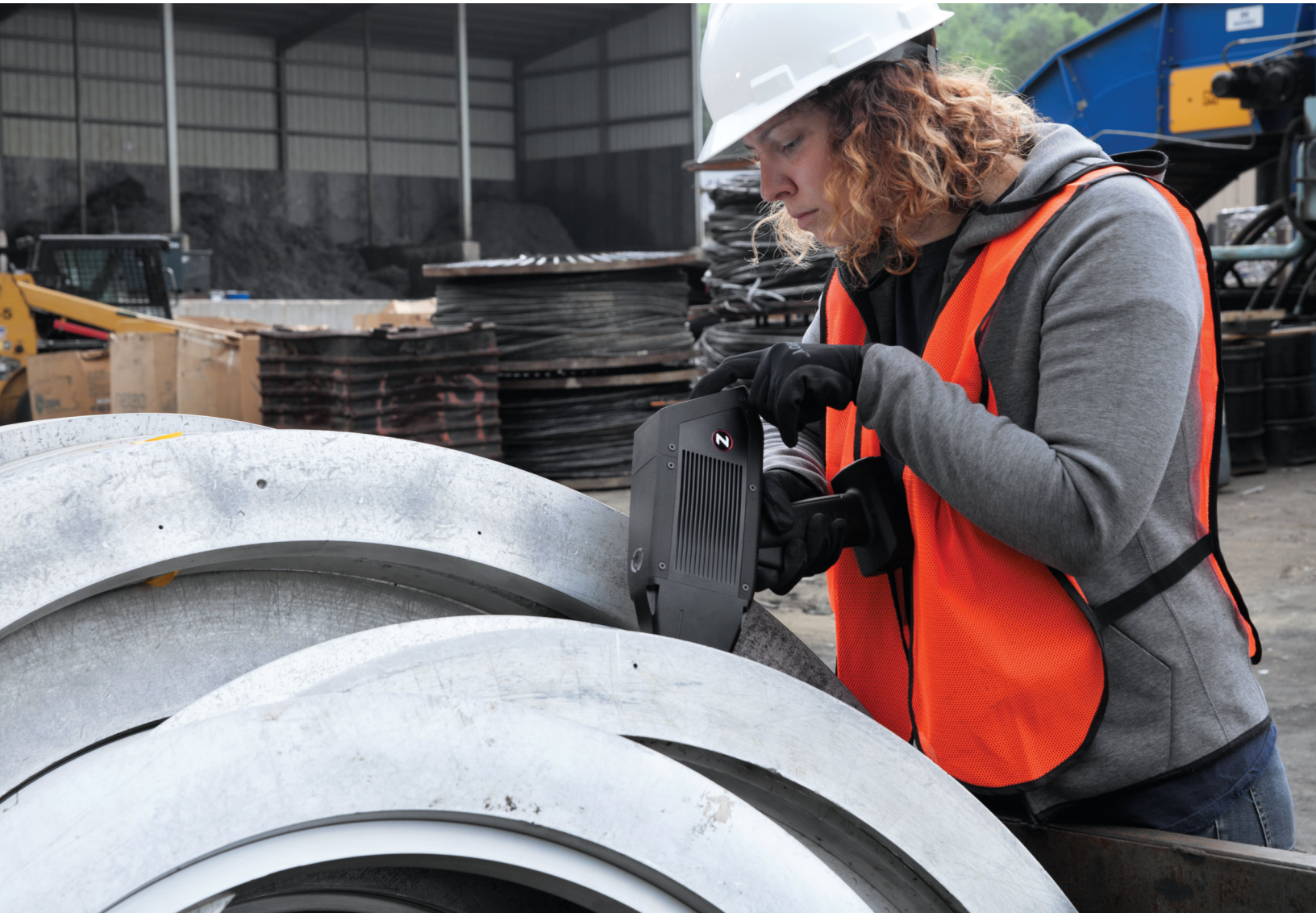
SciAps

NDT-PMI

Carbon, Carbon Equivalents, Alloys
...even L and H grade stainless



Simply the best handheld analyzers ever made
The lightest, fastest and greatest precision for NDT & PMI

The world's ONLY handheld for carbon in steels and stainless.

Meet the all new Z.

The ONLY handheld analyzer with the precision to measure carbon and carbon equivalents in steels, stainless and other alloying materials. Patented powerful, high frequency laser and miniaturized on-board argon purge. Lightweight, compact, take it anywhere – up a tower, into a ditch, onto a rack. Measure carbon, silicon, and alloying metals in seconds.

More than just carbon!

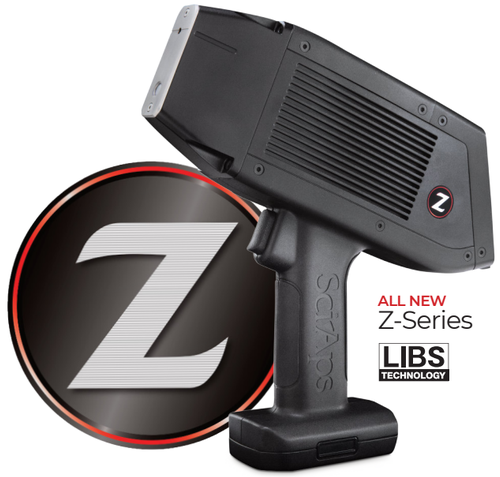
Lithium, boron, beryllium in aluminum alloys. LIBS technology excels at measuring critical alloy elements such as Mg, Si, Li, Be, B, Cr, Mn, Cu and other transition, heavy metals.

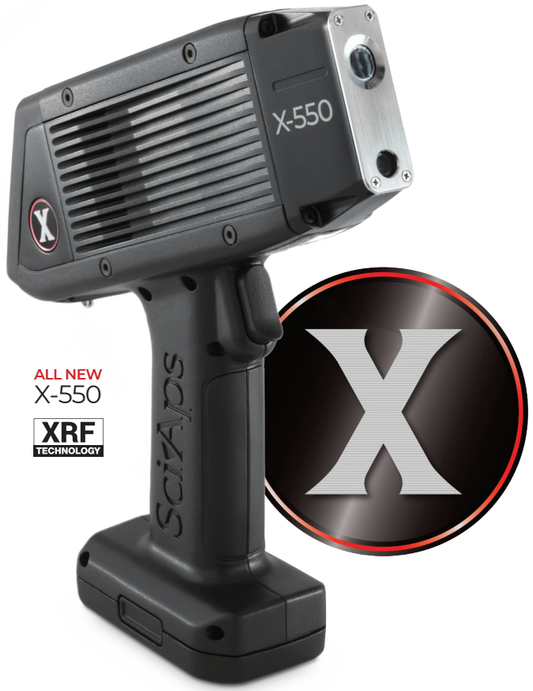
Sulfidic corrosion. The Z measures Si down to 0.02% in 3 seconds for sulfidic corrosion. In use at major refineries. **Cr for flow-accelerated corrosion (FAC)**. The Z measures Cr content < 0.03% in just a few seconds, without the need for X-ray radiation sources.

Field tested, user approved.

With more than 1,000 carbon units shipped globally and included in API RP 578 3rd Edition, the Z is accepted for pipeline testing by every major pipeline owner/operator. Independent studies validate its performance compared to spark OES.

The world's best selling alloy analyzers just got a whole lot better.





For everything else, use XRF.

Simply the lightest, fastest, most ergonomic X-ray analyzer ever made.

Meet the NEW X-550.

The X-550 sets a new performance standard for PMI. The lightest X-ray gun ever made, at 2.8 lbs. including batteries, it's also the fastest, showing the initial test result in less than 1 second. What about more complicated verifications such as sulfidic corrosion, residuals or API 5L that require longer test times or multi-beam tests? Pre-configured on-board apps assure quality testing by every operator

What's better about the X-550?

Perfectly balanced and lightweight to test all day long without fatigue. The narrow footprint permits total access to virtually any test location and weld. Powerful miniaturized X-ray tube excels at measuring low atomic number elements Si, P, S, Mg and Al; this tube combined with highly optimal internal geometry yields blazing speed on previously challenging applications like measuring silicon for sulfidic corrosion.

Great on aluminum alloys, too!

Measure magnesium at the 0.3% level in 2 seconds, 5-10x times faster than competing X-ray guns. Our Aluminum App is optimized for both low atomic number elements and transition metals for ultra-fast, highly specific verification of the many similar aluminum grades. Grades 3003/3004/3005, Cast 356 and 357, and 2014/2024 are just a few examples that are easy for the X, but often confound other X-ray guns.

Oil and Gas Applications

Upstream
Alloy material verification for on shore, off shore rigs.

Midstream
Fast, in-ditch measurements of carbon and carbon equivalents with the Pipeline Safety App. Material verification per API 5L and PHMSA "Mega Rule."

Downstream
PMI for carbon steels, L, and H grade stainless and nickel alloys. Residuals (Cr, Cu, Ni) including carbon. Carbon, carbon equivalents in welds and materials.

Widespread Industry Applications

Power
The Z does it all: flow-accelerated corrosion, carbon, CE in steels and stainless, and alloy PMI. All without the regulatory burden of X-ray.

Fabrication
Need to PMI carbon for fabricated metal product and welds? Use the smallest, fastest carbon analyzer ever made. In use daily at hundreds of fab shops globally.

Pharmaceutical, Chemical
Instantly verify that your alloy materials are 316L. The Z measures carbon down to 0.007%.

Custom Data and Reporting

We've revolutionized speed, connectivity, and test data management. Android OS, WiFi and cloud software operate with the ease of a smart phone. Share tests anywhere in the world.

Real-time synching
Share every test result stored on the analyzer with one or more PCs.

Automatic data merge
Combine metals tests from X-ray and LIBS carbon data into a single report.

Custom report templates
Create templates with your logo, layout, etc. Download data, print, and done.

SciAps Cloud Services
Add real-time visibility, analysis, editing, data merge, reports, and storage across your enterprise.

The Ultimate in Portability - SciAps One Box

The best of handheld X-ray and LIBS in a compact, affordable package of analyzers with shared accessories like batteries, charger and cables. Enjoy optimal performance for virtually every alloy and element for less money than a comparable spark OES system.

Alloy/Element	Best Technology	Comments
Carbon in stainless, steels or other alloys	Z	The Z is the only handheld that measures carbon in these alloys. X-ray cannot measure carbon.
Common stainless, Cr/Mo steels, nickel or other high temp alloys not requiring carbon	X-550 or X-505	Use the lower cost X-505 if you can tolerate a little less speed for low Si, P and S, and don't require a dedicated Residuals App for Cr, Ni, Cu, Nb and V per API 751.
Specialty elements Li, Be, B	Z	X-ray cannot measure Li, Be, B.
Phosphorus and sulfur	X-550 or X-505	LIBS can't yet measure P or S.

Application Notes

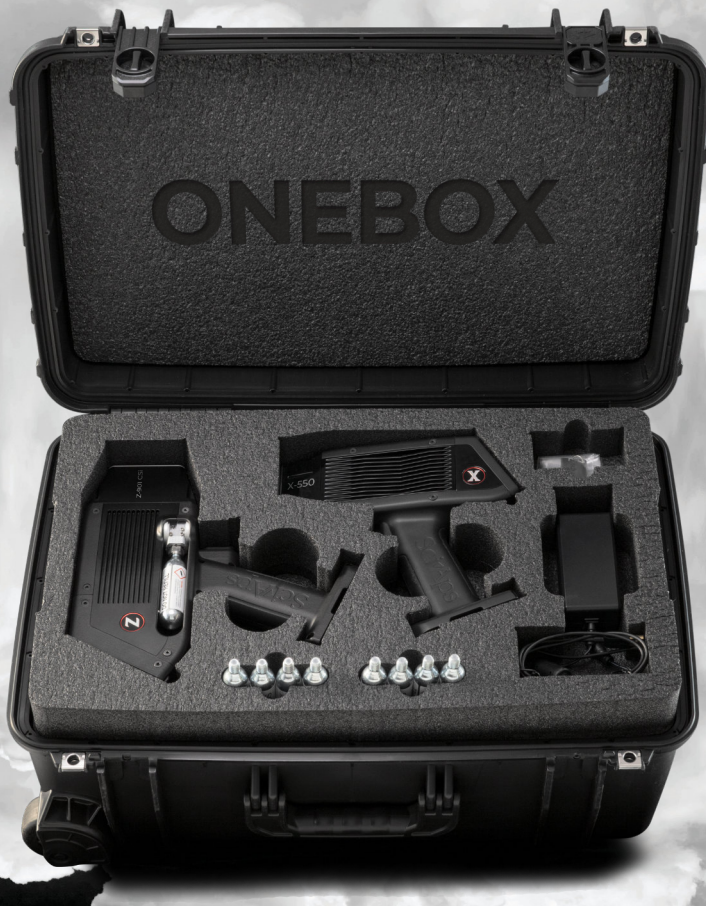
for Carbon, Carbon Equivalents, and Aluminum Alloys available at www.sciaps.com.

XRF Handheld X-ray

Best choice for basic stainless, high-temp alloys, Cr/Mo steels, brasses and bronzes and Al alloys not requiring Li, Be or B analysis. Also, phosphorus and sulfur.

LIBS Laser Analysis

The only choice for carbon and CE in steels, L and H grade stainless and nickel alloys, cast irons and cast steels.



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SEPT2021

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