

# The DELTA - Innovative Features

## Handheld XRF for PMI & QA/QC



Think you have the **fastest** and **most reliable** HHXRF?  
Think again.

Upgrade to the Latest and Greatest in Handheld XRF!

### The DELTA Line

As analytical capabilities expand, and new features are introduced, handheld XRF (HHXRF) enables inspectors to be increasingly effective and efficient. The latest HHXRF on the market, the Innov-X DELTA Alloy Analyzer, provides lightning fast and reliable compositional and grade ID analysis for a wide range of non-ferrous alloys including stainless, Cr/Moly steels, low alloy steels and high temperature alloys. The Innov-X DELTA was engineered for ergonomics and industrial toughness. It withstands high temperature testing conditions, even beyond 800°F (426°C). Upgrade your XRF to the DELTA – the latest HHXRF loaded with innovative features and backed by the industry's best service and support.



**DELTA**  
Dynamic XRF

### The DELTA is the pinnacle of HHXRF development:

- » Field worthy, industrially rugged design:
  - > Durable and Reliable
  - > Ergonomic and Balanced
  - > Hot Swap Batteries and Docking Station keep the DELTA ready 24-7!
- » Superior Analytical Speed & Precision:
  - > 4x the tube current for fast, accurate aluminum sorting
  - > Lowest detection limits – critical for residuals analysis at HF Alkylation systems and FAC inspection at power facilities
  - > Fastest throughput means quickest turnaround times
- » Ground-breaking Smart Features:
  - > Save Analysis Time – SmartSort automatically adjusts analysis settings to produce the right answer in the shortest possible testing time
  - > Grade Match Messaging provides additional instructions for marking and welding
  - > Optimized Grade Library delivers the fastest, simplest point and shoot performance!

### Innovative Features for Positive Material Inspection:

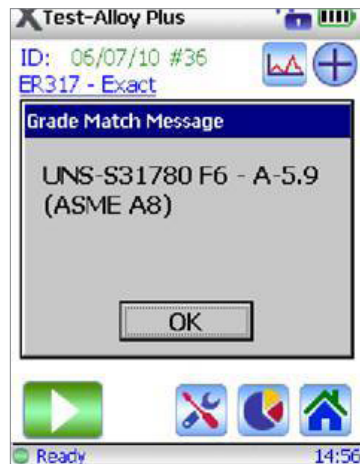
#### Welding Inspection

##### Grade Match Messaging

- » Provides specifications and weld instructions for common weld materials and substrates
- » Fully customizable messages allow for refinery specific coding messages
- » Store multiple Messaging libraries per work site

##### Welding Grade Library

- » Activate alongside standard inspection library for comprehensive PMI work
- » Easy grade addition or editing on board the analyzer!



Weld Grade Match Message



Chemistry is always available - select OK from the Grade Match Message

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## Innovative Features for Inspections:

The DELTA is a reliable and rugged analyzer that maximizes both speed and accuracy. Other XRF systems have compromises – you can ID alloys quickly but an inexperienced operator may not know if an ID is wrong, or when to test longer. So how does the conscientious inspector maximize testing speed, but not increase the risk of mistaken IDs or erroneous readings? Innov-X's SmartSort automates all these decisions, allowing even inexperienced operators to maximize both speed and inspection accuracy. This powerful feature yields optimized throughput and accuracy, making the DELTA an extremely productive XRF for alloy inspection.

### SmartSort

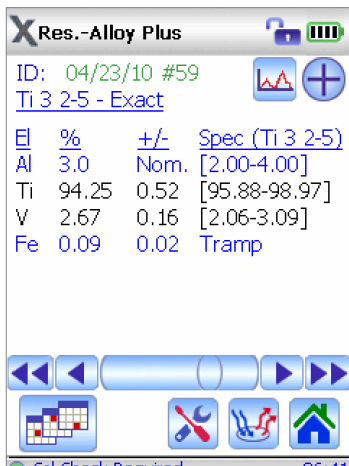
- » Specific grades can be set up to automatically extend testing time, preventing mix-ups
- » Maximizes efficiency for speed testing – automatically extends tests for light elements (Mg, Al, Si, P, S) when absolutely necessary - eliminate unnecessarily long tests AND avoid mix-ups
- » Makes the DELTA an extremely fast analyzer for inspections

### Unrivaled Light Alloy Performance

- » The DELTA offers the most powerful x-ray tube in a handheld: 4x the power!
- » The DELTA provides unmatched aluminum and light alloy analysis capabilities
- » Identify alloys differing principally by only small amounts of light elements
- » Accurately quantify Si, S, and P content in stainless steels and low alloys
- » Comprehensive analysis of titaniums, aluminums, red metals, and high temp and refractory alloys

### High Temperature Ready

- » The DELTA is engineered to be utilized for in-service inspection of high temp systems, even in excess of 800°F (426°C)
- » The DELTA's *industry-exclusive* heat sink dissipates heat away from the XRF electronics
  - » Allows the DELTA to be used for longer durations in hot environments
  - » Facilitates longer reliability of key XRF electronic components
  - » Provides faster cooling of electronics in between high temperature exposure



Analysis results display demonstrating Nominal value (3% Al) and Tramp element (.09 % Fe) features.

### Tramp Library

- » Standard for years in OES systems, the DELTA is the first HHXRF to introduce this feature
- » Allows operators to set a max tolerated concentration for individual elements in 7 unique grade families; these elements are considered "Tramp"
- » The DELTA comes preloaded with a tramp library based on industry standards
- » This allows the analyzer to ID and report tramp material, and allows the user to simplify grade matching by not counting small, expected amounts of tramp elements against the grade match
- » Detect and quantify tramp residuals critical to selective corrosion investigations and failure analysis

Contact Innov-X Systems or your local distributor for a free on-site demonstration of the DELTA and its innovative features. The benefits are clear – analyze and ID your alloy components **FASTER**, with more **CONFIDENCE**, and with a more **RUGGED** and **RELIABLE** analyzer. Innov-X will be there to support you – our goal is to provide the best technology and support to keep you up and running.

Contact us for more information and a free on-site demonstration.



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