OLYMPUS®

Your Vision, Our Future

Compact X-ray Fluorescence

Xpert

XRF for Regulatory Programs

RoHS and Consumer Safety Compliance

- RoHS
- CPSIA
- EN71-3
- Proposition 65

The Xpert for Regulatory Programs
Consumer Safety and RoHS Compliance

The Xpert, XP-6500-CC, for Regulatory Programs is a compact and transportable X-ray fluorescence (XRF) analyzer optimized for Consumer Product and RoHS regulatory compliance programs. It has a well-lit, viewable sample chamber, touch-button operation, integrated camera, and a selectable analysis spot size.

Action levels for Consumer Products and/or RoHS regulations are preprogrammed for rapid Pass/Fail results. The Xpert for Consumer/RoHS Regulations has a safe and secure closed-beam configuration and operation is completely independent of an external PC. It can be powered by battery and is lightweight making it easily transportable for wherever and whenever testing is needed.

Comply with Global Regulations

The Xpert for Regulatory Programs is a fast, accurate, and cost-effective XRF analyzer optimized for analysis of lead (Pb), cadmium (Cd), arsenic (As), mercury (Hg), chromium (Cr) and other toxic elements in metals, plastic, and mixed materials. It provides detection limits that are well within typical regulatory limits in most materials. It provides the ability to test not only at retail locations, but also at loading docks and manufacturing sites to screen imported/exported toys, jewelry, clothing, electronics, and other consumer products before they become a problem.

Worldwide Restricted Hazardous Substance Regulations and Testing Methods

- EU RoHS Directive (2011/65/EU)
- EU WEEE Directive (2012/19/EU)
- China RoHS
- Japan RoHS
- Korea RoHS
- USA CPSIA (HR4040)
- USA Halogen Free Directive
- California Proposition 65
- USA ASTM F2617-08
- USA ASTM F963
- CPSC-CH-E1001-08.3
- CPSC-CH-E1002-08.3

Reliable and Easy-to-Use

Regulators and industry stake holders depend on XRF analyzers for rapid product and component screening to monitor compliance with CPSIA, RoHS, WEEE, EN71-3 and other regulations.

Olympus worked with stakeholders well before the July 2006 EU RoHS Directive went into effect to provide the best possible XRF user experience to meet the impending regulatory requirements.

Olympus continues to follow the development of global regulations to ensure its analyzers and technology stay ahead of the regulatory requirements. And, we continue to stay in touch with industrial and regulatory XRF customers to meet and exceed their expectations with technology advancements and value-added features.

Operation is simple and straightforward. An object is placed directly on the analysis window or, if small, secured in the sample holder to orient it. The chamber door is closed and the operator presses “Start” to acquire results.

The small spot collimator is used for very small objects or for small areas on an object. A digital image of the object can be stored and/or sent along with the analytical results directly to a printer in report format, completely independent of an external PC.

Benefits

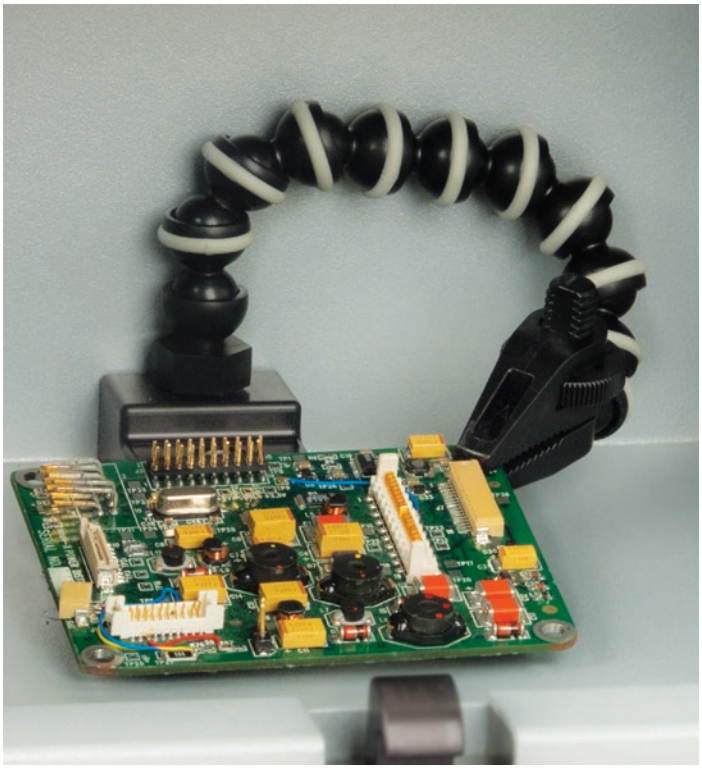
- Fast and nondestructive detection of restricted elements
- Accurate with LODs as low as 1 ppm
- Safe, closed-beam XRF system
- Archiveable results for regulation compliance

Easy-to-Use

- Operates completely independent of a PC
- Responsive, bright, color touch-screen display
- Large LED-lit sample chamber
- Analysis indicator light with 360° visibility
- Large data storage capacity for test archiving
- USB interface port for high-speed data export, printing, external keyboard, and remote control
- Portable operation with optional battery for mobile off-site use

Fast, Accurate, Advanced Technology

- Advanced Silicon Drift Detector (SDD) for low LODs
- 4 W X-ray tube, 200 µA current (max), plus optimized beam settings for accurate analysis
- Floating-point processor delivers fast results, within seconds
- Smart sensor that automatically classifies the sample type into Plastic, Alloy or Mixed for accurate results
- Integrated camera to record analysis images
- Small spot collimation down to 3 mm for small samples or small areas on a sample



Xpert Sample Holder

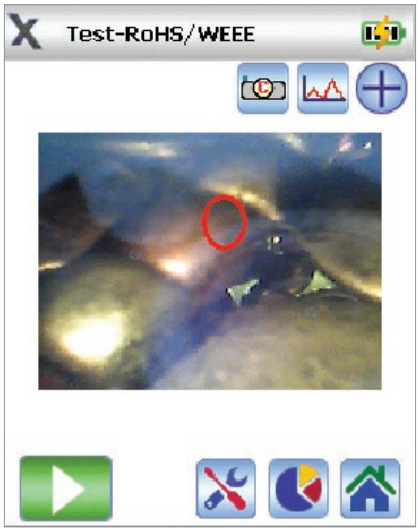
The Xpert is equipped with an articulating sample holder arm to secure and orient small samples for analysis.

Enhanced User Experience
High-Performance Features

Camera and Collimator

The Xpert is equipped with an integrated CMOS camera that records sample images to memory along with the analysis results for report generation. X-ray beam small spot collimation is for measurement of small components and samples. A simple tap on the touch screen in camera view activates the small spot 3 mm or standard spot 10 mm diameter collimation. An on-screen indicator shows the operator exactly where the analysis spot is focused.

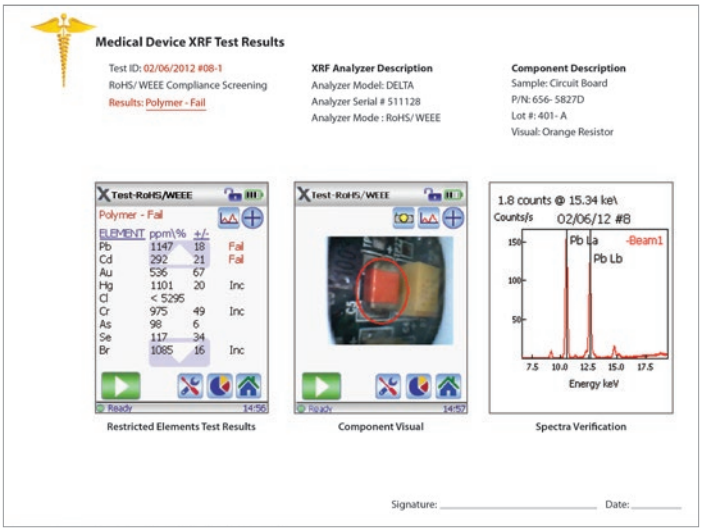
Integrated CMOS camera records sample images to memory.



Detail of the 3 mm spot camera collimated

Customized Reports for Certification

The Xpert PC reporting software customizes and facilitates immediate report generation, including analysis results, qualitative sample information, spectral information, and sample image. Traceable documentation makes the Xpert the ideal tool for a Reasonable Testing Program (RTP).



Example of a customized reporting certificate via PC software

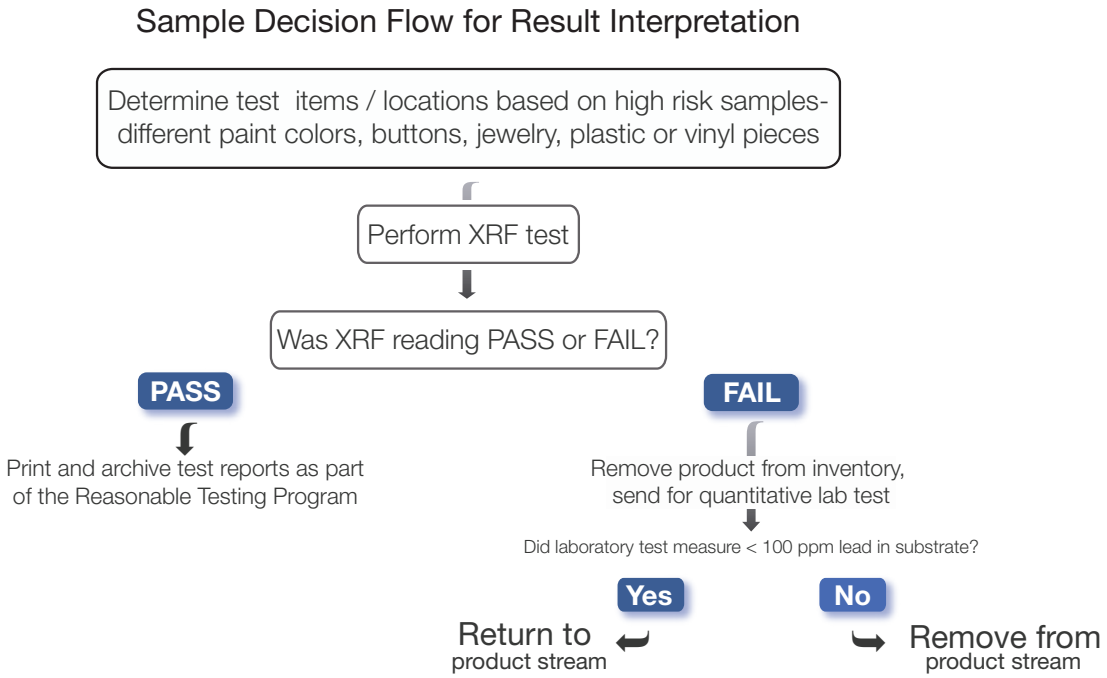
Smart Sense Classification

The Xpert automatically determines sample type (polymer, alloy or mixed) and optimizes measurement conditions accordingly. It recognizes non-homogeneous (“mixed”) samples to alert the operator, which is critical for error-free operation. The Xpert also distinguishes if Pb is in the surface or in the substrate.

Regulatory Program Advantages

Xpert Results Follow the Flow of Regulatory Programs

Sample Decision Flow for Result Interpretation



Xpert for Regulatory Programs XRF Performance

The Xpert combines regulatory recommended XRF technology with multiple value-added features to provide the ideal tool for a Reasonable Testing Program (RTP), affording economy of operational costs, space, and time with a seamless integration of data and results.

Xpert XRF analyzers offer accurate, sensitive analysis with easy-to-use reporting software in an ergonomic and dependable package. It offers detection of limits that are well within typical regulatory limits in most materials.

Regulatory Compliance Concentration Limits

Element / Regulation	RoHS/ WEEE	Consumer/ CPSIA
Cd	<100 ppm	N/A
Cr	Cr^{6+} <1000 ppm	N/A
Hg	<1000 ppm	N/A
Pb	<1000 ppm	<100 ppm substrate <90 ppm surface
Br	PBB PBDE <1000 ppm	N/A

Xpert for Regulatory Program Limits of Detection in PPM*

Element	PE	PVC	Al
Pb	1-2	2-4	2-5
Cd	8-12	15-20	7-10
Cr	10-30	20-50	50-80
Hg	1-2	2-4	2-5
Br	1-2	2-4	–

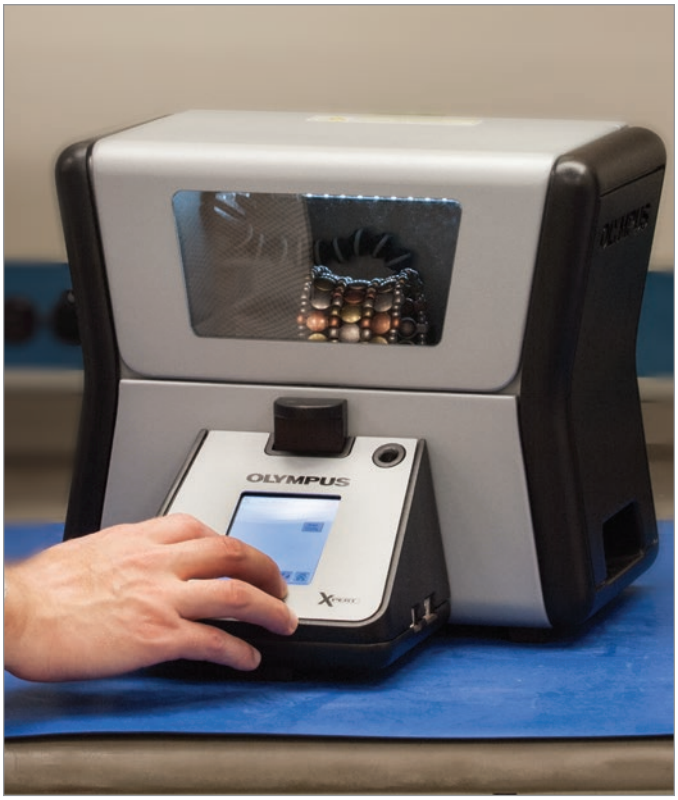
*LODs testing times use 120 s/beam.
Xpert LODs assume multibeam RoHS calibration is used (2 beam/sample).
LODs assume ideal sample types; performance on real samples may vary.

Olympus Xpert for Regulatory Programs
Reliable and Easy-to-Use

The Xpert is easy-to-use. Place large objects directly on the analysis window.

Secure small objects in the sample-holder to orient on the analysis window.

Use small spot collimation for very small objects or for small areas on an object.



Close the chamber door and press Start to get results you can count on.

Xpert

The Xpert provides a fast, highly accurate way to determine toxic metals' levels for quality control purpose. It allows the user to perform an on-the-spot, cost-effective, and completely non-destructive test to check for heavy metals that present in the products.

In addition to Lead, the Xpert provides a high level of performance for other heavy metals of interest. The analyzers come standard with a heavy metals suite that includes Pb, Cr, Hg, Br, Cd, Cl, Ti, Fe, Co, Ni, Cu, Zn, As,Bi, Se, Sn, Sb, Ba, and other elements.

Specifications*

Dimensions	267 mm x 310 mm x 340 mm (10.5 in. x 12.5 in. x 13.4 in.) (with door closed)
Weight	10 kg (22 lb)
Power Requirements	Provided with 100 VAC to 240 VAC, 50 Hz to 60 Hz, 70 watts power supply
Excitation Source	4 W, 40 kV, 200 µA (max.) X-ray tube Anode: Au or Ta
Detector	Si Drift detector
Environmental Temp Range	-10 ºC to 50 ºC (14 ºF to 122 ºF)
Camera and Collimator	Integrated with measurement geometry; Small-spot collimator; selectable diameter sizes (3 mm or 10 mm)
Power	AC power adaptor or rechargeable Li-ion battery
Data Display	55 × 73 mm (2.2 × 2.9 in.) Color LCD touch screen Resolution: 720 x 320
Data Transfer	USB
Element Suite	Pb, Cr, Hg, Br, Cd, Cl, Ti, Fe, Co, Ni, Cu, Zn, As, Bi, Se, Sn, Sb, Ba

Standard Accessories

- Collimator Test Coin
- Sample Holder Clip with Articulating Arm
- USB cable
- 316 Stainless Steel Calibration Check Reference Coin
- Ten (10) spare windows
- Three (3) styluses
- Factory Authorized Training and Support

*All specifications are subject to change without notice.

www.trisco.com.ph

YOUR PARTNERS IN PROVIDING NDT SOLUTIONS

DISTRIBUTED BY:
TRADERS INDUSTRIAL SUPPLY CO., INC.
24th Floor Trident Tower, 312 Sen. Gil Puyat Ave.,Makati City, Philippines
Contact: (+632) 8817-9004 / 8817-8914 / 8844-0749 @local LOCAL: 111, 121, 122, 124
Email: trisco@pldtdsl.net / sales@trisco.com.ph

Xpert_EN_201507 • Printed in the USA • P/N: 920-301-EN Rev. C