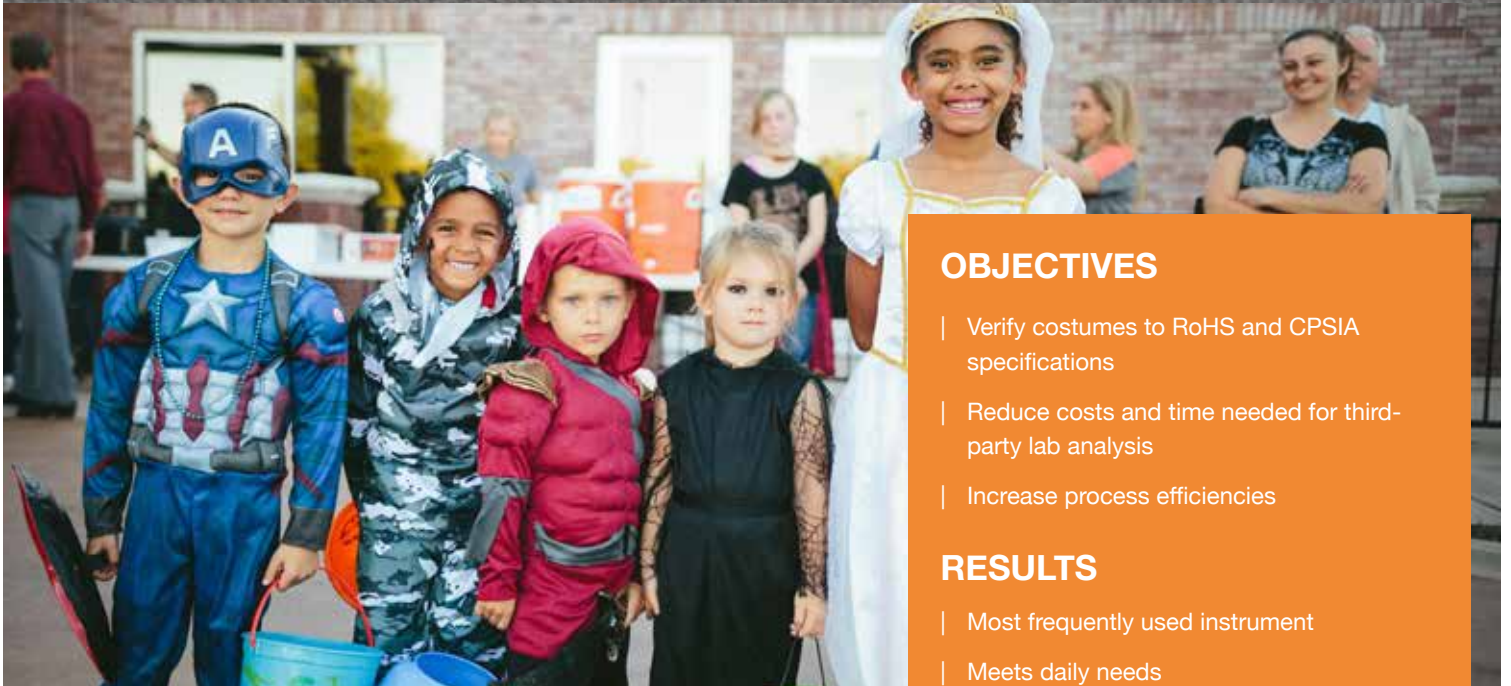


X-MET



OBJECTIVES

- | Verify costumes to RoHS and CPSIA specifications
- | Reduce costs and time needed for third-party lab analysis
- | Increase process efficiencies

RESULTS

- | Most frequently used instrument
- | Meets daily needs

Rubie's Costume saves more than \$250K annually by simplifying their quality assurance programme thanks to X-MET

As the world's largest manufacturer of Halloween costumes and accessories with a head office in the United States, Rubie's Costume Company Inc. wants to make sure that all the products they sell are compliant with the Consumer Product Safety Improvement Act (CPSIA) and Restriction of Hazardous Substances (RoHS) Directive. With a reputation for providing customers with high quality costumes, Rubie's Costume wants to ensure all products that leave their warehouse are safe for their customers. They bought X-MET handheld X-ray fluorescence (XRF) analysers from Hitachi High-Tech to verify whether products are made of plastic or metal components. It also allows them to audit their global supply chain in order to ensure all consumer regulations are met.

SAVING MONEY

Founded in 1951, Rubie's Costume is a multi-national company with distribution sites throughout the world, selling to several blockbuster retailers including Wal-Mart and Target, along with many toy stores, costume shops, variety stores and party stores.

“ The X-MET has cut the need for lab analysis by about one quarter which saves our company over \$250,000/£190,000 per year in lab costs. ”



The CPSIA limits the amount of many toxic metals, most notably lead and cadmium in consumer goods, and this act is especially focused on products intended for children under the age of 12. Rubie's is devoted to assuring its products are safe for consumers by meeting these compliance regulations. Due to the large variety of products Rubie's Costume supplies, there are literally thousands of different components that need to be tested each year.

These tests can cost the company over one million dollars in third-party lab expenses, and it may take days or weeks to get results. According to Sandy Nascimento, Quality Assurance Manager, "third-party testing slows shipments of product and has an adverse effect on overall productivity."

The X-MET doesn't replace the need for lab analysis, but it greatly reduces the amount of samples sent to the lab for testing by failing bad products and passing good products in seconds, and sending only questionable samples to the lab.

The return on investment for the X-MET is huge; the analyser pays for itself more than ten times annually.

PROTECTING REPUTATION

The X-MET is used as a screening tool and serves as a safety net for Rubie's Costume to ensure that the products they supply to their customers are safe and conform to CPSIA regulations. Due to the liability of selling products that don't conform to regulations, some of Rubie's Costume customers require testing on all products. If the wrong material were to slip through the manufacturing process and end up with a customer, it could cause harm to their reputation and could potentially lead to the loss of a major customer. Using the X-MET in their quality program has helped Rubie's Costume to become a supplier to vendors and large retailers that otherwise may not have bought from them.

INCREASING EFFICIENCY

The X-MET is used to screen materials once products enter the distribution warehouse. The products are all identified by barcodes on their packaging; a unique feature of the X-MET which Rubie's Costume is able to take advantage of is the use of a bluetooth barcode scanner to transfer product information to the X-MET. The barcode scanner easily syncs with the X-MET, and can be used to scan product codes directly to the X-MET for sample identification.

Within seconds of pulling the trigger, the results are displayed on the X-MET. Once the analyses are completed, the results are shown clearly on the X-MET's large touch screen display using a simple pass/fail scheme. In this acceptance scheme, a range for tolerances is pre-defined by the user in the X-MET software, allowing basic operators to quickly identify problematic samples. After all the testing is completed, the data can be exported into a customised report format that can also serve as a final inspection report for auditors and clients. It can then be printed from the instrument, saved to a USB flash drive, or saved directly to a network.

Since Rubie's Costume works in large volumes, the analyser is useful because it can store up to 100,000 results before data needs to be exported. The reporting and wireless network capabilities of the X-MET have allowed Rubie's Costume to integrate the results into their global database making it easy to track data and test results. Each user can simply upload the files into a report template, and save it to the company-wide network location.



WHY HITACHI HIGH-TECH AND THE X-MET?

Rubie's Costume chose Hitachi High-Tech over the competition because the X-MET offers excellent performance at a competitive price compared to other brands on the market. Sandy Nascimiento said, "it was an easy choice to implement the X-MET into Rubie's quality control program. Our decision was based on a combination of the instrument's advantageous features along with pricing and quality."

Rubie's Costume is a new customer to Hitachi High-Tech, but they've already bought three additional X-METs for different warehouse locations. The features of the X-MET that set it apart from other analysers on the market are its long battery life, which allows the operator to take measurements for an entire day (10-12 hours) without needing to swap batteries. The Bluetooth barcode scanner and wireless data transfer which allow for easy data entry into their company-wide database. Rubie's Costume has found that these features, coupled with the X-MET's simple user interface, increased the productivity in their quality program.

Ultimately, the X-MET's real value is in its ability to quickly screen for the presence of toxic metals in costumes in order for Rubie's Costume to be fully compliant and confident that its supplying quality products that their customers have become accustomed to.



If you would like to see the X-MET8000 analyser in action visit www.hitachi-hightech.com/hha or email contact@hitachi-hightech-as.com to book a demo.

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X-MET8000 RANGE

Our range of handheld XRF analysers, the X-MET8000 series, delivers the speed and performance required even in the most demanding applications. Suitable for all analysis needs from scrap metal analysis, precious metals and jewellery analysis to positive material identification (PMI) for inspection and manufacturing applications, and regulatory compliance screening.

If you would like to see the X-MET8000 analyser in action visit www.hitachi-hightech.com/hha or book a demo.

