RFID Bale Tags

Metalcraft's RFID Bale Tag is the ideal solution for tagging and tracking any type of bale. Whether it's for agricultural, cardboard, printing, recycling materials, fabrics or non-wovens, the RFID Bale Tag can easily be attached to any type of bale.

The tag's polymer construction protects the text and RFID inlay from the elements providing superior tag stability, durability and performance compared to other paper-based RFID tags.

The 5/16" nickel grommet gives additional strength to the tag to ensure tags cannot tear away due to wind or weakening around the attachment point from moisture or wear.

Available in a wide variety of colors, each tag can be custom printed to meet any design specification and provide high contrast and visibility on any bale.

Potential Applications for RFID Bale Tags

Asset Tracking – the asset id number programmed into the RFID tag plus the barcode and human readable number on

Features	Ideal for bale attachment and tracking Removable and reusable – creates more ROI Made of durable polymer materials Compatible with RFID Tracking Software
Product Print Options	Barcode . Data Matrix . QR Code . RFID . Serial Number . Text
Product Functionality	Abrasion Resistance . Chemical Resistance . Heat Resistance . UV/Outdoor Durability
Popular Applications	Agriculture . Warehouse / Distribution Centers . Manufacturing
Category	RFID Hanging Tags

Metalcraft's RFID Bale Tags can be used to track information about the asset the tag is attached to.

Returnable Containers – Metalcraft's RFID Bale Tags are perfect for tracking both metal and non-metal returnable containers such as pallets, bins, racks. RFID Hang Tags can also be used to track the contents of the containers themselves. Automate the process completely using a portal or fixed RFID reader.

Work-in-Process – the number programmed into the RFID tag plus the barcode and human readable on Metalcraft's RFID Bale Tags can identify a "batch" OR "lot" of product or just simply identify each product obtaining reads at every data collection point as it travels through the production process. And because they are not permanently affixed to the item they can easily be reused thereby maximizing your tag ROI.

For more information read our case study, Weighing The Benefits Of RFID.

Specifications Data

Material	**.002" polypropylene, .001 polyester over laminate**
Serialization	Bar code and human-readable equivalent is produced using the latest high-resolution digital technology available, which provides excellent clarity and easy scanning. Code 39 is the standard symbology with a range of 2.7 to 9.4 CPI (characters per inch). Optional symbologies are available.
Label Copy	The label copy may include block type, stylized type, logos or other designs
Colors	Standard colors include black, red, yellow, green, dark blue, orange, purple or blue. Custom spot colors are also available at no additional charge. Due to contrast needed for the bar code scanner, all bar codes are black.
Standard Adhesive	Hanging tag
Frequency Range	860-960 MHz
Sizes	6" x 3.5"
Packaging	Shipped in "work-out- of" cartons for convenient application.

Chemical Testing

Chemical Soak Test Results (24 hours): Test of label structure and printed image as well as readability of inlay.
Chemical Test Data

Test conditions	Result
Water	no effect
Glass cleaner	no effect
Bathroom cleaner	no effect
Alcohol	no effect
Acetone	Delaminated, inlay unreadable
NaOH	no effect
Nitric acid	no effect

Destructive Testing

Destructive Test Data

Temperature Testing

Temperature Test Data

Read Range Testing

In many cases the tags read intermittently for longer distances than those indicated, however, the results reported below were for continuously responding reads.

Read Range Test Data

Anechoic chamber results

Sample	Metal	Plastic	Cardboard	Wood	Free Air
Average	15 feet	8 feet	8 feet	12 feet	27 feet

Barcode Readibility Testing

Barcode Readability Test Data

Abrasion Testing

Abrasion Test Data

Label Adhesion Testing

Label Adhesion Test Data

Pull Testing

Pull Test Data