

WHY BALE ID TRACING MATTERS

Tracing Fibers to Bale Level

Embarking on the journey

As we embark on the transformative path of textile industry evolution, the significance of Bale ID tracing comes to the forefront. In navigating the challenges of physical tracing, decoding the complexities of coded and non-coded systems, and embracing the pivotal role of the GI Three Essential Bale ID Traceability Modules, we delve into a realm where precision, efficiency, and innovation harmonize seamlessly. This discourse serves as a guiding narrative, exploring why Bale ID tracing matters in the dynamic landscape of the textile industry, addressing challenges for physical tracing, intricacies of code-based and non-coded systems, and the transformative capabilities offered by the GI platform's essential traceability modules. Join us in unraveling the narrative of Bale ID tracing excellence, illuminating the path toward a more resilient and technologically empowered textile ecosystem.

Introduction

Textile Solutions innovates at the intersection of tradition and technology, uniting decades of manufacturing experience with cutting-edge IT. As a leader in Supply Chain Traceability, Sustainability Certification, and Carbon Footprint Management, General Intelligence harmonizes craftsmanship and digital expertise, driving efficiency and sustainability for suppliers through technology. We navigate the textile landscape, shaping a future where sustainability, compliance, and efficiency seamlessly coexist.

Company Overview

- **Innovative Compliance for the Textile Landscape**

Our proprietary **All-in-One** platform serves as the nexus for compliance, seamlessly consolidating various requirements.

- **AI Empowered Solutions**

Textile Solutions is underpinned by integration, automation, Artificial Intelligence (AI), and block chain – collectively forming the backbone of our innovative solutions.

- **Mitigating Compliance Risks**

End-to-end traceability ensures compliance with various standards while reducing risks in key markets.

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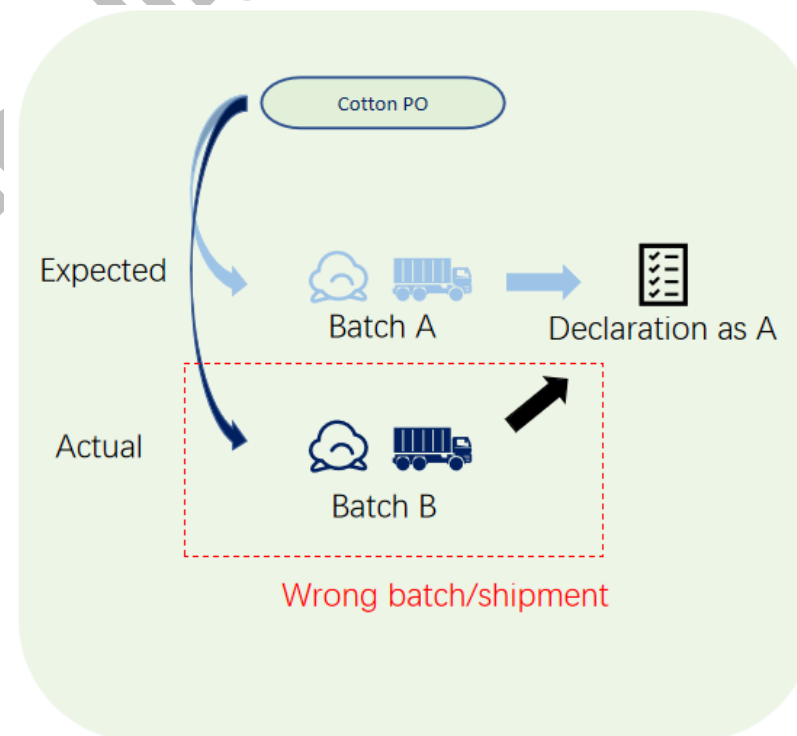
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Challenges For Physical Tracing

Document-based tracing relies heavily on manual data entry, making it susceptible to errors that may go unnoticed. The repercussions of such errors are significant, impacting the reliability of the entire supply chain. By utilizing the wrong batch or shipment information, the traceability of cotton bales becomes compromised, posing a challenge to quality control and source verification.

Introduction

Bale ID tracing plays a pivotal role in ensuring the authenticity and integrity of the cotton supply chain. Document-based tracing has been a common method, but it comes with challenges that can compromise the accuracy of batch and shipment information. For instance, instances of wrong batch or shipment identification, such as substituting Batch B for Batch A, can occur. This substitution can lead to a lack of traceability and authenticity in the supply chain.



Risk Scenario

Navigating Bale ID and Non-Bale ID Scenarios

Introduction

On the one hand, coded bales from countries like the United States, Australia, and Brazil, especially those with unique identification (ID) systems facilitated by General Intelligence (GI), provide a more robust solution to traceability challenges. GI system offer a **distinctive ID** for each bale, ensuring accurate tracking throughout the supply chain. Notably, GI-supported products that come with unique IDs contribute significantly to enhancing traceability.

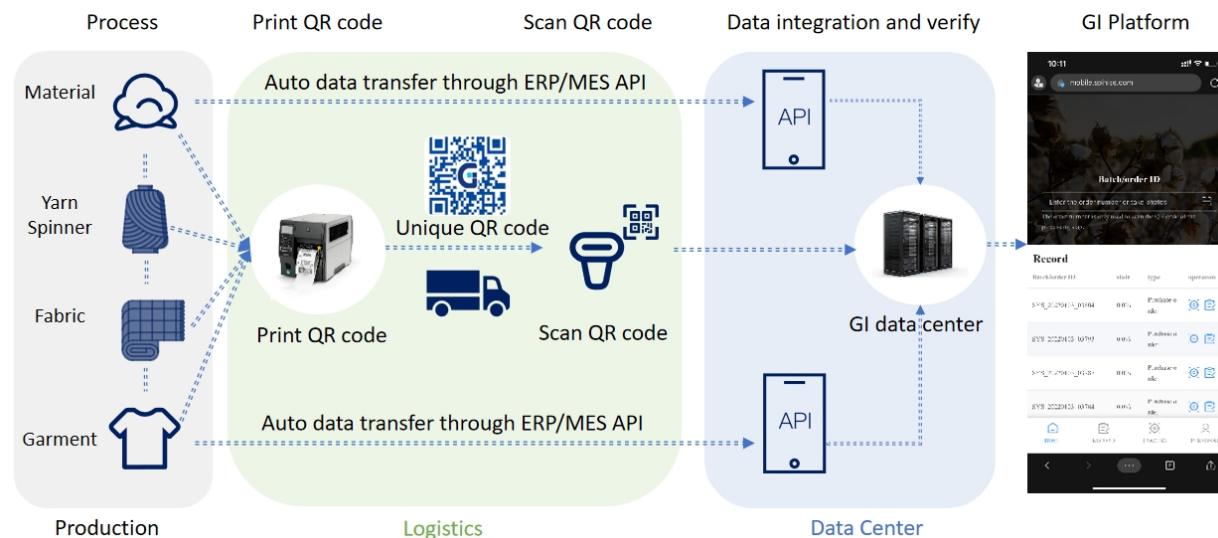
However, challenges emerge when dealing with non-coded cotton, such as that from India, where the absence of a standardized coding system makes it difficult to maintain the same level of traceability. To address this, a comprehensive approach is taken. For bales with **unique ID** facilitated by GI, the system ensures a streamlined and efficient traceability process. On the other hand, for non-coded cotton, a solution is implemented by **mapping all existing bale coding systems and providing a coding generation and printing tool** for bales without an ID.

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As part of this strategy, a visual representation illustrating the principles of coding and traceability is incorporated. This visual aid helps to elucidate the coding and traceability process, offering a clear understanding of how unique IDs are assigned to coded bales and how the coding generation and printing tool operates for non-coded counterparts. In essence, this holistic approach ensures that both coded and non-coded cotton can be effectively traced, contributing to an overarching solution for traceability challenges in the global supply chain.

In this context, two distinct challenges emerge - those associated with bale ID and those without. For cotton batches equipped with a bale ID, the challenge lies in ensuring seamless integration and accurate interpretation of this identification throughout the supply chain. Conversely, when dealing with batches lacking a bale ID, challenges arise in establishing a standardized and reliable tracking mechanism. The absence of a unique identifier complicates the process, making it more prone to errors and creating hurdles in maintaining comprehensive traceability.

Physical Tracing Achieved by Using Label Technology



GI Three Essential Bale ID Traceability Modules

Introduction

To address these challenges, the General Intelligence (GI) platform currently offers integrated systems for coded cotton from the United States, Australia, and Brazil. By providing a seamless integration process, the GI platform significantly reduces the manual workload associated with data entry. This integration not only enhances efficiency but also minimizes the risk of errors, ensuring that the traceability of coded cotton remains accurate and reliable.

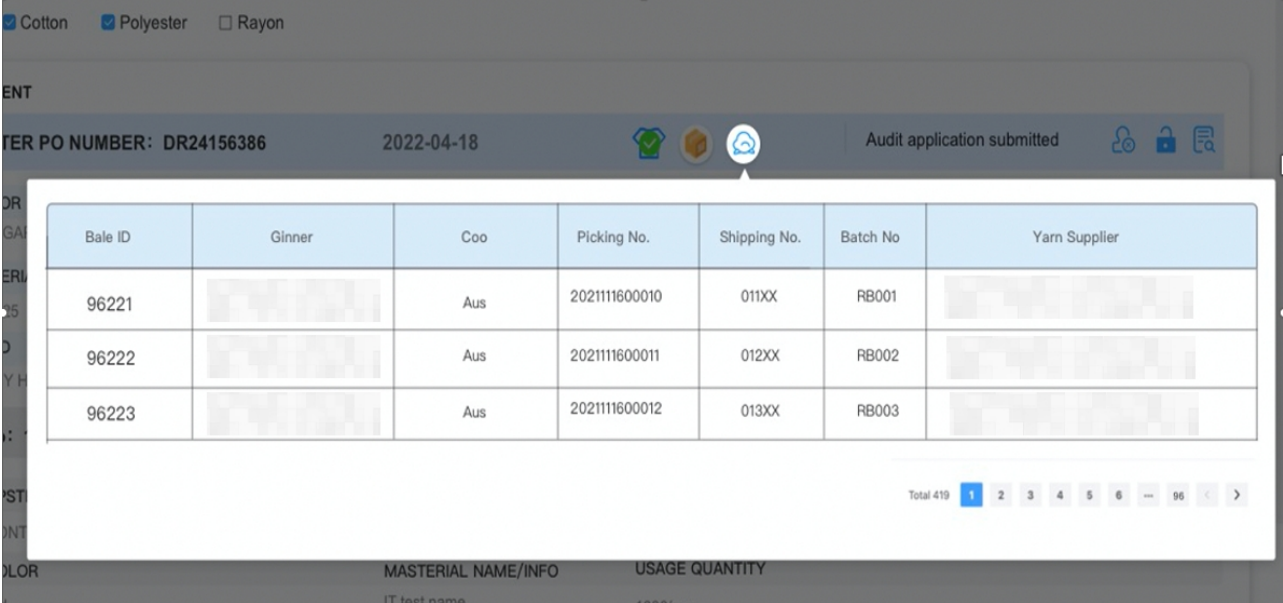
The GI platform incorporates three essential Bale ID Traceability Modules:

1. **Bale ID Reader**
2. **Bale ID Tracing**
3. **Duplication Testing:**

Bale ID Reader:

This module reads the source of the Bale ID from an existing order by considering two critical factors:

The Bale ID of the raw material recorded by the spinner during the production phase. Production process information submitted by the spinner, enhancing accuracy and reliability.



Cotton
 Polyester
 Rayon

ORDER PO NUMBER: DR24156386 2022-04-18 Audit application submitted

Bale ID	Ginner	Coo	Picking No.	Shipping No.	Batch No	Yarn Supplier
96221		Aus	2021111600010	011XX	RB001	
96222		Aus	2021111600011	012XX	RB002	
96223		Aus	2021111600012	013XX	RB003	

Total 419 | 1 2 3 4 5 6 ... 96 < >


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Bale ID Tracing:



The Bale ID Tracing module enables the search for a known Bale ID to precisely identify the corresponding product order. This functionality is crucial for maintaining a comprehensive and accurate record of the entire production and supply chain process.

COTTON BALE TRACING

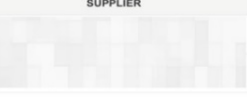

Select Bale ID

PICKING NUMBER: 3342 PICKING DATE: 2022-03-04 QUANTITY: 1/TON
 YARN SUPPLIER:  BALE COUNT: 3 YARN BATCH COUNT:

Bale IDs

#	BALE ID	RAW MATERIAL NAME	RAW MATERIAL BATCH NAME	GINNER	COO
1	96221 	1	3		Aus
2	96222 	1	3		Aus
3	96223	1	3		Aus

Yarn POs

TRACING NO.	PO	SUPPLIER	SUPPLIER RANKING	PRODUCT NUMBER	PRODUCT NAME	BATCH
PYA221000000030	1234		★ ★ ★	code_GM013		yellow
PYA221000000022	1234		★ ★ ★	code_GM013		yellow

Fabric POs

TRACING NO.	PO	SUPPLIER	SUPPLIER RANKING	PRODUCT NUMBER	COLOR	BATCH
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Duplication Testing:

To ensure the integrity of the traceability system, the Duplication Testing module is employed. Its primary function is to confirm that a single bale is picked only once during a spinner's production cycle. This feature enhances data accuracy and prevents potential errors associated with duplicate entries, contributing to the overall reliability of the Bale ID tracing process on the GI platform.

In conclusion, bale ID tracing is crucial for maintaining the authenticity and traceability of cotton in the supply chain. Document-based tracing, while common, is prone to errors that can compromise the reliability of batch and shipment information. By embracing coded bales and utilizing platforms like GI for system integration, the cotton industry can overcome challenges and establish a more accurate and efficient traceability system.



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