





Introducing Twinify

Twinify is the SaaS digital platform that automates RFID tag assignment from inception, creating a secure Digital Twin of each textile in the cloud.

Twinify optimizes data assignment by keeping the EPC as a lightweight, universal identifier for the textiles while managing all related information in its cloud database — free from tag memory limits. This eliminates the need for re-encoding RFID tags requiring manual item handling and specialized equipment, reducing operational complexity and enabling instant, scalable data updates across the entire textile lifecycle.

## Data Assignment Process

In textile manufacturing and commercial laundry operations, textile items such as towels, uniforms, or bed linen can have an RFID tag embedded in them, such as the Datamars LaundryChip™.

Each RFID tag carries a unique Electronic Product Code (EPC), typically represented as a 24-digit hexadecimal string. In Twinify, this EPC is captured during the assignment process using an RFID reader and stored in the platform's cloud database, where it is linked to the specific textile item and its attributes—such as color, size, product type, article number, batch number, or customer-defined fields.





When an RFID tag is digitally assigned to product-specific data (e.g., customer, category, batch, color, size, order...), it creates a Digital Twin: a precise digital representation of the physical item stored in the cloud.

This Digital Twin follows the textile item throughout its whole lifecycle, from production to end-of-life.



嗣

**TEXTILE** 

RECYCLING **COMPANIES** 



... while an earlier assignment enables the use of RFID tags from the beginning of the textile's lifespan.

**<<<<<** 

## Gap In Textile RFID Use

RFID tags such as the Datamars LaundryChip™ are commonly embedded in or attached to textiles and garments at production sites worldwide, but data assignment is often delayed until the products reach the customer—typically the laundry.

This delay leads to **missed opportunities**, including:

- Cost-efficient data capture
- Digital Twin creation at the source
- End-to-end traceability across the supply chain
- Seamless data flows throughout the textile lifecycle

## The Solution

Smartly assigning product data at the source when the tag is embedded into its textile, where it's:

- 1. **Easier** to integrate
- 2. Cheaper
- 3. More valuable: the details for the manufactured textile/garments are present at the source and add immense value to the digital twin that is created as the captured data is used by subsequent processes & stakeholders.



## What Is Twinify?

Twinify is the new Datamars' secure, cloud-based SaaS platform designed to streamline and optimize RFID tag assignment by creating structured Digital Twins for every textile item. It transforms manual tracking into an automated, cloud-managed workflow with built-in validation, reporting, and seamless data integration. Built for textile manufacturers, Twinify connects to RFID readers, captures tag assignments, and ensures each tag is accurately linked to its digital record.

As a central hub, it validates, monitors, exports and manages all assignment data for RFID-tagged textiles.

In other words, with Twinify, every RFID-tagged textile becomes a Digital Twin: a structured, permanent digital record of the item and its attributes (customer, batch, category, etc.) safely stored in the cloud. This enables full lifecycle transparency and data exchange from day one.

#### Key features include:

- > Structured workflows with customizable data fields and user roles
- Automated validation checks to prevent errors and ensure data integrity
  - > Full traceability of all assignments and updates
  - > Exportable records and audit trails via .CSV downloads



#### Each item becomes a Digital Twin

A digital record of the physical product — complete with attributes like customer, category, batch, etc.



### **Enriched Data from the Start**Metadata is attached as soon as

the RFID tag is applied, enabling immediate traceability.



Creating a connected, intelligent textile ecosystem.



#### Always in Sync with the Physical Item

Any stakeholder with access to Twinify can view, search, and track item information in real time.



#### Smarter Operations

The digital twin model supports automation, integration, and informed decision-making — well beyond tag reading.



## **Transformation of a basic RFID** assignment into a permanent,

structured digital identity.

# Why Twinify?

\*\*\*

Built by Datamars, **RFID pioneers** with decades of expertise.



Cloud-first, SaaS platform — secure and scalable.



Adapts to processes and data fields as per your needs

Twinify is a Platform built for Value: it transforms RFID from a basic logistics tool into a digital strategy asset.

#### Why it matters:

- > Full traceability from the manufacturing floor
  - > Faster handoffs with structured data
- > Reduced manual intervention and human error
- Better data for reuse, recycling & regulations (DPP, EPR)
  - Stronger customer communication & integration

1

Creates a connected ecosystem where data flows with the product.



Enables shift from **basic tracking to structured**, smart product management.



A **foundation** for smart factories, product passports, and beyond.



Moves RFID use from reactive logistics to proactive data strategy.

Capture data where it's cheapest, use it where it matters most.



Full Traceability — Know where an item was made, who it was made for, and what it is — instantly



Faster Handoffs — Teams can access structured data without delay



Less Dependency on Manual Checks — Tags are validated and meaningful from the start

# What It Means For Your Business



Stronger Customer Communication — Share product info with partners or platforms at any time



Support for Circular Business Models — Enables reuse, recycling, and sustainability



Data collected where It's Cheapest to Collect — Reduce costs by handling data entry in the manufacturing site



Enables to collect and use data needed for DPP, EPR, and such upcoming regulations

A future-proof platform built by **RFID pioneers**.

## Platform Features

Twinify is compatible with a variety of RFID reader configurations,

including tabletop readers, RFID cabins, and custom setups.

The platform's software interface allows centralized control and monitoring of the assignment process, adapting to the specific needs of each operation.

Users can search, filter, and review tag data directly through the platform, or export it for integration with external systems such as ERP, laundry management, or inventory tools.

#### Highlights:

- Centralized cloud-based SaaS
- > Customizable data fields & roles
- Flexible input (UI or CSV upload)
- > Real-time tracking & validation
- > Remote RFID reader control (Tabletop, Cabin, etc.)
  - > Smart item search, filter, preview
    - > CSV export for reporting
    - > 12-month data retention
  - > Multi-station & multi-site support



