TWINIFY Platform Overview

In textile manufacturing and commercial laundry operations, each item—such as a towel, uniform, or linen—is embedded with an RFID tag, like Datamars' LaundryChip™. When this tag is assigned to product-specific data (such as customer, category, batch, or order), a Digital Twin is created: a digital replica of the physical textile item enriched with its metadata. This enables full traceability, process transparency, and data-driven control throughout the item's lifecycle.

Datamars, a pioneer in RFID technology since 1990, offers the LaundryChip™ series, designed to withstand the harsh conditions of industrial laundry. And now, with the new Twinify platform offering, textile manufacturers and laundry can unlock the full potential of these RFID chips by creating structured Digital Twins for every textile item—transforming manual tracking into an automated, cloud-managed process with validation, reporting, and seamless data integration.

Twinify is a secure, cloud-based SaaS platform built specifically to support and optimize this **RFID tag assignment process**. Designed for textile manufacturers and even laundry, Twinify connects to RFID readers, captures tag assignments, and manages workflows to ensure each tag is correctly linked to digital records. It acts as a central hub to validate, monitor, export, and manage all assignment data related to RFID-tagged textiles.

Thanks to the platform's defined process, validation checks, user roles and customisation on data attributes, it is adaptable to various customer needs & setup. In terms of the hardware setup, the platform can connect to different types of reader setups like tabletop, cabin, etc and offers software control to manage the assignment process optimally.

Currently, the recorded data is available to be viewed, searched, filtered directly through the platform apart from being downloadable directly via csv files.

textile-id@datamars.com
https://textile-id.com

Key Platform Features

- Centralized, cloud-based SaaS architecture
- Customizable data attributes
- Flexible data input: UI or CSV upload
- Tag assignment and order session management via interface
- Near real-time order & product status tracking
- Remote reader control (Start/Stop)
- Advanced list views with search, filter, and sort
- Quick item preview with smart lookups
- Built-in validation & warnings for UI/CSV input
- CSV data export for reporting
- Role-based user access & permissions
- Secure device onboarding
- Live log monitoring
- Multi-station support (e.g. Tabletop, Cabins)
- 12-month data history retention

Attribute Customization

When a customer onboards Twinify, we consult with them to understand the fields and nomenclature they use. After this step, we can customize the platform as per their needs & usage and add desired attributes.

Pricing Plans

- All plans are subscription based and billed in monthly cycles
- Option for a yearly plan with fixed assignment usage & fixed price
- Option for a monthly plan with flexible assignment usage – pay per use
- The assignment for non-Datamars tags is possible and subject to extra charge

Usage Notes & Limitations

- Cloudburst software needs to be running on the readers to use Twinify
- Only one session type allowed per reader at a time
- Reader operations (start/stop) must be controlled exclusively through the platform for optimal usage
- Define restriction zone around readers to prevent tag collision or incorrect scans
- High speed internet connection
- Impinj RFID reader supported – R220, R420, R700, others coming soon.
- Offline or smartphone-based operation currently not available
- Custom file export templates currently not available

TWINIFY Platform Modules Overview

User roles supported

- Manager
- Operator
- Data Operator
- Read only user

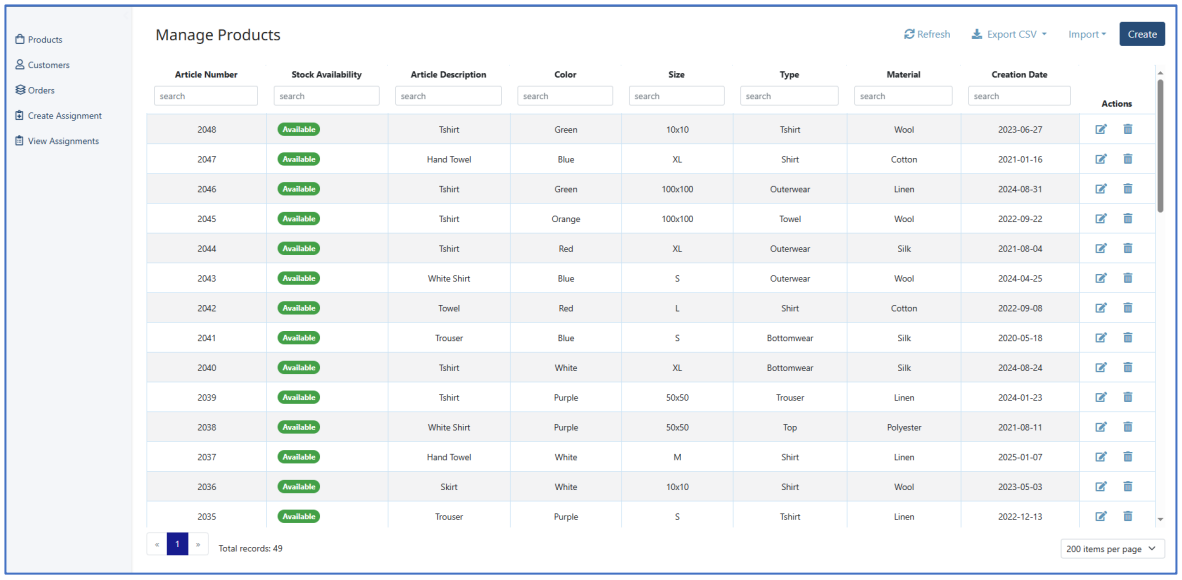
Main Functional Modules:

- Product
- Customer
- Orders
- Create Assignment
- View Assignment
- Validation *(add-on)*

Add on module & features

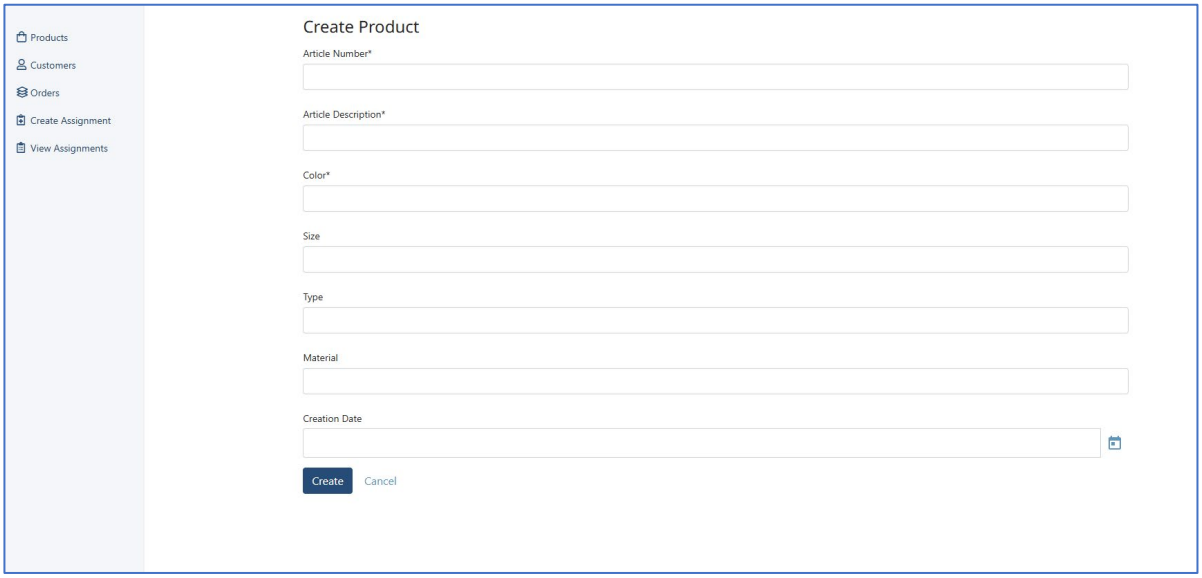
- Pallet Validation Module
    - *This add-on module helps generate reports that confirm & validate the contents of pallets in terms of RFID tags associated with a specific order, product, etc. Only works for the products assigned using Twinify with bundle size information.*
- Access management *(Coming Soon)*
- APIs *(Coming Soon)*

Product Module

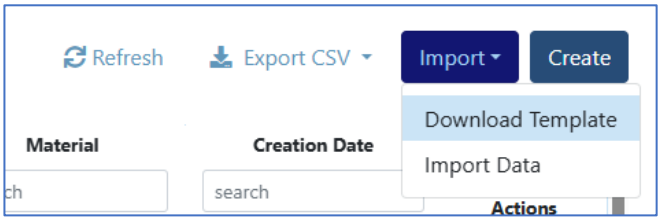


This is the module where the customer can define any attribute they would like to store, and record related to their products/articles against the individual EPC tags.

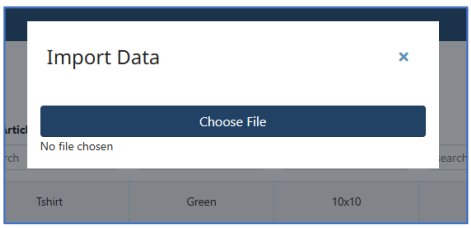
The attributes here are customisable meaning that depending on their need/workflow customer can record attribute like colour, size, material, etc. All this information can be made available in the downloaded file along with individual EPC tags after the assignment is done. For cases when a customer may want to remove a product temporarily or is adding products that are in draft form, they can make use of the status field using Draft or Archived status. Products having only Available status are available for assignments and use in orders. All fields in the module come up default functions of searching, sorting and multiple searches across different fields as well as possibility to download the data in csv file format.



In case customer requires to add bulk data, instead of using the simple interface, they can also upload the data via csv file.



The platform provides templates for inserting data. The customer needs to download this template csv file, and fill/copy data inside and upload it back to the platform. The data would be uploaded only if the validations are correctly passed like all required fields are present.



Note that user actions depend on the roles and permissions meaning that some actions would only be available for users with high permission/role.

Customer Module

Customer module as name suggest allows you to store information related to customers that is needed as per your workflow. Again, based on the needs this module is customisable meaning that you may choose to store fields like customer name, location, etc. At minimum the platform requires an identifier for the customer to be available for the purpose of use in orders module as we will see in next section. This module just like product modules offers both data insertion via interface and csv file uploads using the templates. All fields in the module come up default functions of searching, sorting and multiple searches across different fields as well as possibility to download the data in csv file format.

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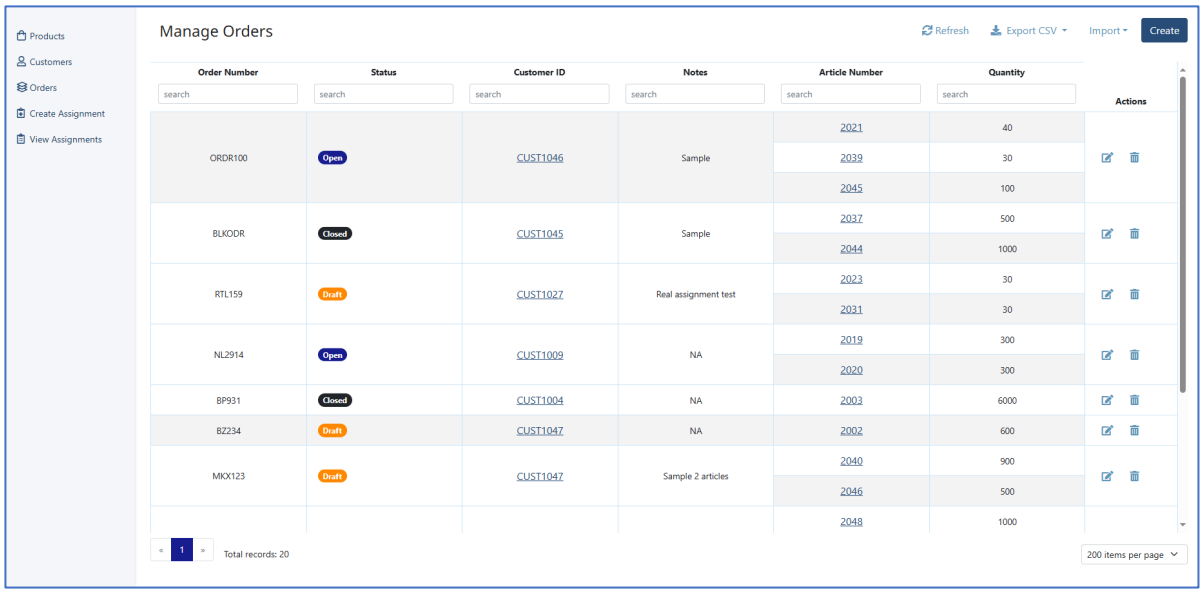
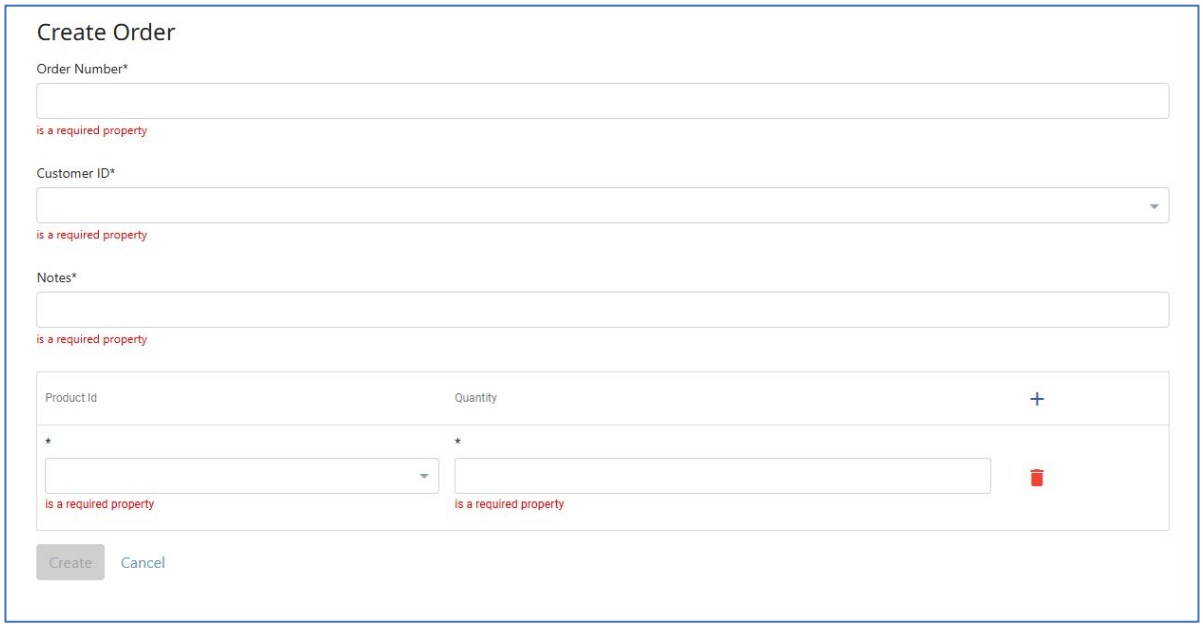
Orders Module



This module is the core component needed for making assignments.
The platform works on the logic that orders are created for the purpose of making assignments and the order themselves contain the information of what products to assign, how many quantities and for whom.

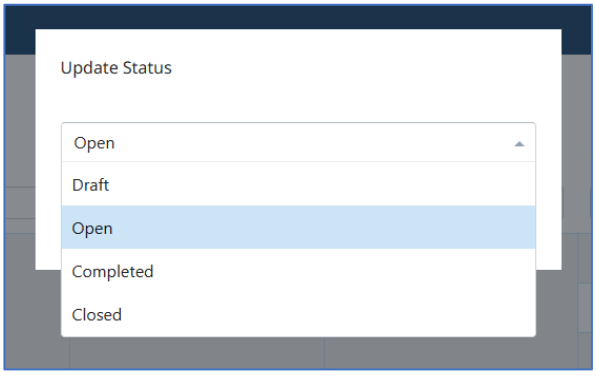


So, this means that an order would need at least the following information to be picked up for the assignment process:

- Product identifiers
- Product quantity
- Customer identifier

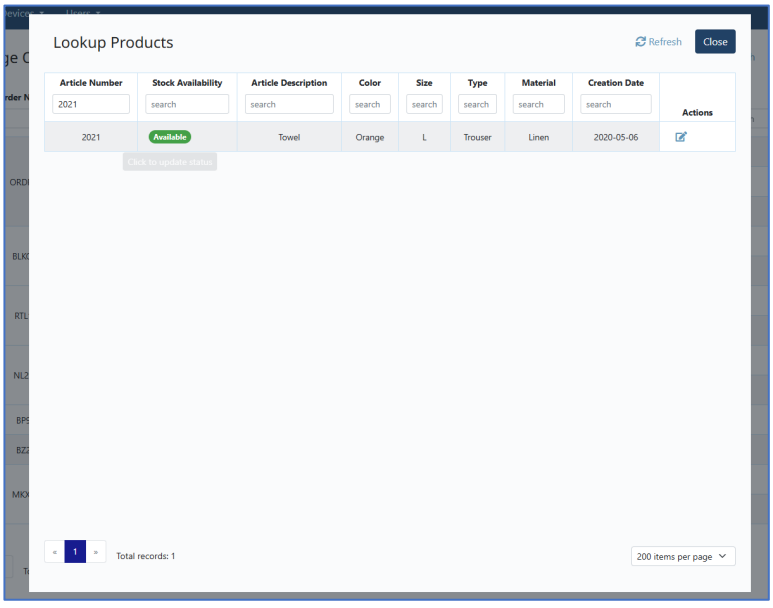
The detail of an order is made available to the assignment operator who does the assignment based on order numbers. This process is described in next module.

Order module offers status management that is helpful for managing the work related to assignment operations. Offered status are simple to use and understand and are following:



Status transitions and logic implemented related to possible actions and data attributes ensure that platform supports the operators to do assignment correctly and removes confusion related to common things like what is to be assigned or how much is to be assigned and so on.

The data entered for order is validated both when entered through the UI interface as well as file uploads for things like existing order number, valid customer id, valid product id, valid product status, product quantity, any other such fields that customer may opt for adding to orders etc.

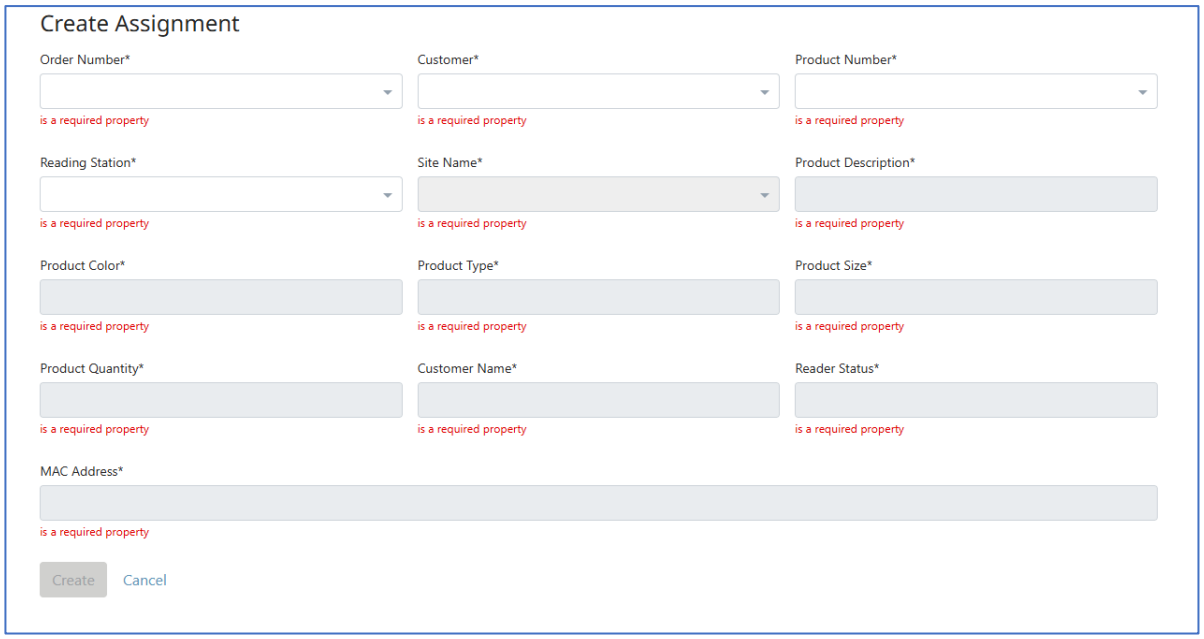


The data is present clear and thanks to quick lookup view, users can search, filter and view data at a glance.

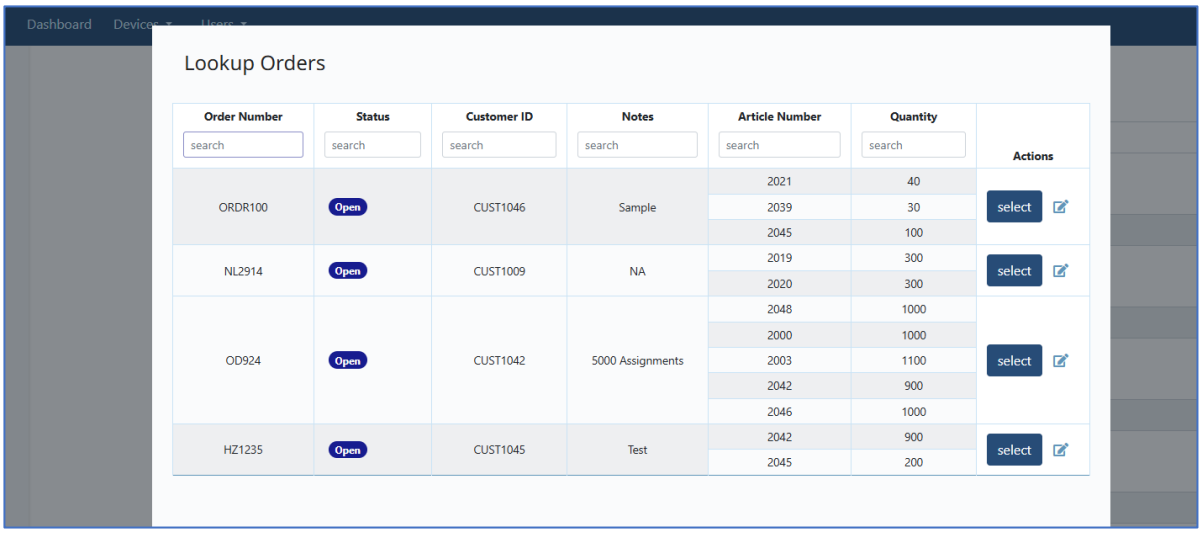
Note that user actions depend on the roles and permissions meaning that some actions would only be available for users with high permission/role.

Create assignment Module

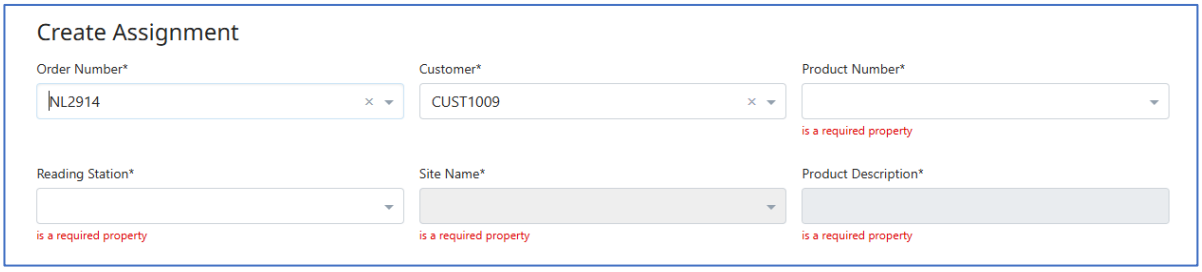
This module is made for operators who carry out the actual physical process of assignment of the data to RFID tags. The underlying principle of the platform is that orders containing information about what, how much and for whom to assign and that order is then picked by the operator, and they perform the process of reading the RFID tags on the textiles and assigning them through the platform. As a minimum it's needed that operators are aware of order number available to them for which they need to make the assignment. There is also possibility to customise the information available & visible here on customer onboarding



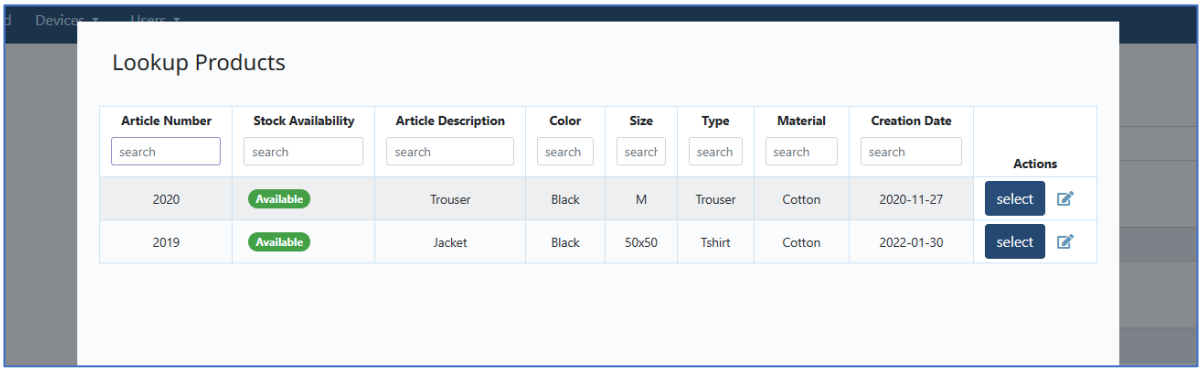
As shown in the create assignment screen above, the information needed to start the process is order number.



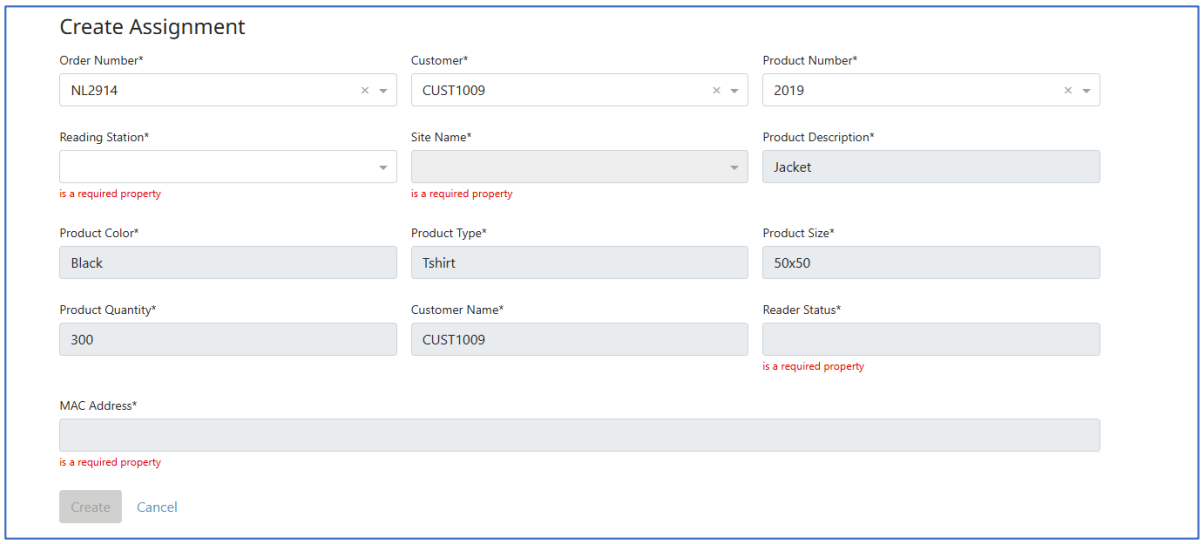
Once order number is selected, the customer id is automatically filled based on the information previously entered in the orders.



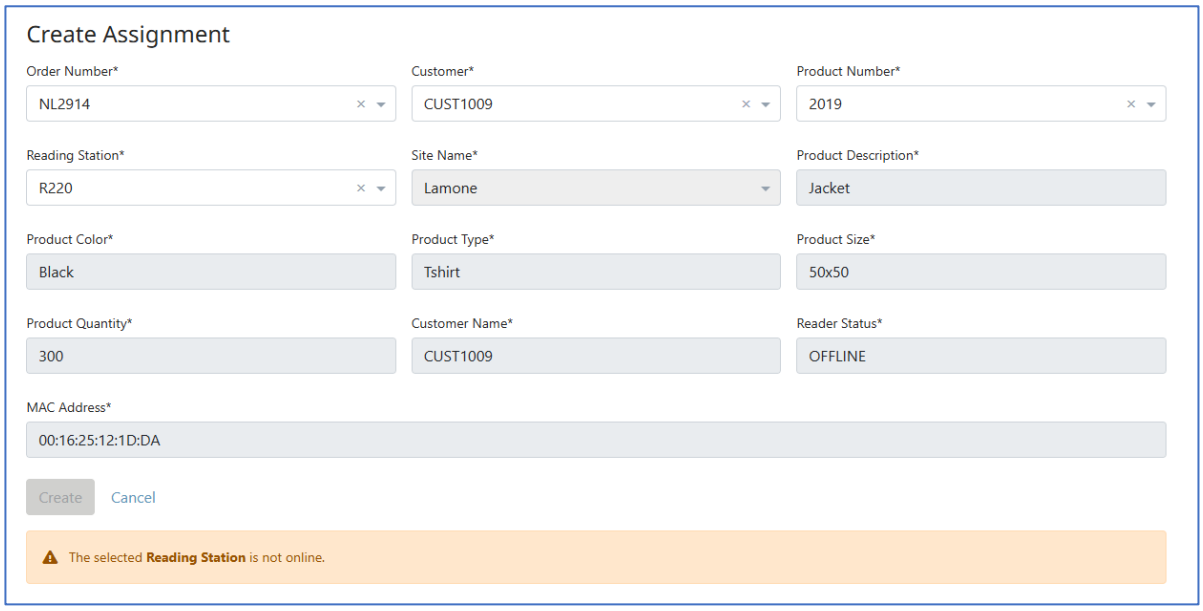
Next selection is about product number for the order. Twinify provides the possibility to have multiple products available for assignment in a single order. In that case the operator needs to click on the product number, and they will be presented with curated list of products that are available for assignment for the specific order.



Upon selection of the product number, the product details are filled automatically and can be customised on the time of onboarding by customer. The filled data is present to help operators verify the assignment is being done for right product.



Next and final step before making assignment is to select the actual reader which would be used for this purpose. This is because Twinify allows to add multiple readers, multiple users and multiple locations meaning there can be assignments done from different places. The platform continuously checks for validations like in case the readers are not available or in use, the operator is notified upon the reader selection.

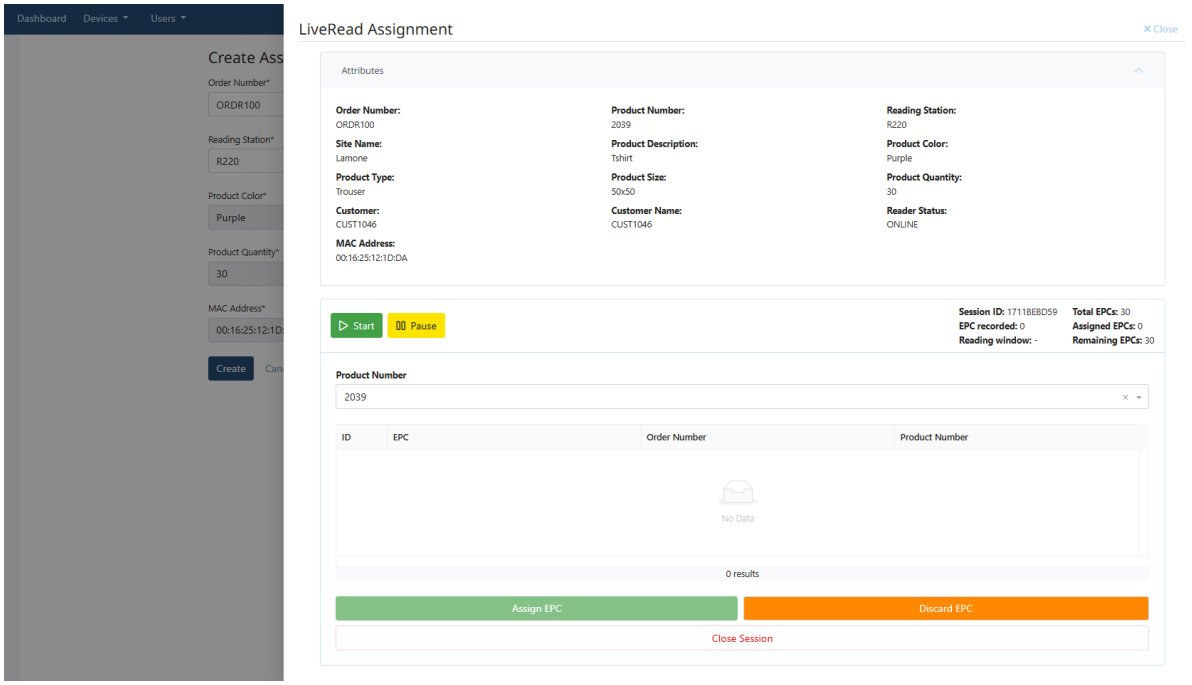


Once the operator is ready, they can press create and enter the assignment session view. This is the place where they will see the EPC from the RFID tags listed and ready for assignment as they move the products/items over the reader.
The interface offers a modern, informative and simple layout.

Software control for Start and Stop reader are present to control the reader and collect the EPCs. When EPC are collected, the operator needs to click on assign EPCs

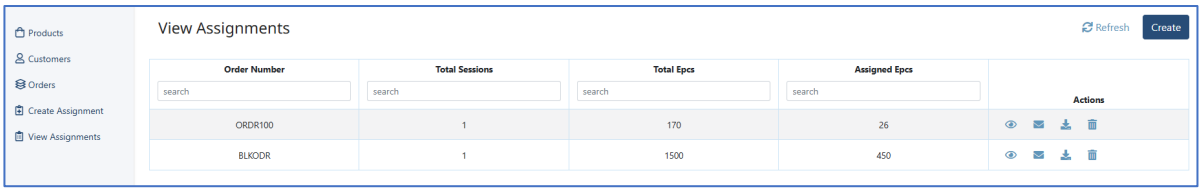
button and data would be recorded and mapped to the EPC with the selected product id and for the specified order.

The operator also gets the option to discard the EPCs if they have read some by mistake and on top of that, the system always reports and checks for duplicates and existing EPC in the record when the Assign EPC action is performed. When operator wants to exit, they can click on close the sessions and the data would be recorded for the specific session under the selected order.

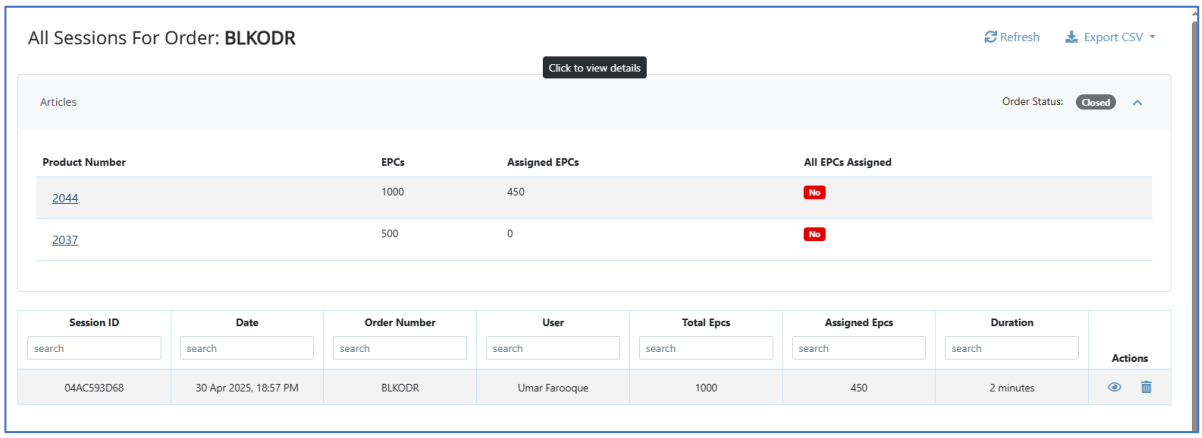


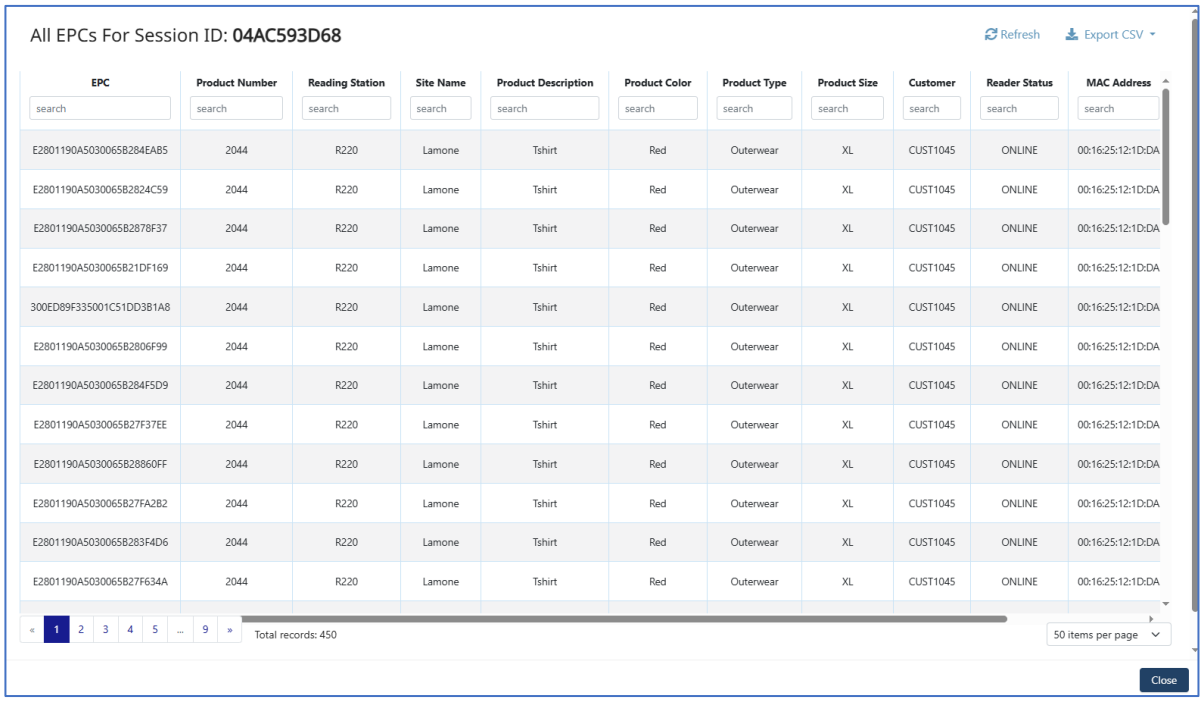
View assignments

When assignments are done either completed or partially, the data for the assignment is made available in the view assignments area.
The data for the assignments is made available at order level meaning that for each order, there are records of the different sessions that were done and the total EPC recorded.



The user can click on details and view data related to sessions that took place for assignment for the orders as well as summary of the order and products that were part of the order along with assignment status.



On all the lists in this module, there are functions for sorting, filtering and multiple searching available for easily finding the data needed. On top of that the download options are also available that allows to export data in csv files which can then be manipulated as needed.

The platform provides powerful data rendering capabilities which allows to view specific EPC data and has some meta functions like recording time taken for each session which can help the customer to time and improve their assignment workflow.