



Your integrated warehouse logistics flow management suite





Warehouse Management System



The ESI-WMS suite is a **modular** solution for managing internal warehouse logistics processes.



The operator interfaces are designed for the management of raw material, component and finished product warehouses, guaranteeing a high degree of customization to meet the needs of various sectors (Pharmaceutical, Fashion, Food, Chemical, Furniture, Manufacturing).

Our experience in the field has enabled us to develop a standard protocol for interfacing with the main field devices and handling systems, managed by the main brands (Siemens, Omron, Rockwell, Phoenix, Wago, ecc.).

PROCESSES MANAGED



OPERATIVE FLOW

01

Receiving goods

Suppliers/Customers,
Inspection



02

Storage

Automated
and/or manual



03

Handling

Picking, Kitting,
Missions



04

PF/SML deposit

Inspection/
Release



05

Shipments

Picking,
Packaging,
Delivery plan



ACTIVITIES



ESI | WMS MODULS

MASTER DATA AND CONFIGURATION

**MASTER DATA
MANAGEMENT**

(MDM) → REGISTRY

AUTH MANAGER

Setting Users, Roles, Permissions

RECEPTION AND STORAGE

RECEIVING MANAGER

Identification of articles, bill/order reconciliation, quality control, loading into stock, returns management

STOCK MANAGER

Definition of rules for storage, sub-stock, quarantine, samples and references

HANDLING

ORDER MANAGER

Transfer order management module

PICKING MANAGER

Manages picking missions and supports the operator in picking activities

SHIPPING

SHIPPING MANAGER

Shipment management from order preparation with picking missions to the management of loading bays

WCS

AUTOMATION MANAGER

Management and integration with automated warehouses

REPORT

REPORT

Management of reporting and statistical analysis

TRACKABILITY

RFID MANAGER

Automatically track material movements with RFID technology

INVENTORY

INVENTARIO

Mobile module for physical inventory management also in dynamic mode

MASTER DATA MANAGEMENT (MDM)

Module for WMS configuration and master data

Through the MDM it is possible to configure all the entities to be managed by the system.

- Establishment master data
- Department master file
- Line master data
- Quality status
- Locations
- Devices
- Printers
- Storage rules
- Underlay levels
- Label layout
- Cold chain parameters
- Alarms
- From ERP:
 - Supplier/customer master data
 - Articles
 - Product groups/subgroups
 - Rotation classes
 - BOM

RECEIVING MANAGER

Incoming goods management module

RICEVIMENTO JDE

Note

DDT

Data DDT

Data e ora ric.

Targa vettore

Vettore

Ricerca ODA

Annulla

Conferma

Ricevimento

Selezionare il DDT

DDT	Del	
DDTPROVA111	19/03/2024	
Ricevuto il	19/03/2024 14:33	
DDT	Del	
ghfh	19/01/2024	
Ricevuto il	19/01/2024 15:08	
DDT	Del	
aaaa	20/09/2023	
Ricevuto il	20/09/2023 17:11	
DDT	Del	
GHGH	20/09/2023	
Ricevuto il	20/09/2023 16:39	
DDT	Del	
ddt00001	19/09/2023	
Ricevuto il	19/09/2023 17:42	

Aggiorna

Area di lavoro: [Default] Nome utente: [admin]

When good enter in the warehouse, the WMS system allows to you:

- **Identify the items** by reading the barcode or RFID tag affixed to the pallet;
 - If goods don't have one, the WMS creates a new identification code and prints the label to be affixed to the goods.
- **Link the goods** with the relevant purchase order and delivery note;
- Make **quality and quantity checks**;
- **Load the warehouse** (physically and accounting);
- Manage any **returns** from customers/supplier.

STOCK MANAGER

Storage rule management module

ESI-WMS supports the storage phase by managing appropriate storage rules.

Feature:

- Goods storage rules
- Sub-stock management
- Quarantine management
- Samples and references management

Deposito (1)

Leggi locazione deposito, oppure il pallet più vicino

C33

Stiva PF C33

Barcode
(00) 00000000 267950007 2 (37) 00000200 (91) 000000 0410180502

Articolo
F134918

Quantità
200 NR

Magazzino logico
081001

Categoria merceologica
PRFIN

Commessa
41018E2

Cliente
MONTENEGRO SRL

Carica

Area di lavoro: [Default] Nome utente: [admin]

ORDER MANAGER

Module to manage transfer orders

Features:

- Manual order creation
- Automatic, scheduled, manual activation
- User assignment
- Priority management and grouping rules
- Order management (*FIFO, LIFO, FEFO logics*)
- Integration with vertical warehouses

WORK ORDER

+ Attiva

- Disattiva

+ Impegna

+ Preparazione

		Tipologia WO	Work Order	Stato	Assieme	Desc. Assieme	Lotto	Unità	Qta richiesta	Inizio Prod.	Priorità
		Mostra tutti	Work Order	Attesa attivazione	Assieme	Desc. Assieme	Lotto	Unità	Qta richiesta	Inizio Prod.	Mostra tutti
<input checked="" type="checkbox"/>		WO	20211159	Attesa attivazione	7338VI	-	U0484	UN	22.500,0000	01/9/2021	-
<input checked="" type="checkbox"/>		WO	20211016	Attesa attivazione	7120TVM01	-	U0923	UN	15.400,0000	22/6/2021	-
<input type="checkbox"/>		WO	20211012	Attesa attivazione	4849FP	-	U0483	UN	35.000,0000	28/8/2021	-

WORK ORDER

+ Attiva

- Disattiva

+ Impegna

+ Preparazione

		Tipologia WO	Work Order	Stato	Assieme	Desc. Assieme	Lotto	Unità	Qta richiesta	Inizio Prod.	Priorità
		Mostra tutti	Work Order	Attivo	Assieme	Desc. Assieme	Lotto	Unità	Qta richiesta	Inizio Prod.	Mostra tutti
<input checked="" type="checkbox"/>		WO	20211159	Attivo	7338VI	-	U0484	UN	22.500,0000	01/9/2021	-
<input checked="" type="checkbox"/>		WO	20211016	Attivo	7120TVM01	-	U0923	UN	15.400,0000	22/6/2021	-

Per Pagina: 50

Stato: Attivo

CreatedAt

RICHIESTE DA PRODUZIONE > MATERIALI PRONTI

+ Richiesta

- Annulla

+ Aggiorna

- Indietro

Numero WO

20211982

Stato missione

Attesa attivazione

Righe WO

Lista Consegna

	UDC	Barcode Locazione	Descrizione Locazione	Imballo	Riga	Articolo	Descr. Art.	Lotto Forn.	Lotto	UM	Qta	Stato qualità	Stato
<input checked="" type="checkbox"/>	U0000006742	01000G030	CENTRALE STOCK G 30 3	N.colli = 8									Pronto
<input type="checkbox"/>		01000G030	CENTRALE STOCK G 30 3	233026/2~U00134~0014	141	33026/2	CONT.PLAST.NEUTRO (GAMMA)	20-0002130	U00134	UN	21.000,0000	Approvato	
<input type="checkbox"/>		01000G030	CENTRALE STOCK G 30 3	233026/2~U00134~0027	141	33026/2	CONT.PLAST.NEUTRO (GAMMA)	20-0002130	U00134	UN	21.000,0000	Approvato	

PICKING MANAGER

Module to manage picking activities

Picking

Trasferimenti (0/15) 3 +

Campionamento (0/0) 0 +

Ordini di Produzione (0/0) 0 +

Contolavoro (0/0) 0 +

Distruzione (0/0) 0 +

Vendita (0/0) 0 +

Reso Fornitore (0/0) 0 +

Area di lavoro: [Default] Nome utente: [infor]

Picking

Leggi il materiale

Locazione
C2L2P2

UDC
UDC-002

Imballo
-

Quantità da prelevare
-

WO-001 Riga 1

<

>

Annulla

OK

Mario Rossi

Picking

Dichiara la quantità prelevata

Seriale letto:
BOX-0000001

Quantità prelevata
1000 NR

Quantità residua
0 NR

Annulla

Conferma

Mario Rossi

Features:

- Suggest pick-up location, item and quantity to be picked up
- Withdrawal item/material/LU
- Supporting the kitting phase (based on BOM)
- List of LU ready for delivery
- LU recall by production (Kanban)
- Errors management

MIX UP MANAGER

Module for production framing control

Carico carrello

Leggi QR-Code cartello verde dei materiali da caricare nel carrello

Codice Ordine
EV2000840

Linea
W954

Articolo
P01B2000.1064

Descrizione
VIAL EZ-FILL FINA VB 8ml 22x1x40 ISO...

F-VIAL-009 F-VIAL-SMF VB 8ml 22x1x40 ISO8362-1-A-6R	0 NR
I00335 TYVEK LID PE-HD 225x382x0.18	1000 NR
I00338 STERI-BAG PE-HD 560x360x0.08	0 NR
I00339 STERI-BAG PE-HD 540x340x0.08	0 NR
I00368 TYVEK SHEET PE-HD 189x346x0.18	0 NR
IA670/VA TRAY 96 PP Ø24 379x221x49.5	0 NR

Indietro

Continua

Area di lavoro: [Default]Nome utente: [admin]

Carico carrello

Leggi QR-Code cartello verde dei materiali da caricare nel carrello

Codice Ordine
EV2000840

Linea
W954

Articolo
P01B2000.1064

Descrizione
VIAL EZ-FILL FINA VB 8ml 22x1x40 ISO...

F-VIAL-009 F-VIAL-SMF VB 8ml 22x1x40 ISO8362-1-A-6R	0 NR
I00335 TYVEK LID PE-HD 225x382x0.18	1000 NR

?

Attenzione

Non hai caricato tutti i materiali presenti in distinta, vuoi comunque continuare?

✓ Conferma

✗ Annulla

Indietro

Continua

Area di lavoro: [Default]Nome utente: [admin]

Features:

- Material compatibility check with the current order BOM
- Batch block
- Alarms management
- Dashboard

Technologies used:

- Scanner barcode
- RFID

SHIPPING MANAGER

Module for the management of shipping orders to end customers

Features:

- Creation of shipping list
- Packing list generation
- Reading parcels set up in the bay
- Unexpected material checks
- Automatic order closure

Technologies used:

- Barcode reader
- RFID gates on loading bays

The screenshot displays the ESISOFTWARE Shipping Manager interface. The dashboard includes a sidebar with 'Home' and 'Gestione spedizioni' (highlighted). The main area features a 'GESTIONE SPEDIZIONI' header with buttons for 'Comandi', 'Nuovo', and 'Esporta griglia'. Below this are six status cards: 'Ricevuti da ERP' (7), 'Rilasciati' (14), 'In preparazione' (9), 'Preparati' (7), 'Caricamento in corso' (5), and 'Caricati' (8). A table lists shipping orders with columns for 'Stato', 'Numero spedizione', 'Destinazione', 'Data consegna', and 'Cliente'. The table shows several 'RECEIVED' status entries. A modal window titled 'Verifica disponibilità' is open, showing a table of selected orders and a 'Verifica Disponibilità Materiali' button. Below it, a 'Rilascia ordini' modal shows a table of orders to be released and a 'Conferma' button.

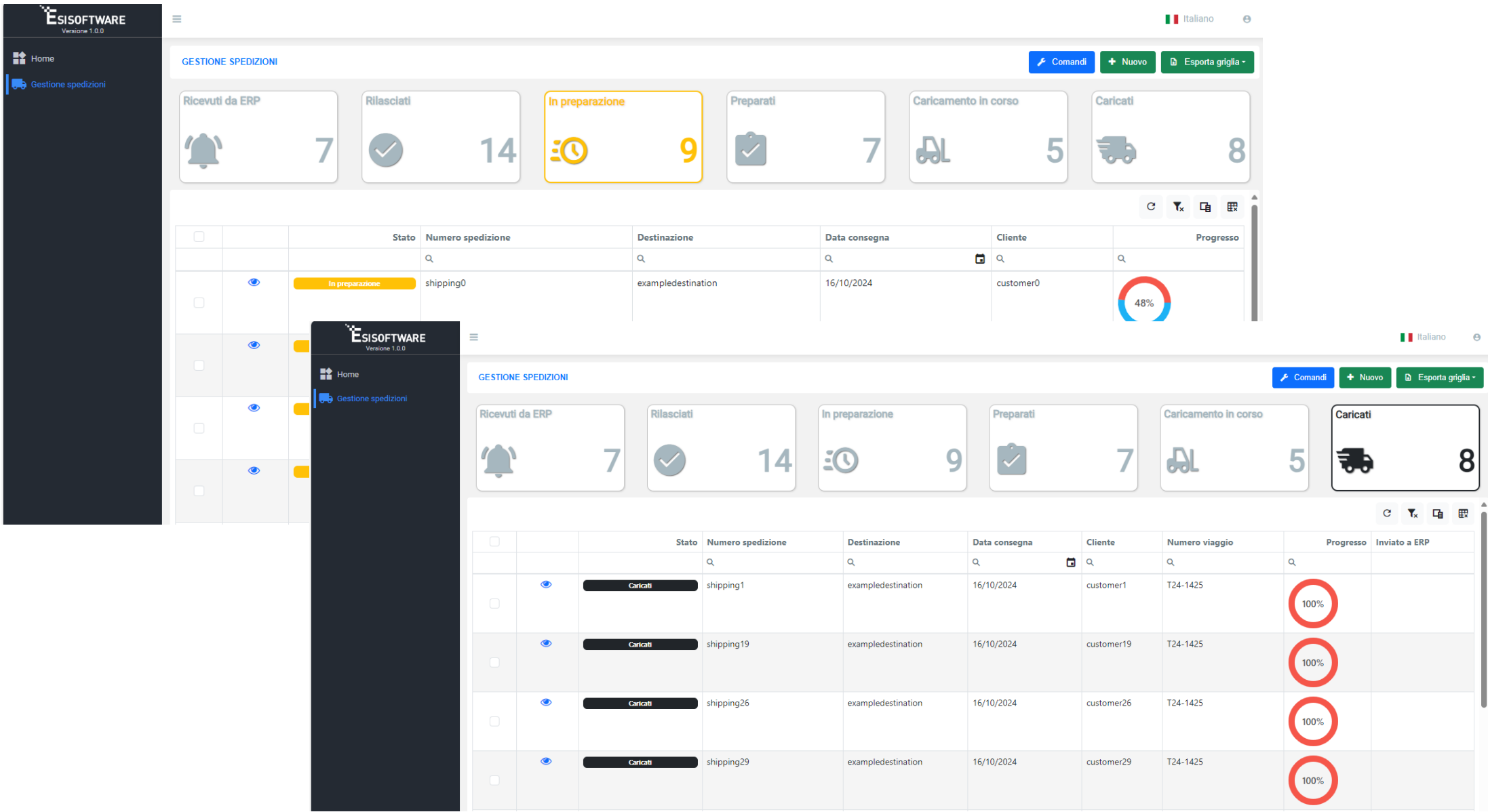
Stato	Numero spedizione	Destinazione	Data consegna	Cliente
RECEIVED	shipping11	exampledestination	16/10/2024	customer11
RECEIVED	shipping18	exampledestination	16/10/2024	customer18
RECEIVED	shipping27	exampledestination	16/10/2024	customer27
RECEIVED	shipping37	exampledestination	16/10/2024	customer37
RECEIVED	shipping38	exampledestination	16/10/2024	customer38
RECEIVED	shipping40	exampledestination	16/10/2024	customer40
RECEIVED	shipping47	exampledestination	16/10/2024	customer47

Ordine	Lista di spedizione	Destinazione
	shipping40	exampledestination
	shipping47	exampledestination

SHIPPING MANAGER

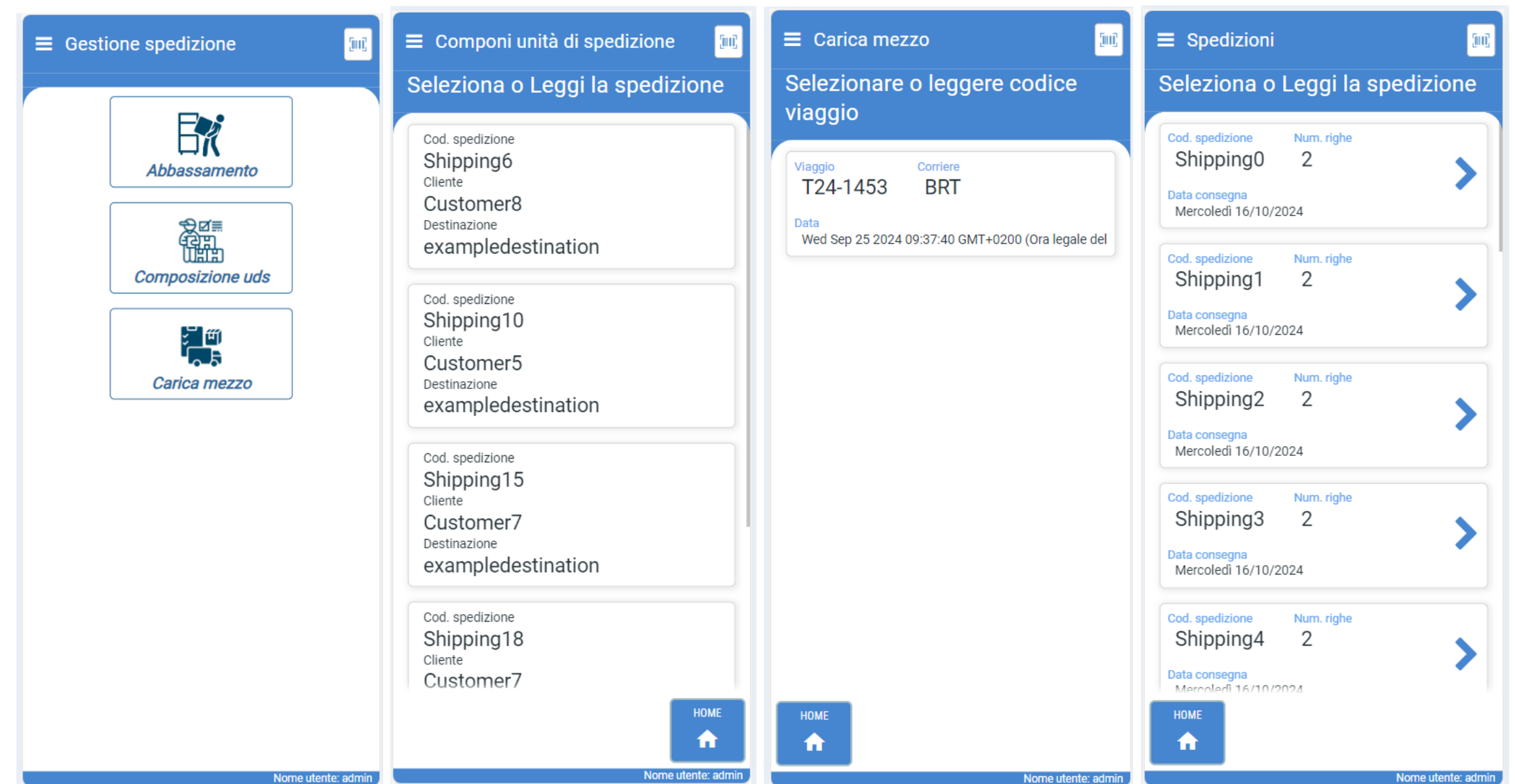
Shipment management funnel

- Creating/receiving dispatch missions
- Releasing shipments
- Preparation (grounding)
- LU prepared
- LU loading in progress
- LU loaded



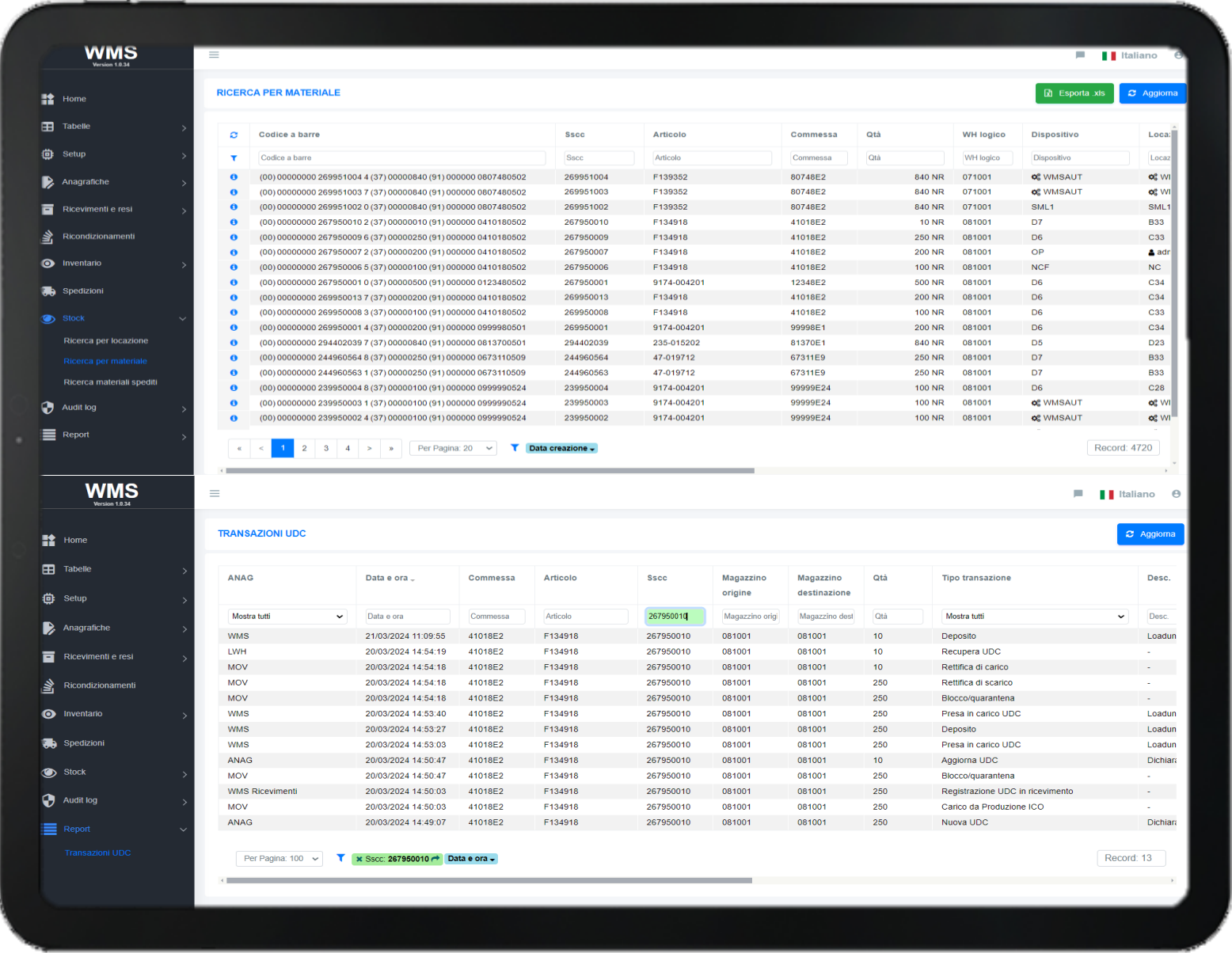
SHIPPING MANAGER

Mobile



REPORT

Advanced reporting module

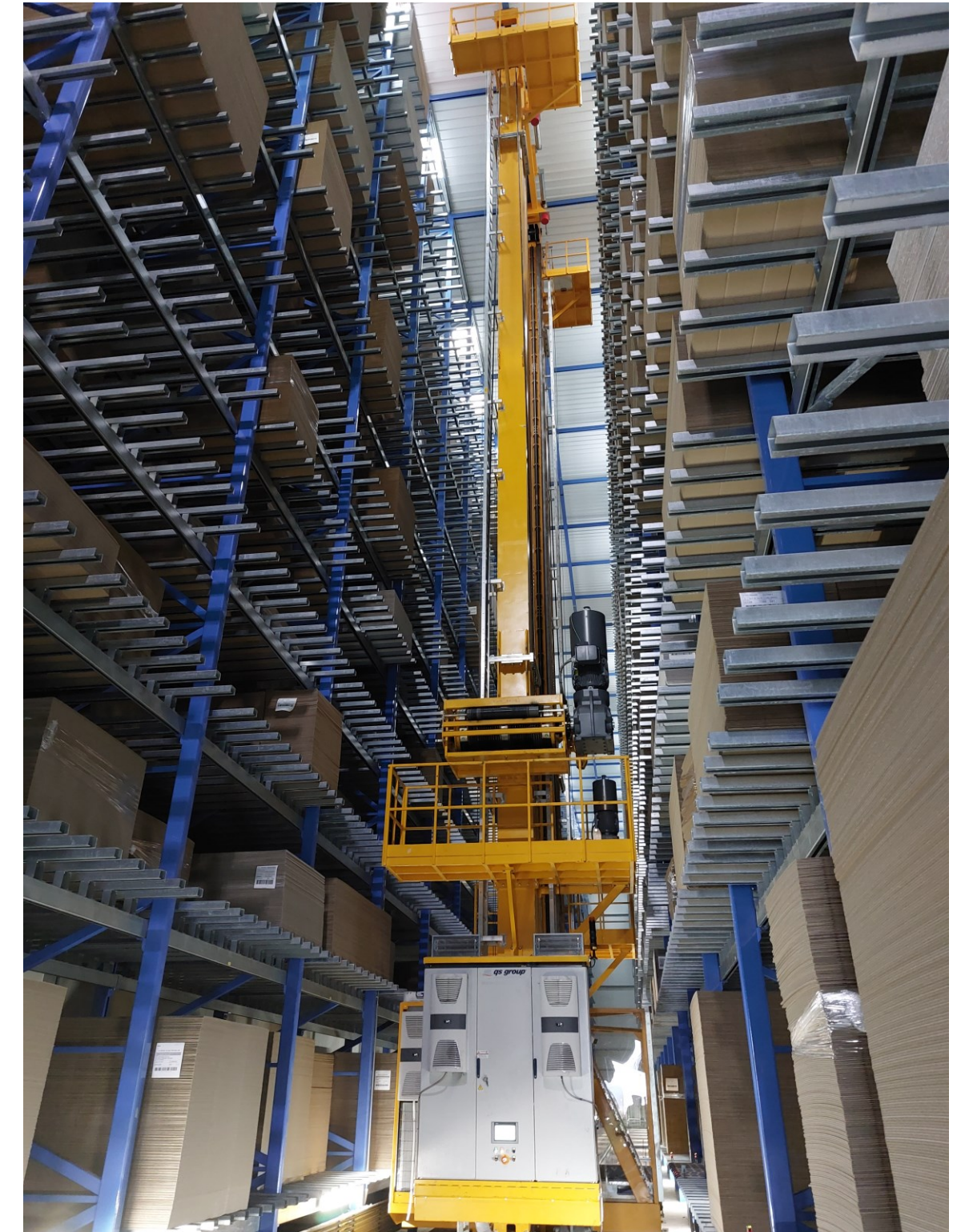


AUTOMATION MANAGER

Module for integration with field devices

Features:

- Check conditions for received **unloading** requests
- Check conditions for received **load** requests
- Exchange messages with **PLC**
- Integration with **AGV**, LGV, AMR

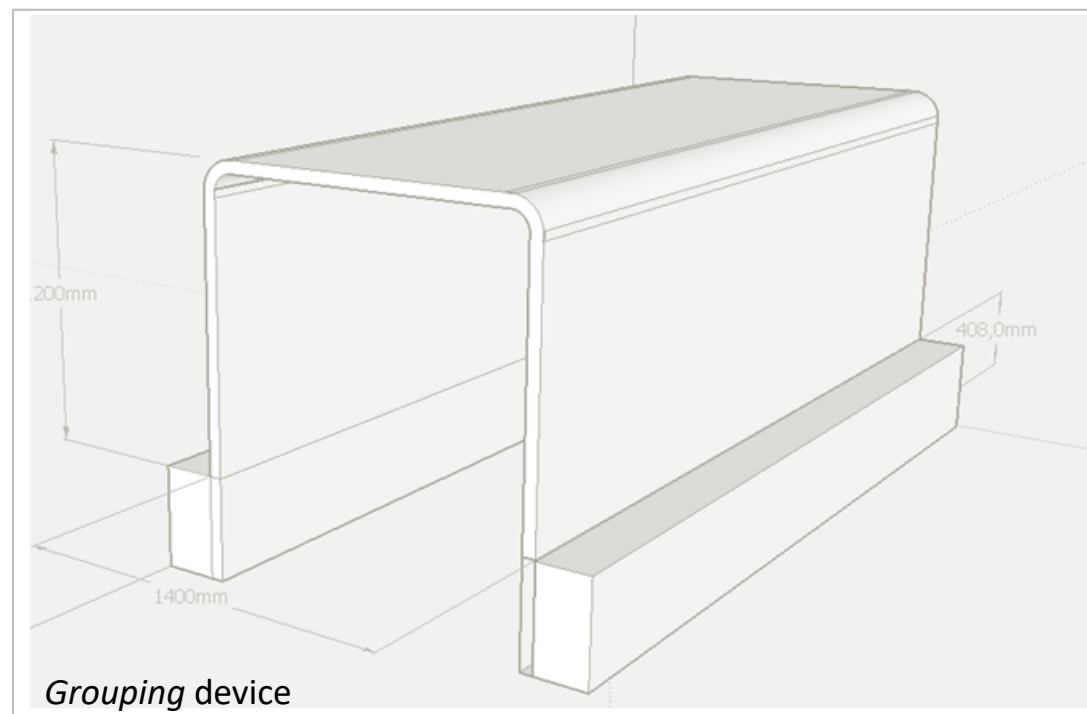


RFID MANAGER

Module enabling automatic tracking of material movements in the warehouse

Features:

- RFID label and printer management
- RFID Data collector
- RFID Supervisor



Tipologia di impianti:

- RFID gates
- RFID tunnel
- Grouping device
- Hoods



RFID MANAGER

Real Time tracking



POC EXECUTION

DEFINITION OF ENVIRONMENTAL
PARAMETERS

TAG TYPE SELECTION

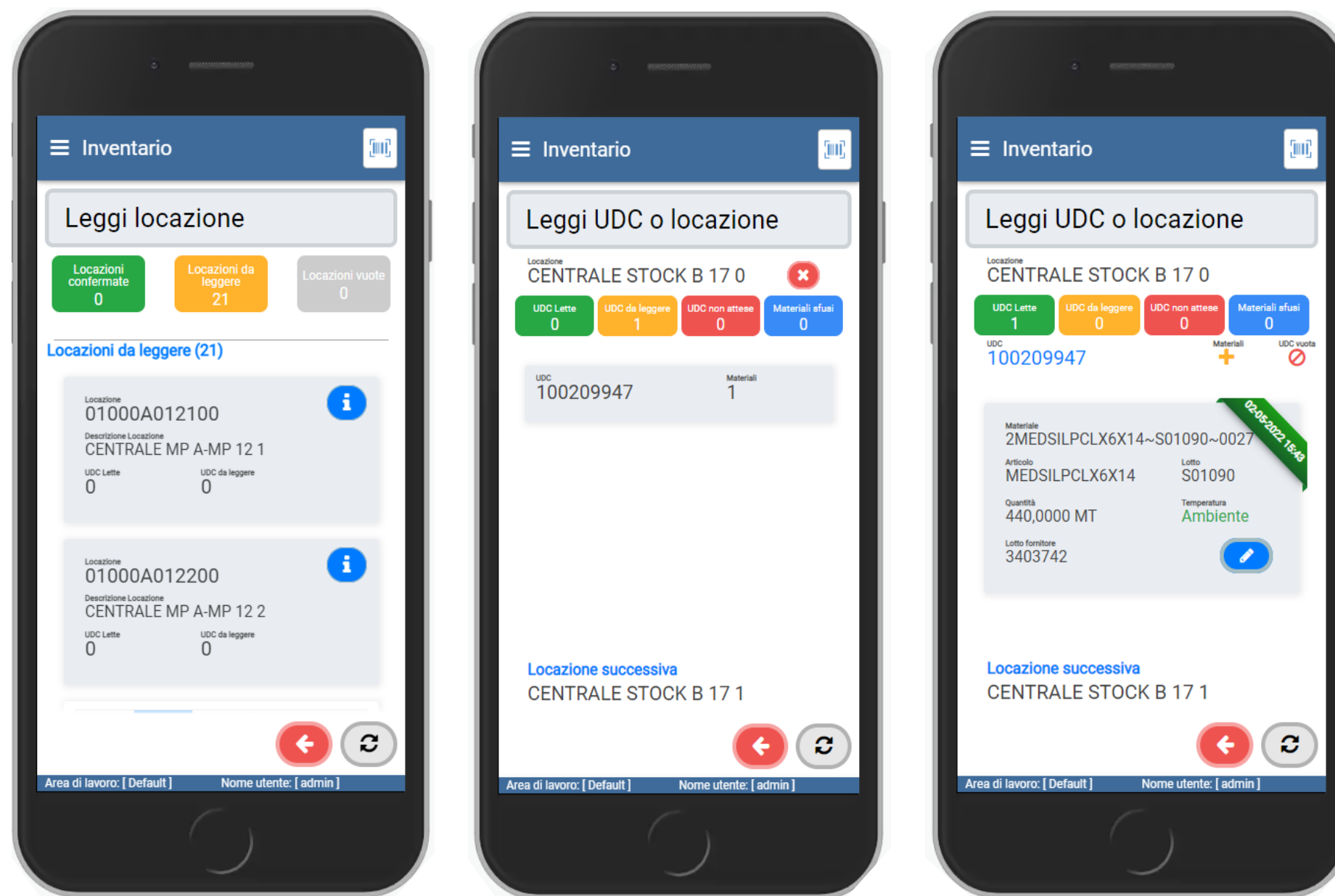
ANTENNA AND READER TYPE SELECTION

ON-SITE INSTALLATION AND INTEGRATION WITH LEGACY SYSTEMS

ELECTRICAL AND MECHANICAL DESIGN RFID GATE

INVENTORY

Module to perform stock inventory



WORKING MODALITY:

- **Autoconfirm**

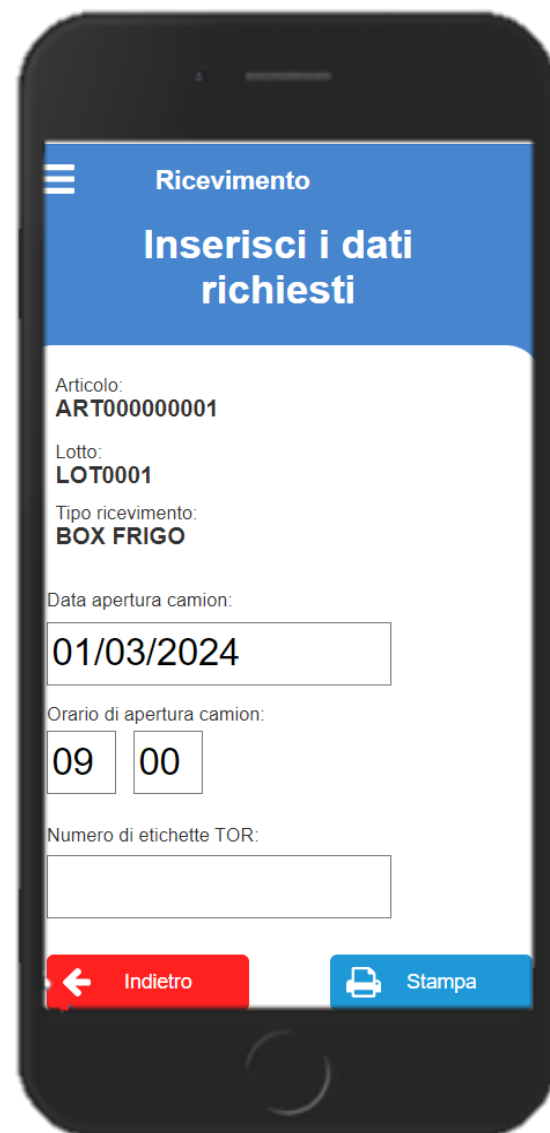
Reading the LU code automatically confirms the contents of the pallet.

- **Manual**

The system requires both the reading of the barcode and the manual confirmation of the materials present (*barcode reading of materials optional or required*).

TOR (*Time Out of Refrigeration*)

Module for product control in refrigerated areas



Ricevimento

Inserisci i dati richiesti

Articolo:
ART000000001

Lotto:
LOT0001

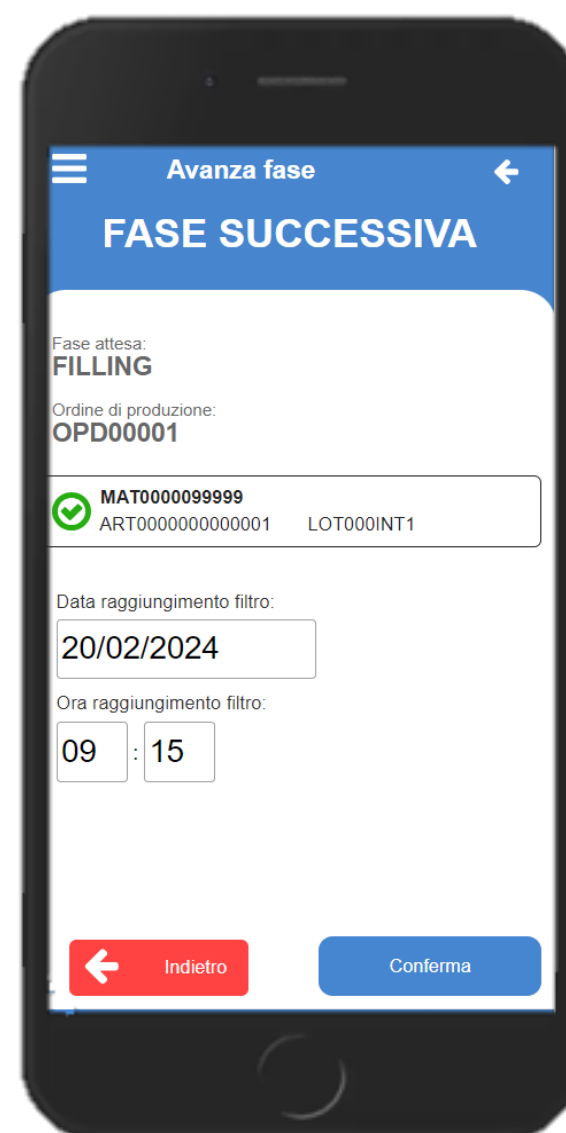
Tipo ricevimento:
BOX FRIGO

Data apertura camion:
01/03/2024

Orario di apertura camion:
09 : 00

Numero di etichette TOR:

Indietro Stampa



Avanza fase

FASE SUCCESSIVA

Fase attesa:
FILLING

Ordine di produzione:
OPD00001

MAT0000099999
ART0000000000001 LOT000INT1

Data raggiungimento filtro:
20/02/2024

Ora raggiungimento filtro:
09 : 15

Indietro Conferma

Features:

- Tracking entry-exit refrigerated area
- Counting TOR (*Time Out of Refrigeration*)
- Counting TIR (*Time In Refrigeration*)
- Counting TOF (*Time Out of Freezer*)
- Alarms management
- Reporting

CONTACT US



Head Office

Esisoftware S.r.l.

Via Pian di Morro I, 1/A,
60043 Cerreto d'Esi AN - Italy



info@esisoftware.it



+39 0732 676611

Renato Romagnoli – General Manager – renato.romagnoli@esisoftware.it



Marco Albertini – Sales Manager – marco.albertini@esisoftware.it

Francesco Novelli – Solution Manager – francesco.novelli@esisoftware.it

Chiara Mosciatti – Head of WMS Unit – chiara.mosciatti@esisoftware.it

This Presentation and its content is copyright of "Esisoftware Srl" - 2024.

All rights reserved. Any redistribution or reproduction of part or all of the contents in any form is prohibited other than the following: you may print or download to a local hard disk extracts for your personal and non-commercial use only. You may not, except with our express written permission, distribute or commercially exploit the content. Nor may you transmit or store it.