



Overview

The PTL Material Flow System is a digital solution developed to enhance and oversee the movement of materials within an organization. It features five specialized portals, each dedicated to a unique phase of the material management process. For instance, the Receiver Portal facilitates the registration of new materials by capturing crucial details like Purchase Order, Invoice, and Docket Numbers, ensuring clear documentation and traceability at every stage.

Portal Breakdown

1. Receiver Portal

Registers incoming materials (with PO, invoice, docket, gate pass, vendor info, and type), assigns handlers, generates OTPs and verification, and tracks status.

2. Handler Portal

Generates OTPs and verification, allocates materials to end users, coordinates transfers, manages OTPs, and updates statuses.

3. End User Portal

Collects materials (using OTP), performs quality checks, accepts or rejects items, manages quantities, submits feedback, and allows team leads to monitor assigned items.

4. Admin Portal

Manages users, master data, oversees system activity, generates reports, and maintains audit trails.

5. Dashboard Portal

Provides real-time visualization of material flow and plant-wise analytics.

Security & Access Control

Role-based access, multi-factor authentication (OTP), session management, and thorough audit trails.

Benefits

- Transparency: Live material tracking
- Accountability: Defined responsibilities
- Efficiency: Streamlined processes
- Traceability: Complete audit history
- Analytics: Actionable insights

Materials are monitored from entry to final use, ensuring secure and efficient handling at every stage.



Main Login Portal

A screenshot of a web browser displaying the login portal for the PTL Digital Material Flow System. The browser's address bar shows "localhost:5000". The page features a light green background with a large, stylized illustration of a warehouse interior. In the illustration, there are yellow forklifts, workers in blue uniforms, and a white delivery truck. A large stack of cardboard boxes is visible on the left. On the right side of the page, the Banas Dairy logo is displayed. On the left side, there is a login form titled "PTL Digital Material Flow System". The form includes four input fields: "Plant:" with a dropdown menu showing "-- Select Plant --", "Section:" with a dropdown menu showing "-- Select Section --", "User:" with a dropdown menu showing "-- Select User --", and "Password:" with a text field labeled "Enter password". Below these fields is a blue "Login" button.

PTL Digital Material Flow System

Plant: -- Select Plant --

Section: -- Select Section --

User: -- Select User --

Password: Enter password

Login

The main login page contains the plant, section and user dropdown buttons and the password text field to login.



Receiver Portal

Receiver Portal

Material Entry

OTP Verification

Pending Physical Handover

Change Password

Date:

10/27/2025

Is PO Available:

Yes

PO Number:

01

Import Material:

Yes

Free of Cost:

Yes

BOE Number:

78

Country of Origin:

India

Custom House Agent (CHA):

try

Type of Material:

New

Is Invoice Available:

Yes

Invoice No.:

67

Is Docket Available:

No

Vendor:

Maruti

Courier:

DIAMOND

Unit of Measurement:

EA

Over Dimensional Consignment (ODC):

Yes

Section:

Systems

Material Handler:

15004411_HN Korot_Tools

Number of Parcels/Box:

5

Submit Material

Clear

The material entry section contains details of all the products that are received at the store.



Hello, Pilat Devjibhai Rupjibhai!

Logout

Receiver Portal

Material Entry

OTP Verification

Pending Physical Handover

Change Password

Verify OTP from Handler

Handler: 15004411_HN Korot_Tools ▼

Identifier Type: PO No ▼

PO No 15

OTP: 667159

Verify OTP

The OTP verification section contains the details that are to be filled by the Receiver(s) and OTP to be given by the handler to the receiver.



Handler Portal

Hello, 15003504_CM Patel_Machine Spare Bana

Logout

Handler Portal

[Fetch Assigned Materials](#)[Submit to End User](#)[OTP Verification](#)[Pending Physical Receipt](#)[Pending UAT](#)[UAT Status](#)[Change Password](#)

All Assigned Materials

All assigned materials fetched successfully

PO No: N/A

Invoice No: 16

Docket No: N/A

Gate Pass: N/A

Vendor: saf

Courier: GATI COURIER

Section: Systems

Handler: 15003504_CM Patel_Machine Spare Banas 2

OTP: 255199

Status: withReceiver

Assigned at: 27/10/2025, 15:11:15

Plant Code: BM01

The handler portal contains Fetch assigned materials section which displays all the details of the pending materials which the handler needs to collect from the receiver.



Hello, 15003504_CM Patel_Machine Spare Banas 2! [Logout](#)

Handler Portal

[Fetch Assigned Materials](#) [Submit to End User](#) [OTP Verification](#) [Pending Physical Receipt](#) [Pending UAT](#) [UAT Status](#) [Change Password](#)

Submit to End User

Identifier Type:

PO No:

Section:

End User:

Material Code:

Material Description:

Quantity Received:

Material Code:

Material Description:

Quantity Received:

[Remove](#)

[+ Add Item](#)

[Submit to End User](#)

[Clear](#)

The submit to end user section contains the details which the handler needs to enter according to the products and also enter the end user name (section wise).



Hello, 15003504_CM Patel_Machine Spare Banas 2!Logout

Handler Portal

Fetch Assigned MaterialsSubmit to End UserOTP VerificationPending Physical ReceiptPending UATUAT StatusChange Password

Verify OTP from End User

Identifier Type:

-- Select --

Identifier Value:

Section:

-- Select Section --

End User:

-- Select End User --

OTP:

Enter OTP

Verify OTP

The OTP verification section is similar to the Receiver OTP verification. The handler needs to enter all the details and the OTP from the handler in order to transfer the materials to the End User.



Hello, 15003504_CM Patel_Machine Spare Banas 2!

Logout

Handler Portal

Fetch Assigned Materials

Submit to End User

OTP Verification

Pending Physical Receipt

Pending UAT

UAT Status

Change Password

Pending Physical Receipt

Pending physical receipts fetched successfully

| End User Name | PO | Invoice | Docket | Gatepass | Material Code | Material Description | Assigned at |
|-----------------|----|---------|--------|----------|---------------|----------------------|-------------------|
| Dilip T Bhedaru | 13 | 13 | 13 | N/A | 1 | comp-1 | 16/10/2025, 15:20 |
| Dilip T Bhedaru | 13 | 13 | 13 | N/A | 2 | comp - 2 | 16/10/2025, 15:20 |

The Pending Physical Receipt section contains the details of the materials that are assigned by the handler along with the End user name.



Hello, 15003504_CM Patel_Machine Spare Banas 2!

Logout

Handler Portal

Fetch Assigned Materials

Submit to End User

OTP Verification

Pending Physical Receipt

Pending UAT

UAT Status

Change Password

Pending UAT

Pending UAT materials fetched successfully

| End User Name | PO | Invoice | Docket | Gatepass | Material Code | Material Description | Delivered on |
|-----------------|-----|---------|--------|----------|---------------|----------------------|-------------------|
| Dilip T Bhedaru | N/A | 2 | 2 | N/A | 1 | comp - 1 | 09/10/2025, 12:12 |
| Dilip T Bhedaru | N/A | 5 | N/A | N/A | 1 | comp - 1 | 10/10/2025, 16:32 |
| Dilip T Bhedaru | 12 | 12 | 12 | N/A | 2 | comp - 2 | 16/10/2025, 14:36 |
| Dilip T Bhedaru | N/A | 2 | 2 | N/A | 2 | comp - 2 | 09/10/2025, 12:12 |
| Dilip T Bhedaru | N/A | 5 | N/A | N/A | 2 | Headphones | 10/10/2025, 16:32 |
| Dilip T Bhedaru | N/A | 5 | N/A | N/A | 3 | Speakers | 10/10/2025, 16:32 |

The Pending UAT section contains the details of the materials along with the end users name which are accepted (OTP verified) by the end user, but the approval or rejection is not yet done.



Hello, 15003504_CM Patel_Machine Spare Banas 2!

Logout

Handler Portal

Fetch Assigned Materials

Submit to End User

OTP Verification

Pending Physical Receipt

Pending UAT

UAT Status

Change Password

UAT Status

UAT status fetched successfully

| PO No | Invoice No | Gate Pass | Docket No | Material Code | Material Description | Quantity Received | Quantity Rejected | Quantity Accepted | Acceptance Status | Rejection Reason | End User | Section | Done at |
|-------|------------|-----------|-----------|---------------|----------------------|-------------------|-------------------|-------------------|--------------------|------------------|-----------------|---------|----------------------|
| 14 | 14 | N/A | 14 | 2 | comp - 2 | 1 | 0 | 1 | approved | N/A | Dilip T Bhedaru | Systems | 17/10/2025, 10:11 am |
| 14 | 14 | N/A | 14 | 1 | comp - 1 | 3 | 2 | 1 | partially_accepted | not good | Dilip T Bhedaru | Systems | 17/10/2025, 10:11 am |
| 14 | 14 | N/A | 14 | 3 | comp - 3 | 1 | 0 | 1 | approved | N/A | Dilip T Bhedaru | Systems | 17/10/2025, 10:11 am |
| 12 | 12 | N/A | 12 | 1 | comp - 1 | 3 | 1 | 2 | partially_accepted | not good | Dilip T Bhedaru | Systems | 16/10/2025, 02:38 pm |
| N/A | 5 | N/A | N/A | 3 | Speakers | 1 | 0 | 1 | approved | N/A | Dilip T Bhedaru | Systems | N/A |
| N/A | 5 | N/A | N/A | 1 | comp - 1 | 2 | 0 | 2 | approved | N/A | Dilip T Bhedaru | Systems | N/A |
| N/A | 5 | N/A | N/A | 2 | Headphones | 2 | 0 | 2 | approved | N/A | Dilip T Bhedaru | Systems | N/A |
| N/A | 2 | N/A | 2 | 1 | comp - 1 | 3 | 0 | 3 | approved | N/A | Dilip T Bhedaru | Systems | N/A |
| N/A | 2 | N/A | 2 | 2 | comp - 2 | 2 | 2 | 0 | rejected | not good quality | Dilip T Bhedaru | Systems | N/A |

In the UAT (User Acceptance Testing) Status section, the End users actions are reflected for example whether the product is approved or rejected or partially approved.



End User Portal

End User Portal

Logout

View Materials

Approve/Reject Materials

Team Pending Materials

UAT Pending

Change Password

All Assigned Materials

Date: 09-10-2025

PO No: 3

Invoice No: 3

Docket No: 3

Gate Pass: N/A

Section: Systems

Handler: 15003455_BH Patel, Packing

OTP: 918500

Status: assigned

Items:

- Material Code: 4, Material Description: comp - 4

The view materials section contains the details of all the products that are assigned to the End user by the Handler along with the OTP.



Hello, Dilip T Bhedaru!

Logout

End User Portal

View Materials

Approve/Reject Materials

Team Pending Materials

UAT Pending

Change Password

Approve/Reject Materials

Pending Materials

| Identifier Type | Identifier Value | Section | View Details |
|-----------------|------------------|---------|------------------------------|
| invoice_no | 15 | Systems | View Details |
| invoice_no | 500 | Systems | View Details |
| po_no | 12 | Systems | View Details |

Fetch Materials Manually

Identifier Type:

-- Select --



Identifier Value:

Fetch Items

The Approve/Reject Materials section contains the Materials that the End user has collected from the handler. This section provides the End User to accept or reject or partially accept the products that were assigned.



Hello, Kalpesh F Chaudhary!

Logout

End User Portal

View Materials

Approve/Reject Materials

Team Pending Materials

UAT Pending

Change Password

Team Pending Materials

Export Log

| Identifier Type | Identifier Value | End User | Action |
|-----------------|------------------|-----------------------------------|------------------------------|
| docket_no | 13 | Dilip T Bhedaru (Dilip T Bhedaru) | View Details |
| docket_no | 3 | Dilip T Bhedaru (Dilip T Bhedaru) | View Details |

The Team Pending material section allows the Team Leader to view the Pending materials of the Team members that are not yet collected.



Hello, Kalpesh F Chaudhary!

Logout

End User Portal

View Materials

Approve/Reject Materials

Team Pending Materials

UAT Pending

Change Password

UAT Pending Materials

| End User Name | PO | Invoice | Docket | Gatepass | Material Code | Material Description | Received at |
|-------------------|-----|---------|--------|----------|---------------|----------------------|-------------------|
| Dilip T Bhedaru | 1 | 1 | N/A | N/A | 1 | comp - 1 | 09/10/2025, 12:05 |
| Dilip T Bhedaru | 500 | 500 | 500 | N/A | 1 | comp - 1 | 15/10/2025, 11:08 |
| Dilip T Bhedaru | 6 | 6 | 6 | N/A | 1 | comp - 1 | 11/10/2025, 13:01 |
| Dilip T Bhedaru | N/A | 15 | N/A | N/A | 1 | comp - 1 | 27/10/2025, 15:05 |
| Dilip T Bhedaru | N/A | 2 | 2 | N/A | 1 | comp - 1 | 09/10/2025, 12:12 |
| Dilip T Bhedaru | N/A | 5 | N/A | N/A | 1 | comp - 1 | 10/10/2025, 16:32 |
| Dilip T Bhedaru | N/A | 500 | N/A | N/A | 1 | comp - 1 | 27/10/2025, 12:23 |
| Dilip T Bhedaru | 1 | 1 | N/A | N/A | 2 | comp - 2 | 09/10/2025, 12:05 |
| Dilip T Bhedaru | 12 | 12 | 12 | N/A | 2 | comp - 2 | 16/10/2025, 14:36 |
| Dilip T Bhedaru | 500 | 500 | 500 | N/A | 2 | comp - 2 | 15/10/2025, 11:08 |
| Dilip T Bhedaru | 6 | 6 | 6 | N/A | 2 | laptop | 11/10/2025, 13:01 |
| Dilip T Bhedaru | N/A | 2 | 2 | N/A | 2 | comp - 2 | 09/10/2025, 12:12 |
| Dilip T Bhedaru | N/A | 5 | N/A | N/A | 2 | Headphones | 10/10/2025, 16:32 |
| Dilip T Bhedaru | N/A | 500 | N/A | N/A | 2 | comp - 2 | 27/10/2025, 12:23 |
| Dilip T Bhedaru | N/A | 5 | N/A | N/A | 3 | Speakers | 10/10/2025, 16:32 |
| Hansa R Chaudhary | 4 | 4 | 4 | N/A | 1 | computer | 10/10/2025, 15:56 |

The UAT (User Acceptance Testing) Pending section allows the Team Leader to view the details of the products that are collected by the End User of their Team and are not yet Accepted or Rejected or partially accepted by the End Users.



Dashboard Portal

| Handler | Total Pendency | 09-10-25 | 10-10-25 | 11-10-25 | 13-10-25 | 14-10-25 | 15-10-25 | 16-10-25 |
|---------------------------------|----------------|----------|----------|----------|----------|----------|----------|----------|
| DP Kuniya_General | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RS Patel_Valve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| VK Patel_Chemicals | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| JD Pandya_Project-MM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DR Pilat_Lab and Pipe Material | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BH Patel_Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CM Patel_Machine Spare Banas 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| KB Patel_Machine Spare Banas 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HN Korot_Tools | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RS Chaudhary_Stationary General | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MK Dekaliya_Electrical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SB Chaudhary_Bearings Vbelts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PV Chibhadiya_Ghee Packing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

The Dashboard contains the Pending materials that are to be collected by the Handlers from the Receiver. This contains the data of last 7 non-sunday days.