

One stop solution for Complete Warehouse Management



Introduction

A warehouse management system is a key part of the supply chain and primarily aims to control the movement and storage of materials within a warehouse and process the associated transactions, including shipping, receiving, put-away and picking. The systems also direct and optimize stock put-away based on real-time information about the status of bin utilization. A WMS monitors the progress of products through the warehouse. It involves the physical warehouse infrastructure, tracking systems, and communication between product stations





WMSMag is a versatile, real-time, RF and Barcode based WMS system that streamlines your fulfilment operation, making it more flexible, more productive and more profitable to operate. WMSMag transforms warehouse operations into a fully integrated logistics and fulfilment business. By enabling a company to take orders from multiple sources, process them in real time with mobile, and automating the shipping and billing processes, organizational efficiency will improve, with positive effect on the bottom line. WMSMag is built for 3PL, fulfilment, and distribution operations. It's ideal for operations where multiple owners of inventory, multiple clients, multiple locations and variable business models are required.

VnVCS V&V Comptech Systems

Modular Architecture

WMSMag 1.0 provides solution for

- Private Warehousing for operated by the firm owning the product
- Public Warehousing for hires out space and services
- 3PL Logistics provides solution to maintain all the customer services
- Agro Warehouse module cover all the Agro operations like testing, fumigation process, Pest Management etc
- Collateral / Bonded warehouse module cover cargo hypothecation process with banks
- Distribution Center Warehousing module covers inventory management behalf of customer, consolidation, packing, break bulk process
- Cold Storage Warehousing module covers cold storage operations, temperature measurement process, quality testing etc

•





General Features

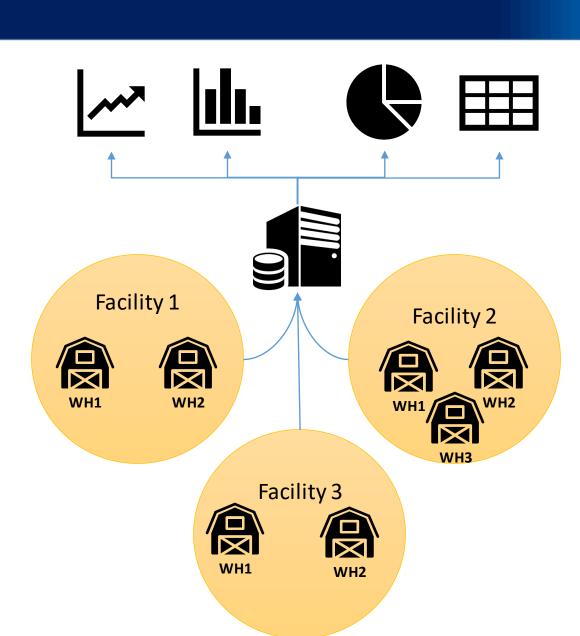
Centralized system with Zone, Cluster and Area Segregation	Cargo Control and Cargo Life cycle maintenance
Warehouse Lease Agreement Management for 3rd party Warehouses	Put away, Picking and Packing
Warehouse Insurance Management	Replenishment
Warehouse Security Management	Assembly
Commodity based Warehouse Management	Cross Docking
3PL Activity	Proximity determination
Multi Model Services	Stacking limits
Review warehouse contents up to n - levels of detail	Integrate with RFId / Bar Code
Manage Inventory based on SKU (Stock Keeping Unit) and Multiple units of measure per item	Warehouse Availability Inquiry (mobile and web application)
Distribution Management	3D view of Warehouse
3rd Party Inventory Management	Alerts and Notifications
Warehouse planning and scheduling, Location Reservation	Realtime Integration for Job Orders with Other Modules
Value Added Services like Sampling / Re-packing / clearing / testing / fumigation	Web Services for 3rd party tool integrations
Billing based on Peak Stock, Average Stock, daywise stock etc	



System Architecture

WMSMag 1.0 designed for multi location and multi warehousing from centralized system.

- Web based software, provides facility any where any time
- Provides centralized solution
- Facilitate to define multiple facilities/locations
- Under each location, facilitates to define different type of warehouses
- All location/facility connects to central server, which maintain all the data
- Creating new Facility and Warehouse is user friendly, user can add any facility and warehouse
- MIS, Management Reports, Contract Management, Finance Control,
 Billing can be handle from centralize system
-





Modular Architecture

WMSMag 1.0 designed with tight interface APIs which used for online interface with RFID and Bar code devices, Mobile Devices like RDT and Android / IOS IPODs

WMSMag 1.0 provides solution for

- Solution for different type of Warehouse such as General WH, Project Cargo, Cold Storage, Agro and Collateral / Bonded Warehouse
- Online Documentation for Import, Export, ICD, DPD, TP, Break Bulk and General Cargo
- Interface with CFSs, ICDs online using Web Service APIs
- Interface with Port Community System
- Interface with Customs ICEGATE and Railways
- Easy process for Shipping Line, CHA, Forwarders and Agents
- Mobile App for Operators which provides allocation of trucks, clearances approval etc.,
- Interface with Gate Automation by allocation of RFID at Origin
- Interface with Barcode for documentation process easiness
- Interface with Truck Operators and Trucks
- Gate Automation for Container and Cargo
- Rail Siding Operation for 3rd Party ICDs and 3rd Party Rakes
- Way Bridge Integration
- User Configurable EDI Engine Covers ICEGATE, FOIS, UN-EDIFACT, PCS, CUSTOMS, VGM and line





User Network

WMSMag 1.0 Connects to

- Factories
- Shipper
- Customer
- Consolidator
- Transporter
- Service Provider
- Distributor
- Vendor



Benefits

- DMS provides easy way for Documentation Management covers recording scanned documents at all stages
- User Define EDI Engine Provides rich facility for EDI generation which can be configurable for any EDIs
- Shipping Line allocation, Agent allocation and monitoring process
- Online data entry from line, CHA, agent and CFS from portal which online interface with TOS
- Online Data Capturing for Gate Operation, Ware House Operation and Truck Plaza / Parking
- Online Survey through mobile device covers seal capturing, damage capturing
- API for Interface with 3rd Party tools like Mobile Apps, SMS, Portals
- Interface with Boom Barriers, CISF control rooms
- Facility availed for driver registration with finger print recording and driving license recording
- Dash Boards and Reports provides online analysis to the management
- Online slot Booking facility for gate with time slot allocation
- **-** ...



Securities

Technology

Portable for any Browser

Dynamic portable to any resolution

Frame Work

IIS Platform

ASP.Net

Angular JS (fast process approach)

HTML 5, Jquery

Node JS for Equipment Interface

Google Map Interface / Google API interface

Web Service Interface with plugins to internal and external

interfaces

GPS / GPRS Interface

Realtime Entry by HHT / VMT

Mobile App

Android

IOS

Windows

Database

Support SQL Server

Support Oracle

Encrypted and pre-compiled controls for fast process

Service

24 X 7 Support

SLA based Support Contracts

Pre-defined Training Calendar

Online Access for Help desk

Escalation Matrix for Service Support

Online Ticketing support system

Security

HTTPS protocol secure the system from hacking and other interference

User control and access control availed in the system to provide

limited usage to the user

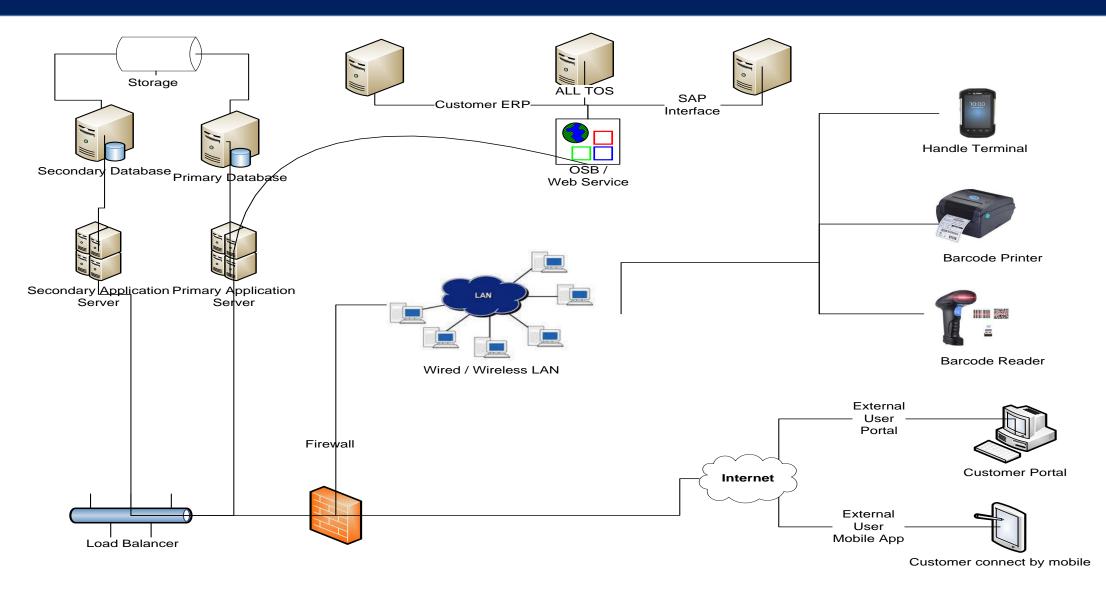
Internal audit process maintains each and every activity

recorded with time and user

Internal algorithm facility availed to avoid data level security

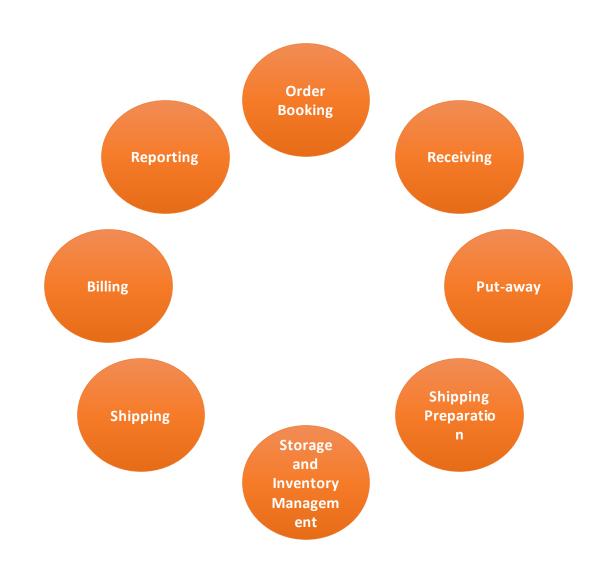


Architecture





Gate Automation



VnVCS V&V Comptech Systems

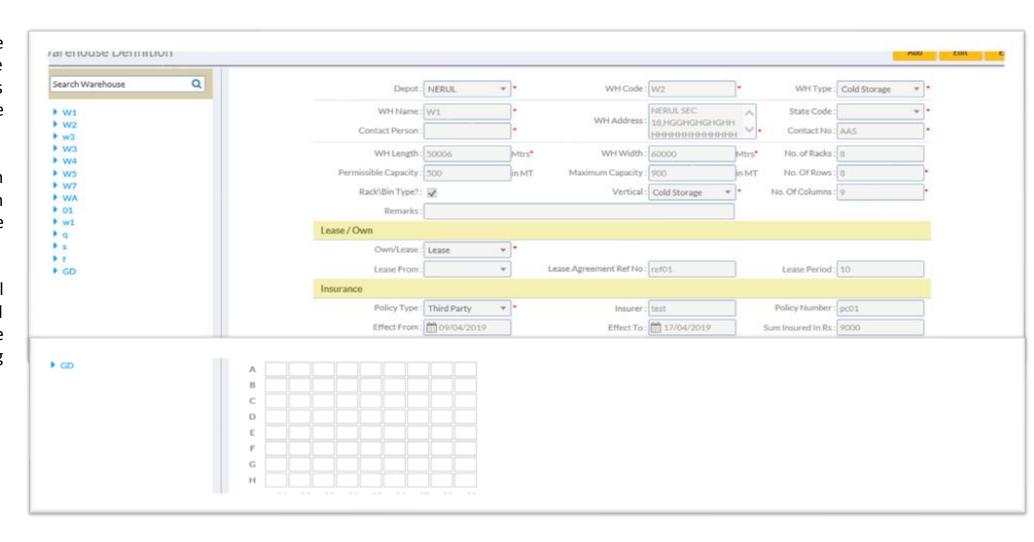
Configuration

Warehouse Configuration

System facilitates to configure warehouses with profile definition like Grids Management, Warehouse Type, Grid Sizes, etc.

Warehouse configuration done by system admin, which is no limit for warehouse creation

System creates, 3 dimensional warehouse grids, which will be used for addressing the cargo location, while planning and placing



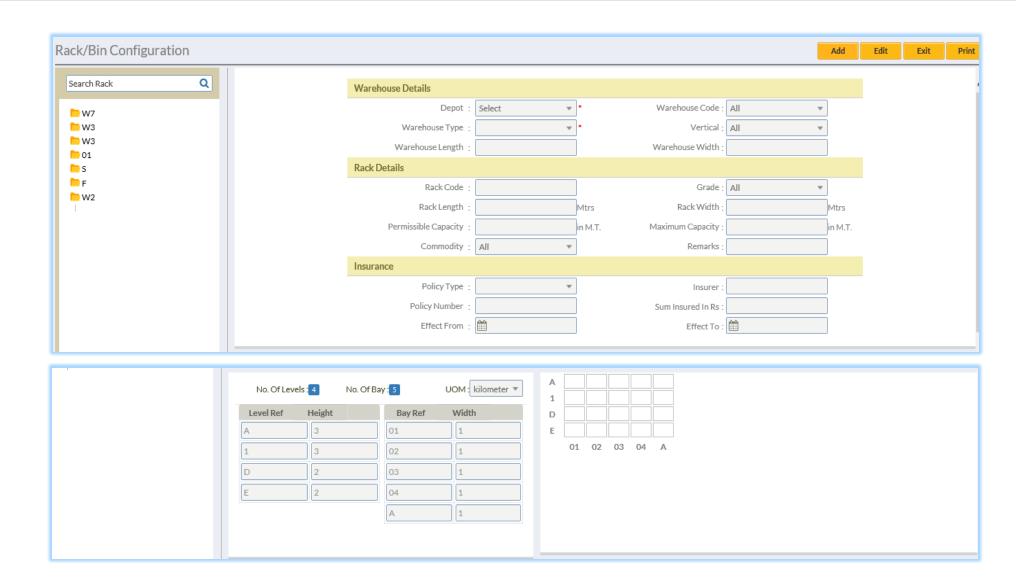


Configuration

Warehouse Rack / Bin Configuration

System facilitates to configure Rack and Bins definition

User able to configure different bin dimensions along with Grade Configurations

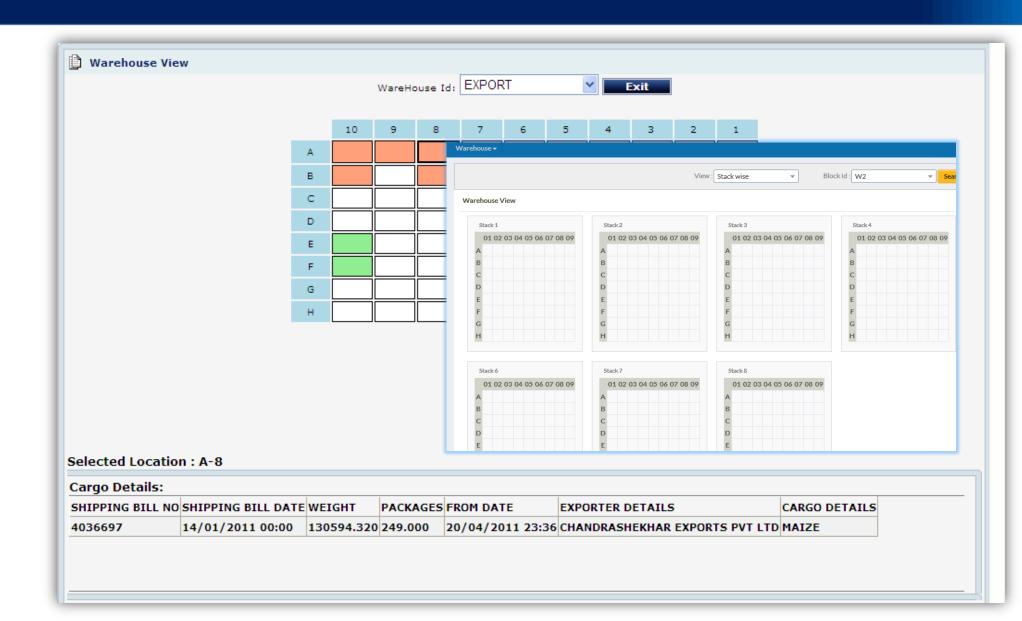


VnVCS V&V Comptech Systems

Warehouse View

Online Warehouse Monitoring

System facilitates to view Warehouse on real time mode along with inventory details. System will show the inventory based on different parameters like; near expiry cargo, aging of cargo, part number basis, SKU basis and so on ..

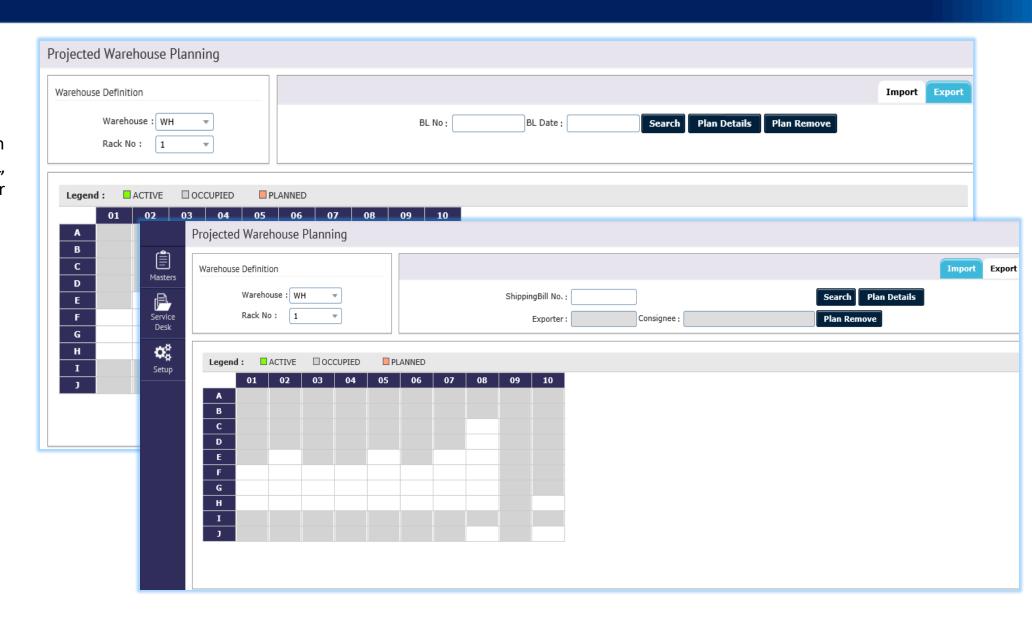




Planning

Warehouse Planning

System facilitates to plan warehouse based on BL, Shipping Bill, PO Number respect to customer





Customer Creation and Contract Definition

Based on commercial finalize the customer application, system provides to define the customer master respect to the deposit customer.

System facilitate to define the contracts for the customer with respect to Handling, Storage and Services. System facilitate to define the Storage Methods like weekly / monthly billing etc.

System send mail to Warehouse in-charge to confirm the area availability based on pre-requisites given by customer along with Warehouse place information

24x7 LOGISTICS PVT.LTD.	Customer Master		
A.ABBA & SONS	Customer Code:	535	•
A.B. CONSULTANTS	Customer:	24x7 LOGISTICS PVT.LTD.	
A.B. PAUL & CO.	Address:		
🗟 A.G. UMRIGAR	Additess.	26 KUMTHA STREET,1ST A	
A.K. CLEARING AGENCY		· ·	
A.M. SODDER & CO	Account Type:	General	
A.P. CARGO MOVERS	Operations Mail Id:	^	
A.P.CARGO CLEARSHIP PVT.LTD.			
A.R. SHIPPING AGENCY		~	Credit Details
A.S. VASAN & SONS	Finance Mail Id:	^	Credit Limit: 0
A.S.A.ENTERPRISES			
A.T.C.(CLG.& SHIPPING) PVT.LTD,		~	Credit Period: 0
MAARAS SHIPPING & LOGISTICS	Contact Person :	MR.C.J.THAKKAR	
MABC INDIA LTD.	Contact Number :	4168661	
		110000	
ACCORD FREIGHT LINES PVT. LTD	Fax Number :		
ACE CLEARING & FORWARDING	PAN No:		
ACQUA TRANSPORTING AGENCY	Service Tax No:		
MACT SHIPPING LTD.	Import Loaded Ground Rent From:	CFS Gate In Date	
ACTIVE FREIGHT (I) P.LTD	Finance Ledger Code:		
ADARSH CLEARING AGENCY			
ADEPT AGENCY	Opening Balance:	0 Cr. V	
ADINATH ENTERPRISES	Current Balance :	0 Dr. 🗸	
ADITYA ENTERPRISES	Status:	✓	
PARROTT THREY			



Inward Process

Application for Deposit Commodities

Order Booking provides user to define Deposit Customer Details, Commodity and cargo details, storage start time and end time etc.,

System provides to update these information directly from portal online by customer. Which sends mail to customer as an acknowledgement and Commercial Team to review for further operation

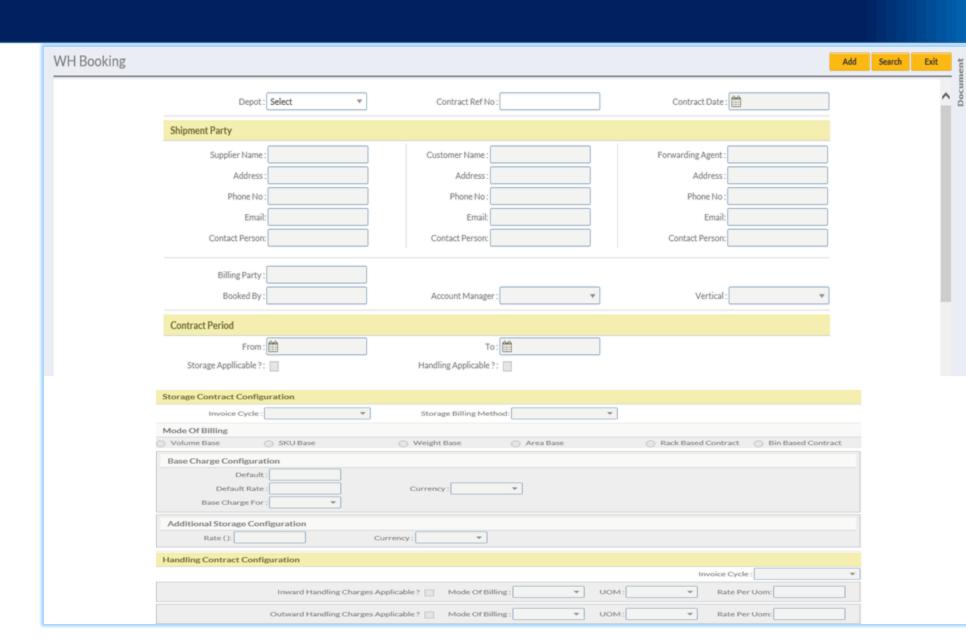
Application for Deposit Commodities			
Customer Code:			
Customer Name:			
Customer Address:			
Commodity:			
Total Number of Bags:			
Total Weight of Commodity:			
From Date and Time:			
To date and time:			
Number of Storage Receipt Required:			
Previous Storage History if any:			
Special Instructions:			
·			
	Save	Exit	



Contracts / Booking

Warehouse Contract Definition

System facilitates to define Contracts for Warehouse based on different parameters such as Storage, Inward Handling, Lease duration, Billing Party





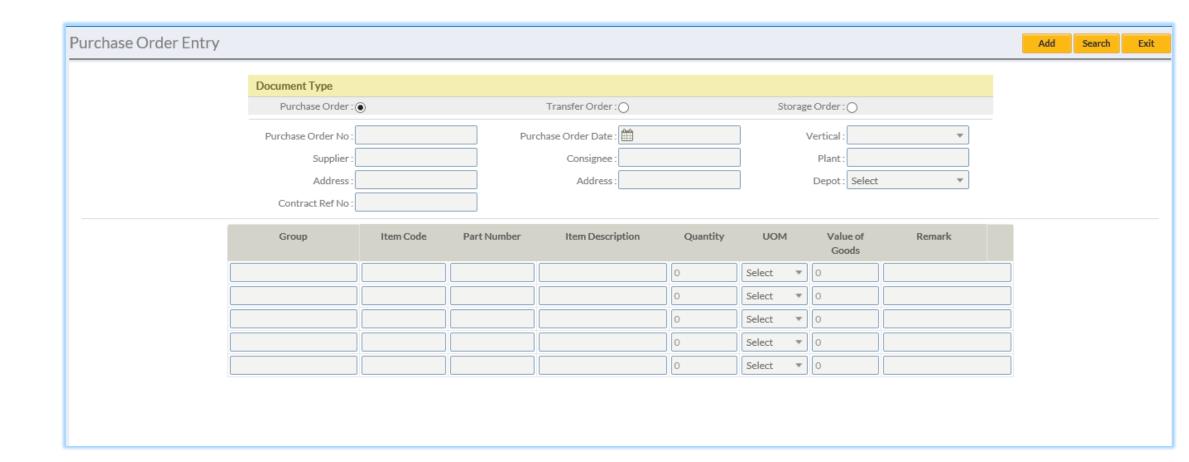
Inward Process



Inward PO Updation

Inward PO Updation

System facilitates to update Inward PO details from Customer. EDI exchange facility availed to upload the PO from system like SAP, Oracle Finance

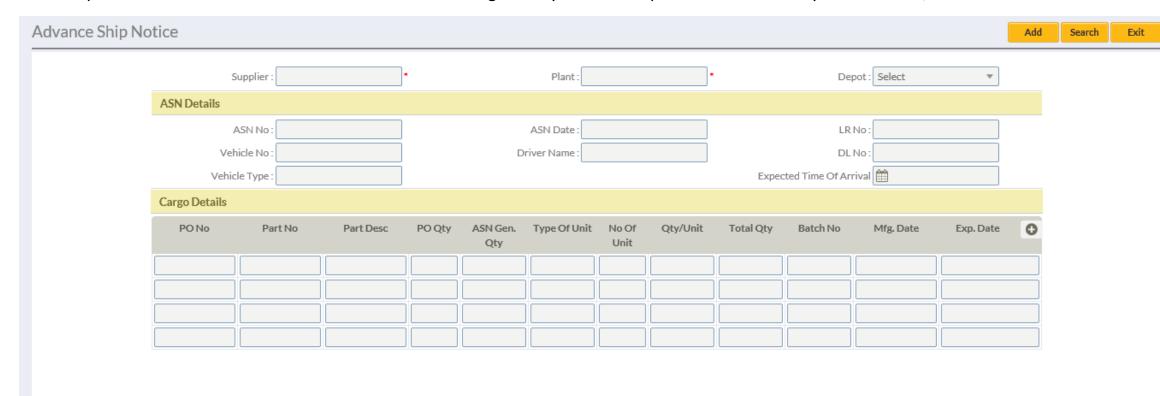




Inward PO Updation

Inward ASN Updation

System facilitates to update Inward ASN details from Customer. EDI exchange facility availed to upload the ASN from system like SAP, Oracle Finance.





Warehouse Planning and Readiness Updation

System facilitates to plan warehouse location based on cargo type, duration and other special instructions.

System facilitates to confirm warehouse space availability, system sends confirmation message to customer for cargo movement



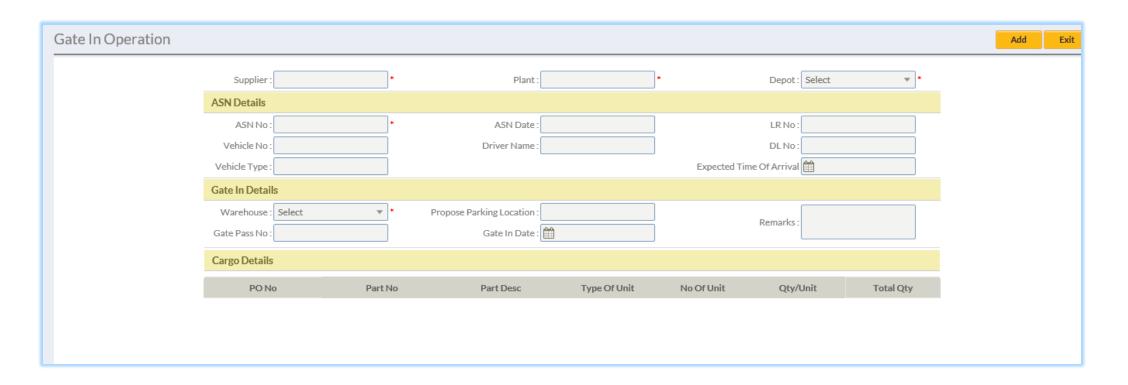


Cargo Gate In

System facilitates to cargo gate in at gate. System facilitates to upload documents attach to Booking number and gate pass, which can be retrieve any time for the reference through Document Management System

System facilitate to verify the cargo with sampling. Weight of the cargo will be measured using weighbridge integration.

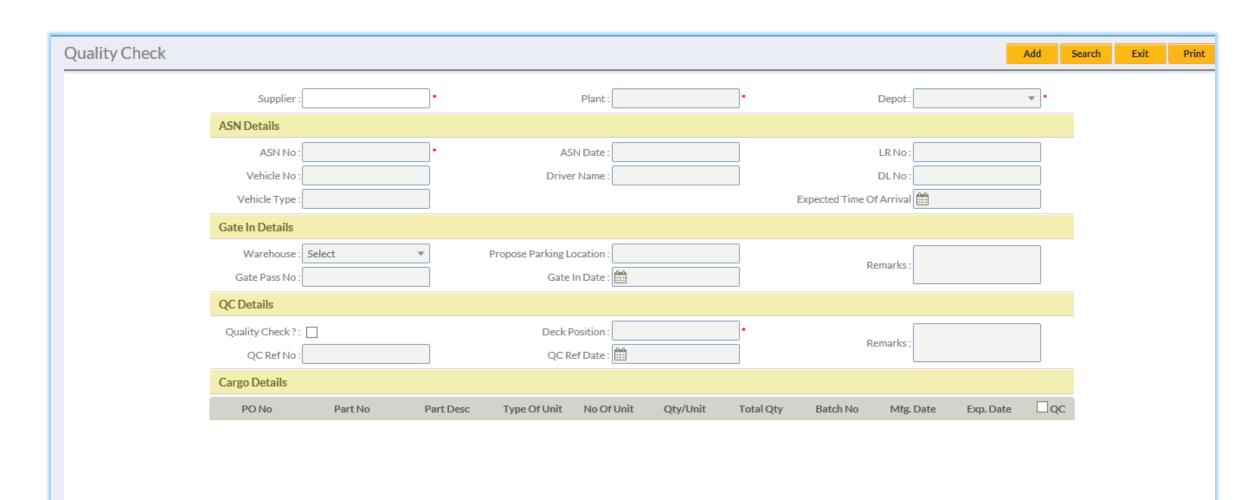
System generate Lot Number Slip (Gate In Pass) for trucks. System prints warehouse location, where need to unload, which chassis allocated for unload





Quality Check

System facilitates to update Quality Check inputs respect to cargo quality





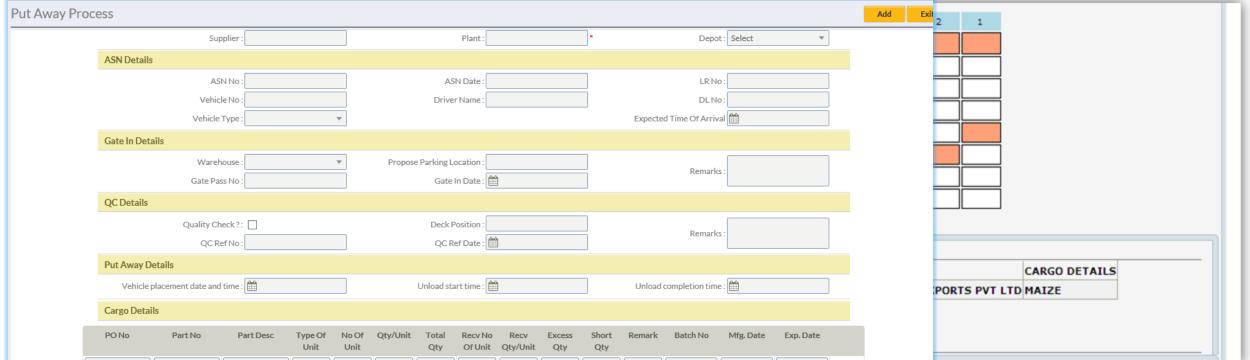
Put away Process

When User select the warehouse location, system popup to enter Unloaded quantity. User able to take the Bar Code label print to paste on goods. System identify each Pallets as Pallet ID, inventory will be maintain microlevel for each Pallet / Bag wise. System maintain SKU base inventory and create the bar code based on that.

For Damage, system provides facility to take the snap of the cargo. System records Sampling taken information for verification purpose

System facilitates to update carting tally online using IPODs. User can open Warehouse in graphical representation, system shows current inventory and planned

location for the cargo.



Inward Process





On dock printer prints the barcode label with all the information related to booking, customer, warehouse location, cargo in date information. Printer connected with KIOSK system and server by Wired / Wireless network

Inventory reconciliation to be done by manually verification v/s system inventory by different methods like Handle terminal, online tracking etc.





Inward Process

Storage Receipt / Truck Out

System facilitates to update carting tally online using IPODs. User can open Warehouse in graphical representation, system shows current inventory and planned location for the cargo.

When User select the warehouse location, system popup to enter Unloaded quantity.

User able to take the Bar Code label print to paste on goods.

For Damage, system provides facility to take the snap of the cargo

System records Sampling taken information for verification purpose

ate Pass Number:	Date: Arrival Time: Departure Time:
Warehouse Name and Code	
Truck/Vehicle Number	
Commodity	
Gross weight	
Weighment Slip No.	
Tare Weight	
Weighment Slip No.	
Tare Weight (including Rejected bags)	
Weighment Slip	
Number of Bags	
Stack Number	
SR/Warehouse Receipt Number	
Delivery Order Number and Date	
Name of Depositor	
Name of Trader	
Remarks	
ignature of Warehouse In-charge/Supervi	sor:
ignature of Agenty Depositor/ Driver.	



Outward Process



Outward Process

Delivery Order Request

Customer can upload the Delivery Request from Portal

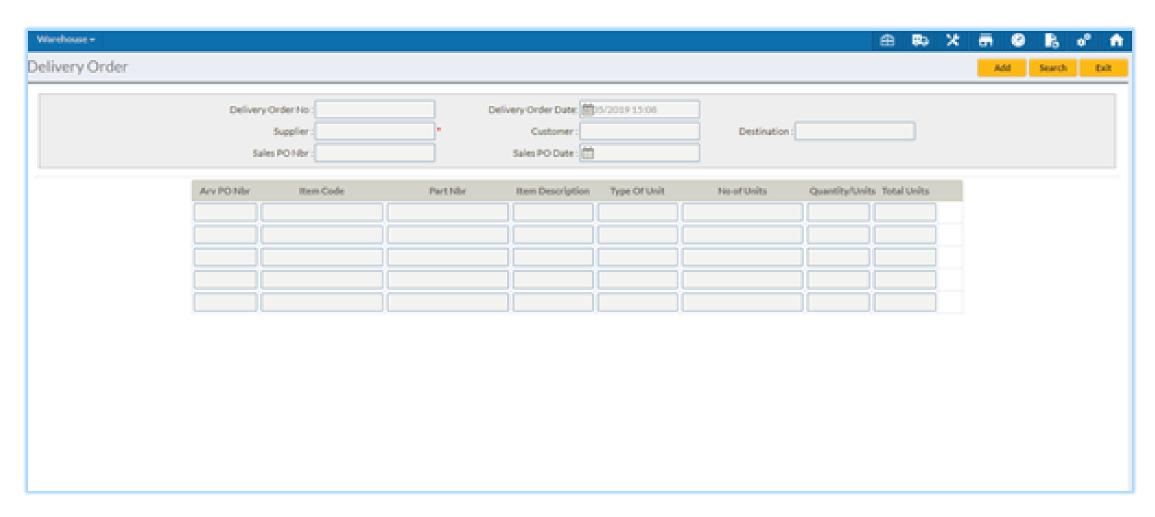
Release Order / Delivery Order			
Delivery Order Number:			
Delivery Order Date:			
belivery order bate.			
Order Booking / SB Number:			
Customer Name:			
Release Reference No:			
Date of Receipt:			
Name of Funding Agency/Bank:			
Delivery given from warehouse:			
,,,			
Client Name:			
Client Address:			
L			
Weight to be Released:			
Quantity to be Released:			
	Save	Exit	
	Jave	LAIL	



Outward Process

Delivery Order Updation

System facilitates to update Delivery Order by manual entry and EDI upload methods

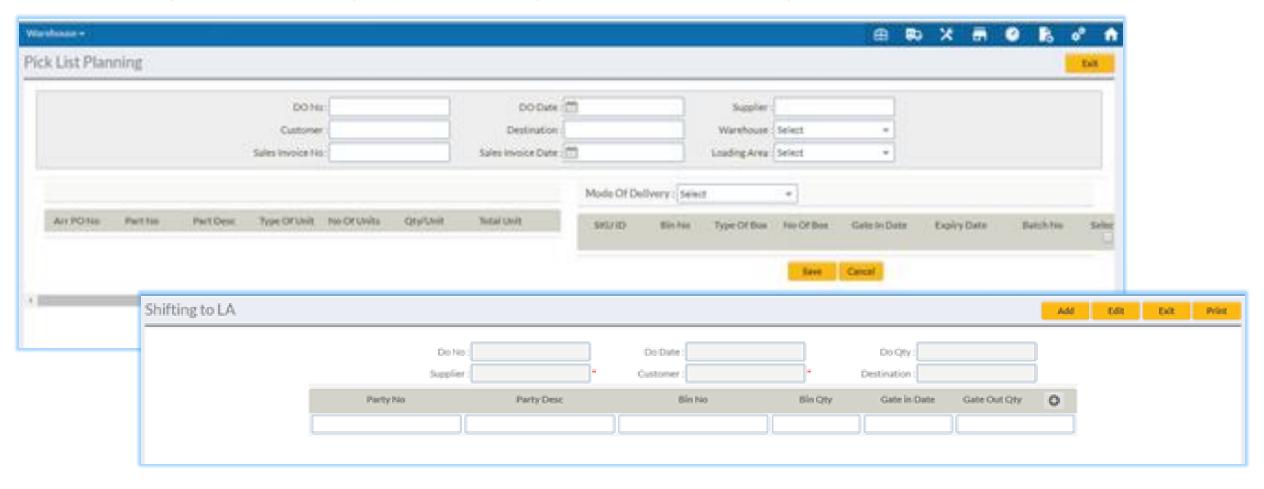




Outward Process

Pickup Planning

System facilitates to prepare Pickup Planning based on Delivery Order Request, System facilitates to view the stock based on FIFO, FEFO methods. Cargo will be moved to Loading Area for vehicle loading, Dispatch Note will be generate based on Vehicle loading





Outward Process

Truck Entry for Pickup

System facilitates to cargo gate in at gate. System facilitates to upload documents attach to Booking number and gate pass, which can be retrieve any time for the reference through Document Management System

System facilitate to verify the cargo with sampling. Weight of the cargo will be measured using weighbridge integration.

System generate Lot Number Slip (Gate In Pass) for trucks. System prints warehouse location, where need to unload, which chassis allocated for unload

Delivery Order Number:		In Pass Number:	
Delivery Order Date:		In Date and Time:	
Order Booking / SB Number:		Truck Number:	
Customer Name:		Driver Name:	
Release Reference No:		Name of Transporter:	
Date of Receipt:		Type of Truck:	
Name of Funding Agency/Bank:		Expected delivery Qty:	
Delivery given from warehouse:		Expected Delivery Wt:	
Client Name:			
Client Address:			
Weight to be Released:		Weightbridge No:	
Quantity to be Released:		Truck Tare Weight:	

VnVCS V&V Comptech Systems

Inward Process

Shipping Note Updation

System facilitates to update SN tally online using IPODs. User can open Warehouse in graphical representation, system shows current inventory and planned location for the cargo.

When User select the warehouse location, system popup to enter Unloaded quantity.

User able to take the Bar Code label print to paste on goods. System identify each Pallets as Pallet ID, inventory will be maintain microlevel for each Pallet / Bag wise

For Damage, system provides facility to take the snap of the cargo

System records Sampling taken information for verification purpose



Selected Location: A-8

Cargo Dotaile:

	cargo Details.						
П	SHIPPING BILL NO	SHIPPING BILL DATE	WEIGHT	PACKAGES	FROM DATE	EXPORTER DETAILS	CARGO DETAILS
ı	4036697	14/01/2011 00:00	130594.320	249.000	20/04/2011 23:36	CHANDRASHEKHAR EXPORTS PVT LTD	MAIZE

VnVCS V&V Comptech Systems

Inward Process

Truck Gate Out

System facilitates to update carting tally online using IPODs. User can open Warehouse in graphical representation, system shows current inventory and planned location for the cargo.

When User select the warehouse location, system popup to enter Unloaded quantity.

User able to take the Bar Code label print to paste on goods. System identify each Pallets as Pallet ID, inventory will be maintain microlevel for each Pallet / Bag wise

For Damage, system provides facility to take the snap of the cargo

System records Sampling taken information for verification purpose

	Gate-Pass
Gate Pass Number:	Date: Arrival Time: Departure Time:
Warehouse Name and Code	
Truck/Vehicle Number	
Commodity	
Gross weight	
Weighment Slip No.	
Tare Weight	
Weighment Slip No.	
Tare Weight (including Rejected bags)	
Weighment Slip	
Number of Bags	
Stack Number	
SR/Warehouse Receipt Number	
Delivery Order Number and Date	
Name of Depositor	
Name of Trader	
Remarks	
Signature of Warehouse In-charge/Su Signature of Agent/Depositor/Driver:	
Entered in Gate-in-out Register Sr.No	For Office Use only:
	Signature of Gate-in-char

VnVCS V&V Comptech Systems

Inward Process

Truck Gate Out

System facilitates to update carting tally online using IPODs. User can open Warehouse in graphical representation, system shows current inventory and planned location for the cargo.

When User select the warehouse location, system popup to enter Unloaded quantity.

User able to take the Bar Code label print to paste on goods. System identify each Pallets as Pallet ID, inventory will be maintain microlevel for each Pallet / Bag wise

For Damage, system provides facility to take the snap of the cargo

System records Sampling taken information for verification purpose

	Gate-Pass
Gate Pass Number:	Date: Arrival Time: Departure Time:
Warehouse Name and Code	
Truck/Vehicle Number	
Commodity	
Gross weight	
Weighment Slip No.	
Tare Weight	
Weighment Slip No.	
Tare Weight (including Rejected bags)	
Weighment Slip	
Number of Bags	
Stack Number	
SR/Warehouse Receipt Number	
Delivery Order Number and Date	
Name of Depositor	
Name of Trader	
Remarks	
Signature of Warehouse In-charge/Su Signature of Agent/Depositor/Driver:	
Entered in Gate-in-out Register Sr.No	For Office Use only:
	Signature of Gate-in-char



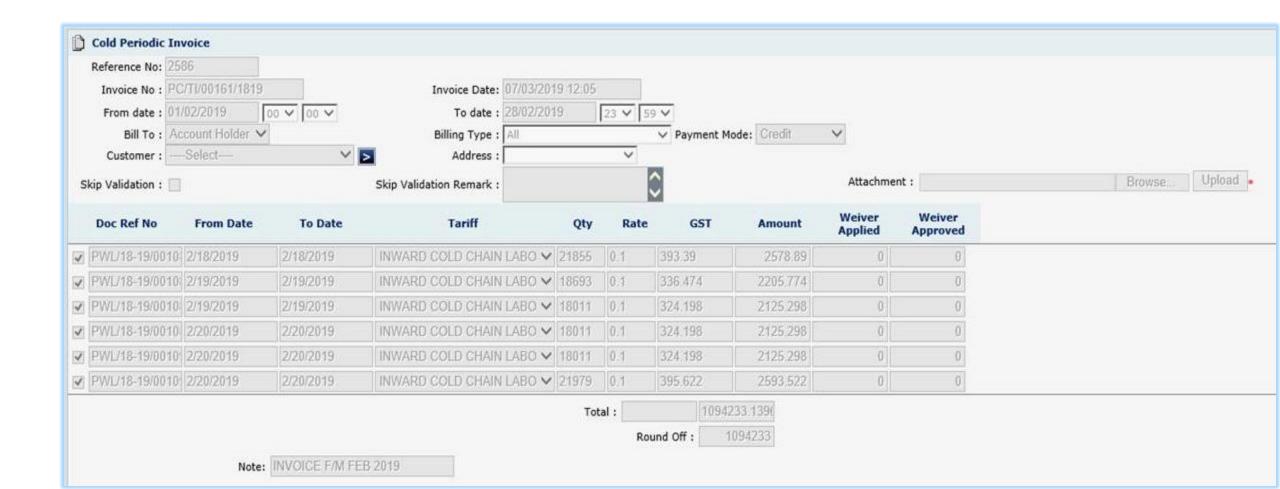
Billing

Billing



Billing

System will generate invoice based on customer contract, inward, outward and stock based.







TAX INVOICE - COLD

	MOTHER DAIRY FRUITS AND VEGETABLE PRIVATE LIMITED	Activity:	TAX INVOICE - COLD
	PAN No: AACCM3174A		
	100133, DISTRIBUTION CENTRE GURGAON Booth NO 920 A, DLF PHASE II ,GURGAON,122102,HARYANA.	Invoice No :	PC/TI/00161/1819
GSTIN NO:	06AACCM3174A1ZZ	State :	06-HARYANA
		Invoice Date :	07/03/2019
Commodity:	GENERAL	Invoice Period :	01/02/2019 TO 28/02/2019
Place of Supply:	06-HARYANA		

Sr No.		Amou	int in INR		
1	INWARD COLD CHAIN LA		117381.80		
2	COLD CHAIN STORAGE A		809934.42		
Amount In Words Nine Lakh Twenty Seven Thousand Three Hundred Sixteen Only			Amount wit	hout taxes:	927316.00

Sr No.	SAC	Classification of Services	Amount in INR
1	996721	REFRIGERATED STORAGE SERVICES	927316.22
2		CGST @9	83458.46
3		SGST @9	83458.46

	Ten Lakh Ninety Four Thousand Two Hundred Thirty Three Only	Total Invoice Amount (Round off):	1094233.00	
--	--	-----------------------------------	------------	--

Remarks: INVOICE F/M FEB 2019 PAN No: AABCH4778A

1)Kindly issue Cheque/DD in name of

2)This document is not a guarantee for the delivery of Cargo.
3) Delivery is strictly on completion of statutory formalities.
4)This is a system generated bill. For any clarification regarding charges or account related enquiries, kindly contact us.

5)All disputes Subject to Delhi Jurisdictions only.

BENEFICIARY DETAILS Beneficiary Name Beneficiary Address

01275-306061 / 306086

Beneficiary Bank Name : ICICI BANK

Authorised Signatory Beneficiary Bank Address - Nirmal Diana New Colony - Dalwal 121101 Mangana



Dashboard and Visibility



Dashboard

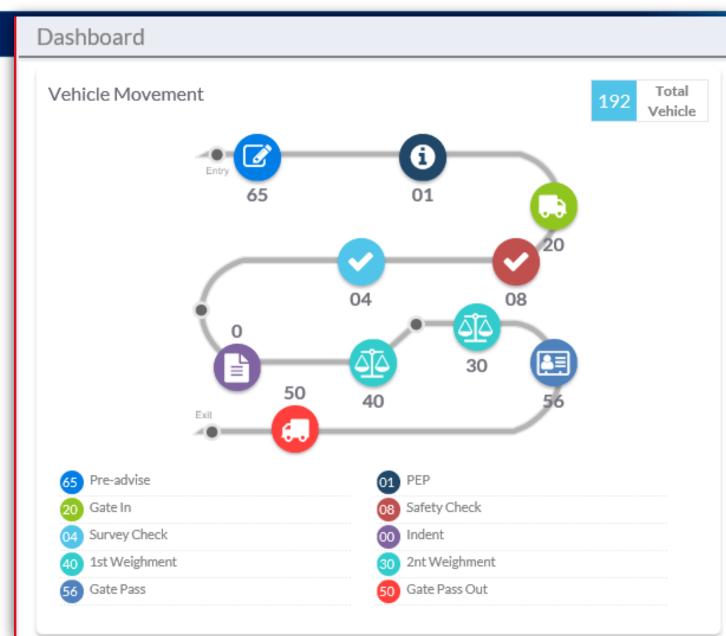
Operation Function Pendency View

System facilitates to view Warehouse Operation micro process pendency and statistics real time based; which provide management / supervisor to take the action.

Facility available in mobile and desktop. User can view the status from platform independent devices.

User can drilldown to the specific function for further details; system availed drill down technology. User able to filter based on customer / supplier to view the current status respect to customer.

This dashboard is based on credential driven; which availed to the customers; they view for their vehicle and cargo point of view only.

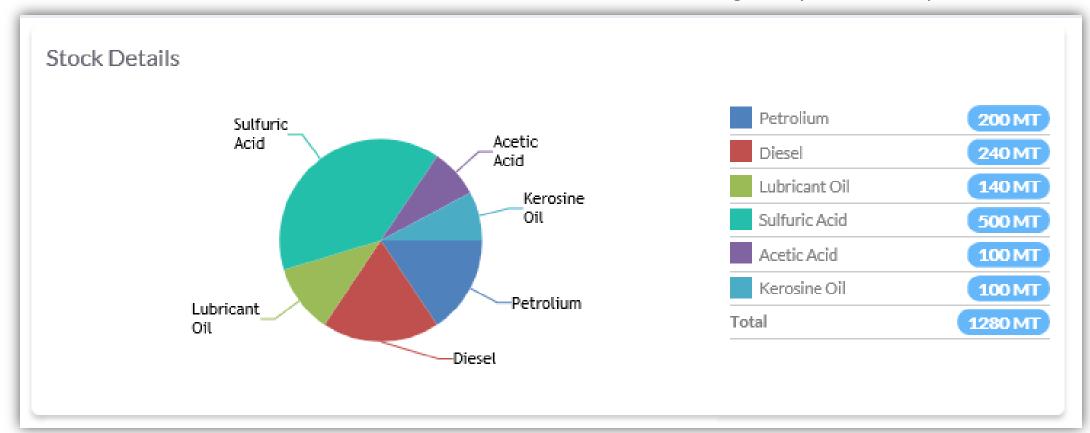




Dashboard Stock view

System facilitate to view the inventory based on 'N' different parameters such as commodity based; customer based; warehouse based; slot based, aging wise. Facility availed in Mobile and Desktop application and user can view anywhere and any time.

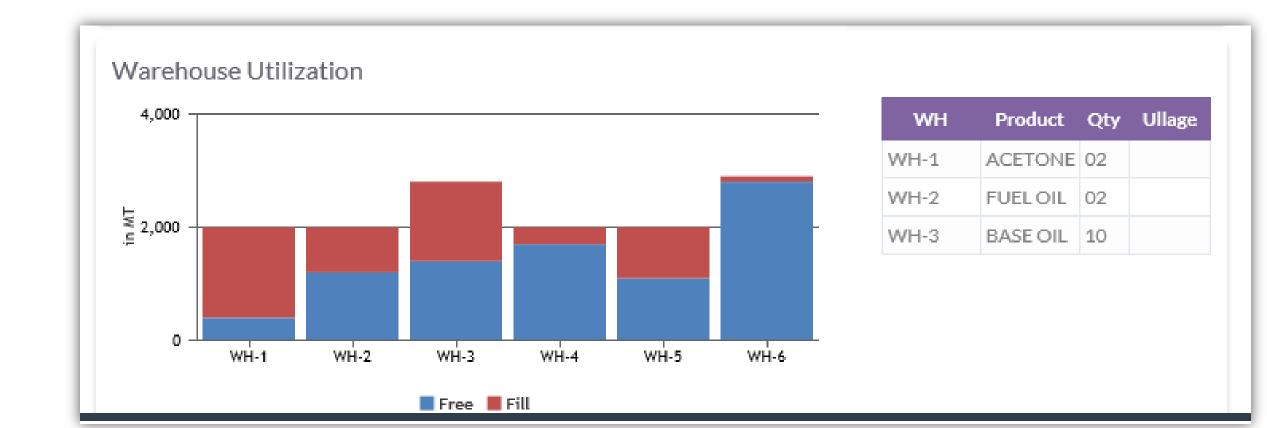
System data control based on customer; direct customer can view the data of their own using this system directly





Dashboard Warehouse Utlization

System facilitate to view the warehouse utilization on real time basis. System provides utilization based on entire warehouse, customer contract basis, product basis, long standing cargo, quarantine cargo etc.



VnVCS V&V Comptech Systems

Dashboard

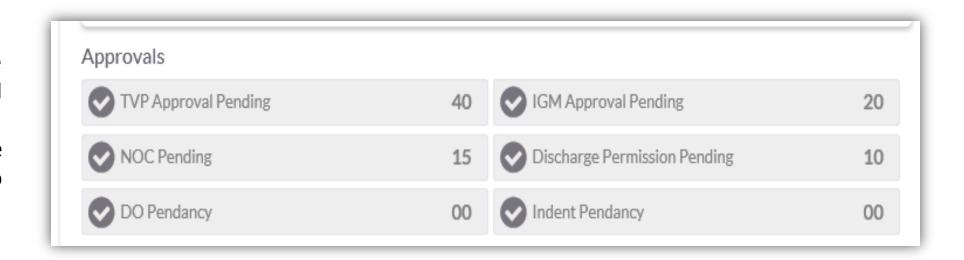
Vehicle turnaround time

System facilitates to view the Vehicle in and out statistics; based on customer and warehouse point of view. User can drilldown the vehicle and identify the time slices respect to business functions

Vehicle No	In Time	Out Time
H4320	28/07/2019 11:18 AM	29/07/2019 21:45 PM
H4385	28/07/2019 09:32 AM	29/07/201911:15 PM
14344	29/07/2019 10:20 AM	29/07/2019 22:35 PM

Operation Pendency View

User able to view the operation pendency based on operation process flow on real time basis and can be drill down to see the cargo details of the pendency



VnVCS V&V Comptech Systems

Value added Process

Value Added Services

- Sampling
- Sorting
- Packing and Re-packing
- Fumigation
- Quality Testing
- Weighment
- Insurance
- Infestation Test
- Lien Marking for Collateral
- Dunnage
- Aeration
- Prophylactic Treatment
- Curative Treatment
- Made-up Bag, spillage and sweeping
- Brushing and Cleaning



Reports

Reports and Registers

During the inward procedures, Warehouse In-charge get following registers:

- Weighbridge register
- Daily Transaction register (Annexure XXII)
- Stack register (Annexure XXIII)
- Quality Sample Analysis Register
- Gate Pass register (Annexure VII)
- Visitors register (Annexure XXIV)

Warehouse In-charge also get

- Stock register
- Cold Storage Temperature register (Annexure XXII)
- Stack register (Annexure XXIII)
- Validity Expiry Register
- Labor Usage Register
- Equipment Usage Register

Case Study: WMS managing 500+ warehouses for Trader after certifying cargo quality

Concern	 No standard business processes adopted Inefficient Operator productivity Improper Inventory control In accurate data synchronization
Solution	 Compelled data capture using Mobile – Mobile Cargo Assessment, Mobile Quality Certification, Mobile Cargo Receipt, Mobile Stocking, and Mobile Shipping Data validation across processes of all departments Tracking and tracing of cargo using RFID readers
Benefit	 Incorporated standard processes to streamline business operations Facilitated role based task assignments monitored against time Digitized capture of cargo and warehouse location information Synchronization of both manual and digital data captured by marketing, operations & finance departments



Contact Us

Offshore Development Centre

Unit # 15, Ground Floor

Building II (A-3), Sector I, MIDC

Millennium Business Park

Mahape, Navi Mumbai 400 710, INDIA



+91-22-2778 2895 / +91-22-2778 2897



contact@vnvcs.com



www.vnvcs.com