

Computer Intelligent Yard Operation System(CiYOS)



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I: Profiles

CiYOS is short for Computer Intelligent Yard Operation System, which is designed and developed by Huadong Soft-tech Co.Ltd independently. It provides a complete solution for the container yard.

CiYOS is a leading container yard operation system in the same line. It integrates excellent managerial experience to better solve the problems that frequently happened in large or medium-sized container yards. It could help to reduce cost and improve service quality through scientific management and automatic operation.

II: Functions

CiYOS meets various scaled container yard's needs for computer intelligent yard operation. Its functions cover the whole producing management process and operating taches, including intelligent planning subsystem, intelligent operation subsystem, decision support subsystem, etc. It provides technological and operational support for realizing high efficient and convenient yard operation.

2.1 Display of system architecture



2.2. Functional structure

C i Y O S	Intelligent Planning Subsystem	ship planning; train planning; highway planning; container yard planning; cargo storage planning; distribution planning;
	Intelligent Operation Subsystem	wireless terminal; intelligent gate control; inventory managing; container packing and unpacking operating
	Container Stacking & Tracking & Managing Subsystem	automatic container and slot searching; car-carried terminal; special region management; yard visualization; track of container situation; loading and unloading for railway transportation; document management; container cargo distribution.
	EDI Subsystem	Support all forms of messages; users can define message standards freely; automatic recognition; data validating; data processing; automatic receiving and sending of message
	CRM & Counting Subsystem	customer relation management; automatic calculation of charges; charges management; charges statistic; financial interface
	Statistic & Query Subsystem	statistic and print of all kinds of work report forms; historical data analysis; all kinds of statistic report forms.
	Container Repair Management	maintenance of container repair quotation; approval of container repair quotation; repaired container moving out of yard; comparison chart of repaired container quantity
	Truck Scheduling & Tracking & Managing	Check on chauffeur work attendance; inner-port vehicle hire; vehicle hire fee maintenance; vehicle moving back; fork lift workload statistic
	Web Service	It can do such things on the net: booking; export planning; packing list completing; it provides the users with such things: documents and container situation queries, etc.
	Decision Support Subsystem	berth analysis; container yard analysis; cargo passing in and out of gate analysis; container data analysis; equipment analysis; income statistic analysis; cost analysis
Utility	application tools; yard editor	

III: Features

CiYOS has excellent features both in technology and operation. It provides the best container number searching solution on the base of efficient yard planning, thus to reduce container shifting and improve the operation efficiency of the yard. Functions like real time ordering, container number recognition, IC card read, etc are all very helpful in yard operation. All the technologies above have been successfully used in other container yards. Its main and specific features are as follows:

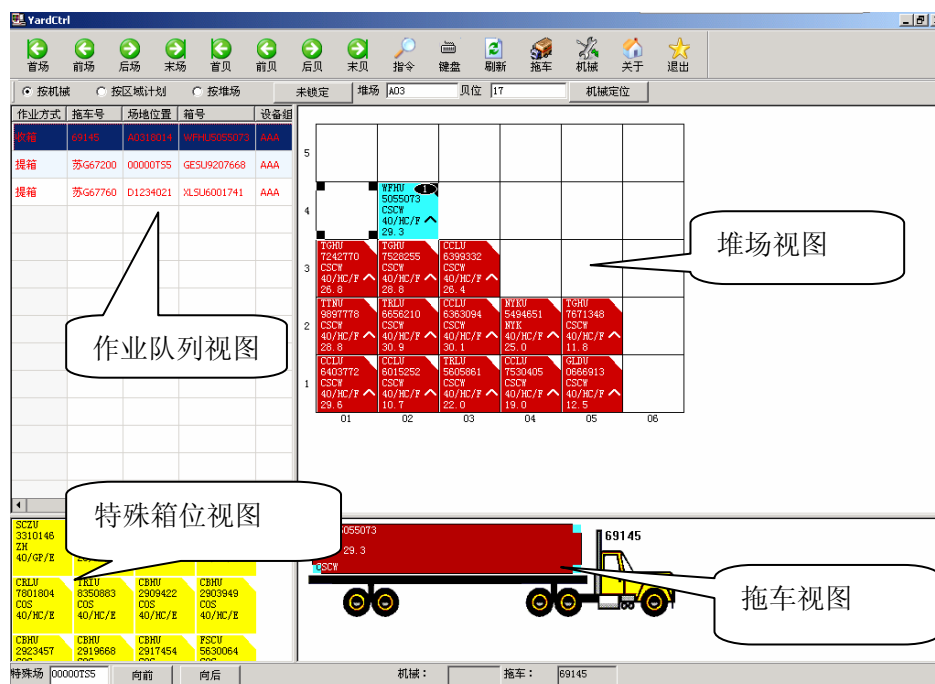
3.1: Operational features

Container and cargo management

- Dynamic container real-time follows
- Integrative management, including check, braising and fuming, container repair, container wash, and vaning and devanning of container, etc.
- Container and cargo delivering management

Wireless car-carried terminal

- Clear view
- Convenient operation



Smart Gate control

- Automatically appoint the position for containers and search for the containers needed.
- Support automatic recognition of container number
- Support automatic IC card recognition, bar code scan, etc
- Control of returning and exchanging container
- Control of damaged containers
- Control of collapsible containers
- Control of direct pick up and loading of vessel containers
- Control of forbidding picking up of those unpaid containers
- Support Dredging / gathering Port operations

Yard planning

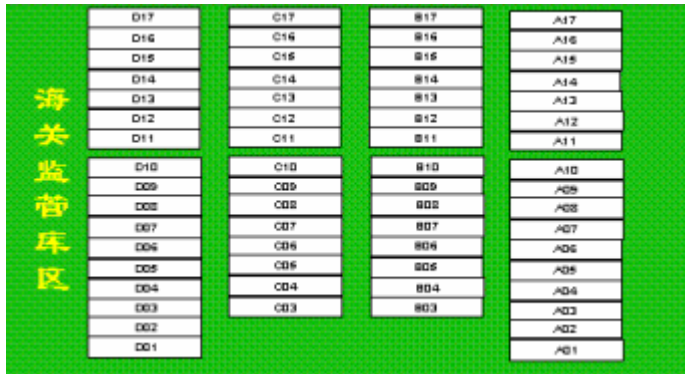
- Wireless yard management
- It provides a yard planning filter that could be iteratively used.
- Planning group will be built automatically
Graphical planning towing operation; planning area will be displayed transparently
- More than one yard planning solutions and operation patterns to provide the entering containers a proper position in the yard
- Yard container display template could be defined by customers
- Support display modes such as: terminal layout, yard bitmap, and bay plan, etc
- Operation rules supporting
- User-defined member report forms

- General, flexible, automatic, and exact counting and charging functions
- Strong operation flex and support ability; It need not programming when solutions for charging is changed
- Support client's credit audit function; real time reflection of client's fees that happened in the terminal
Support financing interface, support directly creating fiscal credence
- Support operation tache charge control
- User-defined report forms and automatic filling
- Provide strong and flexible fee data query function
- Flexible uesr-defined service
- Support e-reckoning and perfect EMAIL service
- Support market department analysis
Support fiscal department analysis

Inventory management

- Cargo location editing of inventory yard
- Display of cargo location plan
- Vanning and devanning plan notarizing
- Vanning and devanning operation notarizing
- Cargo in and out of depot operation
- Cargo location move operation
- Container move applying
- Packing list maintenance





Chauffeur and vehicle management

- Check on chauffeur work attendance
- Inner-port Vehicle hire
- Vehicle hire fee maintenance
- Vehicle moving back
- Fork lift workload statistic

3.2: Technological Features

- ◆ Message-oriented middleware based on security and reliability
- ◆ This system has a high degree of automation and a sophisticated algorithm.
It also accepts the equipment parameter deploying
- ◆ The system design matches better for the needs of key businesses
- ◆ System implementation adopts modularization method, object-oriented design and programming
- ◆ It has a strong query function and flexible report forms making
- ◆ Flexible and secure system management
- ◆ It contains a lot of graphical functions to make the operation visual, flexible and convenient.
- ◆ It is more extensible and maintainable
- ◆ Support wireless technology (2.4G/400M)
- ◆ It provides Internet service

IV: Customer Value

- ◆ Greatly improve the yard' s operation efficiency
- ◆ Realize the unmanned yard operation and high nicety rate of container location (over 98%)
- ◆ Improve container yard' s enterprise image and service quality
- ◆ Enhance gate' s cargo transit ability
- ◆ Automatic container shifting queue to reduce useless searching work and yard cost
- ◆ CiYOS adopts module design .Its functions could be compounded according to the need of the yard

CiYOS is specialized in meeting customer's need. And it has a complete and quick-response customer service system. It aims at ensuring customers' past, present and future investment returns.

V: Typical Clients

Qingdao Zhongyuan Logistics Co.Ltd Gangwan Branch

Ningbo Zhenhai Customs Surveillance Yard