

# CASP for RORO

Stowage Planning System for Car Carrier Ship

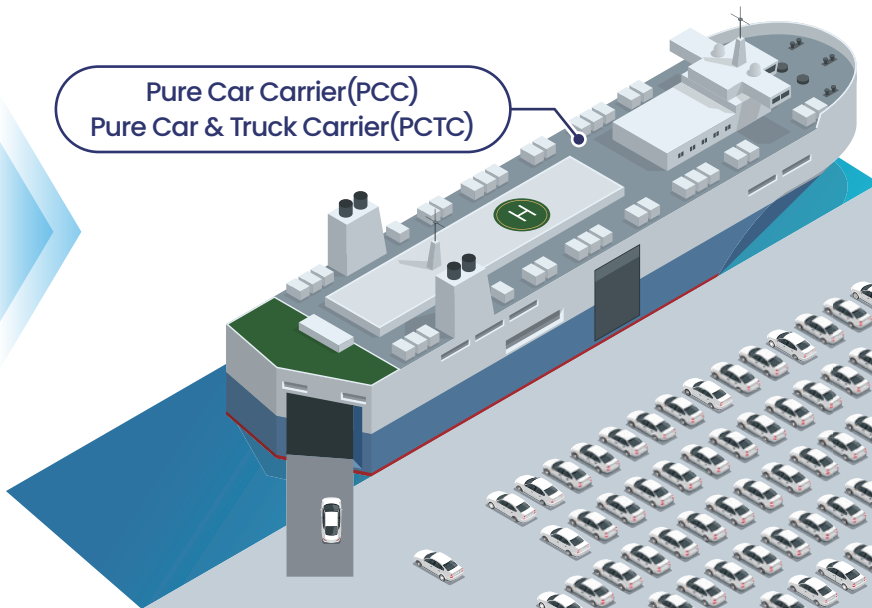
CASP for RORO is a system that allows the management of data necessary for stowage planning and cargo handling for car carrier ships (PCC/PCTC) in a cloud-based web environment. Users can directly define or manage cargo types and classifications, and perform various tasks such as cargo booking management, vessel voyage management, allocation of loading positions, and management of re-handled cargo. Additionally, through a web browser, users can formulate stowage plans and monitor results in real-time without the need for separate program installation, and they can manage the entire process, including reporting and printing results.



CASP for RORO

- ✓ Accurate allocation and utilization of space through **structural definition** based on ship drawings
- ✓ Providing user-friendly **graphical UI** for convenient cargo arrangement

Pure Car Carrier(PCC)  
Pure Car & Truck Carrier(PCTC)



## SYSTEM BENEFIT



### Voyage control and monitoring of cargo booking

- ▶ Monitor shipping schedule
- ▶ Provide ETA (Estimated Time of Arrival) data
- ▶ Monitor cargo booking status by POA in real-time



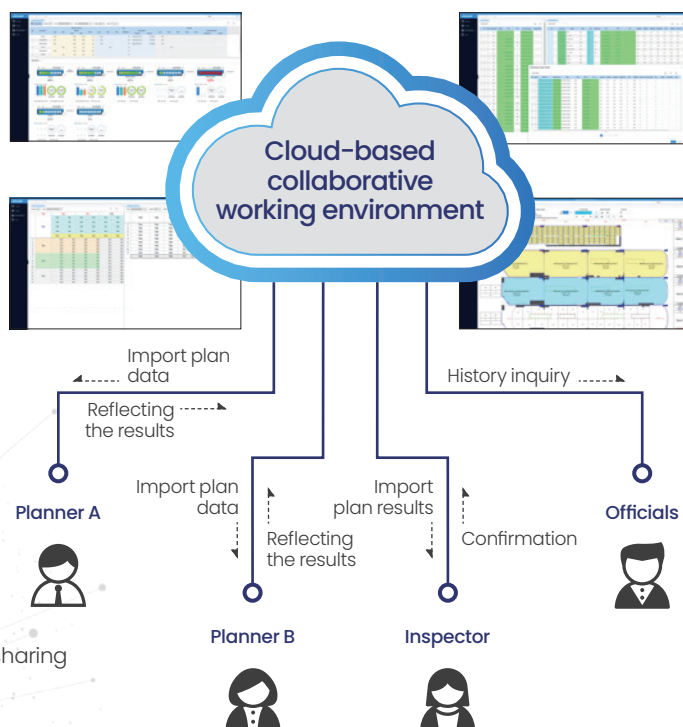
### Stowage plan by user-friendly GUI

- ▶ Fast stowage plan via automatic planning system
- ▶ Optimized cargo placement considering height of deck
- ▶ Stowage plan for loading and discharging considering flow of movement
- ▶ Easy check of layout and occupancy via graphical aids



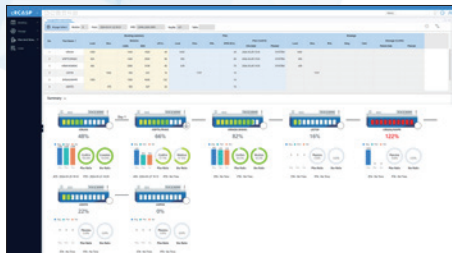
### Stowage planning and operation for loading & discharging by an integrated operating environment

- ▶ Save and share planner's ship planning version
- ▶ Cooperate via internet with no need of system installation or file sharing
- ▶ Cross-check and review planned data by users
- ▶ Ship planning based on POA(Port of Arrival)
- ▶ Real-time planning combined with data from the previous POD(Port of Discharge)

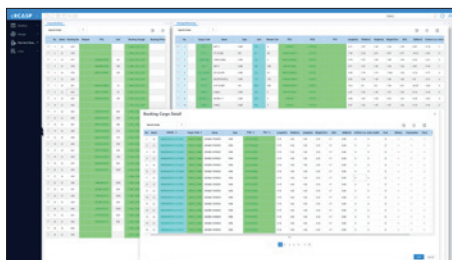


## KEY FUNCTIONS

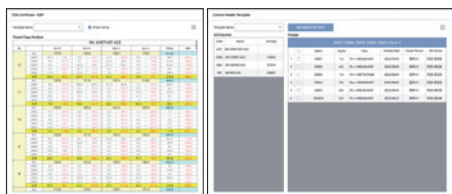
The system provides an integrated environment for managing cargo from stowage planning to loading/discharging operation. Users can take advantage of various useful functions such as cargo data management and a visual GUI to automatically allocate cargo to optimal positions, and promptly review and manage data of space utilization within the vessel.



Voyage Inquiry & Monitoring



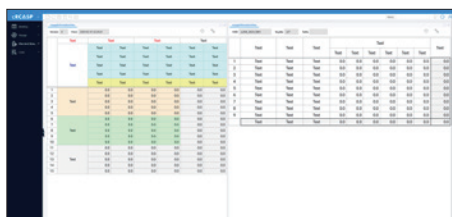
Cargo Booking & Grouping



Onboard Stowage Capacity Analysis



Cargo Stowage Planning



Report

### CODE MANAGEMENT

- Port : Country Code, Port Code, Name, Etc.
- Maritime Route : Port, Code, Name, Etc.
- Shipping Company : Code, Name, Etc.
- Voyage : Number, Vessel Code, Lane Code, Etc.
- Cargo : ID, Name, Maker, Driver's Seat, Length, Width, Height, Weight, Etc.

### PREDEFINE

- Vessel definition for stowage plan
- Define constraints based on cargo data
- Define of cargo area in symbol form
- Calculation of loading area per cargo based on symbol usage volume

### BOOKING LIST MANAGEMENT

- Register and inquiry for booking lists per voyage
- Input cargo data
- Booking version management

### DECK STRUCTURE SETTING

- Lamp load display
- Changing the Lifting Deck's height

### BOOKING GROUPING

- Search for booking record
- Grouping per height of deck, POL/POD etc.
- User-defined cargo grouping

### SHIP STABILITY

- Stability inquiry based on drainage volume and draft data
- Inquiry into the impact caused by wind
- Inquiry into shear force and bending moment

### STOWAGE PLANNING

- Manual and Automatic planning
- Make a booking plan
- Cargo abstraction area
- Action on various work processes
- Optimization of stowage position using search techniques
- Rehandling (Cargo rehandling)
- Change of destination (COD)
- Unloading handling & Route grasp
- Panel plan

### CARGO HANDLING VALIDATION

- Safety distance: Front, Rear, Left, Right
- POD : Arbitrary/Specific POD
- Cargo : Driver's seat, Height, Weight, Cargo direction, Planned direction, Specific cargo

### REPORT

- Summary of cargo quantity data
- Specific loading/Discharging ports
- Cargo loading/Discharging
- Damage & Exception (Damaged and exceptional cargo)
- Display method by area or cargo type
- Statistical analysis screens
- Export to Excel files

### USER DEFINE

- Provisioning per a user group
- Setting for limit on specific functions
- Display options
- Grid data filtering

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66-39, Bansong-ro 513beon-gil, Haeundae-gu, Busan, Korea, 48002

www.tsb.co.kr

+82 70 4733 1000

+82 51 955 3001

inquiry@tsb.co.kr

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