

Automated Terminal Gate OCR Systems



SeeGate2 is a fully integrated second generation Gate OCR system that automatically reads and records the container ISO code number as the truck passes through a gate complex. The system may also include integrated modules for reading of the truck license plate number, the chassis number, the rear plate number and IMO label marking information.

SeeGate2 system is a PC-Based container terminal gate processing system, ideally suited for recognition and recording of container code numbers together with the truck plate numbers, chassis numbers, and others.

The SeeGate2 system includes integrated hardware and software systems. The system is based on a proprietary Container Code Recognition (CCR) software engine and

utilizes rugged high-resolution camera systems with pulsed solid-state LED illuminators. The system can also be interfaced with the terminal load-lists and manifests for enhanced recognition performance.

SeeGate2 is designed to share the container, truck, chassis identifications and other optional container information (IMO label markings, Damage Inspection imaging) with a central server system. This can be done either by TCP/IP communication or by application to application messaging. The recognition results are transmitted after each identification or post processing cycle and are also stored in the local database for manual review. One or more Client applications can intercept the messages, for data recording and/or for further processing.

Benefits of SeeGate2 System:

- Automates data entry of container code, truck license-plate and chassis (optional) numbers
- Automatically reads IMO label markings (optional)
- Captures full container color images for Damage Inspection applications (optional)
- Increase Terminal and Traffic Efficiency
- Provides Real-time data Processing
- Enables Security Surveillance
- Enhances terminal assets tracking and management
- Extensive set of networking, operational, monitoring and maintenance utilities with the Smart Service Suite option

Sample Application:

- Portal installations
- Terminal gate systems
- Border and customs gates

System Features:

- Handles all standard size containers (20, 40, 45, 20/20)
- Reads ISO 6346 formats including check digit verification
- Reads container code number and size/type from both sides, rear and top views
- Reads truck license plate and optionally chassis number from both sides
- Identifies IMO label markings (optional)
- Captures full (four sides) container color images for Damage Inspection applications
- Stores images, selectable jpeg quality or bitmap
- Comprehensive SDK for simplified integration with external utilities, client applications and Terminal Operating Systems (TOS)
- Captures information while truck is in motion
- Simple configurations
- Energy efficient (solid state strobe illumination)
- Multi-spectrum license plate camera & illumination units (IR and/or visible)
- Minimal and simplified equipment installation
- Low maintenance, supported by operational and maintenance utilities
- Superior Reading Accuracy
- Seamless Performance Guarantee

SeeGate2 Display Sample for Container, Truck Plate and Chassis numbers

The screenshot shows the SeeGate2 software interface. At the top, there is a menu bar (File, Edit, View, Help) and a toolbar with various icons. The main display area is divided into three sections, each showing a different image with its identification number overlaid in a green box:

- Left section:** Image of a truck's front grille and license plate. The license plate number is 9B55272.
- Middle section:** Image of a red container with identification numbers KKFU7413051 and 45C1.
- Right section:** Image of a truck's front grille and license plate. The license plate number is ICSZ172882.

Below the images is a data table with the following columns: ID, Truck Plate ID, Chassis/Wagon ID, Front Container ID, and Rear Container ID. The table contains 8 rows of data:

ID	Truck Plate ID	Chassis/Wagon ID	Front Container ID	Rear Container ID
4	9B49535	ZCSZ921072	GCEU6026354	
5	9B40992	APLZ155648	HDMU2394585	DFIU6047837
6	9B98418	HDMZ403762	CCLU4025729	INBU5014881
7	9B69768	APLZ417819	OCLU1468643	MOLU2074630
8	9B55272	ICSZ172882	KKFU7413051	

At the bottom right of the interface, there is a log window showing the following entries:

Time	Date	Description
16:12:55	01-Nov-05	Container recognition is done
16:12:55	01-Nov-05	Images are stored on the disk
16:12:55	01-Nov-05	System waits for a new truck
16:12:55	01-Nov-05	Match done (9B55272 /)

The status bar at the bottom indicates "Ready" and "Uptime: 05:05 (hh:mm)".