CAMCO
TECHNOLOGIES

Rail OCR
Solutions

Rail OCR Portal

Automatic registration of railcars, containers & semi-trailers

Start processing trains without delay

Camco Technologies Rail OCR Solutions capture crucial data while trains approach the terminal, without hindering or delaying operations. Seamless TOS integration ensures that the data is instantly sent to the TOS, ultimately improving train turnaround time.

[**"Driving intermodal automation and efficiency through rail OCR"**]

Rail Portals
Specifically designed to register railcars and containers

TECHNOLOGY TO SUPPORT RAILCAR SEGMENTATION

Rail OCR solutions go beyond accurate container registration: they support identification of railcars as well as the exact location of a container on that railcar. Rail portals are therefore equipped with various sensors complementing the camera systems.
The sensors are used to detect the train, railcar and container boundaries in order to perform segmentation.

This technology also supports the detection, categorization and processing of all types of tank containers.
A standard rail OCR solution will capture pictures of each container's left, right and top side, to ensure basic OCR. Optionally, pictures of the container's front and rear can be provided, for IMDG label recognition.

OCR SUPPORT
- Container number and ISO code
- Non ISO containing numbers (US)
- Railcar and chassis numbers
- (Optional) IMDG and seal presence
- Door direction

SPECIFICATIONS
- Pictures of container left, right and top side
- optional pictures of container door
- Support for double stack containers and double track trains
- Detect location of container on train

Train Gate Operator
Increase productivity with Operator application
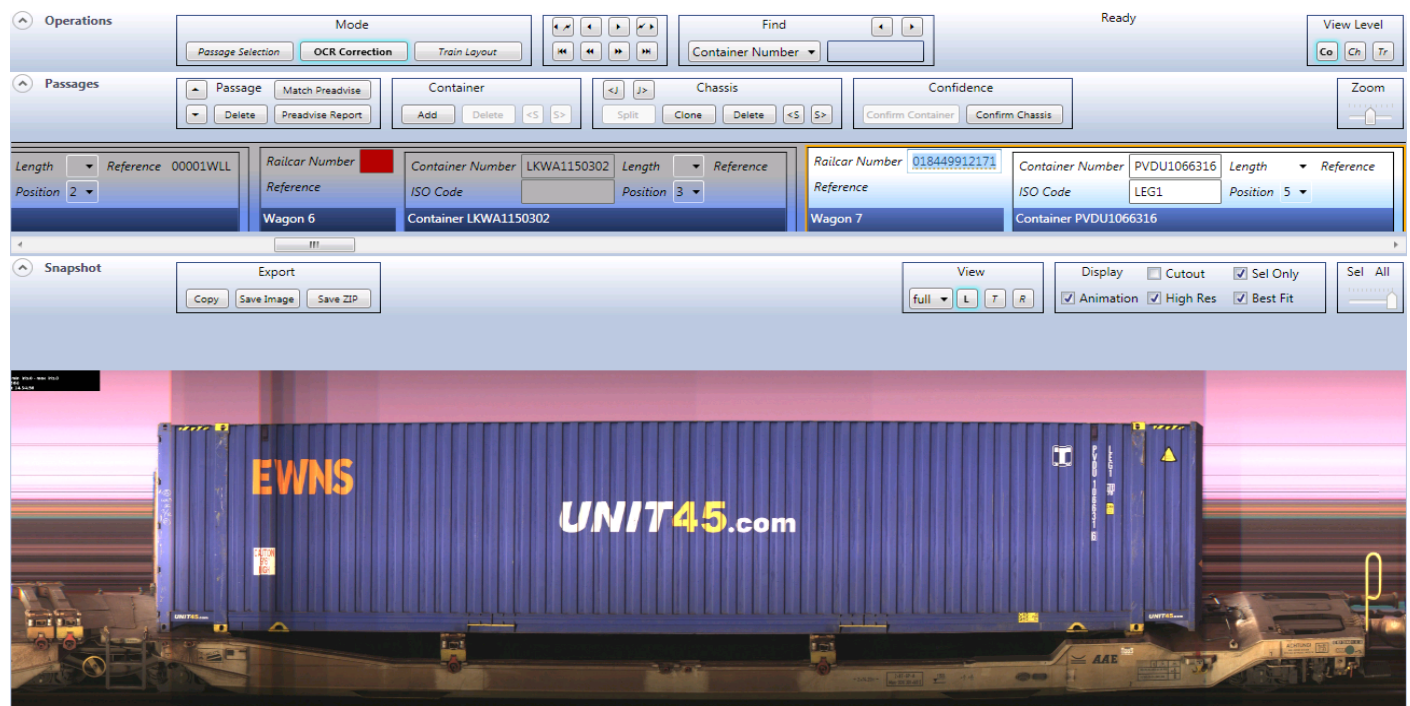
PREPROCESS, REGISTER, POST-PROCESS

Seconds after a train has passed the rail portal, all data is processed and sent to the TOS. Using the Train Gate Operator, the operator can verify the images for further processing. The operator can select a train passage to view the train configuration with its railcars and containers and correct any OCR data. Detailed pictures allow the operator to double-check OCR data, such as container numbers and IMDG labels.

OPTIMIZED PLANNING & HANDLING OF TRAINS

The collected information allows the TOS to plan the moves of each train in the most efficient way.

VISUAL PROOF FOR DAMAGE CLAIMS

High quality images of the railcars and containers are available for effective damage claims management. Optionally, pictures of the container's front and rear can be provided, for IMDG label recognition.
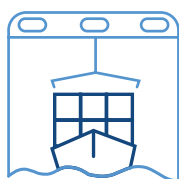

Trackview for better exception handling

The Rail solution can be further extended to support live shunting. Using TrackView, operators can view a complete actual inventory of the railcars located on the shunting tracks. When railcars are moved, the inventory is updated accordingly. This allows for further automated container handling. Rail tallymen no longer need to record this information at the shunting tracks before containers are moved by cranes. With TrackView, operators can work in a more agile way, as processing train data is more focused on exception handling.
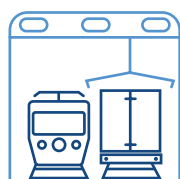
Select	Track	#Wells	#Units	Direction	Last Activity	State
☐	Track1	2	4	inbound	2018-04-28 05:21:51	PENDING
☐	Track1	0	0	inbound	2018-05-28 02:57:35	OPEN
☐	Track2	1	0	inbound	2018-05-28 02:39:20	READY
☐	Track3	22	61	inbound	2018-05-17 02:31:24	PENDING
☐	Track3	0	0	inbound	2018-05-28 02:29:02	OPEN
☐	Track4	0	0	inbound	2018-05-27 23:15:27	OPEN
☐	Track5	2	0	inbound	2018-05-28 01:55:11	READY

" Trackview supports live shunting"
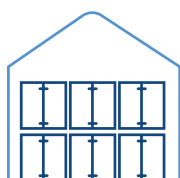
"The essential tool for efficient train processing"

Camco Technologies is a pioneer in the automation of the container hand-over process. The Camco Technologies image recognition and location-based automation solutions provide accurate and essential data for terminals to optimize operations. Our proprietary hardware and software solutions integrate seamlessly with any terminal operation system and are implemented in more than 250 terminals all over the world.

We automate, you operate.

Maritime

Intermodal

Ro-Ro

Logistics