TECHNOLOGY, EQUIPMENT & PEOPLE

Optical Character Recognition (OCR)

Rubber Tired Gantry Crane (RTG)

Radiation Portal Monitors (RPM's)

Vehicle & Cargo Inspection Station (VACIS)

Radio Frequency Identification (RFID)
TERMINAL GATE ENTRY & EXIT
ENTRANCE TO ON-TERMINAL TRUCK QUEUING AREA

GATE PASS ISSUED
DRIVER'S ID SCANNED
INSTRUCTION TICKET PRINTS

MARINE TERMINAL ENTRY
OPTICAL CHARACTER RECOGNITION (OCR)
“KITCHEN” VIEW OF REMOTE CAMERAS
<table>
<thead>
<tr>
<th>STEAMSHIP COMPANY</th>
<th>VESSEL</th>
<th>VOYAGE</th>
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<tbody>
<tr>
<td>BLUE CONTAINER LINE</td>
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<tr>
<td>DELIVERING - RECEIVING CARRIER</td>
<td>BOOKING/BILL OF LADING NUMBER</td>
<td>CARGO DESCRIPTION</td>
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<tr>
<td>EMERAL EXPRESS</td>
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<tr>
<td>PORT OF DISCHARGE</td>
<td>FOR TRANSHIPMENT TO</td>
<td>MOVEMENT IN</td>
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<tr>
<td>CONTAINER NUMBER</td>
<td>SEAL NUMBER</td>
<td>HAZARDOUS</td>
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<td>TGHU787003 6</td>
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<tr>
<td>CHASSIS NUMBER</td>
<td>CHASSIS LENGTH &amp; TYPE</td>
<td>LABELS</td>
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<td>FFFZ016393</td>
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<td>TOTAL ROAD WEIGHT</td>
<td>TRACTOR WEIGHT</td>
<td>OVERSIZE</td>
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<td>CHASSIS WEIGHT</td>
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<td></td>
<td>CONTAINER GROSS</td>
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<td>CONTAINER TARE</td>
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<tr>
<td></td>
<td>CARGO WEIGHT</td>
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TERM NAL TECHNOLOGY

YARD TRUCK RFID TAG

OCR Cameras

CRANE RFID TAG & PTUI

Crane OCR
RADIO FREQUENCY ID (RFID) FOR TRUCKS

RFID tag on Port Truck
Tag triggered by RFID Port
Automated tag/transaction association

RFID FOR CONTAINER HANDLING EQUIPMENT

RFID tag on top-pick forces the truck or chassis tag to transmit its ID. ID is auto transferred back to the top-pick.

Container and Top-pick are automatically associated based on PTUI sensor and location.
The location of the top-pick’s tag is determined when container disengages.
The location information is translated to bay, cell, and tier and updated to the TOS.
Terminal Security

- Transportation Workers Identification Credential (TWIC)
- Vehicle & Cargo Inspection Station (VACIS)
- Radiation Portal Monitors (RPMs)
Transportation Worker Identification Credential

Card Security Features

Sample prototype card shown, production card will differ in appearance

Memory chip carries individual's unique biometric for identity match at reader. If the secured data doesn't match the individual's fingerprint, or the facility has not opened access to the individual the card cannot be used.
Port of Seattle

Where a Sustainable World is Headed