

**GPA Director IT** 

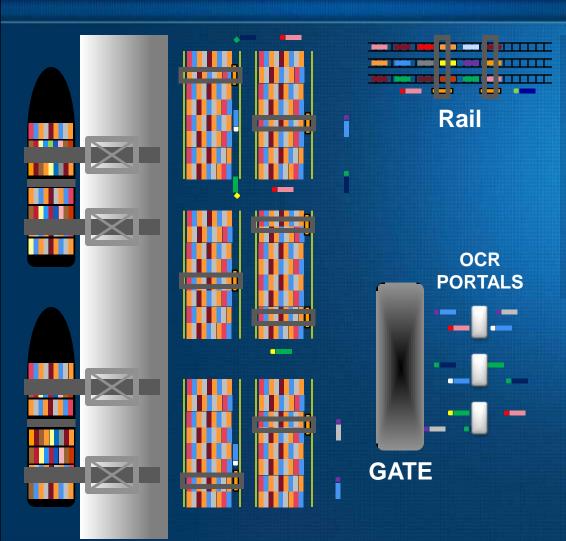
## **Technology in Port Operations**

### What Makes Up the TOS?

- Inventory Database
  - EDI
  - Web Enabled
- Planning and Execution
- Wireless Canopy
- Gate Systems
- Position Detection System
- RFID System
- Billing



# **Terminal Operations**



- Real-time Inventory Control
  - OCR
  - Automatic Inventory Updates
  - RFID-based Job Promotion
- Real-time Equipment
  Monitoring for all CHEs
- 24 x 7 x 365 Support



**GPA Operations Command Center** 



### **GPA Automated Gate Process**

Create Pin Number

- Required Data Entered and Validated
- PIN Number Created
- Over the Road Trucks have RFID Tags Mounted and Registered

Truck Arrives at Pre-Check

- Truck Passes thru OCR with Container
- Container/Truck/Pin Matched in System
- Driver Credential Validated & Container Weighed
- Mission Tickets Generated / Location Planned / Work Instruction Routed to Field Equipment

Container Dropoff Inspection

- RFID Promotes What Truck (Container) is in Which Lane
- Container Inspected, Damages Noted, Seal Entered
- EIR Generated
- Yard Location Finalized if Necessary

#### **GPA Automated Yard Process**

Container Demount

- Yard Mapped with Intelligent Numbering Scheme for Easy Slot Location
- Truck Arrives at Planned Demount Location
- Yard Lift Reads Truck RFID & Promotes Demount Instructions on Mobile Data Terminal in Cab
- Engage Twist Locks Transfers Container Location from Truck To Lift
- Auto Demount Location Update Based on Lift Telemetry, Geospatial Yard Map, and Twist Locks

**Container Mount** 

- Truck Arrives at Planned Mount Location
- Yard Lift Reads Truck RFID & Promotes Mount Instruction on Mobile Data Terminal in Cab
- Engage Twist Locks Transfer Container Location from Yard to Lift
- Auto Mount Location Update Based on Lift Telemetry, Geospatial Yard Map, and Twist Locks
  - Re-handles Planned and Updated Automatically Based on Lift Telemetry, Geospatial Yard Map, and Twist Locks

Container Pickup Inspection

- RFID Populates Which Truck (Container) is in Which Lane
- Container Inspected, Damages Noted
- Seal Verified
- EIR Generated