

ARL RTG Dispatcher

For Marine Container Terminals

A solution for container terminals with medium to high number of RTGs deployed; used by the yard crane dispatchers in operations.

Licensed or Leased Solution

Purchase a software license to use ARL RTG Deployer or lease the tool on yearly basis.

The yearly maintenance fee secures technical support and functionality upgrades.

Orders dispatching								
	Time left	Order start	RTG	From	To	Work start	Moves	Driving time
<input type="checkbox"/>	+2 min	15:51	R29	14H	13B	15:58	1	6.9 min
<input type="checkbox"/>	+3 min	15:52	R129	14E	13E	15:54	2	1.8 min
<input type="checkbox"/>	+3 min	15:52	R46	13I	13I	15:52	2	0.0 min

- Minimize RTG driving distances and driving time, maximizes number of moves per hour
- Identify and avoid future bottlenecks and yard clashes
- Calculate utilization percentage for individual RTGs
- Math algorithm driven productivity increase of RTGs
- Predict RTG under- and over-utilization

$$\begin{aligned}
 (1) & \sum_{i=1}^N \text{Mileage}(CL20, CL40, DL20, DL40, BLX, BLY, BDY, P_i) \rightarrow \min \\
 (2) & |P_i - P_j| \geq \frac{L_i + L_j}{2} + S; \quad i = \overline{1, N-1}, j = \overline{i+1, N}; \quad \text{where } V_{i,j} = 1, \\
 (3) & P_i \geq \frac{L_i}{2}, \quad i = \overline{1, N} \\
 (4) & P_i \leq B - \frac{L_i}{2}, \quad i = \overline{1, N}
 \end{aligned}$$

Main Features

- Identify most suitable RTGs for each move based on planned moves and current yard activities
- Instruct RTG to move to required block taking into account time for dispatching by using yard geometry and driving rules, including 90/180° wheels turn
- Projects three hour RTG dispatching scenario based on current QC and RTG performance

Integration to Terminal Operating System (TOS)

ARL RTG Dispatcher automatically uses TOS data without any re-typing. Data is refreshed by clicking a button.

Getting Started

Setup the TOS interface; install the tool on your web server, and relevant desktops can access the tool via their browser right away!



arl-shipping.com technology solutions for the transportation industry on license, hosted or pay-per-transaction plans.

Innovative and state-of-the-art IT tools working in synergy with existing IT platforms for marine terminals, depot & yards, shipping lines & transport providers, freight forwarders and equipment managers.

- berth and resources planning, yard crane dispatching, performance monitoring and alerting;
- transportation pricing, electronic bookings, interactive schedules publishing;
- container fleet management, sales, interchange processes;
- freight forwarders' value-add services e-business, interaction with shippers and shipping lines and integration with portals;
- container yard inventory management;
- freight forwarder web-site contents and context framework with built-in e-business.