









Efficient management of container, break-bulk, Ro-Ro terminals and warehouses using information technologies





About SOLVO

Who we are:

SOLVO – one of the leading providers of high-end supply chain execution solutions to help optimize port, terminal and warehouse logistics .

Years active:

20

Number of employees:

145

Number of completed projects:

207 (end of 2015)

ΤΟΥΟΤΑ

Among customers:









About SOLVO



Developed first WMS and TOS in the Pos-Soviet space in the 1990s



International certification



70% of all container in Russia is processed by Solvo.TOS

ACT

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Break Bulk Cargo Unitizise Cargo Bags Petroleum Barrels Lumbe Gasolin Coal Drums Paper LNG Grain Pallets Steel Chemical Iron ore Boxes Cars luice Bauvit Trucks Container Wine Cement

All Marine Cargo

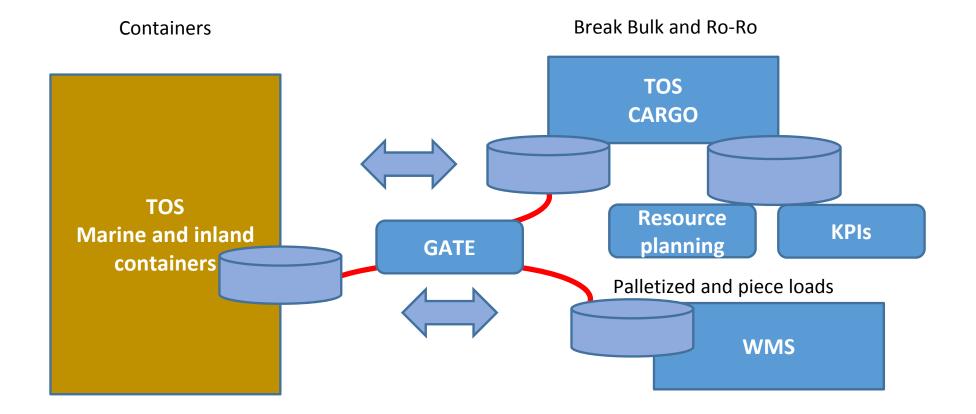
Solutions for container, break-bulk, Ro-Ro and multipurpose

20 years 200+ projects 50+ worldwide partners



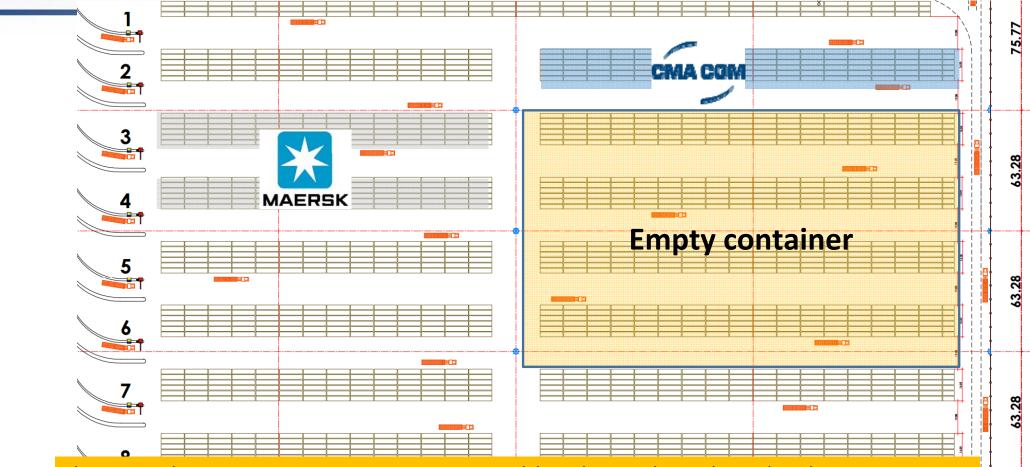






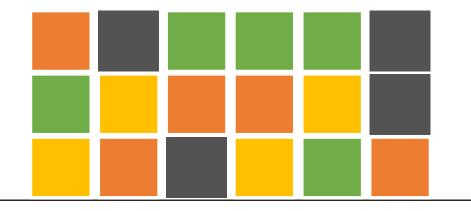
Dynamic stacking rules





The system determines an appropriate container stack based on stacking rules and guides a CHE operator to place the container accordingly. E.g., all Maersk containers are moved for storage to the second stack, while all CMA CGM containers go to the third stack.

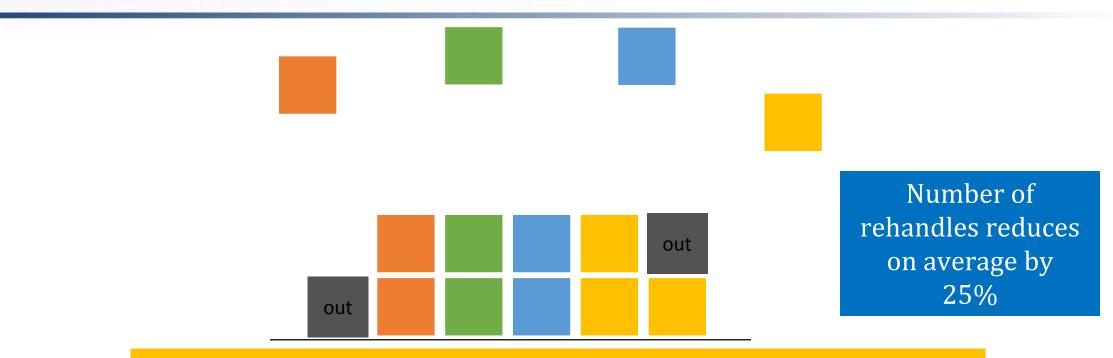




The specific location in a stack is chosen by the system in accordance with stacking strategies. For example, unoccupied locations at the lowest tier are taken first.



Housekeeping and reduction of rehandles



A reduction in the amount of moves is achieved thanks to:

- Address-based storage at the yard
- Dynamic stacking rules and strategies.
- Forecasting of container arrival/departure
- Housekeeping instructions



Layout viewer and editor

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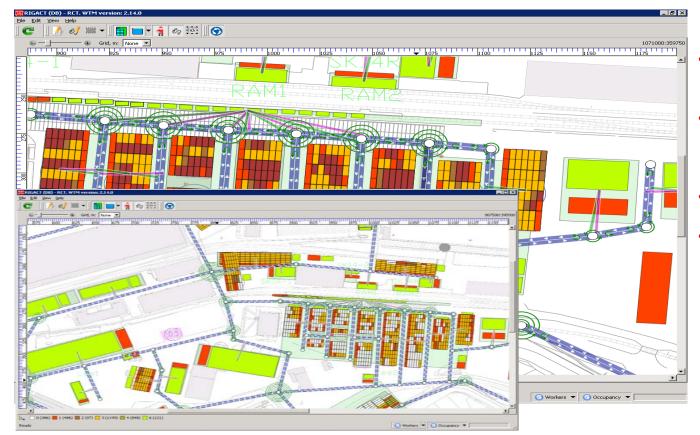
The container terminal layout can be viewed and managed in real time using a built-in interactive layout viewer and editor allowing to:

Fully describe the multilevel topology: establish a tree of terminal location, group and zone occupancy

- Display, edit the position of terminal objects
- Monitor the actual level of terminal occupancy in real time
- Monitor worker movements in the terminal in real time
- Find various objects in the terminal layout and much more



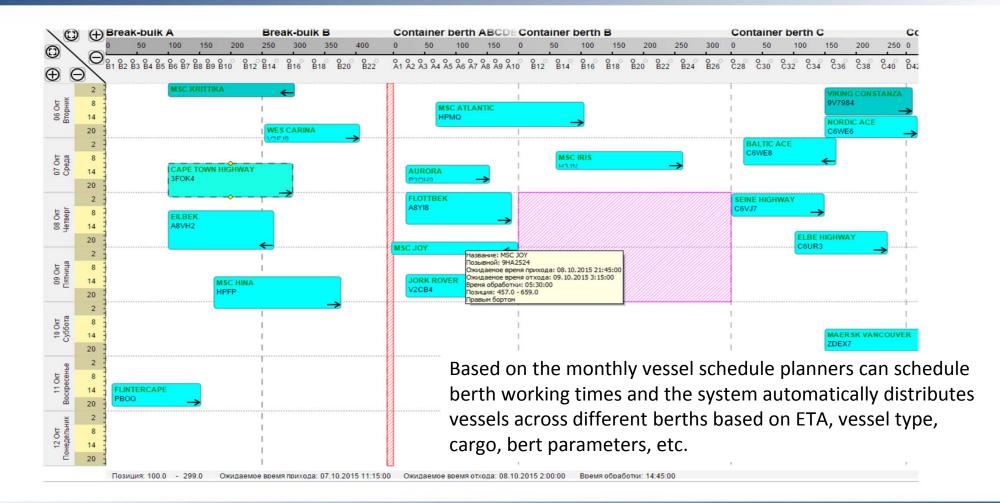




- The system analyzes the available data about the road network of the terminal and builds the optimal route for a CHE;
- The entry of road data is carried out through the roads editor function - part of the Real-time terminal layout viewer and editor;
- The user defines the key check-points, permitted turns and delays.
- The user can also then set the availability of a stack for processing from a selected road.



Berth planning



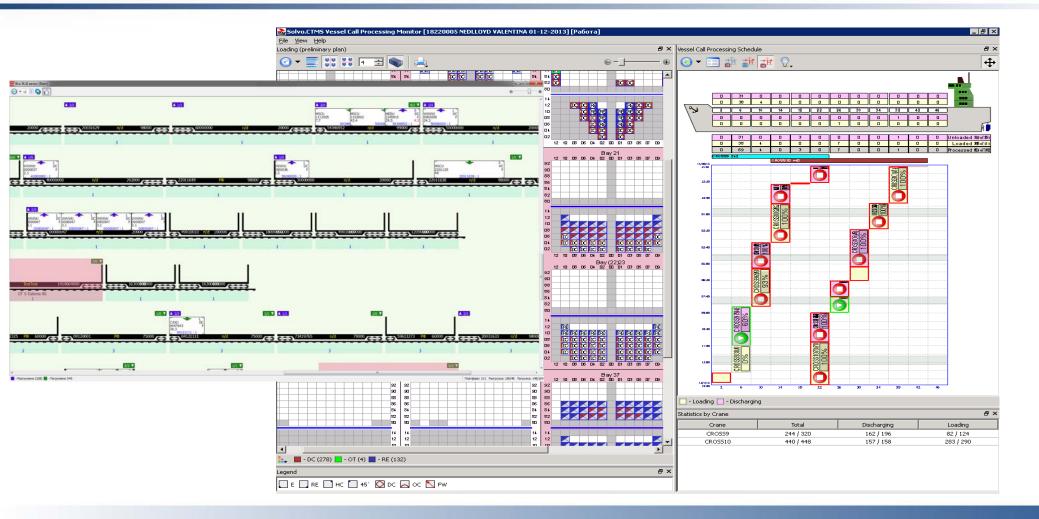




Forwarder send an EDI message to the terminal operator which is automatically processed by TOS. E.G COPARN - transport order booking. The message contains preliminary info about the arriving containers and vehicles.

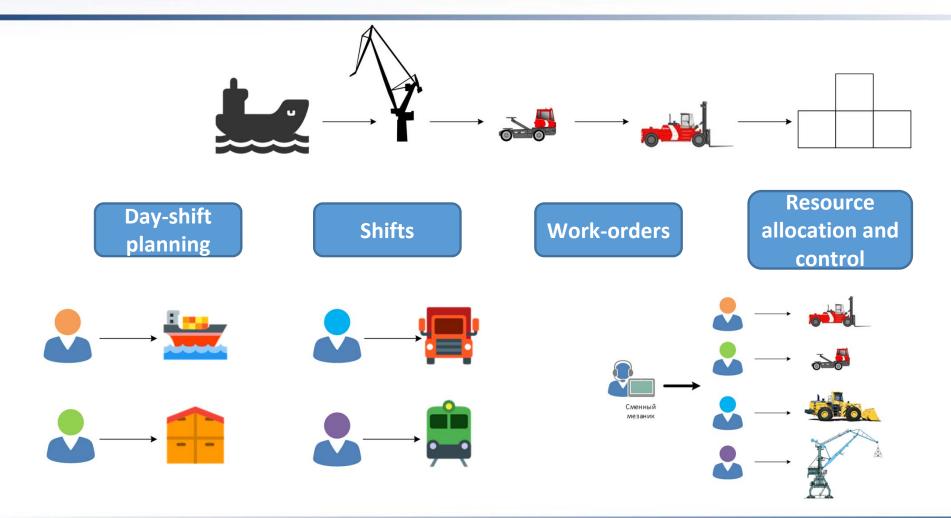


Integrated load/discharge planning applications





Resource planning



Workstations for CHE operators



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STS operator's workstation





Increased productivity for STS



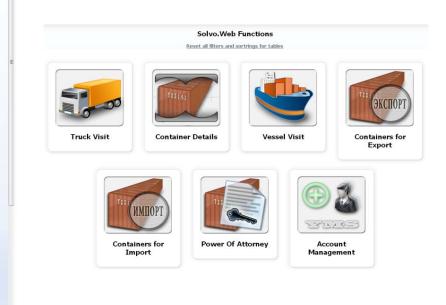


Truck scheduling and truck visit requests

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The remote access allows to grant remote access to the System via the Internet (or local terminal network) e.g. for viewing reference information about terminal operations/ orders/vessel calls, etc. and is available to the shipping line agents and forwarders.





Gate optimization



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Automated identification: containers









Automated identification: break-bulk and Ro-Ro







Automated identification: Ro-Ro

• RDT

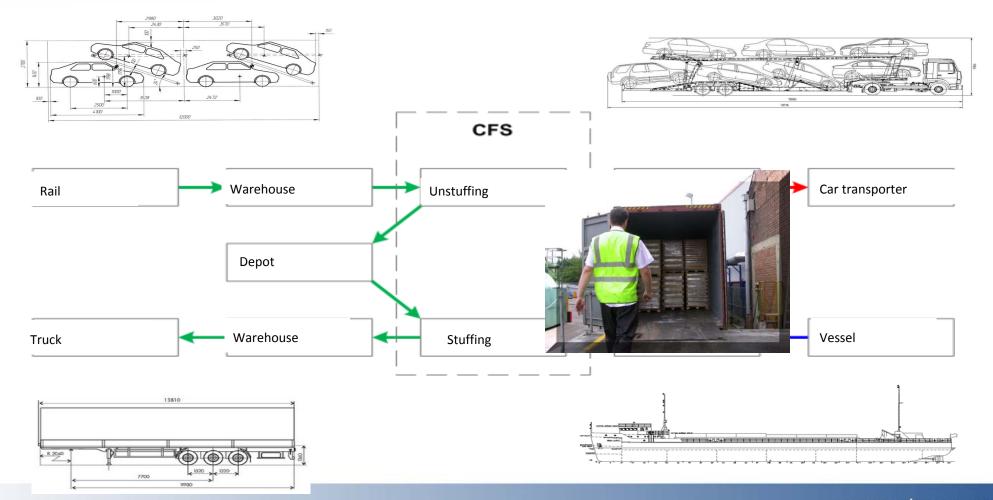
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• Paper

When receiving a tally indicates a load, zone, gang and slot. Vinnumber ID is available for Ro-Ro and new automobiles.



CFS operation





Container Weighing



Weighing management





Automated container delivery



Weighing registration



			Azpec:	
			Телефон:	
			Факс:	
Экспорт		Акт взвешивания N WGT00005	5 or 10.12.2014 20:39	
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Контейнер:	SUDU5275268	Тара: 4500 кг	Elsosofia: 00704872	
Тип размер:	40 R.E			
Пребыл на те	гроживал 04.12.2014г., на плитфорь	и 89652304 (транспорт прибытия)		
Общий вес	контейнера с грузом: 32 14	0 kr.		
Distantia	проживедено на весах RS 104			
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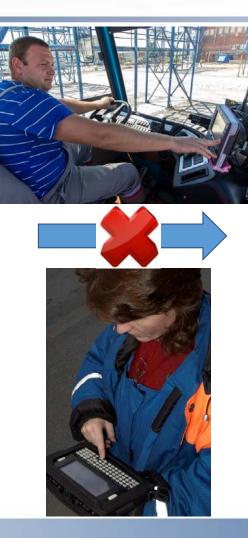
Creation of weighing documents



TOS disables vessel container loading without VGM



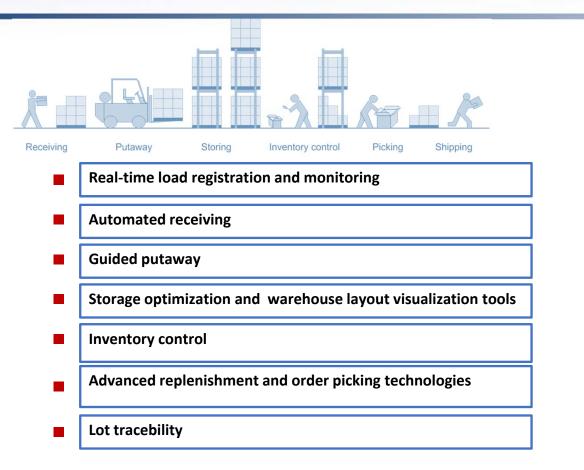
Solvo.TOS blocks delivery and loading of container onto the vessel without VGM data







WMS features





RFID: "Smart shelves"



"Smart shelves" or racks equipped with RFID antennas.

•Racks are made from a special dielectric material to shield from radio signals.

•Smart shelf technology makes it possible to automatically record staging and load grabbing events in the WMS, while freeing up the hands of the operator.





KPI dashboards





Thank you for your attention!



The smarter alternative www.solvosys.com Our stand: #14