

General cargo: a modern perspective on the automation of complex technological chains - from internal operations to interaction with other participants in the global chain

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www.solvosys.com



About SOLVO

Who we are:

SOLVO Group leading global vendor of supply chain execution solutions focusing on TOS for port and railway operators.

Year founded:

1995

Ownership

100% private company

Coverage:

Western and Eastern Europe, Asia, Middle East, Africa.

Offices:

HQ:

Saint-Petersburg, Russia

Representative offices: Dubai (UAE); The Hague (NL), Rome (IT), Naples (IT),







SOLVO's business core areas



Solutions for ports and terminals

A leading Terminal Operating System for ports and terminals. An ultimate set of solutions for managing just any type of cargo: container, break bulk, Ro-Ro, general cargo, etc., including extra solutions as the VBS, AGMS, VGM.



Solutions for yard management

YMS helps to manage all the operations at the yards, including allocation and storage of different types of cargo, housekeeping, reefer and empty containers management, CFS management etc. Providing procurement of gate-entry/ cargo pick-up permits for truck-drivers, trucks and cargo forwarders/ transport companies.



Solutions for warehouse logistics

One of the leading software providers of SCE software. Solutions range from WMS to WCS, Yard, Billing, KPI and more for all verticals: production, retail and distribution, 3PL and pharmaceuticals.



Consultancy in logistics

Logistics and Management consultants, including specializations for Project Management, Optimization, Engineering, Design and Procurement.

As well as training, seminars, webinars and other educational events. Own competence center based on a 30 000 m2 3PL warehouse.



Achievements, Facts and Figures



Developed first WMS, TOS and Introduced the very 1st RDT in Russia in the 1990s



Leader of cabin mounted mobile computers sales in Russia



ISO 9001:2015 certified

26 years of **SUCCESS** 400+ projects 200+ employees



70% of all containers in CIS countries are processed by Solvo.TOS





International certification



Member of leading software and international trade associations

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Multinational brands – SOLVO customers





Challenges to be solved using a Single Digital EcoSystem

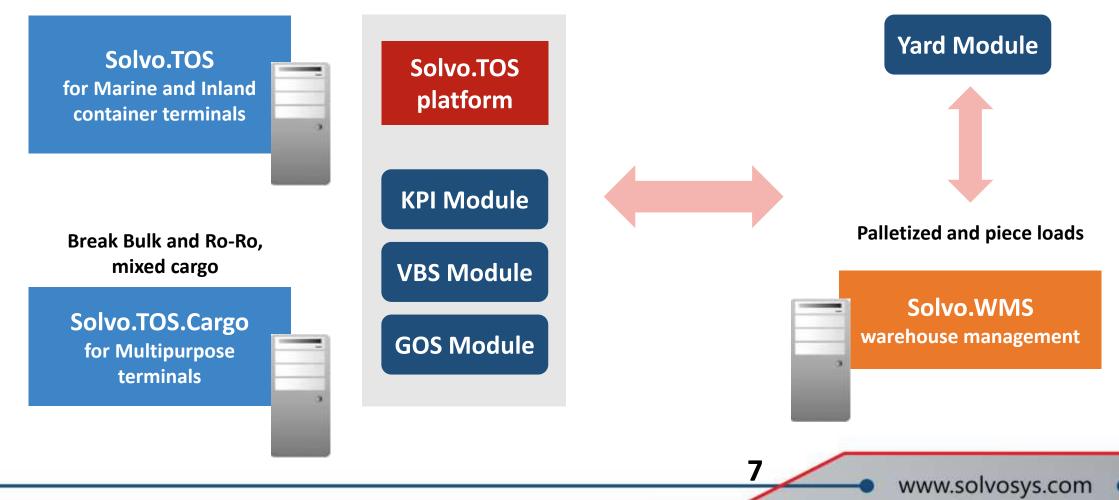
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- The different document format leads to problems with information exchange between various stakeholders in the supply chain;
- Poor planning cause delaying with the cargo delivery time and confusions due to lack of required information;
- Inability to track the status and current location along the extended Supply Chain ;
- Manual planning of personnel and equipment operations not feasible due to the increase of task and works, impacting into the processing time significantly.



SOLVO solutions portfolio

Containers





Solvo.TOS can manage the handling of various types of cargo

Solvo.TOS is able to handle a wide variety of cargo types, including:

- Containers
- Bulk goods (fertilizers, grain, pellets, etc.);
- Goods packed in bags and boxes (cacao, sugar, rice);
- Construction materials;
- Sawn material, round timber;
- Metals (ferrous and non-ferrous);
- Food, including perishable food (meat products, fruits);
- Paper (in rolls and on pallets) and pulp;
- Metal waste, machines;
- Ro-Ro

The system creating for every cargo type dedicated business rules: time and order of work need to be done, people and equipment need to be involved to perform the work.





Cargo characteristics processed by Solvo.TOS



Lood United	Ramp	Attended Attended Attended Attended Attended Attended	RX.301127-01 RY15	050 E T# 130
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nacional Inge Namibianasia 10. (0112) (1	Sec. (1) (1)	DD125-04	Label barcode	Basic Damages
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No. (1997) Tanga Mana Sanata No. (1997) 1001 Manaka ana 1997 Manaka Mana	Ramerilly Deserve	Open storage	BOX 104733 KW-07b	ZFA3120000JE80024 GNCKY AET000721 ©
No. 199120-007 90, 49120-007 96 Million an. 199321 96 Million	16/ 19800/ 927 221000	Oamages (0)	Mather 1 K1333 - 9130	Submit

Among cargo characteristics processed by Solvo.TOS:

Package type, weight, quantity, dimensions (length, width, height), marking (label), markers.

For each cargo type the system can have specific characteristics, for example, cars:

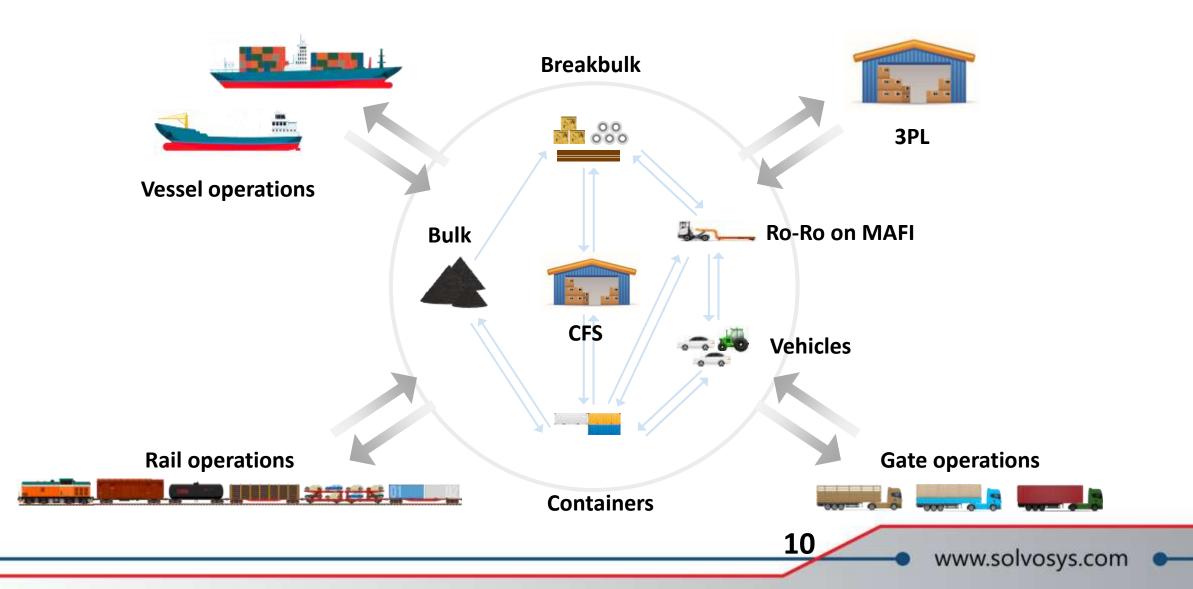
VIN number, color, mode, dimensions (length, width), weight, type.







Support of complex technological chains

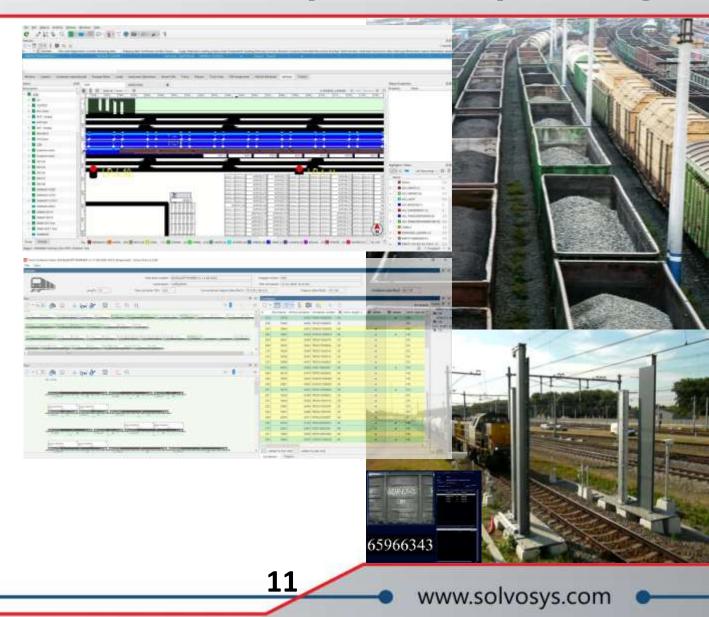




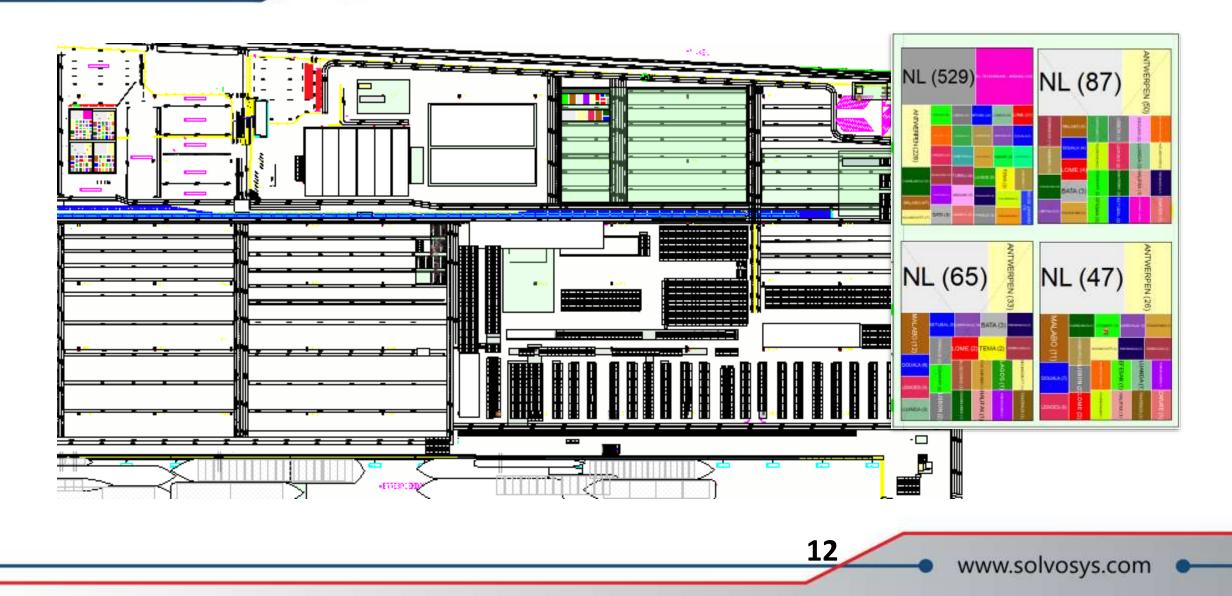
Train Visits and cargo operations planning

The system can perform automatic scheduling on the railroad, operating such data as:

- Cargo information;
- Railcars parameters:
- Railcar Reference Determines railcar length, owner, time to scheduled repair, etc.;
- Railcar parameters: loaded from an external system, or filled in by the tallyman via RDT during registration;
- Cargo putaway specifications;
- Various types of documents, based on which loading and unloading of railcars is carried out;
- Planning, managing and monitoring the progress of loading / unloading trains based on ETA / ETD (estimated time of arrival / departure).







WTM



Interfaces for mobile devices







Aktau Port, Kazakhstan – SOLVO client since 2013

Comprehensive terminal operating system for all types of cargo

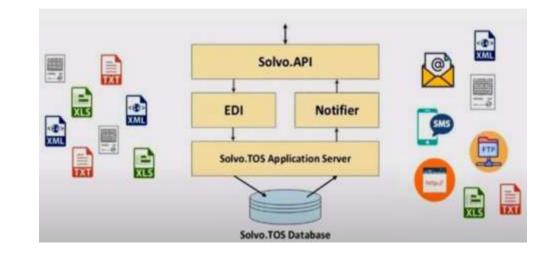




Data exchange between cargo terminals and ports

Solvo.API is responsible for data exchange, which has two modules of its own: EDI module is used to receive and convert data from external information systems, Notifier module prepares messages in the right format for external information systems when certain events occur.





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A unified communication system between representatives of the Caspian region and the so-called new Silk Road was proposed in October 2020 and successfully implemented in 2021.

The main advantage of the unified information system for logistics operators is one-stop communication, which allows quick and easy exchange of information, timely receipt of necessary data for carrying out logistics operations, saving time and resources.



Automation results

(Increase cargo handling efficiency & terminal throughput;

Increase personnel & equipment productivity;

- Improve transparency of technological and commercial processes;
- Increase in load handling speed in the storage zone;

W Reduction in re-handles (nonproductive container moves);

I Eliminating human factor;

- **Improving health and safety ops;**
- **I** Finding efficiencies in processes and logistics;
- **Improving margins;**

@ Reducing operating costs.

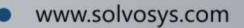






Thank you for your attention!

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Billing

Solvo.SCE

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KP

an integrated supply chain execution platform

