

Realtime Business Solutions *Your Success, Our Commitment*

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TOPX Expert Automation

HAVE YOUR PROCESSES AND EQUIPMENT AUTOMATED TO DRIVE OPERATIONAL EFFICIENCY TO RECORD HIGHS



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Nothing less than extraordinary...

Witness extraordinary results with our Automation-ready TOPS Expert Solution.

Automation has proved to be necessary for container terminals to achieve more efficient operations and increased productivity. The challenge to be ahead of the market in the wake of the rapid deployment of larger ships, taller cranes and larger call sizes has never been more accessible. Don't fall behind and be a part of the currently fully automated terminals around the globe which are powered by TOPS Expert. Its flexible and widely scalable nature can cater to any level of automation and be applied to a partially or fully automated terminal. Ready now and never been done before - the Automation module is available and fully operational on the Cloud!

The ability of TOPS Expert to communicate both in parallel and real-time will continue to be the underlying catalyst in providing the most efficient TOS in the market. It has proven to have higher efficiency in comparison to any other TOS due to its parallel decision-making using real-time data.

However, TOPS Expert Automation is at the forefront due to its design allowing for the elimination of a third-party middle layer (ECS). TOPS Expert has a built-in real-time optimization and dispatching mechanism direct to equipment for each move. Without the middle layer, decision-making is not just faster; it is in real-time. Therefore, work instructions are created with increased accuracy and precision.





Automation is integrated into a spectrum of operations and processes on a planning level, real-time scheduling level, execution level, and equipment level. This intelligent automation functionality also enables CHEs such as ASC, ARMG, ARTG, AVG, STS, etc., to automatically adapt to dynamic situations which optimizes performance and output. The Automation in the TOPS Expert software allows TOPX to communicate directly with the equipment without the need for a thirdparty interface solution. As a result of eliminating all additional unnecessary layers, container movements are determined in real-time free from any human intervention. Because TOPX can automatically and instantly communicate with all equipment on the field, decisions are made with reliability.

It is crucial to distinguish between an architecture that supports real-time processing like TOPS and one that can only provide transaction processing. More likely, those TOS which cannot truly sustain a real-time connection will cause CHEs to execute incorrect work instructions due to transaction processing being vulnerable to data redundancy. Consequently, containers may move to a bay that is no longer available, requiring planning to start from the initial stages again. Therefore, TOPS has considered all aspects of the operational spectrum to provide terminals with Automation designed to drive real results.

TOPS Automation

Autonomous equipment mitigating human interference also constitutes a decrease in labor costs. Other areas benefiting from Automation include CHE optimization generating the minimum moves required to execute a task which inherently increases the task turnover rate. With fewer moves, there is less energy consumption and emissions. At RBS, we are always committed to developing a quality product and value working towards a more sustainable future.

The devices that can be automated using the TOPS Expert solution include GOS, OCR, Reefer Monitoring, etc. By seamlessly integrating with third-party GOS software, terminals are provided with gate automation for all modes of transport. Accordingly, access control, yard interchange, and position detection systems can detect and identify all incoming and outgoing traffic.

Revolutionize your terminal today with our automation-ready TOPS Expert Solution!





KEY BENEFITS



Intelligent Automatic CHEs Automatically adapting to dynamic circumstances



Gate Automation For truck, train, and vessel, increasing traffic flow



Scalability

Have the ability to decide if you want partial or complete terminal automation



Real-time Data is sent and retrieved instantaneously



Reliability

Operations are executed with more accuracy and precision



Reduce Operating Costs

Reduce human intervention enabling terminals to overall reduce operational costs



Increased Performance Minimal operational downtime



Increased Safety Automated equipment creates a safer working environment



Sustainable Resource Control Automated operation prolongs the life of equipment as they are performing the minimal movements possible



Optimized Container Flow

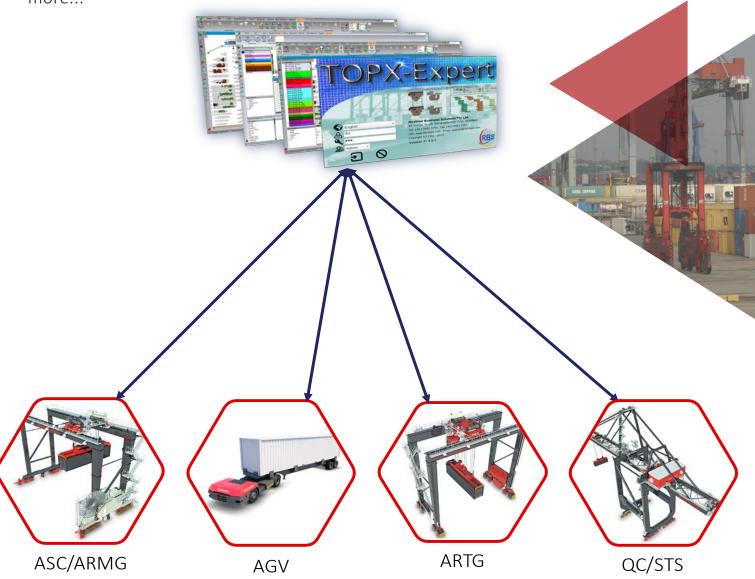
Maximizing the use of CHE by determining the minimum number of moves required



TOPS Automation Process

TOPS Expert Automation is at the forefront of global terminal innovation due to its design allowing for the elimination of a third-party middle layer (ECS).

TOPX Expert Automation module can interface directly with any automated equipment and devices without the need for an Equipment Control System (ECS). This has been proven in Pelindo 1 and Pelindo 3 Terminals in Indonesia. Equipment that TOPX has interfaced with includes: ASC, ARTG, STS, AGV, and ARMG. Devices that RBS TOPS has interfaced with includes: RFID, GOS, OCR, DGPS, RMS, and many more...





"As a terminal with the intention to automate operations and activities, the TOPS Automation module provided a seamless and easy integration."

- CIO of Central Java Region, TPKS Terminal Operating over 30 successful terminals for over 27 years

Contact Us

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