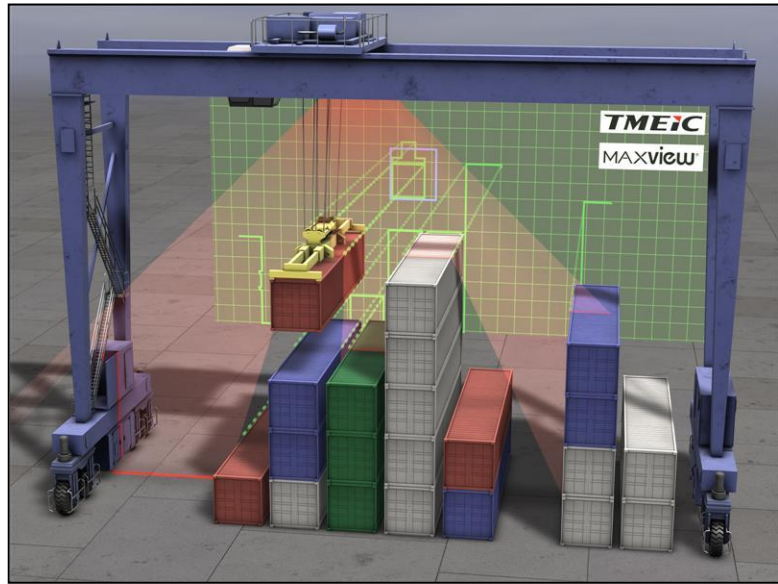


## The Maxview Smart Move™ System

**Laser-based stack profile and  
operator landing assist system**

*Reduce damage and operating  
noise, and increase your yard  
crane productivity with the  
**Maxview Smart Move™**  
system.*



### Benefits

Stack topples are a problem during container yard operations, causing damage to equipment and in some cases injury to humans. Additionally, the productivity of the yard is affected, and the resulting operational disruption is felt throughout the terminal.

The **Maxview Smart Move™** addresses this issue by efficiently regulating hoist and trolley speeds during operation based on the measured profile of containers under the crane.

- **Eliminate Stack Topples** > the trolley speed is limited as the spreader approaches an adjacent container stack to avoid collisions.
- **Reduced wear and tear on the spreader, head block and wire ropes** > The hoist speed is limited to a pre-set value as the spreader approaches the pick-up or drop-off point to assure smooth, soft landings.
- **Reduced operating noise level** by softer handling of containers.
- **Increased Productivity** > Operators will be able to take rounded or optimal path to the target location at verified safe heights above the container stack.

### Features

- **Proven Design** – The system is in service on cranes today. The design is based on TMEiC's extensive experience in crane automation applications in the container handling and other heavy material handling industries.
- **Easy to install and maintain** – Simple set-up, with "hands off" operation and minimal preventative maintenance.
- **Available for Retrofits** – The system can be quickly and easily retrofitted onto existing cranes.
- **Simple Interface** to the existing crane control system via network connection, or a hard-wired discrete interface, as appropriate for the existing crane control system architecture.
- **Open System Design**, utilizing the latest open-system technologies and a minimum of proprietary components to provide a full-featured, yet simple, system that can be easily extended to meet your needs, now and in the future.
- **Flexible Design**, allowing for a high degree of customization based on the specific needs of the operation and existing crane control equipment.

## How it works

The **Maxview®** system uses a laser scanner and **Maxview®** software modules to measure and continuously update the profile of containers and other obstructions under the crane.

- The profile is updated continuously, and without any need for additional trolley motion (including during the first move over the vessel).
- The **Maxview®** system also tracks the spreader position (hoist position and sway), and continuously compares the distance between the spreader plus load and all objects in the stored profile.
- The **Maxspeed®** crane control system uses the **Maxview Smart Move™** measurements to create a slowdown envelope around the spreader, and limits the hoist or trolley speed as required to prevent hard contact during operation.
- These slowdowns limit the crane speed when, and only when, hard contact is imminent. Therefore crane productivity is not reduced when **Maxview Smart Move™** system is active.
- The **Maxview Smart Move™** system functions are optionally selectable for:
  - trolley motion,
  - hoist motion,
  - operations over the stack,
  - operations in the truck lanes.
- The **Maxview Smart Move™** Crane Management System (CMS) screen is provided for the crane operator to increase his or her visual awareness of the profile of containers and objects below the crane. This CMS screen also indicates the system status.



Figure 1 – Rubber Tired Gantry Crane (RTG)

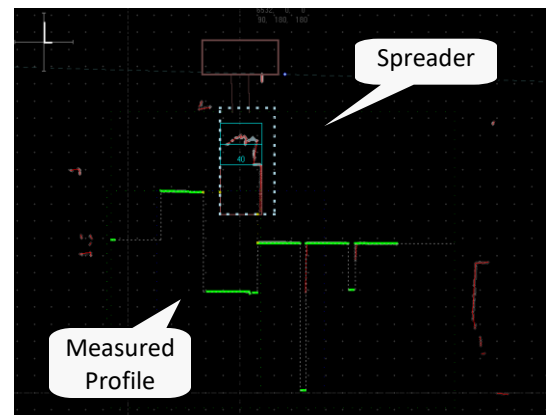


Figure 2 – Maxview® measurement example

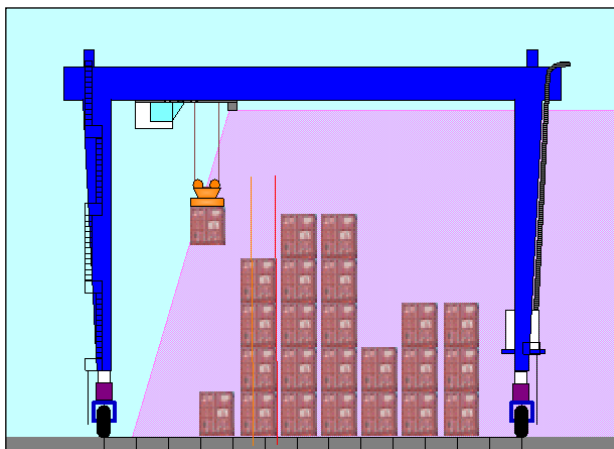


Figure 3 - The **Maxview Smart Move™** system in action.

# TMEiC

*We drive industry*

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