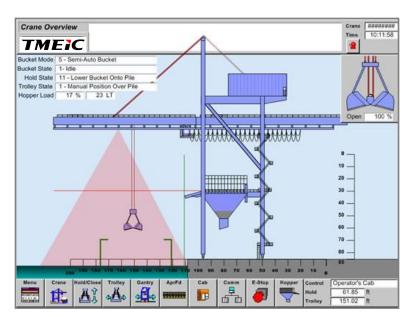


## MAX**vicw**°

# The Maxview Smart Dig™ System

## Laser-based profile measurement and operator assist system

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



#### **Features**

- Auto-detect of working area in the vessel > The Maxview<sup>®</sup> system measures the extents of the vessel hull and deck to estimate the working area for the bucket.
- Material pile profile measurement > The Maxview® system measures the profile of the material pile on the vessel and reports the peak as the working target for the bucket during unloading.
- Equipment profile measurement > The Maxview® system measures the profile of the crane structure under the trolley, including the hopper and the spill plate.
- Vessel profile measurement > The Maxview<sup>®</sup> system measures the profile of the vessel, including hatch covers and any superstructure on the centerline of the crane.
- Hopper full detection > The Maxview®
   system reports the profile of the material in
   the hopper.
- Spill plate position detection > The Maxview® system reports the status of the spill plate.

#### **Benefits**

- When used with the Maxspeed<sup>®</sup> crane control system, the Maxview Smart Dig<sup>™</sup> system provides the following:
- Increased Productivity > The Maxview® system measurements allow the Maxspeed® Auto-Dig function to take the optimal path to the target location at verified safe heights above the measured profile of the load material, vessel and equipment.
- Reduced wear and tear on equipment and wire ropes > The hoist speed is limited as the bucket approaches the equipment and material profile to avoid damaging contact.
- **Reduced vessel damage** > The hoist speed is limited as the bucket approaches the vessel profile to avoid damaging contact.
- Reduced material waste and clean-up > Reduced opportunities for material spillage due to missing the hopper, dumping in a full hopper, or dumping with an improperly configured spill plate.
- Reduced operating noise level by softer handling of the bucket and material.

### The Maxview Smart Dig™ System

### **How it works**

The **Maxview Smart Dig™** system uses a laser scanner and **Maxview®** software modules to measure and continuously update the profile of material, the vessel, and crane equipment and other obstructions under the crane.

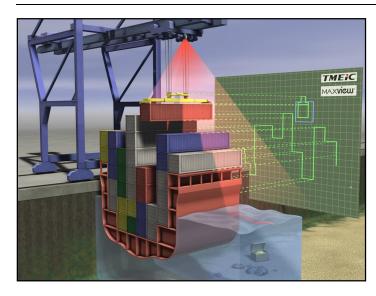
- The profile is updated continuously during normal operations.
- The Maxspeed<sup>®</sup> crane control system uses the Maxview Smart Dig™ measurements to enhance the Auto-Dig functions.
- These slowdowns limit the crane speed when, and only when, hard contact is imminent. Therefore crane productivity is not reduced when the Maxview Smart Dig™ system is active.
- The **Maxview Smart Dig™** Crane Management System (CMS) screen is provided for the crane operator to increase his or her visual awareness of the profile of material and equipment below the crane. This CMS screen also indicates the system status.





### Design Features

- **Proven Design** > The design is based on TMEIC's extensive experience with **Maxview**® and crane automation systems 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.
- 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.





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TMEIC Corporation is a group company of Toshiba Mitsubishi-Electric Industrial Systems Corporation (TMEIC).