

Camera Automation System, CAS-THOCR

OCR System for Tophandlers



Figure 1 – Front End Loader With OCR Sensing Solution Installation Locations

The PACECO® CORP. Camera Automation System is a camera capture system designed to be installed on Container Handling Equipment (CHE) to enable reading of ISO standard container numbers either with human intervention or in an automated fashion with the OCR option. Referred to as Camera Automation rather than OCR or Audit system because this technology can do either task of Audit or OCR container imaging independently of the other task. The figures below show the typical OCR capture with our Tophandler OCR system on a 20ft container at the bombcart/chassis level.



Fig 2 – Container Being placed onto an awaiting Chassis

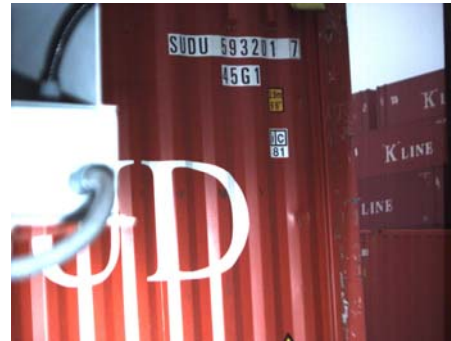


Fig 3 – OCR cameras capture the container number at twist lock unlock

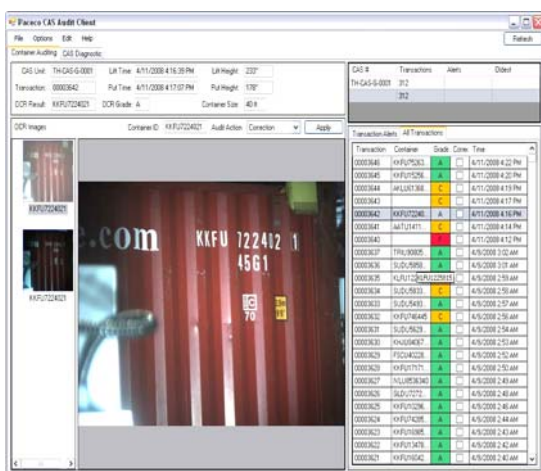


Fig 4 – Includes Audit Client for Manual Corrections of OCR Reads

The OCR system will read the container's ISO ID number from the side of the container when triggered by the container sensing system. The OCR images are typically acquired during the unload or load from a UTR bombcart or chassis level height The OCR system can have 90% or greater container reads when in operation during day or night lighting conditions. There are two cameras configured to read 20ft and 40ft container numbers on Tophandlers.

The system also includes an Audit client (Fig. 4) for manual corrections of containers that were lower than A-grade reads by a clerk (an A grade read is defined as a container number read with a valid check digit and the container number exists in the terminal candidate list). There is also remote monitoring software included (Fig. 5) for remotely diagnosing faults and status of an installed OCR system on a machine.

Features & Benefits

- Performs OCR reading any container at chassis or bomb cart height level.
- Allows for rapid yard automation with a minimum of cost and hardware deployment.
- Can be used Standalone or with a terminal wireless network.
- Works on 12VDC and 24VDC systems (consumes 30A at 12VDC, 15A at 24VDC)
- System has complete remote control for startup/shutdown and imaging even with the engine not running.
- Eliminates the need for labor intensive manual "spotting" of loads.
- Perfect for terminal rail yard applications or exception handling.
- Audit system allows for correction of difficult to read containers in a safe workstation environment.
- Containers can be graded for OCR read accuracy.
- Integrates with **WhereNet®** Real Time Location Tracking Systems

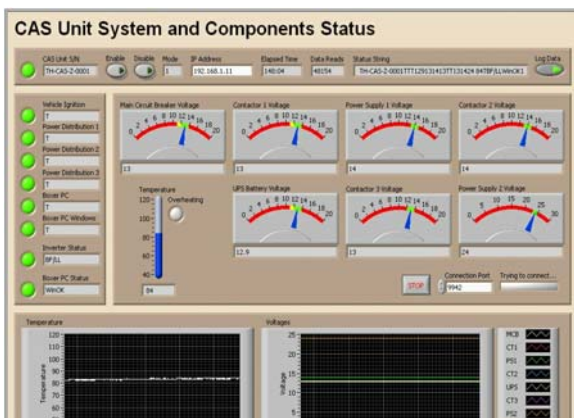


Fig. 5 – Includes Remote Monitoring of Health of installed OCR

For more information about this or other PACECO® CORP. products please contact us at (510) 264-9288

THE PACECO® CORP. ADVANTAGE

Extensive Experience with Quay Crane and RTG Manufacturing and Design • Experts in large scale deployments of custom hardware and software technology for harsh environments • In house software and hardware group for quick turn of software and hardware design and support • Local Inventory of Technology Hardware stored on-site at corporate headquarters in Hayward, CA • PACECO CORP. stands behind its products. We service what we sell • All products sold have on-call and on-site support and hardware replacement programs available • Extended Service maintains backward compatibility to end of life products.