



One-Touch Lock-Out™

One-Touch Lock-Out (OTLO) is a safety compliance solution that uses Near Field Communication (NFC) to validate equipment lock-out/tag-out processes meet the highest safety standards required in your operations.

POINTS OF DISTINCTION!

- One-Touch is a paperless system that tracks the lock-outs/tag-outs (LOTO) results of personnel in real-time.
- Reading NFC tags validates where and when staff did a proper lock-out/tag-out in accordance with the isolation / restoration steps.
- Eliminates failure modes that will save lives.
- Reduces the time it takes to safely shutdown or start-up your equipment & operation processes.
- An excellent ROI is achievable.
- The touch screen design is finger-friendly.
- LOTO verification is achieved at the central server via NFC authentication, photos and audio recordings.

One-Touch Lock-out FEATURES

- Mobile staff have all their lock-out/tag-out procedures & work instructions on their smartphones and tablets.
- Lock-out sequences are optimized for each person.
- Equipment must be approached in the proper sequence and positioned correctly to ensure safety compliance.
- Management can centrally monitor/control the shutdown process and can introduce ad-hoc procedural changes to its participants to address unforeseen problems.
- WiFi communications provide real-time awareness to all participants. If a WiFi black hole is reached, One-Touch operates in an off-line mode to continually manage the staff member's tasks.
- Comprehensive reporting and information analysis serves management's need to continually optimize their processes.

REGULATES LOCK-OUT/TAG-OUT & ENERGY ISOLATION PROCESSES.

VALIDATES THE RIGHT PERSON IS AT THE RIGHT EQUIPMENT POINT.

ALL TOUCHSCREEN TARGETS ARE EASY-TO-TAP, EVEN WITH YOUR THUMB WHILE WEARING GLOVES.

ISOLATION / RESTORATION STATUS RESULTS DELIVERED IN REAL-TIME TO A CENTRAL SERVER.

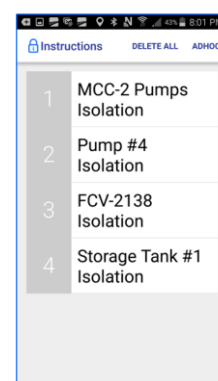
VERIFICATION CAN BE DONE BY A SINGLE PERSON WHO OBSERVES THE CENTRAL SERVER RESULTS.

ISOLATION & RESTORATION CAN BE SET TO EITHER FIXED, PARTIALLY FIXED OR RANDOM SEQUENCES.

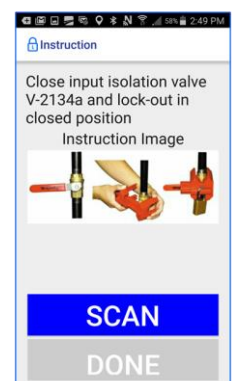
MANAGEMENT HAVE CONTROLS TO ADDRESS UNEXPECTED LOCK-OUTS.

WEB CONSOLE SERVICES ARE PROVIDED TO ACCESS/ANALYZE THE LOTO HISTORY.

Isolation Instructions for Shutdown Events



Instruction Step for Lock-out Function



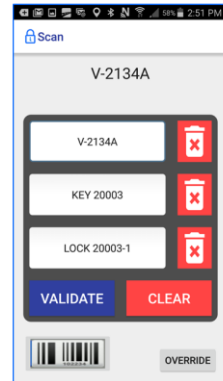
- One-Touch is being designed to integrate with your computerized maintenance management system and process control historians.
- There is a family of NFC-based smartphone and tablet devices that are designed for harsh conditions, hazardous locations (such as Class 1/Div1), portability and ease of use that will meet the safety requirements of any industry.
- NFC tags we supply are low cost, yet reliable and robust for all types of environments.

One-Touch Lock-Out BENEFITS

- Reduces the time it takes to do a shutdown or startup while ensuring safety.
- Eliminates failure modes and dangerous actions.
- Removes the inaccurate nature of paper-based systems.
- Ensures personnel follow best practices.
- Organizes a complete work plan for each staff person.
- Eliminates the need for Lock-out Verifiers or Inspectors.
- Delivers immediate feed-back on the shutdown process status.
- Makes equipment data and procedures handy to all personnel while out in the field.
- Ad-Hoc changes and updates are handled in real-time between field staff and management.
- Meets the lowest Total Cost of Ownership (TCO) objectives.
- Measures safety KPIs & enables continuous process improvement.
- The learning curve in just minutes to effectively use this application.
- One-Touch provides proof of when and where a task occurs.

One-Touch Lock-Out Functions

Lock-out Validates the Device + Key + Lock



Confirmed Lock-out for Lock on Device



Tag-out Validates the Correct Device

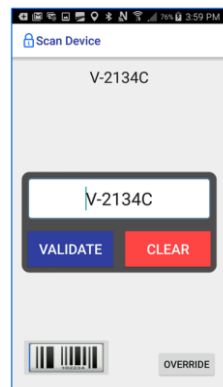
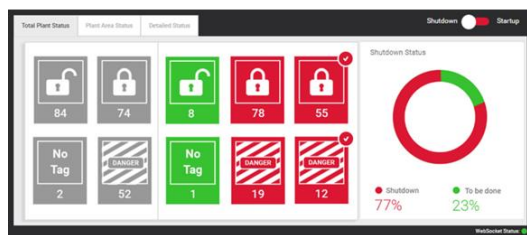


Photo of Tag Confirms Tag-out



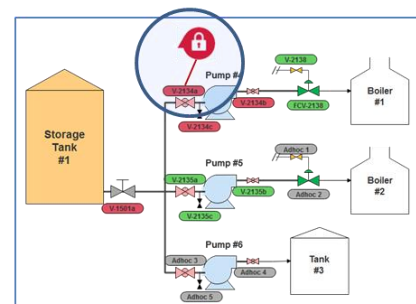
OTLO Dashboard Presents LOTO Results



Plant Status Overview shows staff the % completion and the quantity of equipment in different states. The Grey symbols are items outside of the LOTO event.



This photo is a Status Detail example showing the status of specific equipment items. Green = active; Red = LOTO



This P&ID diagram is another Status Detail. Touching the mouse on an equipment ID displays if it is a lock-out or tag-out type.