

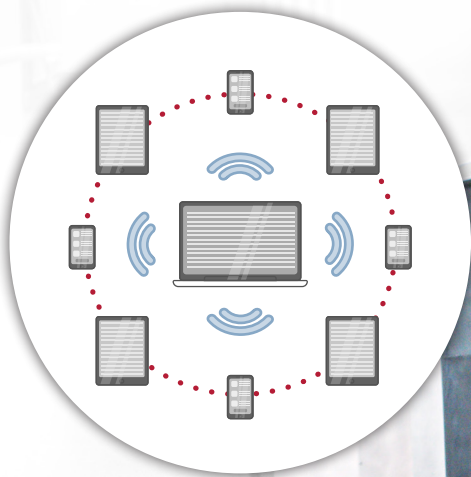
LOCKTIME

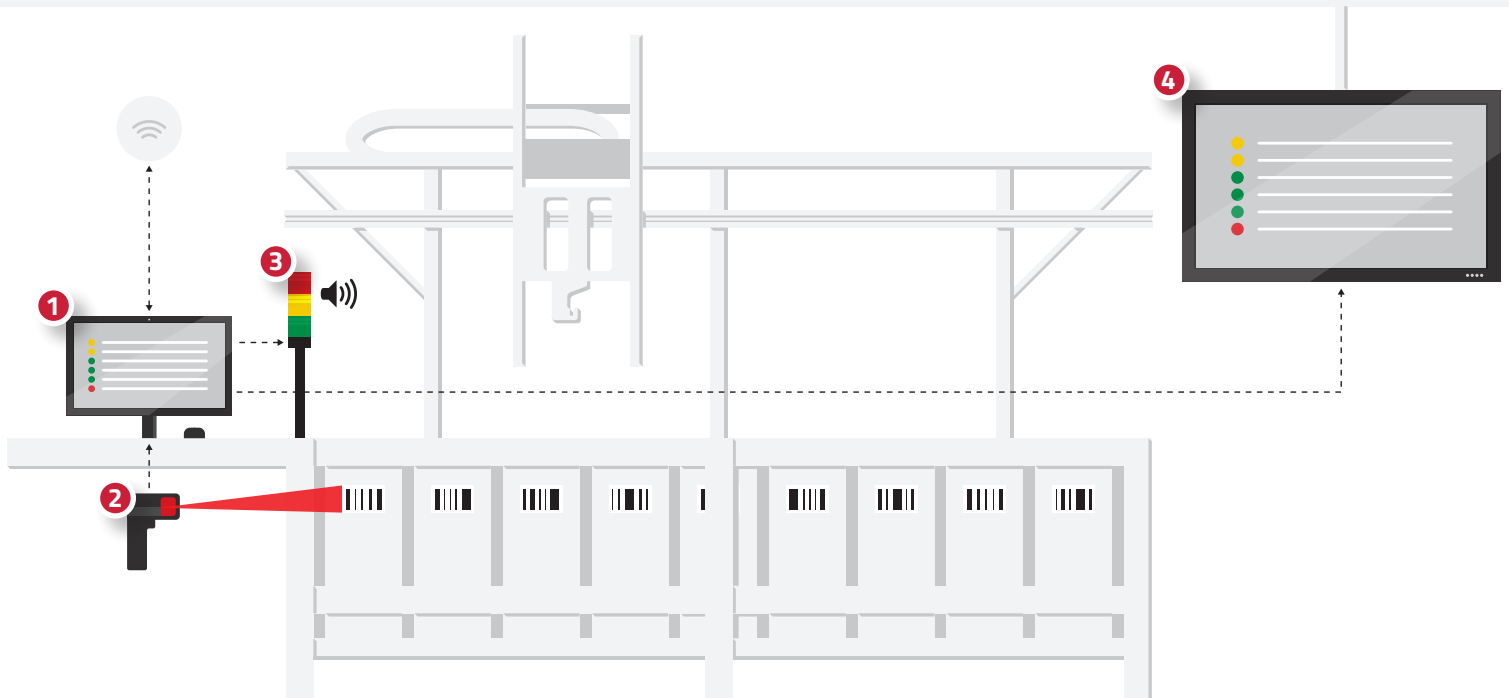
PAPERLESS PROCESS MANAGEMENT AND
QUALITY CONTROL FOR MANUAL CHEMICAL
PROCESSING

REL's Industry 4.0 LOCKTIME control solution for human driven Non-Destructive Testing (NDT) and Surface Finishing (SF) processes is designed to remind and record process steps while wearing full operation PPE! LOCKTIME eliminates the need to manually set 'egg' timers and record process step timing by using a LOCKTIME scanner exactly like the one used at the local grocery store. Line control with exact check-in check-out times according to a recipe will maximize processing efficiency and robustness.

Part recipes can be selected on the system UI using the LOCKTIME scanner to check parts in and out of every process step with audio and visual guidance. The step timing is automatically stored in an infinite database which maximizes real time operation visibility and allows for recalling a report of any part, batch, or traveler number that was processed on the system.

Process owners can interact with LOCKTIME on the provided User Interfaces (UI) or remotely log in with a smart device from anywhere!





1

The computer at the beginning of the line will initiate a batch of parts into the line. Recipe Creation, Line Status, and Quality Data will also be on the line-side computer, as well as accessed remotely. Individual logins ensure access control and record user actions.

2

As the part moves from process to process, the operator will utilize a wireless handheld scanner to register when parts are in process. Scanners will be holstered on operators, and bar codes are attached to tanks and quality check locations.

3

An industrial Stack Light will provide quick, intuitive audio and visual feedback.

Red = Action Required
Yellow = Action Soon
Green = No Action Needed

4

The Operation Screen will reflect current line status, current parts in line, time remaining on current processes, and next steps in the process.

LOCKTIME WILL:

- ▲ Define and store treatment recipes
- ▲ Guide operators, eliminating individual timers and process sheets
- ▲ Provide immediate feedback to operators in the event of a process infraction
- ▲ Document which parts completed which processes, and process duration
- ▲ Store, query, export, and print part quality data
- ▲ Provide engineering with tools for preventative maintenance and predictive chemical change outs
- ▲ Define and store process, equipment, and chemistry quality checks
- ▲ Future Modules will include "Read Only" sensory capability

LOCKTIME

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