

CASE STUDY · LABOR & LINE EFFICIENCY

Zone-level workforce tracking across assembly lines

A zone-level labor tracking system that turns a single door clock-in into a live map of where every operator is working, for how long, and on which line. Built for plants that need real labor cost per area instead of a plant-wide average.



At a glance

Per zone	2 sec	Live
Labor hours attributed by area, not by plant	Typical identification time per check-in	Staffing and time-on-station visibility per shift

Overview

The problem

The plant only had a single clock-in / clock-out at the door. Once an operator was inside, nobody knew which line they were on, how long they stayed, or where labor hours were actually being consumed.

What we built

We deployed check-in points at each assembly area. Operators identify themselves with face recognition, a badge scan or a short code, and every movement between zones is time-stamped automatically.

The result

Labor hours are now attributed line by line, so supervisors can see real time-on-station, staffing gaps and efficiency per area instead of one plant-wide number.

How it works

01 Zone check-in points

Compact terminals are mounted at the entrance of each assembly area, cell or work center. Nothing changes in the operator's routine beyond a two-second identification.

02 Three ways to identify

Face recognition for hands-free areas, badge scan for gloved or clean environments, and a short numeric code as a fallback when hardware is down.

03 Automatic time-stamping

Every entry and exit is stamped and tied to the operator, the zone and the shift. Movement between zones is inferred automatically — no paperwork, no supervisor tally sheets.

04 Efficiency dashboards

Supervisors see time-on-station, staffing versus plan, and labor hours per line in near real time; leadership gets historical trends by area, shift and product family.

What we deliver

- Terminal hardware selection and installation plan per zone
- Face recognition, badge and code enrollment for the workforce
- Zone, shift and line configuration mapped to your routing
- Supervisor dashboard plus exportable labor reports
- Operator and supervisor training on the new flow

Best fit for

- Plants with multiple assembly lines or work cells under one roof
- Operations that move people between lines during a shift
- Teams that need real labor cost per line for quoting or costing

Stack: Face recognition · Badge / code check-in · Zone time-stamping · Efficiency dashboards

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