

CIM-006

Restoring the Performance of a Production Line (Food Industry, FR)

Major Problem

A critical production line was running **22% below target**, creating delays, rework, material loss, overtime, and an unstable supply to downstream processes.

The bottleneck shifted daily – nothing was predictable.

M1 → M6 Phasing

M1 - Diagnostic

- 0–1 day VSM mapping.
- Three daily Gemba walks over four days.
- Core issue identified: a moving bottleneck caused by unstable material feeding and slow manual quality checks.
- Unreliable data: TRS readings were inconsistent.

M2 - Action Plan & 30/60/90 Day Cadence

- Priority 1: stabilize material feeding (micro-SOP + dual verification).
- Priority 2: reduce QC cycle time (partial automation + clearer criteria).
- Daily 15' routine + weekly TRS drift review.

M3 - MMQ & Execution Control

- Six 1-page SOPs developed.
- Standardized line start-up process (using 6M root-cause prompts at each deviation).
- Simple visual management with three reliable indicators.

M4 - Pre-Hoshin Review

- Load test over 3 weeks.
- Validation of routines + decision to add a floating operator for peak periods.

M5 - Post-Hoshin Consolidation

- QC cycle adjustments.
- Full autonomy kit provided (SOPs + dashboards + MMQ logic).

M6 - 6-Month Review

Verified TRS stability, drift patterns, and corrective actions applied.

Intermediate Problems & Resolutions

1. Operator Variability

- Skills matrix + accelerated cross-training.
- 10-day intensive feedback loop → 40% reduction in handling errors.

2. Excessive Changeover Time

- 3-day SMED blitz.
- 35% time reduction.

3. Unusable TRS Data

- Dashboard redesign + new input rules.
- Data reliability from 50% → 92%.

Results

- +18 TRS points in 70 days
- Fixed, stable bottleneck after 3 weeks
- -22% material loss
- +14% available capacity without CapEx
- Lower HSE exposure (fewer micro-stops and improvisation)

Conclusion

The line regained predictability and rhythm.

Teams understood where to act, TRS readings became trustworthy, and performance started compounding instead of drifting.

The plant recovered throughput without investment.