

Manufacturing Quality Report - Q4 2024

Executive Summary

Overall manufacturing quality improved by 12% this quarter, with defect rate reduction from 4.2% to 3.7%, resulting in estimated annual savings of \$1.8M.

Production Performance Metrics

Total Units Produced: 245,847 (↑8.3% QoQ)
First Pass Yield: 94.2% (↑2.1% QoQ)
Defect Rate: 3.7% (↓0.5% QoQ)
Rework Rate: 2.1% (↓0.3% QoQ)

Departmental Performance

Assembly Line A: 94.8% yield, 3.5% defect rate
Assembly Line B: 93.7% yield, 4.1% defect rate
Painting Dept: 95.1% yield, 3.2% defect rate
Packaging Unit: 96.5% yield, 2.8% defect rate
Quality Control: 97.2% yield, 2.1% defect rate

Staffing & Productivity

Total Staff: 847 employees
Overtime Hours: 12,450 (↓8% QoQ)
Output per Employee: 290 units/shift (↑5% QoQ)
Training Hours: 4,200 total (↑15% QoQ)

Cost Estimates & Savings

Defect-Related Costs: \$1.2M (↓15% QoQ)
Rework Costs: \$847K (↓12% QoQ)
Scrap Reduction Savings: \$452K (↑22% QoQ)
Total Quality-Related Savings: \$2.5M

Quality Improvement Initiatives

1. Automated Visual Inspection System (Pilot: 3 lines)
2. Enhanced Operator Training Program (452 operators certified)
3. Preventive Maintenance Schedule Optimization (+23% uptime)
4. Supplier Quality Management Portal Integration