



POWER TO OWN

PROPOSAL

Training Clips to Enhance Phone Assembly Quality

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Introduction

Our phone assembly process includes several critical stations where operators often face challenges, leading to assembly defects. These defects not only increase production costs but also impact overall product quality and customer satisfaction.

As a repair technician, I propose creating short, easy-to-understand training clips that demonstrate the correct installation methods for challenging components. This initiative aims to reduce defects and improve efficiency on the production line.

Objectives

In our current setup, word-based SOPs serve as the primary training resource for operators. However, frequent changes in operators have led to significant challenges in maintaining consistent assembly quality.

By transitioning to video-based SOPs, we aim to:

1. **Reduce Defects:** Minimize errors at critical assembly stations by providing clear, visual guidance.
2. **Enhance Skills:** Equip operators with practical, step-by-step instructions tailored to the most challenging tasks.
3. **Increase Efficiency:** Streamline the assembly process by reducing rework and increasing first-pass yield.
4. **Boost Confidence:** Build operator confidence through accessible and reusable training materials.

Scope of the Project

This project involves identifying the most error-prone assembly stations, developing video-based Standard Operating Procedures (SOPs), and implementing them as part of the operator training program.

Expected Outcomes

- Defect Reduction: A measurable decrease in defect rates at critical stations.
- Improved Operator Performance: Enhanced proficiency and reduced error rates among operators.
- Cost Savings: Reduced rework and waste, leading to lower production costs.
- Scalable Training: A library of reusable training resources for ongoing operator development.

Advantages and Disadvantages

Advantages of Video-Based SOPs

1. Enhanced Retention and Comprehension: They simplify complex concepts, making them easier to grasp and remember.
2. Reduced Production Costs: Minimizing errors and rework lowers operational expenses.
3. Accessibility and Flexibility: Training videos are easily accessible and can be viewed at any time, allowing for self-paced learning.
4. Cost-Effectiveness and Efficiency: Creating training videos can be more cost-effective, particularly when considering the long-term impact.
5. Increased Engagement and Motivation: They can be made interactive and entertaining, keeping operators interested and focused.
6. Visual Learning: Training clips provide a clear, engaging, and effective learning method.
7. Reusable Resources: The video clips can be used multiple times for current and new employees.
8. Boosted Employee Confidence: Access to practical training fosters confidence and improves job satisfaction.
9. Continuous Improvement: The library can be expanded and updated based on evolving assembly challenges.
10. Improved Product Quality: Fewer assembly defects enhance customer satisfaction.

Limitations of Video-Based SOPs

1. Limited Interactivity: Videos are passive learning tools and lack real-time interaction or the ability for operators to ask questions. Operators might struggle to clarify specific doubts without additional guidance.
2. Initial Production and Maintenance Costs: Producing high-quality video SOPs requires significant upfront investment in equipment, software, and skilled personnel. Regular updates are needed to reflect process changes, which can incur ongoing costs.
3. Variation in Learning Paces: Operators may learn at different speeds, and videos cannot be easily adjusted to suit individual needs during playback.
4. Risk of Overlooking Practical Experience: Watching a video does not provide hands-on practice. Some operators may grasp concepts visually but struggle when applying them physically.

Conclusion

This proposal seeks to address critical quality and operational challenges within the phone assembly process by introducing clear, visual, and practical training clips. By enhancing operator skills, reducing defects, and creating scalable training resources, this initiative promises long-term value for our production operations and customer satisfaction.

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