

Transforming Equipment Audits and Troubleshooting Across Semiconductor Facilities

How Micron reduced equipment downtime, enhanced compliance, and accelerated real-time collaboration using Telepresenz® Smart Ops™



75%

Equipment recovery time cut from 12 hours to 2 with remote expert support



90%

Reduction in travel — experts and vendors collaborate virtually across U.S. facilities



100%

Automatic photo/video capture for traceable audit and training records

Client: Micron Technology

Industry: Semiconductor Manufacturing / Advanced Electronics

Scale: Multiple manufacturing and R&D; sites across the United States

Worker Environment: Cleanroom and controlled facilities with high-value production assets

IT Environment: Secure public cloud enabling collaboration between internal SMEs, technicians, and external vendors

Devices: RealWear HMT-1 for technicians; tablets and desktops for remote experts and vendor specialists

Micron Technology, a global leader in semiconductor memory and data storage, operates complex production environments where every minute of equipment downtime translates into lost production. Field technicians relied on manual documentation and on-site visits from subject-matter experts (SMEs) to verify installations, conduct audits, and resolve equipment issues. These travel-based audits and troubleshooting sessions caused delays and extended mean-time-to-repair (MTTR). Incomplete photo and video records made it difficult to demonstrate compliance or trace quality issues during inspections. Involving vendor engineers was equally challenging — coordination through email and phone lacked the visual context required for high-risk operations.

“When every minute of equipment downtime equals lost production, Smart Ops lets our experts be there instantly — without leaving their desks.”

Solution: Telepresenz® Smart Ops™ for Digital Inventory Management and Remote Inspections

To reduce downtime and improve quality assurance, Micron deployed Telepresenz® Smart Ops™ as a centralized collaboration and inspection platform connecting technicians, SMEs, and vendors in real time.

Field technicians use RealWear HMT-1 devices to stream live video from cleanrooms to remote experts. SMEs log in via tablets or desktops to guide the technician, verify installations, and identify risks as they happen. Experts can annotate live feeds, share procedures or manuals, and issue real-time corrections. Every photo, video, and inspection note is automatically archived within Smart Ops™ for audit and training purposes. When advanced support is required, external vendor engineers are securely invited to the same session for instant collaboration — no travel required.

"We've turned every piece of equipment into a live, inspectable workspace — visible to anyone, anywhere, in real time."

With Smart Ops™, Micron significantly shortened mean time to repair and reduced expert travel by more than 90%. All inspection records are now automatically captured and stored, creating a complete visual audit trail for regulatory compliance and continuous improvement. Real-time remote collaboration has accelerated root-cause analysis, improved safety standards, and minimized disruptions to production lines. The result is a culture of instant response and precision-driven maintenance that enhances equipment reliability and plant efficiency.

Key Outcomes:

- 75% faster equipment recovery through instant expert support
- 90% reduction in travel and faster vendor coordination
- 100% traceable audit records with visual documentation
- Improved compliance and safety through verified procedures
- Operational efficiency gains from real-time collaboration

"Smart Ops has become a standard tool in our maintenance workflow for risk assessment, troubleshooting, and vendor coordination."

About Telepresenz®

Telepresenz® — AI-Powered. Frontline-Focused. Future-Ready. Telepresenz connects inspectors, engineers, and administrators through real-time collaboration and AI-powered operational workflows. With Smart Ops™, aerospace teams gain digital control over inspections, inventory, and compliance — turning complex maintenance programs into seamless, transparent, and efficient operations.