# AMS Optics Augmented Reality (AR)

- Increase productivity of mobile workers by providing relevant asset and process data and locating assets quickly using AR visualization

- Reduce cost, safety risks, and repair times with Remote Assistance via live video, audio calling, and messaging

- Improve training and knowledge transfer with AR-supported documentation such as annotated videos and digital step-by-step procedures
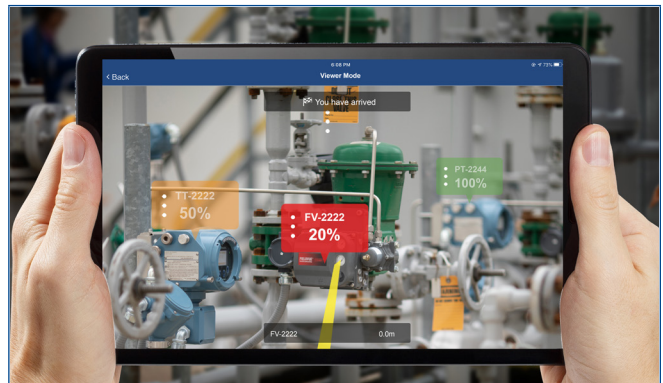
Augmented Reality enables field workers to easily navigate to an asset and quickly access relevant data.

Introduction

Have you been stuck in a situation where you need a technical expert to help repair a critical equipment issue? Do you spend countless hours locating an asset or trying to get information for a specific asset in the plant? Are you experiencing knowledge drain and need to upskill your workforce?

These challenges lead to inefficient maintenance processes, often resulting in increased equipment downtime.

AMS Optics AR helps field workers improve productivity in the field, make better decisions for maintenance operations, and enables collaboration in real-time with subject matter experts.

Improve Situational Awareness

In industrial sites with thousands of devices scattered across large areas, it's not easy for field workers to quickly locate malfunctions in order to resolve issues, minimize downtime, and prevent safety incidents.

AMS Optics AR visually maps assets in the plant so that users can navigate to the source of the problem and resolve it much faster.

IoT Data Integration

AR functionality is natively integrated with AMS Optics. No additional work is required to display asset information on the mobile app.

Field workers can instantly get access to asset and process data, and reference documentation or previous maintenance activities performed on that asset to help resolve the issue.
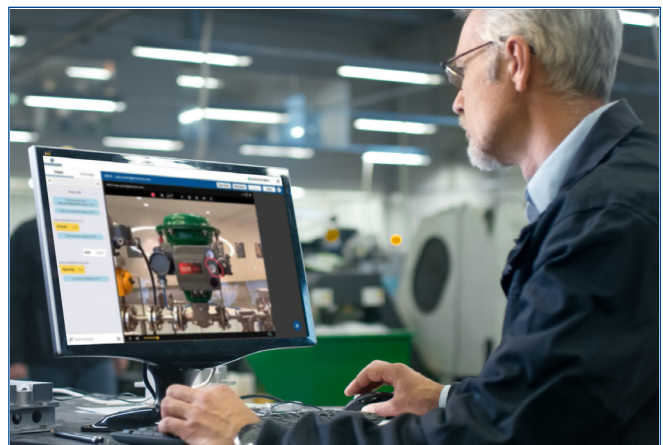
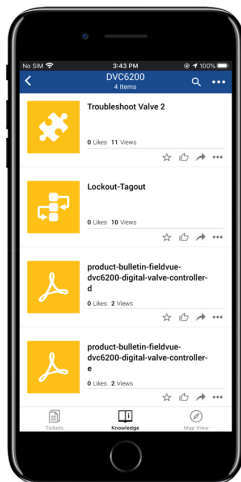*Share and maintain knowledge within the organization.*

Live Remote Assistance

When something goes wrong on site, every hour of downtime is critical. With live Remote Assistance, there is no need to wait for an expert to travel to the site as they can guide field workers throughout the entire troubleshooting process. The field worker and the remote expert can collaborate visually to efficiently resolve issues.

Augmented reality supported remote assistance enables multiple experts and technicians to work together on providing a solution much quicker. AR supported remote assistance maximizes machine uptime and increases first time fix rates, thus increasing plant profitability.

Knowledge Management

Skilled workers and experts are aging out or tough to find. Hiring experts is an option, but it is costly. With Augmented Reality for AMS Optics, you can train workers to become the next generation of experts. There are multiple sources of information available that could help retain knowledge in the organization and train new, less experienced workers at a faster rate.

Knowledge Database
Capture practical knowledge created during the service process and store it in a dedicated library, which is easily searchable, editable and shareable for re-use

Digital Procedures
Provide logical procedures to help technicians perform preventive maintenance. It includes a checklist to assure that the full-service procedure is executed according to requirements
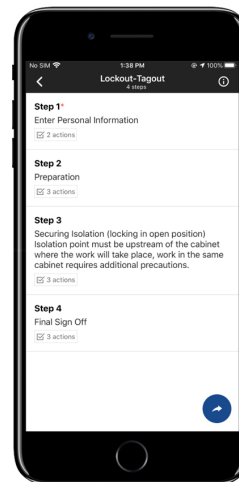
AMS Optics Integration Get relevant asset and process data. Easily navigate and identify problems in a crowded, multi-asset environment without involving the control room
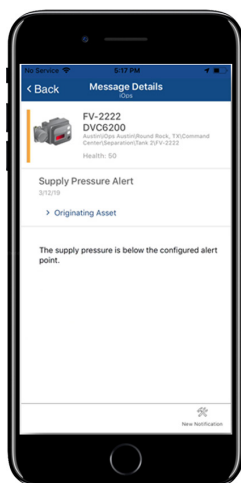
Subject Matter Experts Engage up to 7 experts with relevant expertise in a specialized job, task, or skill. Send AR supported, step-by-step procedures to walk technicians through each step of complex repair or maintenance
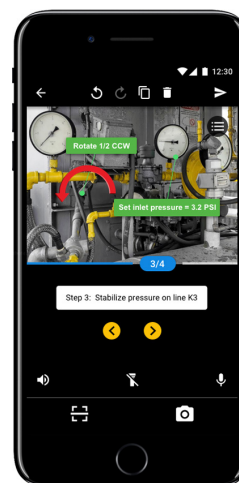
Built-In Ticketing System

All actions and exchange of information—documents, AR-annotated instructions, photos and other content—are recorded in Tickets. Each ticket can include information about service location, site, and equipment for subsequent search and retrieval. Tickets can be examined, reused, or exported as reports. Field service managers can escalate and reassign unresolved tickets to different users in the organization and archive closed tickets in the database for future reference.
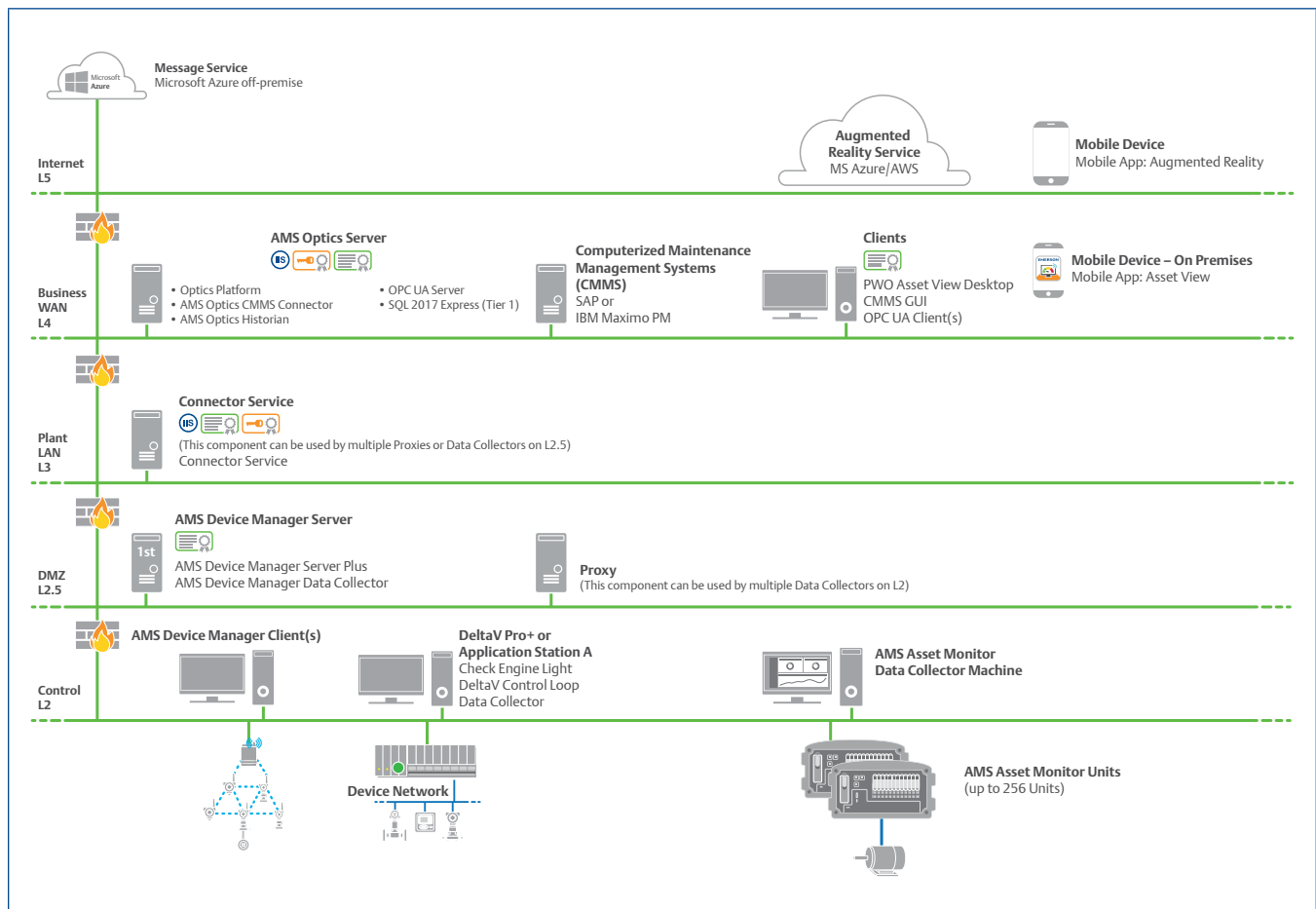
System Requirements

Web Application

Supported browsers: Chrome (Preferred), Firefox, and Chromium.

Smartphones and Tablets

- Apple devices, running iOS 13.0 or higher:
  - iPhone 8 or newer
  - iPad Pro 2nd and 3rd generation
  - iPad 5th generation or newer
  - iPad Mini 5th generation or newer

Android devices with Android OS version 9.0 or higher (later release)

Refer to the AMS Optics Connectivity flyer and AMS Optics System Connectivity List flyer for details on supported data sources.

*AMS Optics Mobile and AR utilize Microsoft Azure Message Service for site access and are not available for use in all countries. Please contact your local sales office to confirm availability.

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