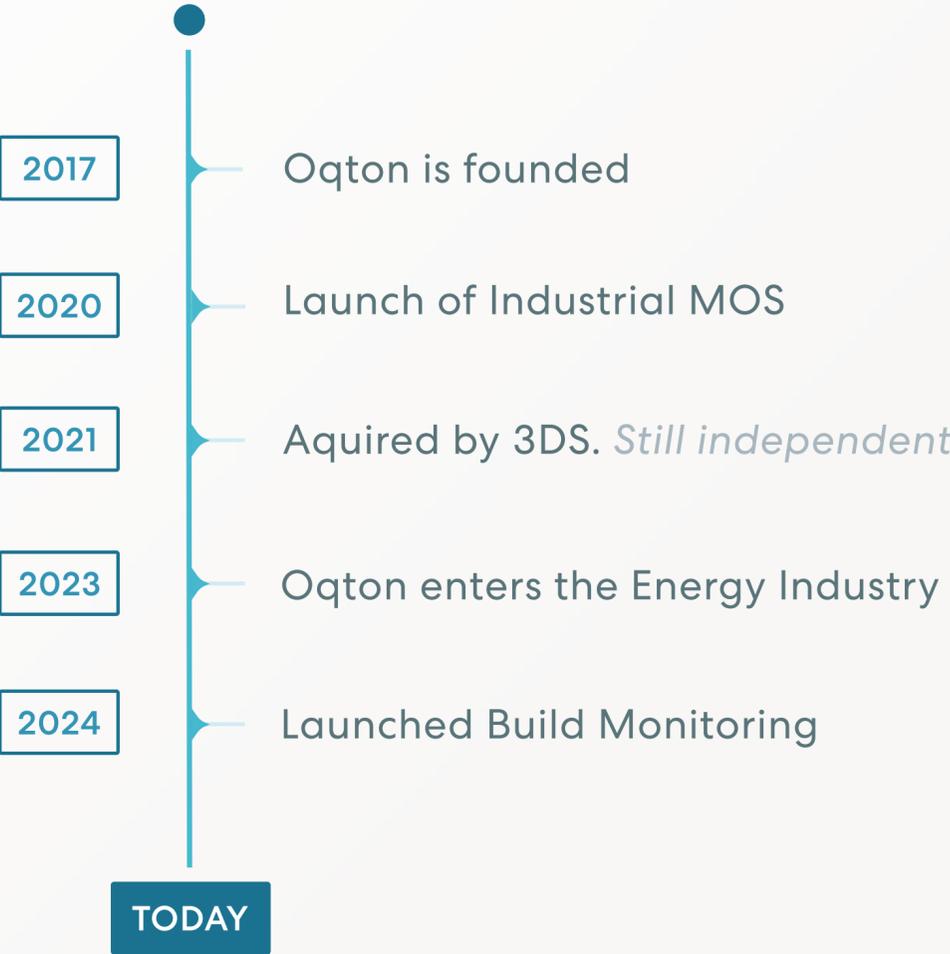


Monitoring & Inspection

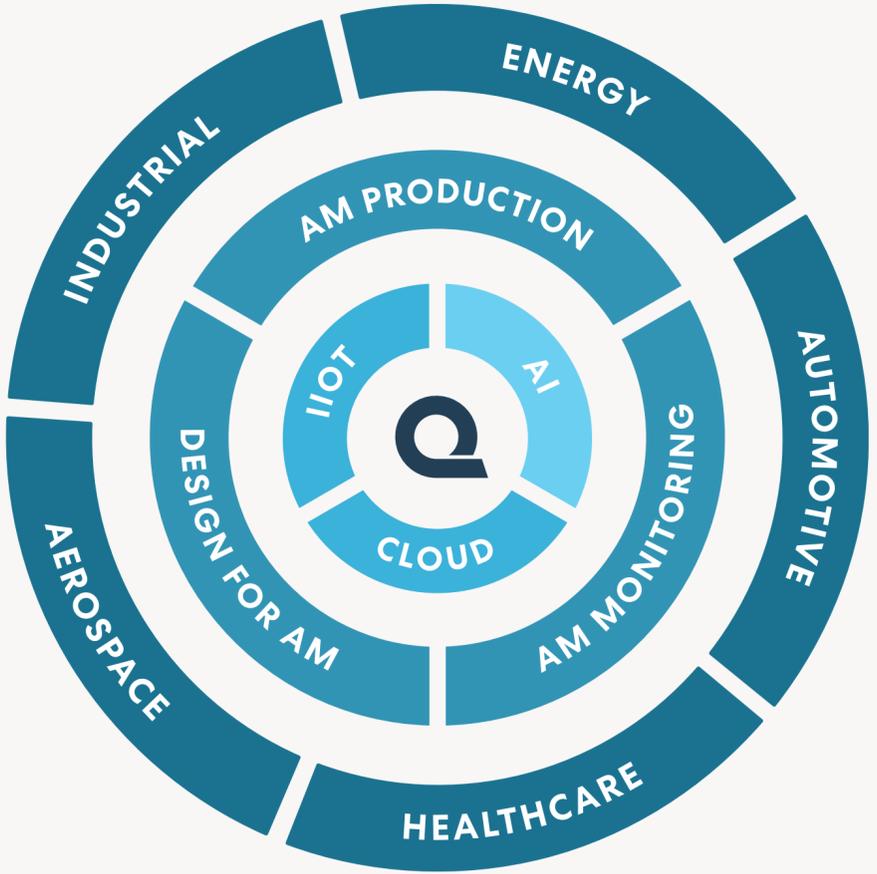
2025

Company Overview

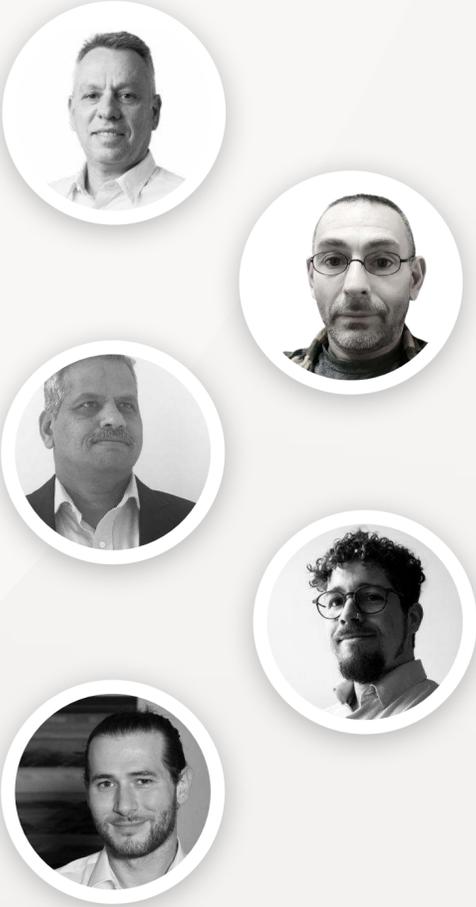
MILESTONES



CAPABILITIES & VERTICALS



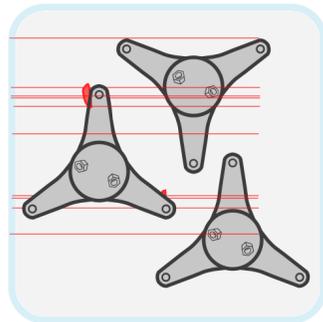
PEOPLE



Our Mission

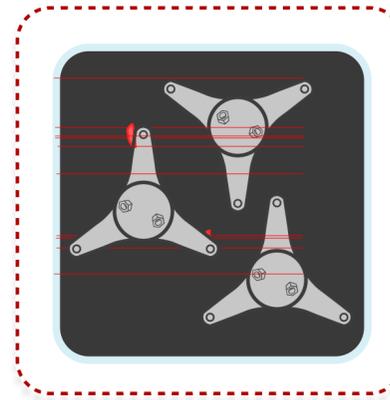
Enable **Additive** based On Demand Manufacturing and
increase **Additive Manufacturing** adoption in **regulated markets**

Monitoring & Inspection



Build Monitoring Cloud

Detect on-line anomalies



Build Monitoring On Prem

Detect on-line anomalies



Build Inspection

Inspect and correct anomalies & defects

Enabling Cost-Effective AM Production

Cut CT Scans & Expenses

- ✓ **Automated Defect Detection:** Fewer CT scans
- ✓ **Cost & Time Savings:** Shorter turnaround
- ✓ **Targeted Next Steps:** Replace full scans with focused checks

Slash Operational Costs

- ✓ **Real-Time Detection:** Catch anomalies early
- ✓ **Reduce Scrap & Downtime:** Minimize wasted builds
- ✓ **Faster Resolution:** Accelerate fixes & ROI

Minimize Engineering Review Time

- ✓ **Automated Reporting:** Less manual data crunching
- ✓ **Shorter Review Cycles:** Quicker decisions

Streamline Reporting

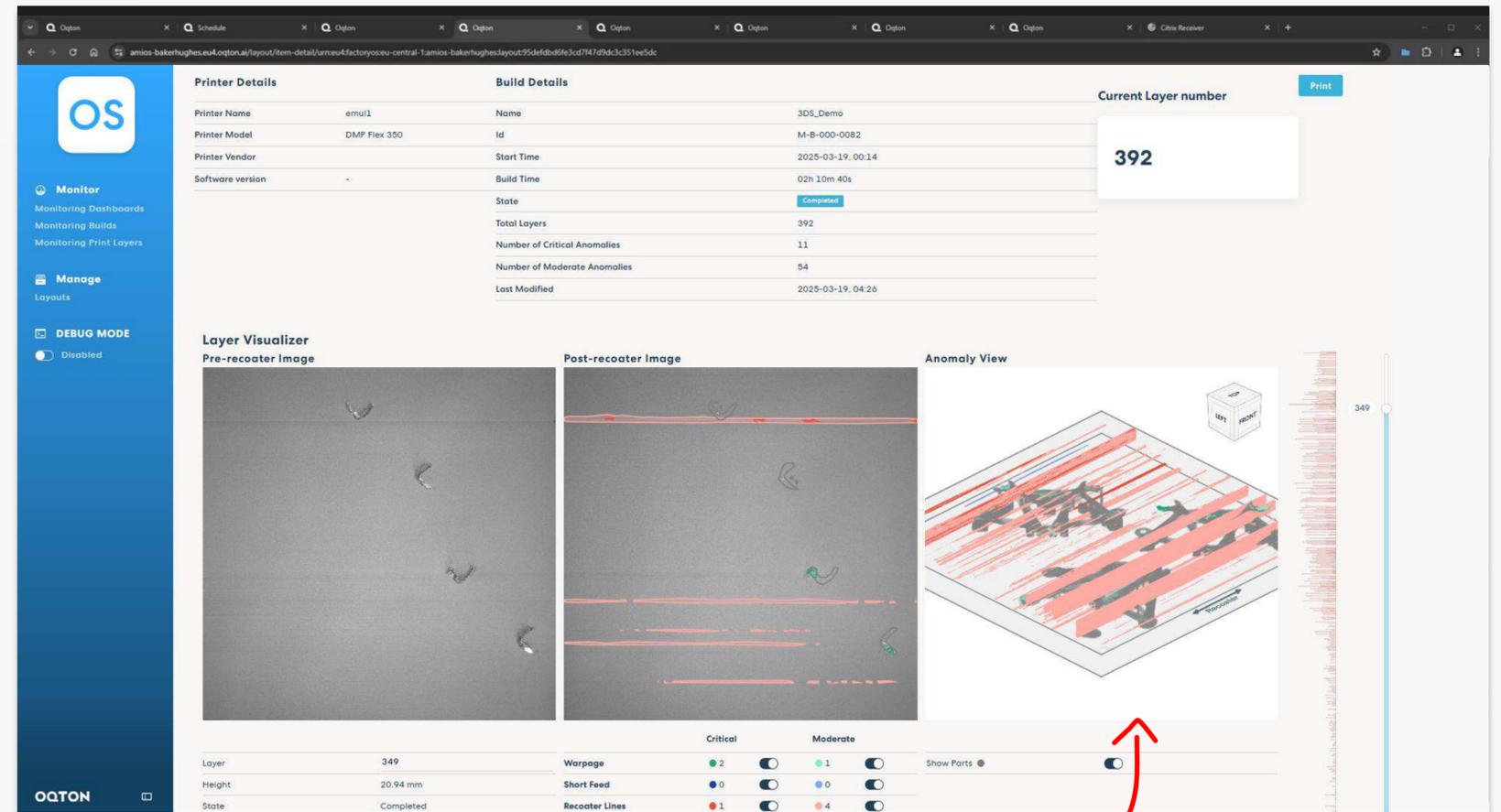
- ✓ **Automated Report Generation:** For every print job
- ✓ **Comprehensive Reports:** Anomaly details, sensor & visual data included
- ✓ **Enhanced Communication:** Simplify stakeholder updates

Ensure Consistent Quality in Production

- ✓ **Early Anomaly Flags:** Address issues quickly
- ✓ **Repeatable Results:** Consistent build outcomes
- ✓ **Stable Process:** Improve reliability

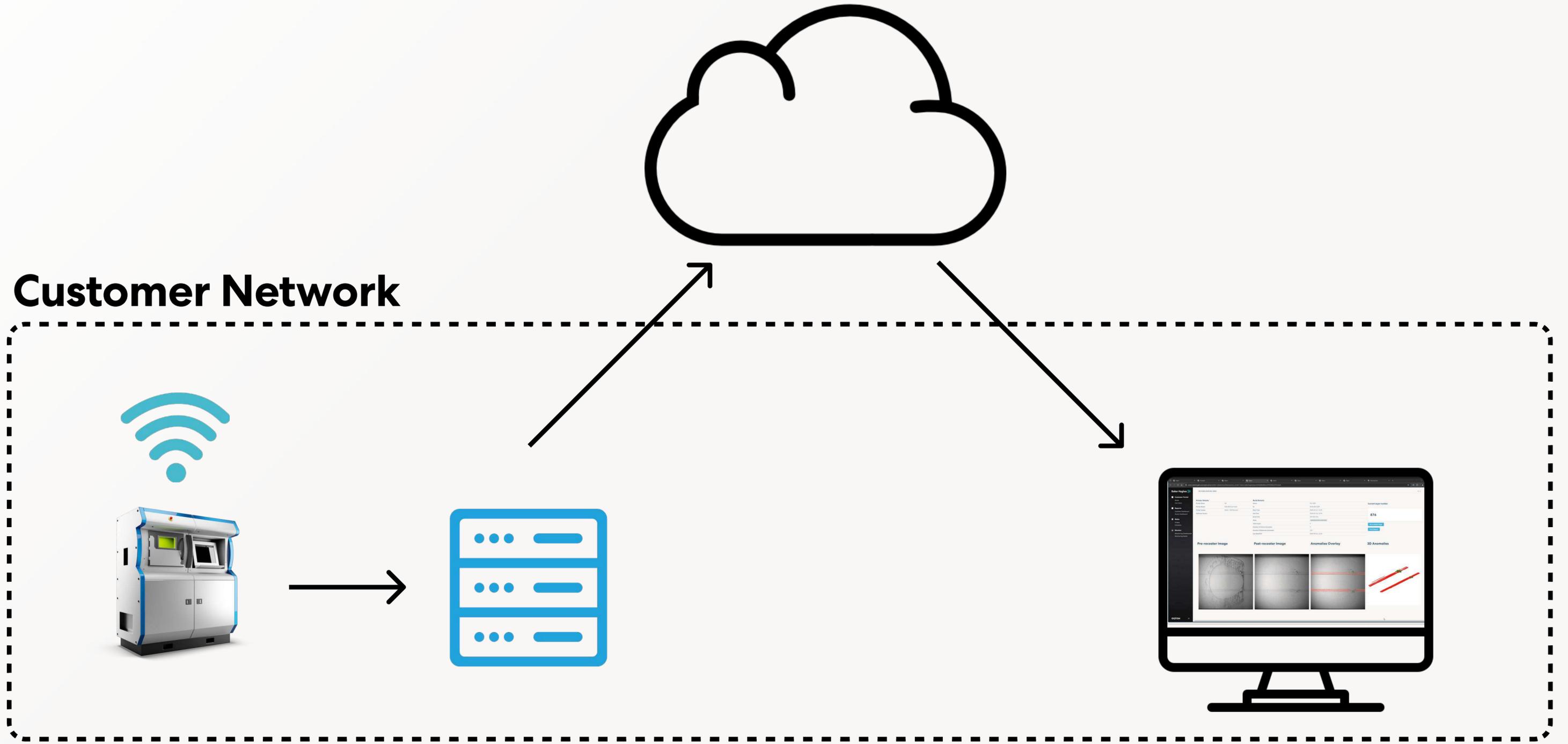
Build Monitoring

- AI anomaly detection
- Alerts through e-Mail
- Full traceability
- Real-Time
- Camera based
- Reports
- Saas
- MES connectivity (optional)
- User: Shop-floor Manager / Operator



Geometrical Assistance (3D)

Build Monitoring Cloud



Build Monitoring Cloud



Build Monitoring

Build Monitoring Benefits

Developed By **OQTON**

Baker Hughes 

MONITORING BENEFIT

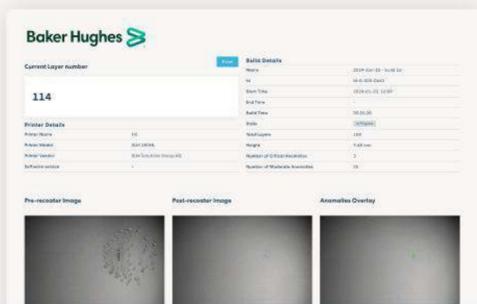
Active Monitoring Time Savings:

136 engineering hours per year per printer

Before: **139 Hours** - Active Monitoring

↓ **98% Reduction**

After: **3 Hours** - Alert Review



REPORT BENEFIT

Time Saved for Root Cause Analysis:

>1 hour for each suspicious detection

Before: **>1 Hour** - Manual Review Of layer Images

↓ **98% Reduction**

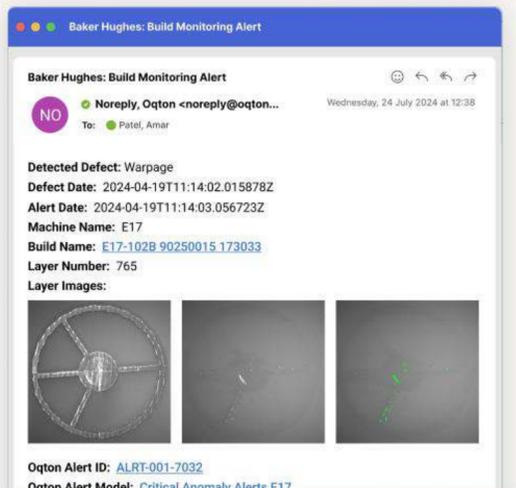
After: **<2 min** - Build Quality Report



ALERT BENEFIT

Actionable real-time alerts:

-18% scrap cost reduction



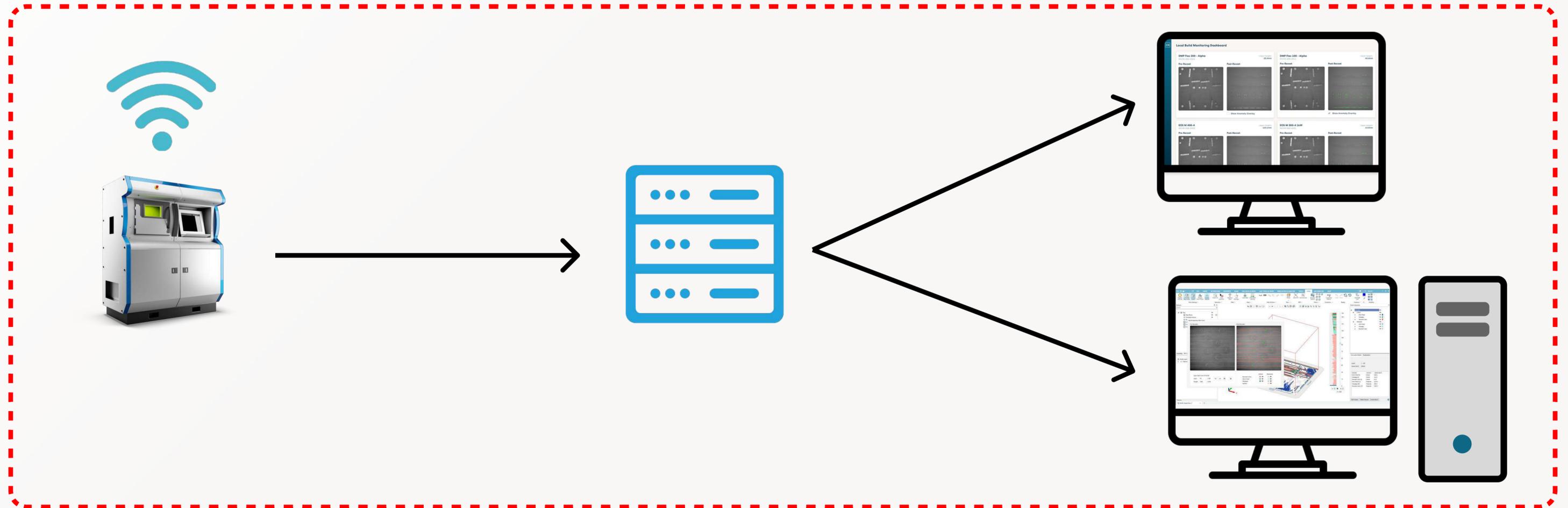
LinkedIn Post

Build Monitoring On Prem

Enable customers to leverage **core Build Monitoring** capabilities in **regulated** environments who cannot use Cloud applications

Build Monitoring On Prem

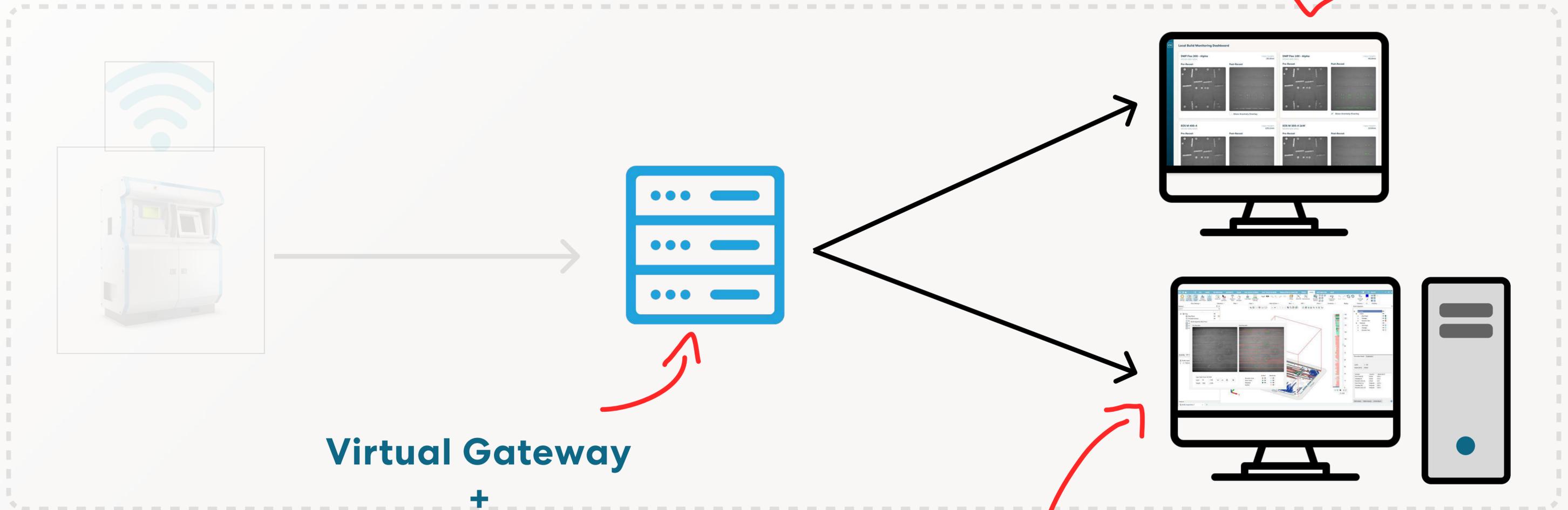
Customer Network



Build Monitoring On Prem

Build Monitoring Web Client

Customer Network

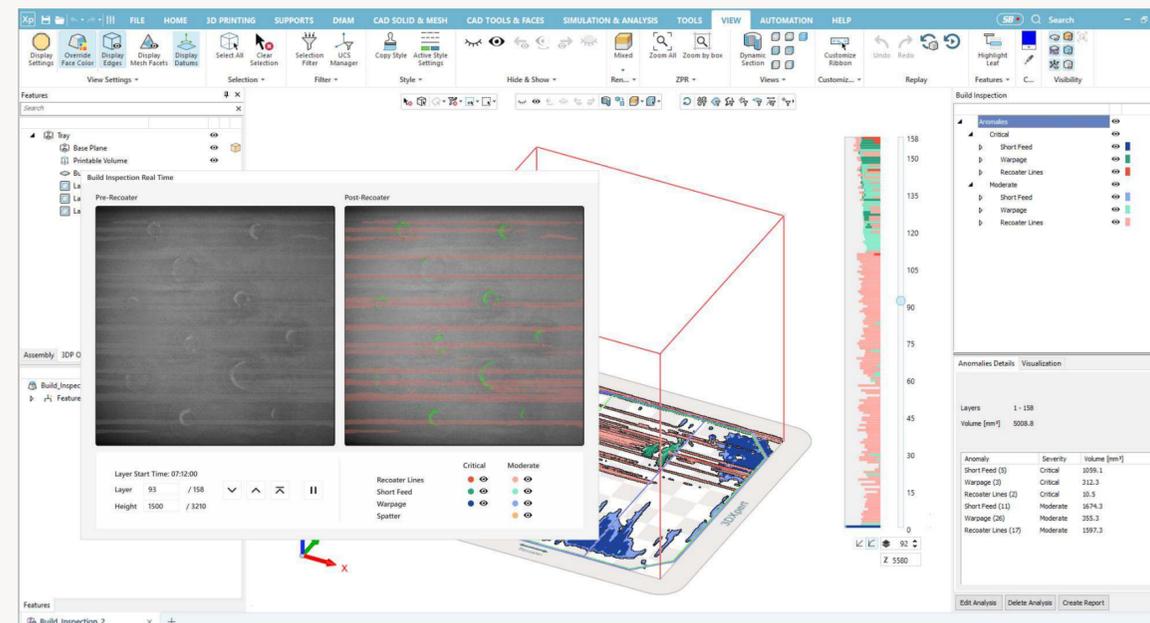
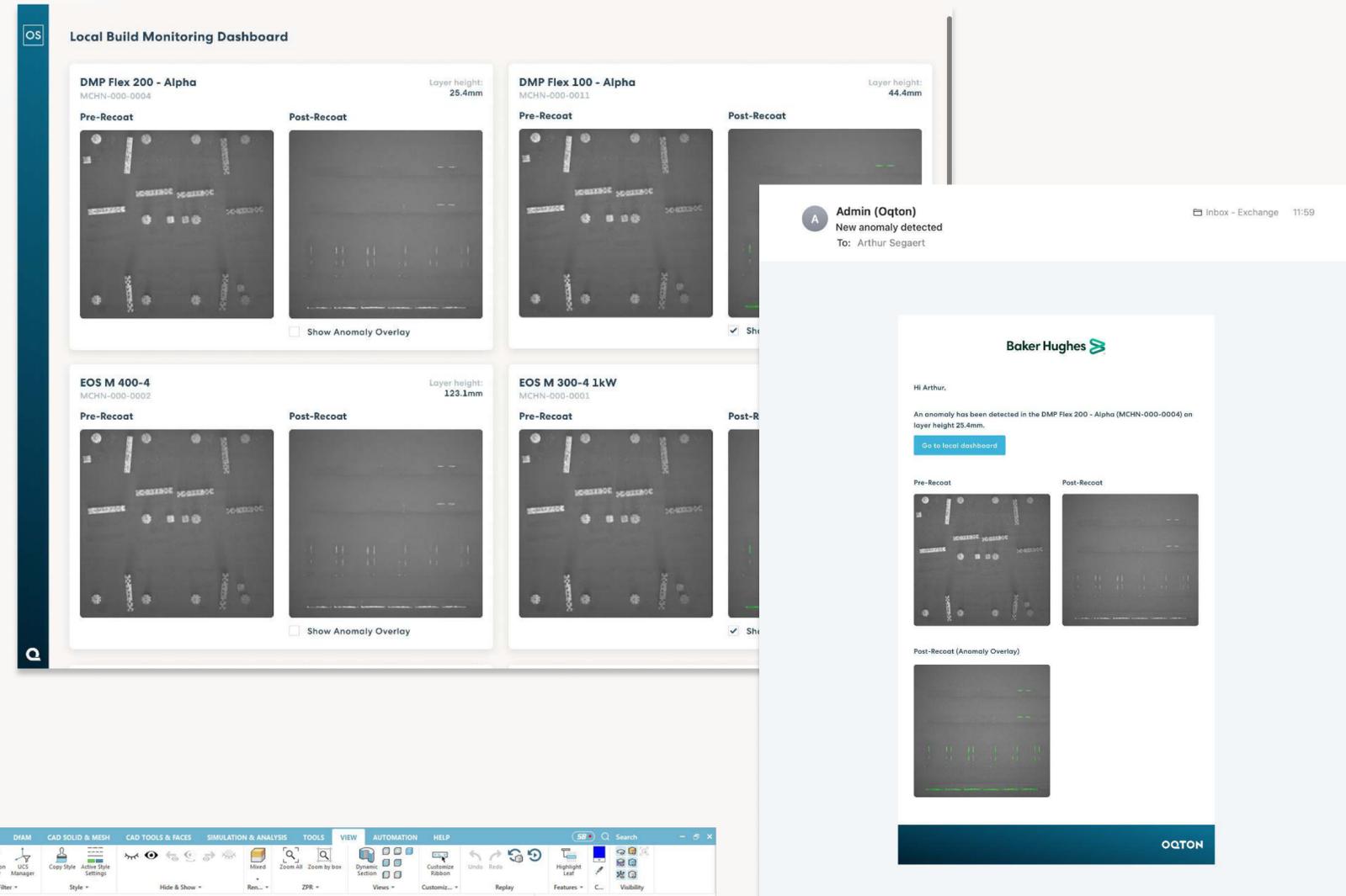


**Virtual Gateway
+
Web Server**

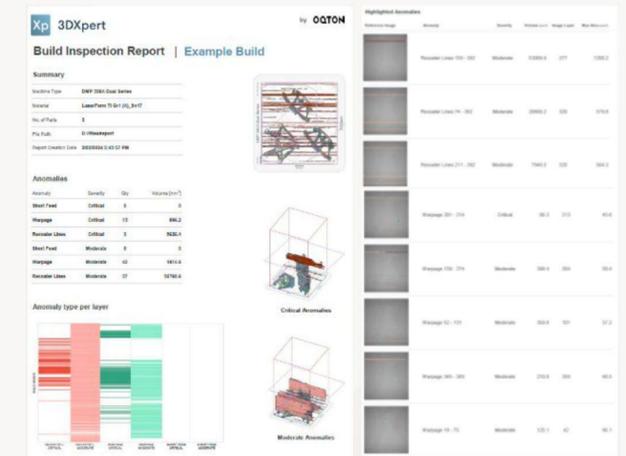
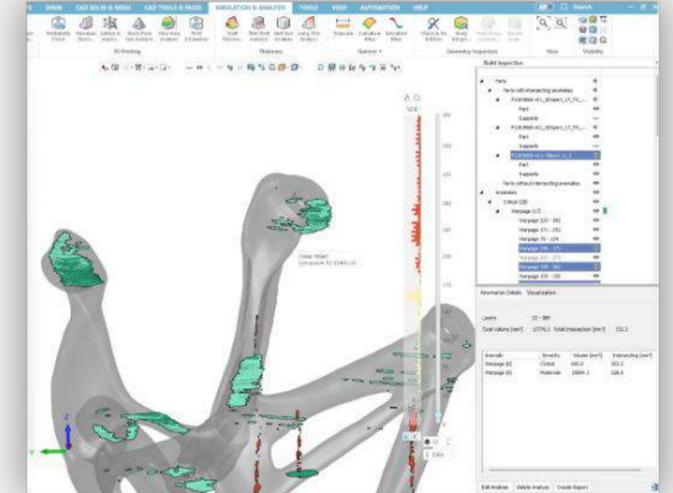
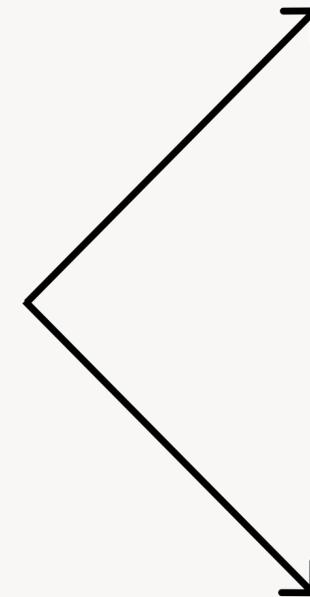
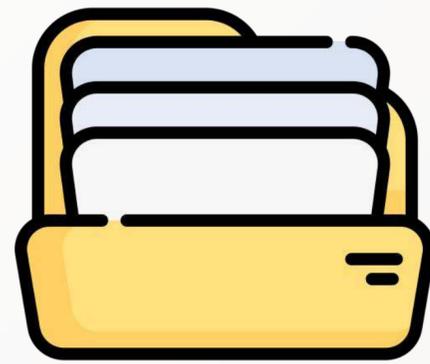
Build Inspection Real Time

Build Monitoring On Prem

- Alerts through e-Mails
- Web Client & Desktop Application
- Live images with anomaly detection
- Hosted on customer hardware
- Same AI Model

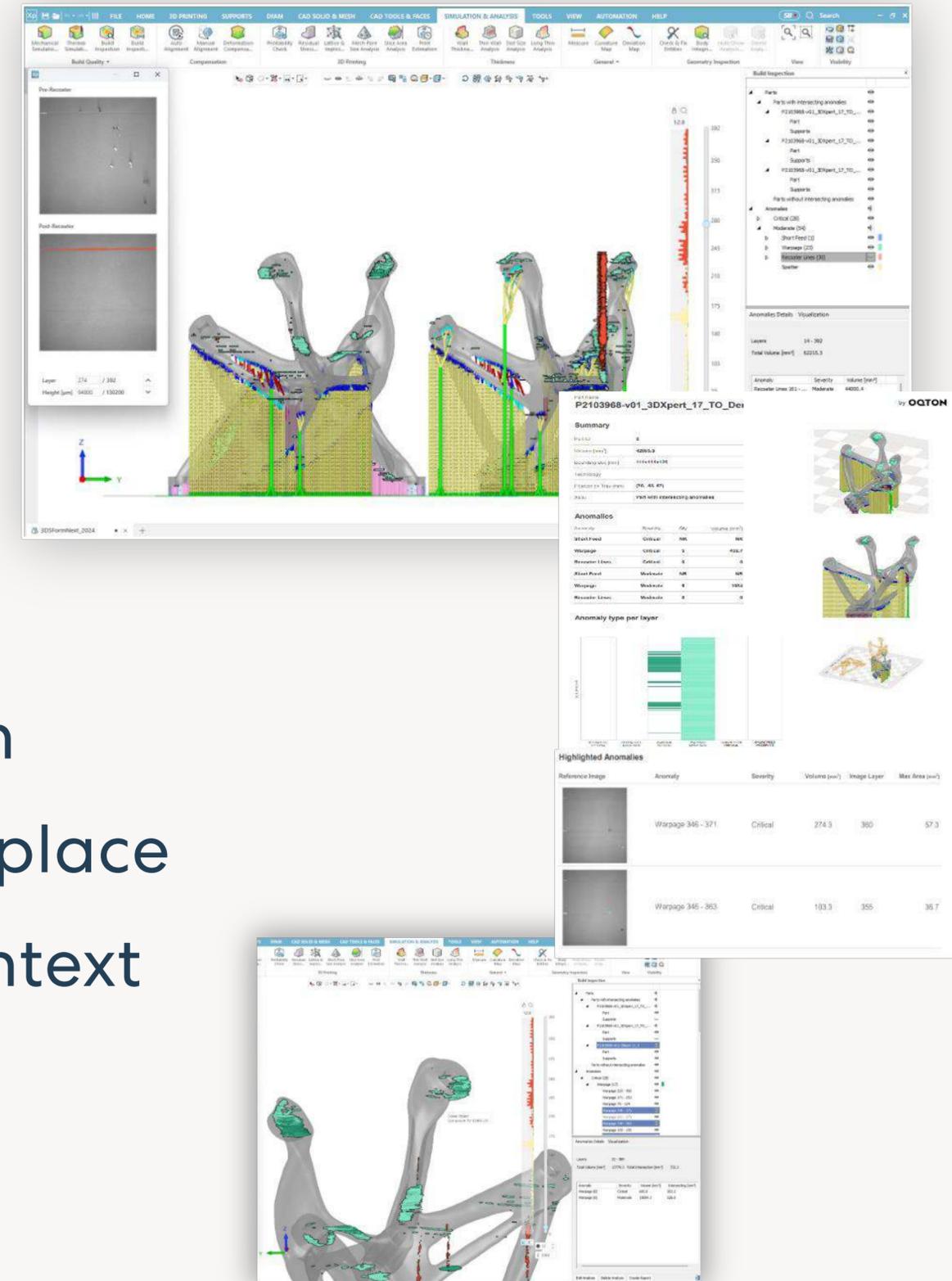


Build Inspection



Build Inspection

- Post print: Focused on root cause analysis
- Local & Secure data handling
- Same AI Model (as Build Monitoring)
- Analyze anomalies in the context of a part
- Share results with customers: Report generation
- Geometry, simulation & slice data (opt.) in one place
- Bring anomalies into your data preparation context
- User: Engineer



AI Model

SUPERIOR DEFECT DETECTION & INSIGHT:

- ✓ **Comprehensive Anomaly Detection:** Identifies key defects like Spatter, Warpage, short feeds and more, across a print job's image stack.
- ✓ **Smart Severity Categorization:** Instantly prioritize critical anomalies, streamlining your review. Quickly identify and act upon high-severity defects, eliminating the need for review of every detection.

TRUSTED, AGNOSTIC & SECURED

- ✓ **Industry-Validated AI:** Our AI model is trained on real-world data from Baker Hughes and a range of industry partners.
- ✓ **Universal Printer Compatibility:** Works with images from any 3D printer.
- ✓ **On-Premise Deployment:** Maintain full data control and security.

FLEXIBLE & USER-FRIENDLY

- ✓ **Customizable Thresholds:** Tailor sensitivity to your specific needs.
- ✓ **Seamless Integration:** Access insights within your existing workflow (3DXpert, Web, Email).

OQTON

Enable **additive** based on demand **manufacturing** in **regulated** markets



Thank **you**