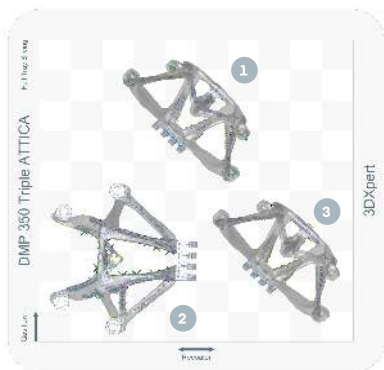


# Oqton Launches Build Quality Product Suite

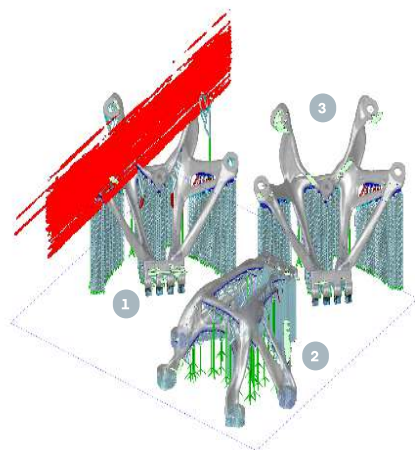
## Build Job Quality Report

### Build Summary

Machine Type, Name	DMP 350, 685972
Build Job ID	A 157843
Material	Titanium
Job Failed	No
Overall Quality Rating	Critical
Exposure Parameter ID	DMP_X345
Layer Thickness	60 um
Layers Printed	2135
Total Build Job Height	128.1 mm
Build Job Interruptions	1
Parts with Anomalies	3
Job Start - Finish	2023-08-18 15:00 + 14h
Duration	Exposure 12hrs, Idle 2hr



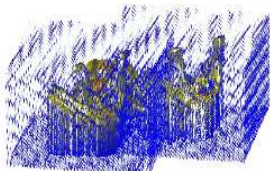
Made For 3D SYSTEMS



### Pre-Build & Correlation

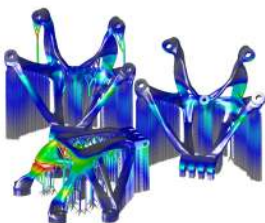
#### Thermal Simulation

Temp. exceeded @ layer	367
Temp. exceeded %	17%
Part tem. within spec	Yes



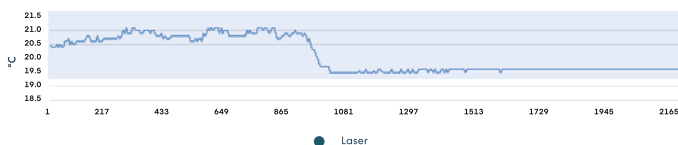
#### Mechanical Simulation

Z-def. alert @ layer	678
Z-def. exceeded %	27%
Part def. within spec	No

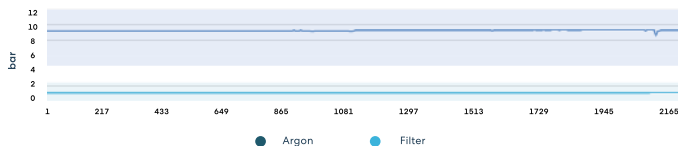


### Sensor Data

#### Temperature Monitoring



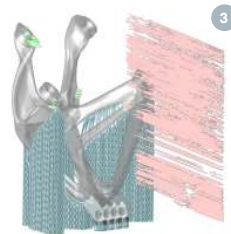
#### Pressure Monitoring



### Anomalies Summary

#### Critical Anomalies

	Qty	Vol (mm³)
Short Feed	0	0.0
Warpage	6	73.3
Recoater	6	37.8

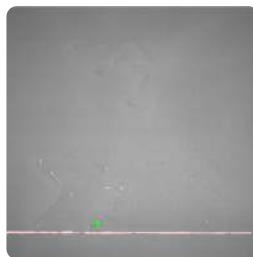


#### Non-Critical Anomalies

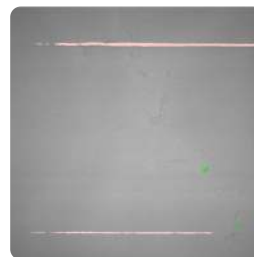
	Qty	Vol (mm³)
Short Feed	0	0.0
Warpage	19	127.3
Recoater	9	64.9



Layer 1395



Layer 580



Layer 1280

# Oqton Build Quality

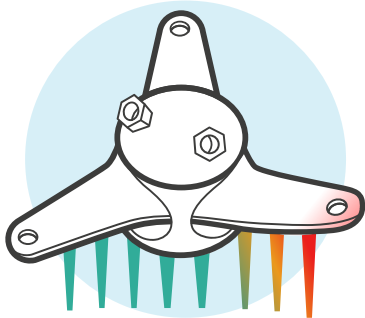
Trace quality of AM parts and evaluate build performance



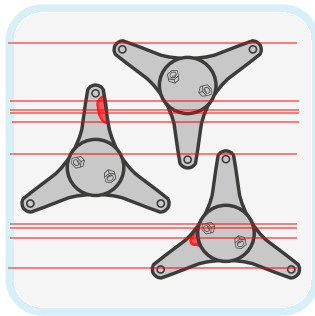
Oqton now offers a new AI-enabled solution as part of its Build Quality suite. The solution enables users to monitor, track and inspect quality metrics of metal powder bed builds throughout the full additive manufacturing process.

- Simulate and analyze for deformations, shrinklines, plastic deformations, thermal performance and more with **3DXpert Build Simulation**.
- Monitor in real-time the build process using the power of AI with our cloud-based **MOS Build Monitoring**.
  - Take fast decisions to drastically reduce scrap related costs with no extra sensors needed.
  - Enable remote monitoring of the machine status.
- Analyze print anomalies in context with the build plate inside of **3DXpert Build Inspection** to infer root causes, optimize and correct build procedures to correlate with simulation and scan path analyses in 3DXpert.
- Trace the full quality process thanks to comprehensive traceability. Generate detailed quality reports for each part produced.

BEFORE



DURING



AFTER



## Build Simulation

Prevent predictable anomalies & defects

## Build Monitoring

Detect on-line anomalies

## Build Inspection

Inspect and correct anomalies & defects