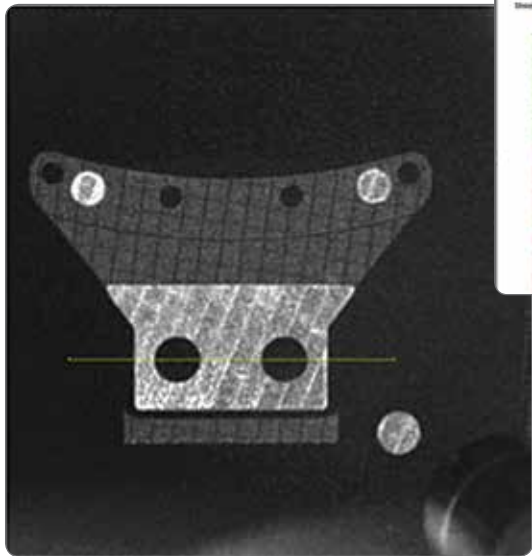
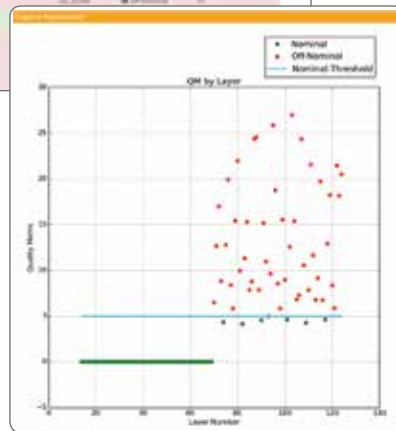


PrintRite3D[®] CONTOUR[™]

Process Control and Quality Assurance Software for Additive Manufacturing



Layer Number	SP Value	In Nominal	Quality Metric
43	10.2040	OK	100
44	10.2040	OK	100
45	10.2040	OK	100
46	10.2040	OK	100
47	10.2040	OK	100
48	10.2040	OK	100
49	10.2040	OK	100
50	10.2040	OK	100
51	10.2040	OK	100
52	10.2040	OK	100
53	10.2040	OK	100
54	10.2040	OK	100
55	10.2040	OK	100
56	10.2040	OK	100
57	10.2040	OK	100
58	10.2040	OK	100
59	10.2040	OK	100
60	10.2040	OK	100
61	10.2040	OK	100
62	10.2040	OK	100
63	10.2040	OK	100
64	10.2040	OK	100
65	10.2040	OK	100
66	10.2040	OK	100
67	10.2040	OK	100
68	10.2040	OK	100
69	10.2040	OK	100
70	10.2040	OK	100
71	10.2040	OK	100
72	10.2040	OK	100
73	10.2040	OK	100
74	10.2040	OK	100
75	10.2040	OK	100
76	10.2040	OK	100
77	10.2040	OK	100
78	10.2040	OK	100
79	10.2040	OK	100
80	10.2040	OK	100
81	10.2040	OK	100
82	10.2040	OK	100
83	10.2040	OK	100
84	10.2040	OK	100
85	10.2040	OK	100
86	10.2040	OK	100
87	10.2040	OK	100
88	10.2040	OK	100
89	10.2040	OK	100
90	10.2040	OK	100
91	10.2040	OK	100
92	10.2040	OK	100
93	10.2040	OK	100
94	10.2040	OK	100
95	10.2040	OK	100
96	10.2040	OK	100
97	10.2040	OK	100
98	10.2040	OK	100
99	10.2040	OK	100
100	10.2040	OK	100



FEATURES

- Real-time in-process monitoring of geometry
- Collects in-process sensor and machine data
- Links real-time process data to critical-to-quality (CTQ) features
- Provides for process intervention
- Real-time acquisition and visualization: HMI module
- Measurement accuracy sufficient to resolve a 100µm feature in-plane

BENEFITS

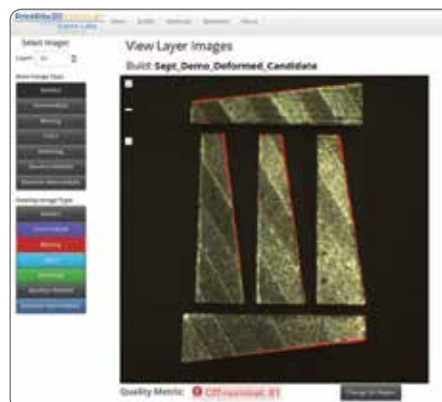
- Provides objective evidence of compliance to design intent
- Early defect detection
- Scrap reduction
- Increased yield

Software for real-time monitoring of in-process part geometry

- ▶ Layer-by-layer geometry measurement tool.
- ▶ Provides manufacturing engineers with the capability of comparison of 'as-built' to original digital CAD model 'should be'.
- ▶ Includes optics, mechanical system and data path to image two-dimensional melted powder.

REPORTING

- ▶ Powerful edge detection algorithms verify geometry of the component as it is being built.
- ▶ Provides three-dimensional roll up of all layers.



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