

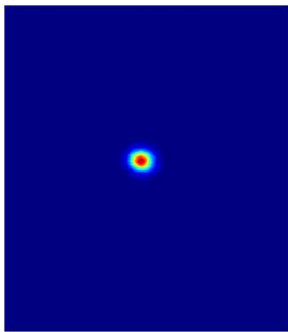
PowderSpy Measurement Report



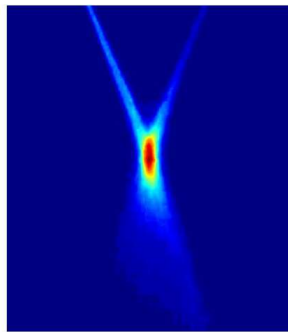
Measurement Nr: 711
Timestamp: 06.11.2023 / 09:07:43

Operator: Lukas Maiß
Department: Development

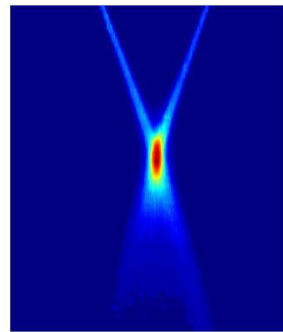
PowderSpy SN: PS-0015



z = 13.09 mm



x = -0.09 mm



y = 0.03 mm

Analysis Results

Focus Diameter: 1.05 mm Working Distance: 13.09 mm

Measurement Settings

Resolution	Exposure Time	Gain	Aperture	Laser Power
2800*2100 Px	50 ms	1	12	100 mW
Images per Step	Total Steps	Step Width		
1	1500	20 µm		

Analysis Settings

Evaluation Algorithm	Single Particle Removing
1-D 86 %	Yes

Validity

Criterion	Actual Value	Range	Passed
Nozzle detection certainty [%]	95%	80 to 100 %	✓
Sensor Saturation [%]	83%	70 to 95 %	✓
Working distance delta [mm]	0.1 mm	-0.3 to 0.3 mm	✓
Pulsation factor [%]	7.3%	0 to 10 %	✓
Homogeneity Factor [%]	91%	70 to 100 %	✓

Nozzle

Nr	Model Name	Serial Number	Manufacturer	Manufactured FD ^[1]	Manufactured WD ^[2]
1	PS Nozzle 13	PSN-13A	PS Nozzles	1 mm	13 mm

Material

Nr	Material	PSD	Powder flow	Carrier Gas	Shielding Gas
1	316L	15-45 µm	35 g/min	4 l/min	{8 l/min}
2	316L	15-45 µm	35 g/min	4 l/min	

Comment

Test of PS Nozzle 13 on powder focus shape, position and diameter. PS Nozzle 13 with a good powder focus. Production of customer parts permitted.