

System QFD

Date: 2/2/2026

1	Decrease time to convert between flows																		
2	Increase particle density in fluid																		
3	Change laser color																		
4	Visibility of particles					9													
5	Visibility of silicone																		
6	Match silicone to HPMC refractive index									9									
7	Success rate when testing on phantom	9						3					9						
		Technical Requirements								Customer Opinion Survey									
	Customer Needs	Customer Weights (Scale 1-5)	Decrease time to convert between flows	Increase particle density in fluid	Change laser color	Visibility of particles	Visibility of silicone	Match silicone to HPMC refractive index	Success rate when testing on phantom	1 Poor	2	3 Acceptable	4	5 Excellent					
1	Conversion time	4	10											B					
2	Particle selection	1		8	8														
3	Laser Wavelength (Color)	2			10														
4	Clarity of silicone	3				10					S		K						
5	Refractive index match	5				7	8	10			K			S					
6	Validation	4	8			7	7	8	10	S				B					
7	Technical Requirement Units		s	particles/pixel	nm	color	%	Unitless	%										
8	Technical Requirement Targets		120	0.1	532		90	1.35	80										
9	Absolute Technical Importance		72	8	28	93	68	82	40										

Legend
 S Stomach
 K Kidney
 B Brain

10
11