

System HOQ

Project: Metal 3D Printer
Date: 10/20/2024

Engineering Requirements

1	Materials Tested							
2	Final Print Material	+9						
3	Final Print Volume	-1	-1					
4	Power							
5	Inert Gas	+9	+9					
7	Young's Modulus Tested	+9	+3		+1	+1		
	Dog Bone Size	+1		+9				+3

Engineering Requirements

Customer Needs	QFD	Materials Tested	Final Print Material	Final Print Volume	Power	Inert Gas	Young's Modulus Tested	Dog Bone Size
Ease of Use	3	3	3					
Safety	5	9	3		3	3		
Time	4	1	1	1	3	3		1
Successful Installation	5	9	1	1	9	9		
Tensile Test Results	2	3	9				9	3
Final Part and Assembly	4		9	9	9	9	3	
Instruction Manual	5	3					3	
Engineering Requirement Units		Al, SS 316L, Ti, Bronze	Al, SS 316L, Ti, Bronze	mm^2	V, A	N, Ar, bar, purity	Gpa	mm
Engineering Requirement Targets		All	SS 316L	<90x90x8 0	230V, 16A	2 bar N, Ar, purity >=2.5	193	N/A
Absolute Technical Importance		124	87	45	108	108	45	10
Relative Technical Importance		12.41241	8.708709	4.504505	10.81081	10.81081	4.504505	1.001001