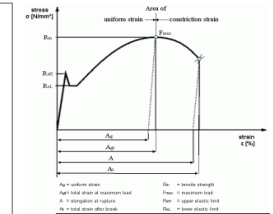
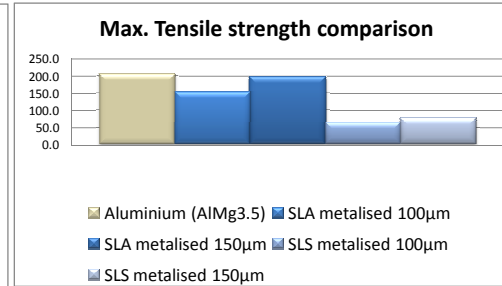
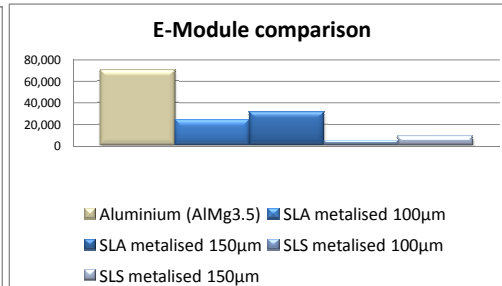
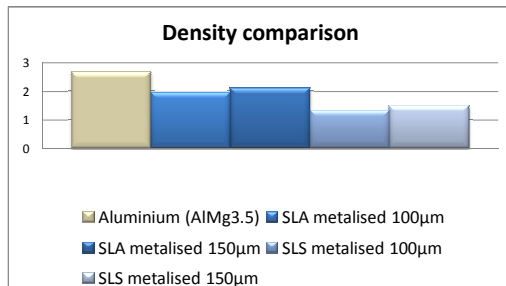


Metalise it... Mechanical property test

comparison of mechanical properties of RP parts with/out metalisation



	Density [g/cm ³]	width [mm]	thickness [mm]	E-modul E _{mod} [MPa]	Tensile strength σ-s [MPa]	Elongation ε [%]	Tensile strength _{max} σ-max [MPa]	Elongation max ε - max [%]	σ-break [MPa]	ε-break [%]
SLS PA 2200	0.9	10.38	4.12	1667	49.1	10.71	49.1	10.71	46.1	18.87
SLS metalised 100µm	1.32	10.58	4.33	5230	65.1	2.96	65.1	2.96	61.7	3.32
SLS metalised 150µm	1.49	10.62	4.46	8585	78.1	2.09	77.3	1.9	76	1.96
% SLS - 100µm	147%			314%	133%	28%	133%	28%	134%	18%
% SLS - 150µm	166%			515%	159%	20%	157%	18%	165%	10%
SLA (ceramic filled)	1.6	12.02	1.45	9,967	60.20		63.1			0.89
SLA metalised 100µm	1.95	12.03	1.45	23,986	109.80		152.9			2.19
SLA metalised 150µm	2.1	12.04	1.45	31,234	133.80		197.6			3.86
SLA metalised 200µm	2.26	12.05	1.45	49,587	202.90		276.8			1.57
% SLA - 100µm	122%			241%	182%		242%			246%
% SLA - 150µm	131%			313%	222%		313%			434%
% SLA - 200µm	141%			498%	337%		439%			176%
Aluminium (AlMg3.5)	2.66			70,000	75.0		205.0			12.00
Mild steel (S235JR)	7.85			190,000	205.0		415.0			21.00



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