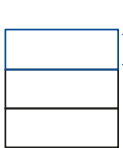
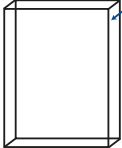
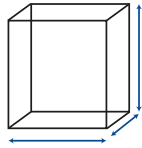

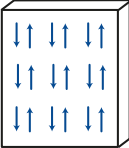
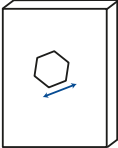
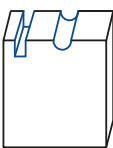
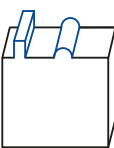
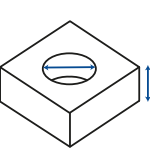
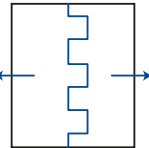
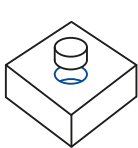
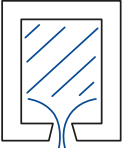


MATERIALS COMPARISON -  
DESIGN GUIDELINES

Metals

		LAYER THICKNESS	MINIMUM WALL THICKNESS	MAX SIZE & MIN SIZE (MM)	MIN SIZE OF TEXT	MAGNETIC PROPERTIES	MINIMUM VISIBLE DETAIL	ENGRAVING	EMBOSSING	ENLARGEMENT RATIO	INTERLOCKING & ENCLOSED PARTS	ASSEMBLY	HOLLOWING
		Print resolution	Minimum recommended wall size to ensure there are no errors during printing	Maximum dimensions possible to respect an item	Minimum text size to ensure visibility..	Possibility of exerting attractive or repulsive forces on other materials	Minimum dimension to ensure detail visibility	Graphic elements hollowed out on the surface of the model	Graphic elements raised above the surface of the model	Minimum ratio to be observed between the diameter of a hole and the thickness of the wall of the model	Possibility of printing parts that will articulate between each other & Possibility of printing a model with volume inclusions	Possibility of assembling parts while leaving a minimum space between them	Optimization of the weight and price of a model by removing its internal material
													
FDM	Ultrafuse® 316L	150 µm	1mm	MAX SIZE 80 x 80 x 80 mm or MIN SIZE 115x115x40 mm	-	Yes	-	0.40mm – 1mm	0.60mm – 1mm	-	Not recommended & Not recommended	No	-
	Ultrafuse® 17-4 PH	150 µm	1mm	MAX SIZE Raw : 80 x 80 x 80 or 115x115x40 MIN SIZE -	-	Yes	-	0.40mm – 1mm	0.60mm – 1mm	-	Not recommended & Not recommended	No	-

DMLS / SLM	Aluminum AISi10Mg0,6	150 µm	1mm	MAX SIZE 220 x 220 x 250 MIN SIZE -	1mm	-	1mm	0.5mm	0.5mm	1/1	No & No	No	No
	Titanium 6Al-4V	60 µm	1mm	MAX SIZE 220 x 220 x 250 MIN SIZE -	1mm	-	1mm	0.5mm	0.5mm	1/1	Not recommended & Not recommended	No	No
	Sterling Steel 316L	40 µm	1mm	MAX SIZE 220 x 220 x 250 MIN SIZE -	1mm	-	1mm	0.5mm	0.5mm	1/1	Not recommended & Not recommended	No	No

Binder Jetting	Steel/ Bronze 420SS/BR	100 µm	1.1 to 3.2 mm	MAX SIZE Unpolished : 400 x 250 x 250 Polished: 152.4 x 152.4 x 152.4 MIN SIZE Unpolished : 0.3 x 1.27 x 0.8 Polished: 15 x 15 x 15 mm	0.76mm	-	0.8mm	0.76mm	0.76mm	1/1	No & No	No	Yes (for raw parts) No (for plated parts)
	Sterling Steel 316	100 µm	1.1 to 3.2 mm	MAX SIZE 120 x 120 x 70 mm MIN SIZE Polished: 15 x 15 x 15 mm	-	-	0.8mm	0.76mm	0.76mm	1/1	No & No	No	Yes (for raw parts) No (for plated parts)

Wax Casting	Bronze	25 µm	0.8mm	MAX SIZE 125 x 125 x 40 MIN SIZE -	Width: 0.5mm Height: 1.5mm	-	0.4mm	0.5mm	0.4mm	1/1	No & No	No	No
	Brass	25 µm	0.8mm	MAX SIZE 125 x 125 x 40 mm MIN SIZE 0.6 x 2.4 x 2.4 mm	Width: 0.5mm Height: 1.5mm	-	0.4mm	0.4mm	0.5mm	1/1	No & No	No	No
	Sterling Silver	25 µm	0.8mm	MAX SIZE 125 x 125 x 40 mm MIN SIZE 2.4 x 2.4 x 0.8 mm	Width: 0.5mm Height: 1.5mm	-	0.4mm	0.4mm	0.5mm	1/1	No & No	No	No