FUSED DEPOSITION MODELIN

Manufacturing process from the Direct Manufacturing area, with which a work piece is assembled via the process of the melting from plastic material.





Component size with ABS and PEI > max. 914 x 609 x 914 [mm] / 36" x 24" x 36" [inch] **Component size** with PC > max. 406 x 355 x 406 [mm] / 16" x 14" x 16" [inch]

With large components, the option of manufacturing single parts and join them together is possible.

Tolerance according to DIN ISO 2768c

Tolerance Class		Measuring limits for the rated dimensions limits (value in mm)					
Symbol	rough	from 0,5 to 3	over 3 to 6	over 6 to 30	over 30 to 120	over 120 to 400	over 400 to 1000
С	rough	+/- 0,2	+/- 0,3	+/- 0,5	+/- 0,8	+/- 1,2	+/- 2

Following materials are available:

ABS-M30 (P430 ABS), PC (Polycarbonate), PEI (Ultem 9085)

ABS colour: natural, black (optional also white, grey, red and blue)

PC colour: white, black **PEI colour:** ivory, black

Properties							
ABS-M30	PC	PEI					
good chemical resistancehigh impact and notch impact resistance	> good mechanical strength value	 high mechanical property aviation authorized in accordance to FAR 25.853 and ABD0031 high thermal stability 					

Possible layer thickness for each material:

ABS-M30: 0.127 mm, 0.178 mm, 0.254 mm, 0.330 mm

PC: 0.178 mm, 0.254 mm, 0.330 mm

Ultem 9085: 0.254 mm, 0.330 mm

File format for the FDM-Software: STL, iges, vda, step, catiaV4, catiaV5, unigrahics, acis, parasolid.