

Glossary

This glossary covers the most common terms in AM.

Term	Definition
Additive Manufacturing	The process of joining materials to make parts from 3D model data.
Computer Aided Design	The use of computer-based software to aid in design processes.
Design for Additive Manufacturing	The methodology of creating, optimising, or adapting the form and function of a part, assembly, or product to take full advantage of the benefits of additive manufacturing processes.
Finite Element Analysis	A computational method for predicting how a product reacts to forces, vibrations, heat, fluid flow and other physical effects.
Generative Design	A design method that uses algorithms and sometimes artificial intelligence to generate multiple design solutions based on specific design criteria and constraints.
Topological Optimisation	A mathematical method which spatially optimises the distribution of material within a defined domain, by fulfilling given constraints previously established and minimising a predefined cost function.

Abbreviations

Abbreviation	Definition
AM	Additive Manufacturing
PLA	Polylactic Acid
PBT	Polybutylene Terephthalate
PEEK	Polyether Ether Ketone
PPS	Polyphenylene Sulfide
PC	Polycarbonate
ABS	Acrylonitrile Butadiene
SLS	Selective Laser Sintering
DfAM	Design for Additive Manufacturing
CAD	Computer Aided Design
FDM	Fused Deposition Modelling.
ISO	International Organization for Standardization
QC	Quality control
FEA	Finite Element Analysis
CT	Computed Tomography
HIP	Hot Isostatic Pressing
SLM	Selective Laser Melting
EBM	Electron Beam Melting
DED	Directed Energy Deposition
PSD	Particle Size Distribution
STL	Standard Tessellation Language
STEP/STP	Standard for the Exchange of Product Data

