

ADDITIVE MANUFACTURING TECHNOLOGIES

K. SRINIVASULU REDDY¹ & SOLOMON DUFERA²

¹Associate Professor, Mechanical Design & Manufacturing Engineering Program,
Adama Science and Technology University, Adama, Ethiopia

²M. Sc students, Mechanical Design & Manufacturing Engineering Program,
Adama Science and Technology University, Adama, Ethiopia

ABSTRACT

Additive manufacturing (AM) is a latest technology that could improve manufacturing process by building up thin layers of materials from digitized three-dimensional (3D) designs virtually constructed using advanced CAD software. This technique affords the creation of new types of object with unique material properties. But while AM is widely billed as ‘the next industrial revolution’, in reality there are still significant hurdles for successful commercialisation of the technologies. This paper aims to provide a comprehensive review of literature, technologies and manufacturing practices on modern Additive Manufacturing.

KEYWORDS: Additive Manufacturing (AM), 3D-Printing, Rapid Prototyping (RP), Stereo Lithography (SL)