

Selective Laser Melting: Art Status and Developing Tendency

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Selective laser melting (SLM) technique, an additive manufacturing process by powder bed, has become the first choice for complex metallic component fabrication in industry in the past years, due to its high precision, excellent performances over other techniques. However, there are still some bottlenecks before it can get wider applications in the future. In this report, the new progress and developing tendency of SLM technique and equipment developed in the past years have been reviewed. Especially, the mechanisms about how to promote the forming quality of the components by the large SLM equipment with the four laser beam scanners and the sizes of 500x500x1000 mm³ has been discussed.