

VISITECH «WORLD'S FIRST» TO INTRODUCE DIRECT IMAGE SINTERING POLYMER POWDER BED FUSION USING DLP AND IR

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Now conceptually proven and the world's first to do so, Visitech has dubbed the new additive manufacturing technique “DIS” – for Direct Image Sintering.



Using their own DLP-based, powerful IR light engine instead of the traditional single focused laser beam, known from SLS technology, core benefits such as drastically increased print speed, resolution, and build area are the result. Visitech aimed to remove the limitations of the widely used Selective Laser Sintering (SLS) method and develop powder bed fusion (PBF) as a better candidate for industrial applications. This would require high throughput and resolution.

The R&D team's approach was to achieve full-layer image projection in one shot, using a powerful DLP-controlled IR light source to melt and fuse the polymer powder with high precision. The journey involved solving some key challenges along the way. Having proven that it works, however, is a huge leap forward. The success not only resulted in a new PBF concept being born – it opens a world of opportunities for both machine builders and the AM industry to explore, with cost-effective mass production capabilities possible, based on Visitech's scrolling subsystem for AM.

Breaking the news about Visitech's all-new IR-powered DIS concept was 3dprint.com. You can read the full article here.

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Intrigued by this new additive manufacturing concept and looking for more information about DIS and how it can be of value to your business? Send us your thoughts and questions!

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