

SUPERB RESULTS FOR DIRECT IMAGE SINTERING (DIS): EXCEEDS SLS BUILD STRENGTH IN PBF PRINT TESTS

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In July 2021, [3Dprint.com](https://3dprint.com) [broke the story](#) about the first successful print using Visitech's Direct Image Sintering (DIS) method for polymer PBF.

Since then, material testing and technology fine-tuning have revealed significant benefits of DIS compared to traditional PBF by SLS – making it one of the most indicative technologies for additive manufacturing industry growth.

DIS printing: Bigger, faster, stronger parts

While acclaimed as the polymer PBF additive manufacturing solution that indeed enables volume printing at high speed and precision, the Visitech team recently revealed additional DIS benefits.

Test results produced by an independent lab found that the new technology not only prints parts faster than traditional SLS laser; printed parts are also stronger.

This great advantage further widens the potential for polymer PBF applications, which, according to 3Dprint.com's recent article, is expected to generate over \$2 billion by 2030.

[Read all about DIS on 3dPrint.com](#)

Wide range of uses

Described by customers as an “eyeopener for future high-volume 3D printing”, the DIS tech has caught great attention at recent trade shows as machine builders discover the broad application range for the tech.

DIS optimally takes PBF into industrial-level 3D printing for our customers. You can print many small objects requiring high resolution by employing a multi-projector scrolling configuration with a high fill factor in a large building area

Endre Kirkhorn, R&D Manager at Visitech

“A wide range of industries can benefit from using DIS, including automotive, medical and healthcare, consumer electronics, heavy industry, military, and aerospace,” said Kirkhorn. Tool manufacturing, housings, jigs and fixtures, prosthetics, replacement parts, prototypes, and air ducts are some practical industrial-level applications well-suited for DIS.

Support for early adopters

Visitech officially releases DIS for orders in Q4 2022, targeting machine builders. A typical system

comprises a single or multiple [LUXBEAM® Rapid System LRS MCx-WX-IR projectors](#) and the proprietary LAMA or LAMA Pro software, depending on the builder's desired configuration.

To complete the system, machine builders provide their own choice of powder handling and heating setup in addition to an X and Z motion system, into which DIS integrates. For faster and more effortless technology implementation, Visitech offers support to machine builders and can provide reference- and custom motion system configurations.

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