SHD LOGISTICS

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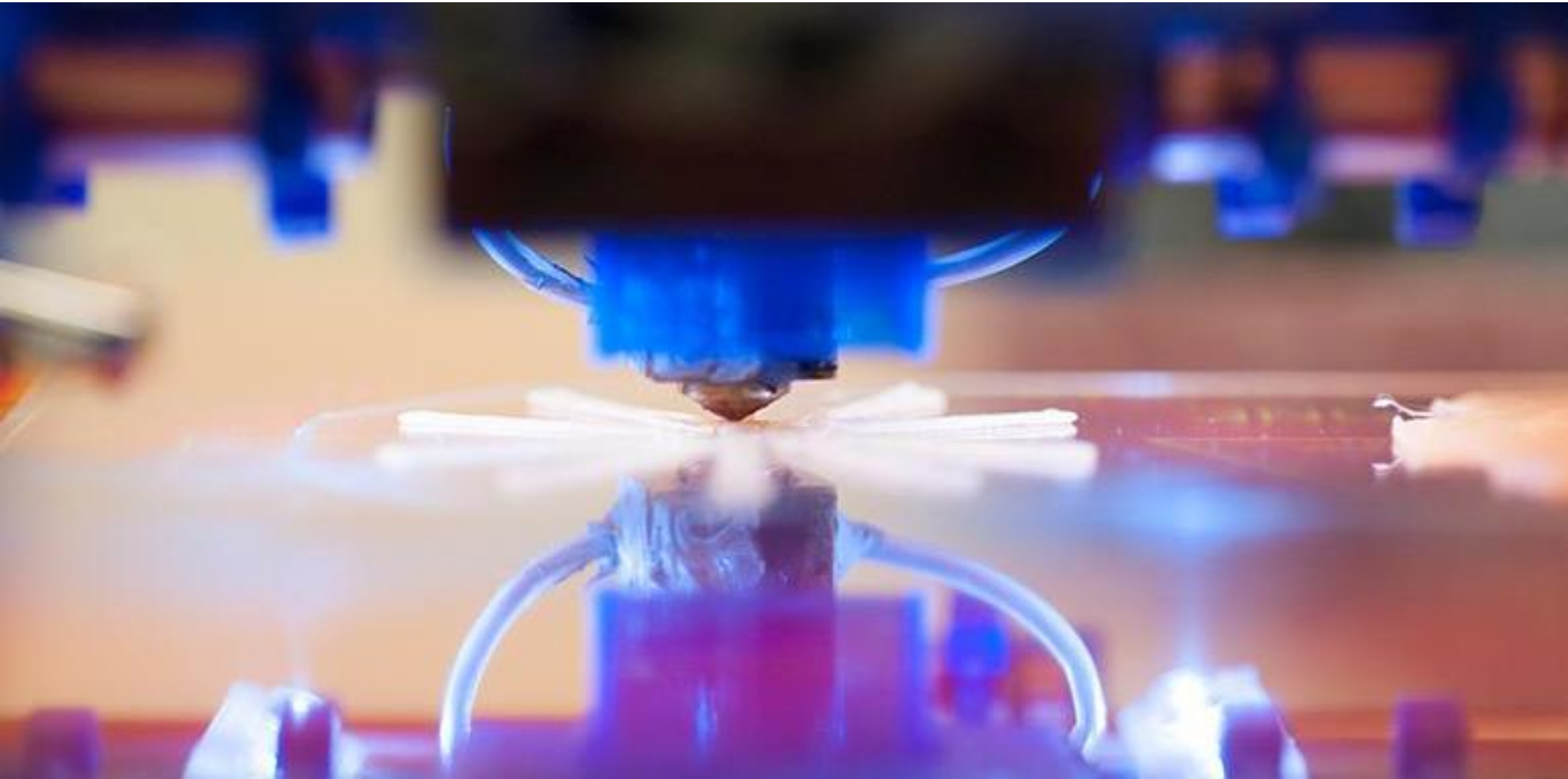
What is 3D printing?



SHD asks and answers: what is 3D printing, and how can it be used in a logistics operation?

The actual mechanics of 3D printing are in some ways not unlike that of the inkjet printers that have been a fixture of office and home life for so many years - except for the obvious difference that, while inkjet printers spray ink onto a sheet of paper, 3D printers inject materials that gradually build a three-dimensional object.

Of course, the commercial viability of 3D printing and its chances of entering the mainstream hinge to a great extent on its affordability, while other factors - such as the speed and quality of the printing process – will also play a part.

The much-hyped (some would say over-hyped) technology is yet to really establish a niche in the logistics industry, but those who believe 3D printing has the potential to become a supply chain 'game changer' contend that more and more companies will eventually choose to embrace 3D technology and switch to 'build-to-order' business models.

The theory is that a significant move to 'build-to-order' production strategies might lead to a restructuring of the relationship between manufacturers, wholesalers and retailers which would, in turn, impact on the role of logistics services providers. Such a scenario would see 3PLs having to rethink their role in the supply chain and could ultimately lead them to move away from their current primary roles of storing and moving inventory to printing goods on-demand at facilities located close to their client companies' end consumer market.

But there are already real-world examples of forward thinking logistics companies deploying 3D printing to good effect. For example, a 3PL offering returns management in the clothing sector was recently faced with an ever-increasing number of returns due to buttons missing from garments. Instead of storing hundreds of different types of button or purchasing them on an 'as required' basis with an unsatisfactory lead-time, the logistics business opted to produce buttons in the style and amount required using 3D printing technology. 3D printing gave them the ability to print the exact button required when it was needed to perform the fix.

Certainly 3D printing's potential to 'disrupt' should not be underestimated, particularly in industry segments that produce highly complex and customised goods and many logistics providers appear ready to embrace the change and the possible implications of evolving 3D printing technology on global supply chain dynamics.

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