

Partnership to lower cost of AM

3D printer manufacturer Nexa3D has expanded its partnership with Forward AM, the 3D printing arm of chemical company BASF, to produce three new ultrafast photopolymer 3D printing materials for rapid prototyping applications. The new photopolymers, x45 NATURAL, x45 CLEAR, and x45 BLACK, are engineered to speed up the 3D printing of prototypes across a variety of industries and applications, such as housings, enclosures, pipes, packaging products, and footwear components. The partnership leverages BASF's expanding portfolio of tailored formulations and Nexa3D's ultrafast NXE 400 3D printer to improve the speed of turnaround times and offer greater design agility, as François Minec, Managing Director BASF 3D Printing Solutions, explains.

Forward AM, the brand of BASF 3D Printing Solutions, accompanies its customers along the whole journey – from first idea to final printed part. “With our strong ties to BASF, we are in a position that’s unique in the industry,” says Mr. Minec.

Mr. Minec is keen to highlight Forward AM’s capabilities in Virtual Engineering. “We consult both customers that want to take the first step into Additive Manufacturing (AM), or that are experts starting a new project with AM. By ‘thinking additive’ we make sure to fully harness the benefits and the freedom of AM. It is important for us that we consult every customer with regards to the right technology and the right material for each project. We are able to consult in a technology-agnostic way – this possible as we offer all major AM technologies and materials (powders, photopolymers, plastics filaments, metal filaments). And going one step further, we can also print the components and thus deliver proof of concept – showing our solutions add real value and convince under real-life conditions. By our wide range of post-processing we can achieve a part surface known from injection moulding – and offer customized colour shades, meeting individual customer needs.”

Mr. Minec is excited to expand the partnership with Nexa3D as he believes their broad range of photopolymers is well-matched for the high throughput of Nexa3D’s NXE 400 system. Both parties started the exchange on potential collaboration in Additive Manufacturing in 2020. The official partnership on photopolymer started in May 2021. “Nexa3D is not only providing world class 3D printing machines and solutions to different verticals but they also offer an open system to end users,” Mr. Minec points out. “We at Forward AM share the same vision with Nexa3D by providing high quality and performance 3D printing materials on open printers to enable manufacturing possibilities and further

drive the industrialization of Additive Manufacturing.”

The aim of the partnership is to enable a lower cost per printed part, he adds. “By combining the high-speed printing process and our photopolymers, we intend to make Additive Manufacturing more economically viable for applications ranging from functional prototyping to small volume production.”

The first of the newly launched materials from Nexa3D and Forward AM is x45 NATURAL, a tough material suitable for the 3D printing of models and functional prototypes requiring high-strength and durability. The second material, x45 CLEAR, is designed for the printing of functional prototypes that need quick turnaround times.



BASF 3D Printing Solutions

Forward AM

Website: www.forward-am.com

