

Press Release

October 14, 2021

Forward AM Launches Ultrafuse® Flexible Filament Portfolio for Additive Manufacturing

- » **New filaments specially developed for applications requiring flexible materials across multiple industries**
- » **Portfolio builds on long-standing BASF expertise in flexible materials**
- » **Expanded Ultrafuse® filament portfolio contributes to affordable industrial Additive Manufacturing**

With three new filaments – Ultrafuse® TPU 64D, Ultrafuse® TPU 95A and Ultrafuse® TPS 90A – Forward AM is launching a portfolio of advanced flexible materials for Additive Manufacturing (AM). These new filaments enable the easy, rapid and cost-efficient production of 3D printed parts via Fused Filament Fabrication (FFF).

With soft yet durable haptics, high mechanical strength and excellent abrasion resistance, the new filaments are ideally suited to a wide range of industrial applications requiring outstanding flexibility and impact resistance. These properties make the Forward AM Ultrafuse® Flexible Filament Portfolio the stand-out choice wherever long-term component flexibility and stability are required.

“Flexible materials surround us in our daily lives, in automotive manufacturing and production tools as well as in household appliances and consumer goods. In developing our Flexible Filament Portfolio we leveraged the decades of experience

BASF has gathered in flexible materials such as Elastollan® for traditional manufacturing. We are now transferring this expertise to AM, to support our customers in realizing next-level industrial 3D printing applications with the very best flexible filaments on the market,” says Roger Sijlbing, Head of Sales and Marketing, Additive Extrusion Solutions at BASF 3D Printing Solutions GmbH.

The three new filaments in the portfolio were all developed for the most demanding industrial applications, with each material delivering different specific properties and benefits:

- Ultrafuse® TPU 64D is the hardest elastomer in this material range. It offers high rigidity while maintaining excellent flexibility and is perfectly suited for industrial applications that demand highly impact-resistant parts.
- Ultrafuse® TPU 95A was developed to enable the rapid and easy printing of a durable yet flexible polyurethane-based material. Its outstanding abrasion resistance makes it the material of choice for wear-and-tear applications.
- Ultrafuse® TPS 90A stands out thanks to its unprecedented soft-touch surface haptics, giving printed parts a non-slip touch and feel - unique in filament printing. With low moisture uptake and convincing layer adhesion, this filament is ideally suited to two component parts and appliance grips.

In 2018 Forward AM launched the company’s first flexible filaments with Ultrafuse® TPU 85A and Ultrafuse® TPC 45D. By launching a broader, dedicated Flexible Filament Portfolio, Forward AM now offers even more flexible Additive Manufacturing materials at affordable prices.

Ultrafuse® filaments are specifically developed to work on all common open-source Fused Filament Fabrication (FFF) printers from beginner to industrial level, making it one of the easiest and most cost-effective technologies in Additive Manufacturing today. The Ultrafuse® Portfolio comprises filaments ranging from engineering-grade materials, through reinforced and support materials, to advanced metal filaments for a variety of industrial applications.



Photo: Example applications printed with the advanced filaments from the new Forward AM Flexible Filament Portfolio (from left to right: Ultrafuse® TPS 90A, Ultrafuse® 95A, Ultrafuse® 64D. (Source: Forward AM).

For a closer look at the full Forward AM Ultrafuse® Portfolio, please visit our [website](#) or take a look [here](#).

About BASF 3D Printing Solutions

BASF 3D Printing Solutions GmbH, headquartered in Heidelberg, Germany, is a 100% subsidiary of BASF New Business GmbH. It focuses on establishing and expanding the business under the Forward AM brand with advanced materials, system solutions, components and services in the field of 3D printing. BASF 3D Printing Solutions is organized into startup-like structures to serve customers in the dynamic 3D printing market. It cooperates closely with the global research platforms and application technologies of various departments at BASF as well as with research institutes, universities, start-ups and industrial partners. Potential customers are primarily companies that intend to use 3D printing for industrial manufacturing. Typical industries include automotive, aerospace and consumer goods. For further information please visit: www.forward-am.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 110,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €59 billion in 2020. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com.