Joint Press Release

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Raise3D Launches Metal 3D Printing Solution Featuring Ultrafuse® Metal Filaments by Forward AM

- **Raise3D launches MetalFuse, an end-to-end Metal Fused Filament Fabrication (FFF) solution, with Forward AM as materials partner**
- **Ultrafuse® 316L and 17-4 PH metal filaments enable faster and more cost-effective 3D printing of metal parts**
- **Raise3D to pilot MetalFuse units at selected Asia-Pacific partners in 2021, with global rollout to launch in 2022**

Shanghai, China – May 26, 2021 – Today at TCT Asia, Forward AM and Raise3D, a leading professional 3D printing equipment manufacturer, jointly announced the launch of the Raise3D MetalFuse system using advanced Ultrafuse® metal filaments by Forward AM, the brand of BASF 3D Printing Solutions. This end-to-end solution is a fully integrated printing ecosystem for metal 3D printing, comprising a desktop 3D printer for Metal FFF, a catalytic debinding furnace, a sintering furnace, optimized software for Metal FFF, and the top-flight metal filaments Ultrafuse® 316L and 17-4 PH by Forward AM.

Both companies collaborated closely throughout the development process to ensure the seamless interaction of the MetalFuse system and Ultrafuse® metal filaments, as well as easy user-handling. “Metal FFF is one of the most promising AM

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technologies, and we are impressed by the capabilities of Raise3D's MetalFuse ecosystem. We are convinced that this next-level combination of Metal FFF-optimized software, catalytic debinding and sintering units, and our Forward AM Ultrafuse® metal filaments will deliver great value to customers. This joint approach is a major contribution to making Metal Additive Manufacturing competitive on an industrial scale," says Firat Hizal, Head of Metal Systems Business Group, BASF 3D Printing Solutions GmbH.

"We are very pleased to have Forward AM as our materials partner. In the process of MetalFuse development, we compared our solution with various FFF printers for print accuracy, print size, repeatability, stability, and slicing software support optimized for Metal FFF. Through in-depth testing and optimization with Forward AM's experts, we successfully improved the accuracy and mechanical properties of the printed samples," says Wales Mai, Technical Director, Raise3D.

The first two pilot MetalFuse units will be installed at selected partners in Asia-Pacific in 2021. The delivery ceremony of the first set of MetalFuse units in China was held onsite at the TCT Asia exhibition.

"With the first two pilot MetalFuse units installed in Asia-Pacific, we look forward to enabling our local customers to produce tailor-made metal parts requiring far less time and at greatly reduced cost. Forward AM will continuously innovate in Metal FFF materials to further industrialize Additive Manufacturing," explains Dr. Chen Li, Head of Business Management and Operations, BASF 3D Printing Solutions Asia-Pacific.

Raise3D plans to launch the large-scale delivery of commercial MetalFuse systems from the first half of 2022 onwards. At present, the printing filaments supported by MetalFuse are Forward AM's Ultrafuse® 316L and Ultrafuse® 17-4 PH. Additional Ultrafuse® metal filaments are expected to be available in parallel to Raise3D´s global rollout plans. Raise3D is the official distributor partner of Ultrafuse® Metal Filaments in China. All regional users, resellers and service partners can now apply for samples via raise3d.com.cn.

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 and with research institutes, universities, startups 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.

About Raise3D

Raise3D designs and manufactures top-performing 3D printers and Additive Manufacturing solutions for corporations. With offices in California, Rotterdam, and Shanghai, Raise3D is positioned to lead in developing end-to-end, fully integrated solutions with Metal FFF and desktop 3D printing.