



Product Service

CERTIFICATE

No. Z2 107566 0001 Rev. 00

Holder of Certificate: **Lehmann & Voss & Co. KG**

Alsterufer 19
20354 Hamburg
GERMANY

Certification Mark:



Product: **Reproducible AM Build Process**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 713179022

Valid until: 2025-10-29

Date, 2020-11-05

(Norbert Thimm)



Product Service

CERTIFICATE

No. Z2 107566 0001 Rev. 00

Model(s): Test was performed with several LUVOCOM 3F PAHT 9825 NT filaments of one batch (Batch no. 205382) in combination with two Ultimaker S5 Pro machines (Type 202253)

Brand Name: LUVOCOM 3F Filament

LUVOCOM® 3F
FILAMENT
Additive manufacturing solutions

The combination of LUVOCOM 3F PA^{HT} 9825 NT filament with an Ultimaker S5 Pro fulfills the requirements regarding a reproducible AM Build Process:

- Production monitored: The production facility for filament and machine production was inspected with regard to quality assurance to assure reproducibility.
- Steady geometrical accuracy: Geometrical accuracy was tested with statistical reliability according to VDI 3405 Page 7 and resemble the specifications in the filament data sheet.
- Steady tensile strength: Tensile strength was tested with statistical reliability according to ISO 527 and resemble the specifications in the filament data sheet.
- Consistent and reliable material: Differential Scanning (DSC), Thermogravimetric Analyses (TGA) and Fourier Transform Infrared Spectroscopy (FTIR) were performed on used and unused filament. All requirements on the material composition are according to specification.
- Emission tested: Particle and chemical emissions of the filament-machine combination were tested according to UL 2904.

This certificate is only valid in combination with a valid certificate of the machine manufacturer (Z2 108298).

Tested according to: PPP 10999A:2020

Production Facility(ies): 107619

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ CERTIFICADO ◆ CERTIFICAT