



Higher flight efficiency inside

For Your Ultimate Requirements: Unmatched High-Performance Thermoplastic Compounds for Drones

You want to improve your drone performance? You want to save costs and gain more value? We are your material partner to achieve the utmost. Benefit from our decades of experience with structural thermoplastic materials. Profit from our knowledge with numerous approved applications.

Our materials offer unmatched properties:

- Highest strength – up to 520MPa
- Highest stiffness – more than 50Gpa
- Combined with an impact strength of 90kJ/m²
- Low weight
- Excellent fatigue strength
- Insensitive to humidity
- Temperature range – 40°C up to more than 240°C

This performance is a result of our leading material technology based on high-performance carbon fibers (XCF technology), long chain polyamides and a unique compounding process.

These properties enable:

- Higher centrifugal forces
- Increased flight efficiency
- Lower energy consumption
- Better flight performance

LUVOCOM® XCF -
Stronger, lighter
and lower system
costs compared to
light metals and
CFRP solutions



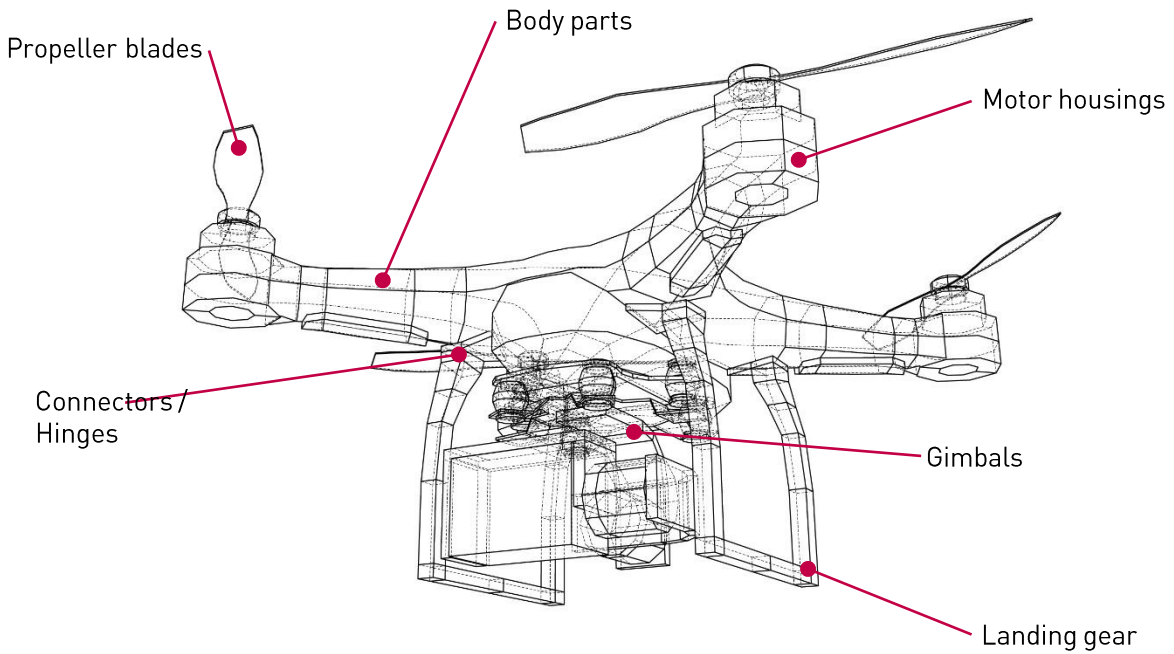
STRUCTURAL



WEIGHT



SUSTAINABLE



We offer comprehensive material solutions for drones. From all-wing aircraft to octacopters. From pure video use to heavy transport. Our tailor-made materials have already proven themselves in numerous components. In addition to the technical aspects, costs and sustainability play a particularly important role. Here too we offer advantages, especially compared to light metals and CFRP.

Application example: Propeller blade

Material: LUVOCOM 20/XCF/35/BK – high-performance carbon fiber reinforced PPA



LUVOCOM XCF for propeller blades up to 1.4m (56")

527 MPa flexural strength

31 GPa flexural modulus

50% lighter than aluminium

43% lighter than PA66 GF50

Europe & Head Office
 Lehmann&Voss&Co. KG
 Alsterufer 19
 20354 Hamburg | Germany
 Phone: +49 40 44 197 250
 Email: info@lehvoss.de

North America
 LEHVOSS North America, LCC
 185 South Broad Street
 Pawcatuck, CT 06379 | USA
 Phone: +1 855 681 3226
 Email: info@lehvoss.de

Asia
 LEHVOSS (Shanghai) Chemical Co., Ltd
 Unit 4805 Maxdo Centre
 8 Xingyi Road, Changning District
 Shanghai 200336 | China
 Phone: +86 21 6278 5186
 Email: info@lehvoss.cn

www.luvocom.com

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