The EddyCus® CF map 6060 is a desktop device especially designed for the mapping of carbon fiber texture. The testing system utilizes the electrical conductivity of the carbon fibers to gain structural information such as fiber orientation and fiber distribution. The high resolution EC-scans also enable defect detection, e.g. gaps, fuzzy balls, misalignment, wrinkles, overlaps, and often impurities, cracks and delamination.

The EddyCus® system can be used at any stage in the production: for example for carbon fiber textiles, stacks, preforms or composites. Simply flat to slightly curved parts or preforms can be checked by the table top system. Therefore, it particularly helps process engineers or R&D focused groups to evaluate the results of individual production steps.

The software allows to filter differently oriented layers or highlight anomalies such defects. The user can classify the results to deepen the understanding of the material.
DATA SHEET
EddyCus® CF map 6060 – Structural Analysis Mapping

PARTS GEOMETRIES

- Scan area: 600 x 600 mm²
- Min. pitch: 0.025 mm
- Speed: 400 mm/sec (full scan: 30 min)
- Mode: Contact and non-contact
- Carbon Fiber Materials: CF fabric, textile, stack, prepreg, preform, composite
- Add-ons: Camera for positioning, Distance sensor
- Device dimension: 1,200 / 1,700 / 1,350 mm (w/h/d)

CHARACTERIZATION & APPLICATION

Structural Analysis
- Fiber orientation of individual layers & hidden layers
- Fiber spacing & fiber distribution

Defects & Errors
- Gaps
- Overlaps & wrinkles
- Misalignments & undulations
- Delaminations
- Fuzzy balls

Application Fields
- Automotive & aircraft structures
- Energy sector (pipes & tanks)
- Civil engineering (bridges)
- many more

FIBER ORIENTATION & UNDULATION

Undulation can be detected

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Undulation can be detected