# OPTICAL TESTING & METROLOGY

## **COMPOSITE DEFECT DETECTION**



### **NON-DESTRUCTIVE TESTING OF COMPOSITE MATERIALS**

Modern composite materials are light and strong. By choosing an appropriate combination of matrix and reinforcement materials, a new material can be made to meet the requirements of a particular application. Failure mechanisms in composites are different from other materials and the inspection technologies available during development, production and in-service are limited. The defect detection technology presented by Optonor provides inspection and measurement solutions specially adapted to the failure mechanisms and mechanical characterization of composites. Measured data and results are presented in standard export formats for reporting and data storage.



#### **FEATURES & BENEFITS**

- Fast, accurate and efficient
- User friendly and robust
- Testing of large and small structures
- Advanced filtering for testing in
- demanding environmentsNon-contact, laser based, interferometric technology
- Object excitation by piezo transducers
  Thermal and vacuum based
- Inermal and vacuum bas excitation optional
- Clear and simple documentation
- Defect detection mapping
- Static deflection analysis
- Vibration Analysis
- Full-field measurement using either real-time or numerical analysis



#### **APPLICATIONS**

- Quality Control
- Product Testing and gualification
- Condition Monitoring
- Non Destructive Testing:
  - Delamination
  - Lack of bonding
  - Impact damages
  - Matrix and fiber cracking

#### MATERIALS

- Fibre reinforced plastics
- Ceramic and metallic composites
- Sandwich structures
- Wood



#### **PRODUCTS & SYSTEMS**

- SNT 410
- VibroMap 1000
- Measurement and analysis services

See specific system brochures for more information.

"The Optonor system has been used for testing of delaminations in jet-engine honeycomb components. It has performed excellent for many years!"

Bent Slotnes, NDT Level 3, AIM Norway

