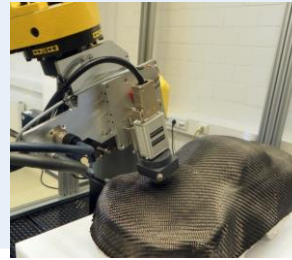
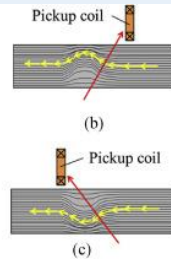
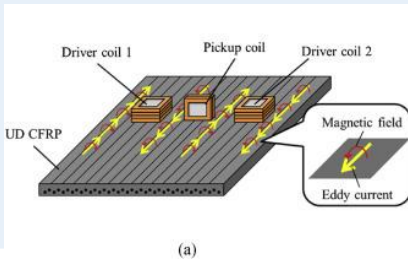
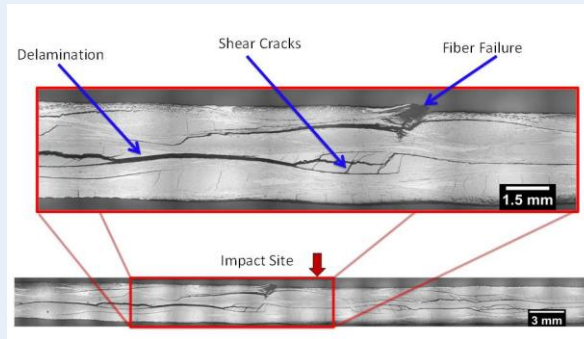


Composites expertise

Defects detection

Type of defects detected on composite parts

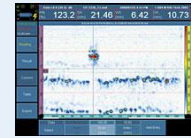
- Cracking
- Matter inclusion
- Porosity, delamination
- Imperfection in the volume



Methods

Surface ultrasonic testing
Penetrant testing

Volume ultrasonic testing
 (50 kHz to 15 MHz)



Low (5 to 50 kHz) and high frequency (> MHz) eddy currents testing
Terahertz Imaging

Structure analysis, metallurgy by AND methods

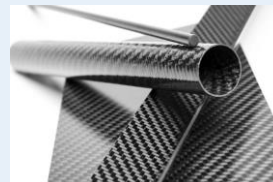
Measurable values

Mechanical characteristics

- Young's mechanical modulus E, shear G, density
- Hardness, residual stresses (permanent)
- Applied stresses, strains

Structural and physical characteristics

- Macro and microstructure information
- Fiber orientation, compaction, stacking
- Resin rate, matrix, interface



Methods

Ultrasonic testing

Eddy current testing