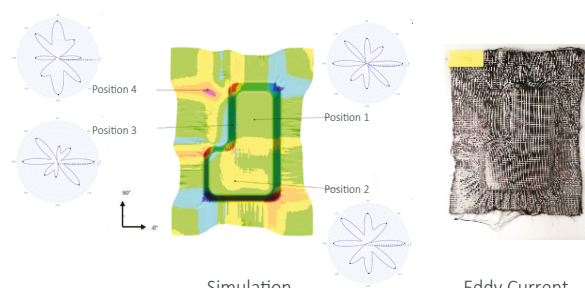
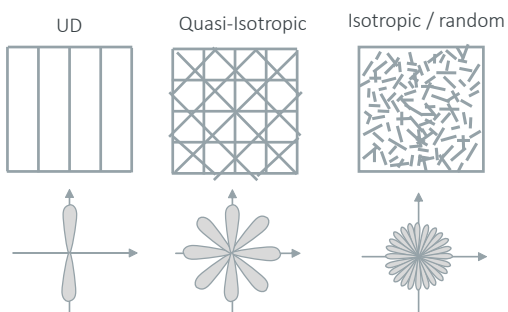


Parts geometries	Flat, slightly curved or shaped
Carbon fiber materials	CF fabrics, textile, stack, preform, composite
Speed	500 measurements/sec results in 0.25mm resolution
Feature	Rotate sensor independently to quickly check orientation
Mode	Contact and non-contact
Integration support	CAD files, SDK libraries .net, personal training
Software	Evaluation software EddyEVA for 2D & 3D eddy current images
Robot/ automated tool required	0.1 mm goal point difference, pay-load of ~1kg

## Application as Spot Check for Stacking Sequence & Validation of Simulated Fiber Orientation

**Rotate sensor on a single location - evaluate fiber orientation of multiple layers below within seconds**

- ▶ Quick check of fiber orientation @ critical locations
- ▶ Check correct stacking sequence after lay-up
- ▶ Eddy Current displays lay-up orientation similar to tensile plots



Pos	Simulation Expected Orientation [°]								Eddy Current Measured Orientation [°]							
	Layer								Layer							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
1	-3	42	87	-48	-48	87	42	-3	-3	43	87	-48	-48	87	43	-3
2	10	56	100	-34	-34	100	56	10	10	58	101	-33	-33	101	58	10
3	-15	30	75	-60	-60	75	30	-15	-15	31	69	-62	-62	69	31	-15
4	39	84	130	-5	-5	130	84	39	39	87	130	-8	-8	130	87	39

## Application as 3D Scanner for EC-Images

**Mounting the sensor on robot to scan line-by-line to acquire images from layers beneath the surface**

- ▶ Fiber orientation of individual layers & hidden layers
- ▶ Fiber spacing & fiber distribution

