AMS-40/57 - Rotor Blade Scanner
– Fast, high-performance scanner

The AMS-40/57 is an automated XY scanner, dedicated for regular production control of assembled wind turbine rotor blades, as well as spar components.

**Features**
- Scanner components mounted on a motorized forklift truck
- XY scans along a 4-7 meter long rail with a track scanner unit
- Lifting and holding system for safe precise attachment of track scanner
- High-performance multiple ultrasonic contact probe alignments
- On-board tray for calibration plates
- Container and pumps for handling of coupling water
- Operator work station
- 100% battery operated scanner
- Autonomous scanner unit
- Total scanning time less than 120 minutes on a 50 meter blade, both sides covered.

**Applications**
Scanner for automated ultrasonic inspection of large FRP composite rotor blades, spars and spar-caps, containing UD fibre girder laminates, for MW size wind turbine rotor blades.
Mechanical Design
The AMS-40/57 is designed as a mobile stand alone scanner system, intended for inspection of large wind turbine blades and spar components. The whole system is powered from an integrated motorized fork lift truck, turning the scanner unit virtually autonomous.

1. Scanner unit with up to 4 ultrasonic probes.
2. Track with rail suspension.
3. Clamp / foot for track unit depending on application.
4. Scanner table with lift tower and bridge.
5. Tray for calibration plate.
7. Motorized fork lift.

Technical specification for AMS-40/57

Scanning velocity
In X direction: max 100 mm/s
In Y direction: max 250 mm/s

Scanning stroke
In Y direction: 900 mm with four ultrasonic contact probes for high inspection efficiency.
Standard Track length 4.600 mm in X direction, adaptable up to 7.000 mm length.

Object Dimensions
Minimum curvature: R 500 mm, depending on scanning width and length.
Minimum width: 100 mm

System Interface
The scanner is delivered with interface to any original P-scan System 4 or P-scan Stack System ultrasonic control unit.

Options
Track rail suspension for scanning of either vertical or horizontal surfaces. Track is suspended, clamped and locked with a foot at each end, equipped with either suction cups or clamp feet, attaching the scanner system tightly to the inspection object.
Optional scanner setup for inspection of leading and trailing edges of rotor blades is available upon request.